

622. National Aeronautics and Space Administration,
Extraterrestrial Life; a Bibliography. Washington:
NASA, 1964. 2 pts. (NASA SP-7015) (For sale by
U.S. Govt. Print. Off.)

Pt. 1: Domestic and foreign report literature; a selected listing of annotated references to unclassified scientific and technical reports published between 1900-1964; pt. 2: Published literature; a selected of annotated references to journal articles and books published between 1900-1964.

Both parts include such subjects as extraterrestrial life, exobiology, the origin of life on earth, the suitability of other planets for the development of indigenous life, and the terrestrial contamination of spacecraft. Both parts are arranged in reverse chronological order and are followed by personal author and subject indexes. Prepared by the Scientific and Technical Information Facility for the National Aeronautics and Space Administration by Documentation Incorporated.

623. National Aeronautics and Space Administration,
Significant Achievements in Space Bioscience,
1958-1964. Washington: NASA, 1966. 128p.
(NASA SP-92) (For sale by U.S. Govt. Print. Off.)

One of a series of ten volumes which summarize the progress and describe achievements during the period 1958 through 1964 in the following areas: Astronomy, Bioscience, Communications and Navigation, Geodesy, Ionospheres and Radio Physics, Meteorology, Particles and Fields, Planetary Atmospheres,

Planetology, and Solar Physics. Bibliography, pp. 119-128, lists 202 references to significant books, journal articles, and technical reports.

624. Potocko, Richard J., Bibliography Related to Human Factors System Program, July 1962-February 1964.

Washington: National Aeronautics and Space Administration, 1964. 237p. (NASA SP-7014)

A list of references with abstracts arranged in 21 subject categories, covering books, reports, and journal articles in biotechnology and human research. All citations previously appeared in Scientific and Technical Aerospace Reports or International Aerospace Abstracts, July 1962-February 1964.

625. Roos, Charles, comp., Bibliography of Space Medicine.

Washington: National Library of Medicine, Reference Division, 1958. 49p. (U.S. Public Health Service, Publication, no. 617. Bibliography Series, no. 21)

Consists of 381 annotated references compiled by the Head, Document Section, National Library of Medicine, arranged by subject category and covering the period from the 1930s to 1958. References selected from the National Library of Medicine and aviation, aviation medicine, and astronautical publications. Supplement, 1958, continues and brings the number of references cited up to 431.

626. Ruff, Siegfried, and Hubertus Strughold, Compendium of Aviation Medicine. Washington: [National Research Council]. 1942. 130p.

Translation of the authors' Grundriss der Luftfahrtmedizin (Leipzig: Johann Ambrosius Barth, 1939). A pioneering work in the field. Bibliography, pp. 127-129, lists approximately 70 references, mainly to German journal articles on the effects of altitude. First chapter covers historical development of the subject.

627. Sagan, Carl, "The Quest for Life Beyond the Earth," in Smithsonian Institution Annual Report, 1964. Washington: 1965. pp. 297-306. (Its Publication, 4613)

Reprinted from Harvard Alumni Bulletin, April 4, 1964. Reviews recent ideas on the origin of life and extraterrestrial life and suggests that before the decade is out voyages of discovery will be made to Mars by the U.S. and U.S.S.R. Instruments will search for the presence of life on Mars and radio back the news to Earth.

628. Schmidt, Ingeborg, Bibliographie der Luftfahrtmedizin; eine Zusammenstellung von Arbeiten über Luftfahrtmedizin und Grenzgebiete bis ende 1936: Berlin: J. Springer, 1938. 136p.

A worldwide bibliography of approximately 3,000 items classified by subject. Contains both book and journal article references on medical aspects of aeronautics. "Verschiedenes...", pp. 2-6, contains some historical references.

629. School of Aerospace Medicine, Epitome of Space Medicine: Research Reports and Articles from Scientific Journals. Randolph AFB, Tex.: USAF School of Aviation Medicine, 1957. 1 v. (Various pagings)

Consists of a collection of 40 of the outstanding reports and articles on space medicine published from 1949 to 1957. Includes the historical "From Aviation to Space Medicine" by Hubertus Strughold as ch. 21. This paper was reprinted from Journal of Aviation Medicine, v. 23, August 1952. Contains a bibliography of 25 books and journal articles.

630. Sergeyev, Aleksandr A., Essays on the History of Aviation Medicine. Washington: National Aeronautics and Space Administration, 1965. 413p. (NASA Technical Translation TT F-176) (For sale by Clearinghouse for Federal Scientific and Technical Information (OTS), Springfield, Va.)

Translation of Sergeev's Ocherki po Istorii Aviatsionnoi Meditsiny (Moscow: USSR Academy of Sciences Publishing House, 1962) which consists of nine essays on the history of Soviet aviation medicine and an excellent final chapter entitled, "Bibliography of Works in Russian on Aviation Medicine up to 1950," pp. 254-398, listing approximately 1,730 references to books and journal articles.

631. Shneour, Elie A., and Eric A. Ottesen, compilers,
Extraterrestrial Life: an Anthology and Bibliography.
 Washington: National Academy of Sciences and
 National Research Council, 1966. 478 p.
 (National Research Council Publication 1296A)

Supplementary to Biology and the
 Exploration of Mars; Report of a Study held
 under the Auspices of the Space Science
 Board, National Academy of Sciences, National
 Research Council, edited by C. S. Pittendrigh,
 (Washington, 1966). Prepared under the
 guidance of the Study Group on Biology and
 and the Exploration of Mars of the Space
 Science Board as a means of providing access
 to the literature on life beyond the Earth.
 Includes 34 papers by international experts
 reprinted from various journals and published
 between 1945 and 1965; and a bibliography
 containing over 2,000 selected references
 to world literature from the 18th century
 through 1965.

632. Slager, Ursula T., Space Medicine. Englewood Cliffs,
 N.J.: Prentice-Hall, 1962. 388p. (Prentice-
 Hall Space Technology Series)

Primarily a textbook but "The Concept
 of Space Medicine," pp. 13-17; is a historical
 account of the subject. "Bibliography,"
 pp. 17-18, lists 27 book and journal article
 references.

633. Stearns, Peggy E., and Catherine F. Kaspanek, comps.,
Catalog of Scientific Publications, 1942-1963.
 Pensacola, Fla.: U.S. Naval Aviation Medical
 Center, 1963. 157p.

List of published works based on studies done by the U.S. Naval School of Aviation Medicine. Although primarily technical works are listed, the "Topographical Index," p. 147, cites approximately 30 references under "History and General Aspects of Aviation Medicine."

634. Sullivan, Walter, We Are Not Alone: The Search for Intelligent Life on Other Worlds. New York: McGraw-Hill, 1964. 325p.

The science editor of the New York Times reviews past and present astronomy, research, and thinking about the origin of life and the universe, and current beliefs about extraterrestrial life. Includes "References," pp. 292-310, which lists chapter bibliographies.

635. Syme, Anthony, The Astronauts. London, Melbourne: Horwitz, 1965. 130p.

History of the accomplishments of the following astronauts and cosmonauts: Yuri Gagarin, Alan Shepard, Virgil Grisson, Gherman Titov, John Glenn, Scott Carpenter, Andrian Nikolayev, Pavel Popovich, Walter Schirra, Gordon Cooper, Valery Bykovsky, Valentina Tereshkova, Vladimir Komarov, Konstantin Feoktistov, Boris Yegorov, Alexei Leonov, Pavel Belyayev, John Yound, Edward White, James McDivitt, Gordon Cooper, and Charles Conrad.

636. Thomas, Jean L., comp., A Bibliography of Reports Issued by the Behavioral Sciences Laboratory: Engineering Psychology, Training Psychology,

Environmental Stress, Simulation Techniques, and Physical Anthropology, 1946-1962. Wright-Patterson Air Force Base, Ohio: 6570th Aerospace Medical Research Laboratories, Behavioral Sciences Laboratory, 1963. 109p. (Available from Clearinghouse for Federal Scientific and Technical Information (OTS), Springfield, Va.)

Lists 907 reports including some on aviation medicine, space medicine, and weightlessness.

637. White, Clayton S., and Otis O. Benson, eds., Physics and Medicine of the Upper Atmosphere; A Study of the Aeropause. The Proceedings of a Symposium on the Physics and Medicine of the Upper Atmosphere Held at San Antonio, Texas, November 6, 7, 8, 9, 1951, Sponsored by the Air University School of Aviation Medicine, Randolph Field, Texas. Arranged by the Lovelace Foundation for Medical Education and Research, Albuquerque, New Mexico. Albuquerque: University of New Mexico Press, 1952. 611p.

Essays by 42 of the leading experts in the field. Covering all phases of the subject in an attempt to present what is known in such a way that future research may be based on it. Each essay includes a very brief bibliography.

638. Young, Richard S., Extraterrestrial Biology.

Coordinating Editor: James V. Bernardo. New York:

Holt, Rinehart and Winston, 1966. 119p. (Holt

Library of Science)

Deals with the question of how study of the extraterrestrial environment can contribute to understanding of life and its processes. Bibliography, pp. 113-114, lists nine annotated references to books on the possibilities of life on other planets.

Meteorology

639. Ashby, John H., A Preliminary History of the Evolution of the Tiros Weather Satellite Program.

Comment ed. Greenbelt, Md.: Goddard Space Flight Center, 1964. 102p. (HHN-45)

Traces the development of the first meteorological satellite, Tiros, from an experimental R&D satellite to an operational system supporting worldwide weather analyses. Includes chronology, pp. 79-90. Bibliography, pp. 95-102, lists approximately 100 references. Footnote references scattered throughout the text.

640. Congress, House, Committee on Science and Astronautics, Space and the Weather. Report of the Committee.

Washington: U.S. Govt. Print. Off., 1962. 21p.
(87th Cong., 2d Sess. House Report no. 2561)

Deals with astronautics in meteorology, especially the Tiros weather satellite program. Based on subcommittee hearings held during August and September 1962 to assess the progress of weather satellites and their implications.

641. International Meteorological Satellite Workshop, Washington, D. C. 1961. Proceedings. Washington: U.S. Govt. Print. Off., 1962. 226p.

Sponsored by the National Aeronautics and Space Administration and U.S. Weather Bureau. Consists of 31 somewhat technical papers on

astronautics in meteorology, especially on NASA meteorological satellite programs. A few papers have brief bibliographies.

642. Kiss, Elemer, "Annotated Bibliography on Rocket Meteorology," Meteorological and Geoastrophysical Abstracts, v. 11 (September 1960), pp. 1480-1535.

A bibliography of approximately 280 annotated references to books and journal articles, worldwide in scope, on the use of rockets in the upper atmosphere, and published between 1950-1960. Items are arranged chronologically and alphabetically by author within each year. A subject outline provides a guide to the subject matter. A geographic outline provides a guide to the locations of areas where observations and measurements were conducted.

643. Kiss, Elemer, Bibliography on Meteorological Satellites, 1952-1962. Washington: Weather Bureau, 1963.
380p. (For sale by U.S. Govt. Print. Off.)

Approximately 988 annotated references to books, technical reports, conference papers, and journal articles for the period 1952-1962, international in scope, are arranged alphabetically by author within each year. Subject outline, geographical outline, author index, and serial index are included. About 800 of these references were listed in the following four compilations in Meteorological and Geoastrophysical Abstracts: October 1960, pp. 1480-1535; March 1963, pp. 870-936, for the period 1961-1962; February 1964, pp. 405-447, for the period 1959-1962. March 1964, pp. 634-663, is a further compilation which covers the period 1963.

644. Library of Congress, Legislative Reference Service,
Meteorological Satellites. Staff Report Prepared
for the Use of the Committee on Aeronautical and
Space Sciences, United States Senate. Washington:
U.S. Govt. Print. Off., 1962. 201p. (87th
Cong., 2d Sess.)

A Committee Print which describes the
use of satellites for a worldwide weather
prediction system. Contains much background
historical information. Includes "Some
Significant Events in the Development of the
Meteorological Satellite System; A Chronology,"
pp. 134-143.

645. Meteorological and Geoastrophysical Abstracts,
Boston, Mass.: American Meteorological Society,
1950 to date. Monthly.

Lists 11,000 abstracts a year from world
literature on the subjects of meteorology,
oceanography, hydrology, geophysics, and
astrophysics. Abstracts on satellites listed
under section "Instrument Carriers.". Subject
classification with annual author, subject,
geographical, and journal indexes. Also each
issue usually contains cumulative, annotated
bibliographies on subjects of special interest,
as well as a title and keyword permuted
index entitled, Meteorological and Geoastro-
physical Titles. This latter has many entries
under the keywords "history" and "historic."

646. National Aeronautics and Space Administration, Final
Report on the Tiros I Meteorological Satellite

System. Staffs of Goddard Space Flight Center and U.S. Weather Bureau. Washington: NASA, 1962.

258p. (NASA Technical Report R-131) (For sale by U.S. Govt. Print. Off.)

This report is divided into two parts: Pt. I includes the design, development, operation, and engineering evaluation of Tiros I; Pt. II is concerned with the meteorological uses of the television data obtained from Tiros I. Bibliography, pp. 109-112, lists 86 references to books, journal articles, and reports.

647. National Aeronautics and Space Administration, Significant Achievements in Satellite Meteorology, 1958-1964. Washington: NASA, 1966. 141p.
(NASA SP-96) (For sale by U.S. Govt. Print. Off.)

One of a series of ten volumes which summarize the progress and describe achievements during the period 1958 through 1964 in the following areas: Astronomy, Bioscience, Communications and Navigation, Geodesy, Ionospheres and Radio Physics, Meteorology, Particles and Fields, Planetary Atmospheres, Planetology, and Solar Physics. Bibliography, pp. 137-141, lists 97 references to significant books, journal articles, and technical reports.

648. National Aeronautics and Space Administration, Significant Achievements in Space Applications, 1965. Washington: NASA, 1966. 85p. (NASA SP-137) (For sale by U.S. Govt. Print. Off.)

This volume summarizes the progress in space applications in 1965 in the following areas: Communications, Geodesy, and Meteorology. "References," pp. 83-85, lists 45 technical reports and journal articles. A companion volume (NASA SP-136) describes the significant scientific progress in 1965 in the following areas: Astronomy, Ionospheres and Radio Physics, Particles and Fields, Planetary Atmospheres, Planetology, and Solar Physics.

649. National Aeronautics and Space Administration,
Significant Achievements in Space Applications, 1966.

Washington: NASA, 1967. 91p. (NASA SP-156)

(For sale by U.S. Govt. Print. Off.)

This volume summarizes the progress in space applications in 1966 in the following areas: Applications Technology Satellites, Communications Satellites, Satellite Geodesy, Meteorological Program, and Navigation and Traffic Control Satellite Program. The last three papers have references. A companion volume (NASA SP-155) describes the significant scientific progress in 1966 in the following areas: Space Astronomy, Space Bioscience, Ionospheres and Radio Physics, Particles and Fields, Planetary Atmospheres, Planetology, and Solar Physics.

650. U. S. Treaties, etc., Meteorological Satellite System.

Washington: U.S. Govt. Print. Off., 1963. 5p.

Text of agreement regarding Canadian participation in an operational meteorological satellite system established by the United States and designed to provide for continuous meteorological observation on a global basis.

651. Vaeth, Joseph G., Weather Eyes in the Sky: America's Meteorological Satellites. New York: Ronald Press, 1965. 124p.

History of the U.S. meteorological satellite program, including projects Vanguard, Tiros, and Nimbus, by the manager of the Tiros Operational Satellite System Engineering Division, National Weather Satellite Center, U.S. Weather Bureau. Bibliography, p. 119, lists six references.

652. Vercelli, Francesco, L'Aria nelle Natura e nella Vita. 2. ed. Torino: Unione Tipografico-Editrice Torinese, 1952. 718p.

Handsomely illustrated text on meteorology, encyclopedic in scope. Includes information on V-2 rocket flights in New Mexico, aviation meteorology, planetary atmospheres, and jet propulsion. In particular chs. 18-21, pp. 601-707, deal with (18) aerodynamics and utilization of air and wind, (19) applications to lighter than air, (20) heavier-than-air-flight, and (21) modern aviation.

653. Wexler, Harry, and J. E. Caskey, Jr., eds., International Symposium on Rocket and Satellite Meteorology, 1st, Washington, D. C., April 23-25, 1962, Proceedings. Sponsored by Committee on Space Research (COSPAR), World Meteorological Organization (WMO), and International Union of Geodesy and Geophysics (IUGG). New York: Interscience, Amsterdam: North Holland, 1963. 441p.

Consists of 39 papers by experts from all countries arranged as follows: Pt. I, "Meteorological Rockets," Pt. II, "Meteorological Satellites-Radiation Studies;" Pt. III, "Meteorological Satellites-Cloud Studies;" Pt. IV, "Meteorological Satellites-Special Studies." Most of the articles contain brief bibliographies.

654. Widger, William K., Meteorological Satellites.

New York: Holt, Rinehart and Winston, 1966.

280p. (Holt Library of Science)

Deals with the development of meteorological satellites, especially with the weather satellite Tiros I, which has changed the whole course of meteorology. Ch. 4 is entitled "The History and Background the Led to Tiros." Bibliography, pp. 255-276, lists references by chapter.

Physics

655. Ahrendt, Myrl H., The Mathematics of Space Exploration.

Coordinating Editor: James V. Bernardo. New
York: Holt, Rinehart and Winston, 1966. 160p.
(Holt Library of Science)

Presents in simple form enough of the applications of mathematics in the space age to enable the lay person or the student who has a reasonable knowledge of mathematics to form an appreciation and understanding of the role of mathematics in the exploration of space. Bibliography, p. 157, lists 13 references to books.

656. Goddard Space Flight Center, Publications.

Washington: GSFC, 1963 (2 v.) to date.

Annual. (For sale by U.S. Govt. Print. Off:)

A collection in two annual volumes of the articles, papers, talks, and reports generated by the scientific and engineering staff of Goddard Space Flight Center for the year. V. 1 is entitled "Space Sciences" and v. 2 is entitled "Space Technology." Each volume includes author index. Many of these articles were originally published in the journal literature or as official NASA publications.

657. Jastrow, Robert, and A. G. Cameron, "Space: Highlights of Recent Research," Science, v. 145, no. 3637
(September 11, 1964), pp. 1,129-1,139.

The authors deal with the recent research highlights in the particular collection of scientific problems to which space vehicles can make some specific contributions not achievable by ground-based experiments. Discusses geodesy, meteorology, upper atmosphere, magnetosphere, magnetopause, the atmosphere of Venus, solar physics, x-rays, and gamma rays. Bibliography, p. 1,139, lists approximately 50 references.

658. Library of Congress, Aerospace Information Division,
Future Trends in Soviet Science and Technology;
Review of Soviet and Soviet-Bloc Literature.
 Washington: The Library, 1963. 279p. (Its
 AID Report, P-63-2)

A compilation of informed Soviet statements on the future considered indicative of Soviet long-range planning. Sources examined available at Aerospace Information Division during the period September 15 through November 15, 1962. The "quotation-in-depth" method is used with occasional bibliographic references in the text. "Astrophysics and Space Sciences," pp. 32-84.

659. Ludwig, George H., The NASA Program for Particles and
Fields Research in Space. Washington: National
 Aeronautics and Space Administration, 1962. 26p.
 (NASA Technical Note D-1173)

A review of the NASA program for investigating the upper atmosphere by means of earth satellites and deep space probes. Bibliography, pp. 24-26, lists 32 primarily American journal references.

660. National Aeronautics and Space Administration,
Significant Achievements in Ionospheres and Radio
Physics, 1958-1964. Washington: NASA, 1966.
60p. (NASA SP-95) (For sale by U.S. Govt.
Print. Off.)

One of a series of ten volumes which summarize the progress and describe achievements during the period 1958 through 1964 in the following areas: Astronomy, Bioscience, Communications and Navigation, Geodesy, Ionospheres and Radio Physics, Meteorology, Particles and Fields, Planetary Atmospheres, Planetology, and Solar Physics. Bibliography, pp. 51-60, lists 126 references to significant books, journal articles, and technical reports.

661. National Aeronautics and Space Administration,
Significant Achievements in Particles and Fields,
1958-1964. Washington: NASA, 1966. 94p.
(NASA SP-97) (For sale by U.S. Govt. Print. Off.)

One of a series of ten volumes which summarize the progress and describe achievements during the period 1958 through 1964 in the following areas: Astronomy, Bioscience, Communications and Navigation, Geodesy, Ionospheres and Radio Physics, Meteorology, Particles and Fields, Planetary Atmospheres, Planetology, and Solar Physics. Bibliography, pp. 83-94, lists 152 references to significant books, journal articles, and technical reports.

662. National Aeronautics and Space Administration,
Significant Achievements in Solar Physics, 1958-1964.

Washington: NASA, 1966. 95p. (NASA SP-100)

(For sale by U.S. Govt. Print. Off.)

One of a series of ten volumes which summarize the progress and describe achievements during the period 1958 through 1964 in the following areas: Astronomy, Bioscience, Communications and Navigation, Geodesy, Ionospheres and Radio Physics, Meteorology, Particles and Fields, Planetary Atmospheres, Planetology, and Solar Physics. Bibliography, pp. 91-95, lists 95 references to significant books, journal articles, and technical reports.

663. Seifert, Howard S., and Mary H. Seifert, Orbital

Space Flight. New York: Holt, Rinehart and

Winston, 1964. 138p. (Holt Library of Science)

Deals with the physics of satellite motion including laws of motion, forms of energy, satellites, launch and reentry. Bibliography, p. 129, lists 20 references to books.

664. Sutton, Richard M., The Physics of Space. Coordinating

Editor: James V. Bernardo. New York: Holt,

Rinehart and Winston, 1966. 176p. (Holt Library

of Science)

Discusses the many ways physics is important to our understanding of space. This book is a do-it-yourself astronomy book to help the reader become better acquainted with outer

space and the applications of the laws of physics. Bibliography, pp. 171-172, lists 12 references to books.

665. Symposium on Space Physics, Washington, D. C., 1959,

The Exploration of Space. Edited by Robert

Jastrow. New York: Macmillan, 1960. 160p.

The National Academy of Science had previously published these papers in the Journal of Geophysical Research, August and November, 1959. Includes 15 scientific papers from the first symposium on space physics held under the auspices of the National Academy of Sciences, National Aeronautics and Space Administration, and the American Physical Society, April 29-30, 1959. The papers cover the need for scientific space research, existing instrumentation in space physics, what new apparatus might make possible, and the need for planetary and lunar exploration. Some papers include brief bibliographies.

IMPACT AND APPLICATIONS OF SPACE EXPLORATION

Military

666. Air University, Research and Special Studies Progress Report. Maxwell Air Force Base, Ala. July 1, 1956, to date. Semiannual.

Annotated bibliography of the research and special study projects of the staffs and faculties at the Air University and the various components of it, including the USAF Historical Division. Issued annually to provide some indication of the state of progress of research in process.

667. Air University, Studies and Histories Prepared by the USAF Historical Division, Research Studies Institute, Air University, as of 1 September 1959. Maxwell Air Force Base, Ala.: The University, 1959. 13p.

Lists 138 historical studies issued from 1943-1958 and covering among other military aeronautics topics World War II and the Korean conflict. In addition lists a number of policy studies and published histories.

668. Air University, Libraries, Air University Abstracts of Student Research Reports. Maxwell Air Force Base, Ala.: 1957 to date. Annual.

Title, 1957-1964: Air University Annotated List of Student Research Reports. Brings together and arranges accordingly in one annual annotated list student research reports and theses from the several schools of Air University: Air Command and Staff College, Air Force Institute of Technology, Air War College, and Squadron Officer School. Includes many entries under "Space" in the subject index.

669. Air University Periodical Index to Military

Periodicals, Maxwell Air Force Base, Ala.:

Air University Library, 1949 to date. Quarterly.

Lists 18,000 largely nontechnical references a year to significant articles, news items, and editorials from 68 English-language military and aeronautical periodicals generally not indexed elsewhere. Arrangement is alphabetical by subject with annual and triennial cumulative volumes. Published 1949-1962 as Air University Periodical Index.

670. Anzalone, Alfred, Space Technology: a Partial Search

of the Literature Concerning the Applications of

Orbital Space Satellites to Advanced Weapons

Systems. Dover, N.J.: Feltman Research and

Engineering Laboratories, Picatinny Arsenal, 1959.

109p.

A list of annotated references to unclassified literature with a uniterm index.

671. Baxter, James P., Scientists Against Time. Boston:
Little, Brown, 1946. 473p. (An Atlantic Monthly
Press Book)

Official history of the U.S. Office
of Scientific Research and Development,
1940-45, in which the author describes
the scientists, money, and organization
which produced new weapons of war. Ch. XIII,
"Rockets," pp. 201-211, describes the
development and use of rockets in World
War II.

672. Bulow, Hilmer, freiherr von, Geschichte der Luftwaffe,
eine kurz Darstellung der Entwicklung des Dritten
Wehrmachtteils, mit einem Geleitwort des
Reichsluftfahrtministers Generaloberst Göring.
2. aufl. Frankfurt am Main: Diesterweg, 1937.
189p.

History of the German air force from 1909
to 1937. Covers European aerial operations
in World War I. Contains the following
three sections: "Entstehung und Gestaltung
der Luftwaffe bis zum Weltkrieg," "Die
Luftwaffe im Weltkrieg," and "Die Luftwaffe
nach dem Weltkrieg," First edition
published in 1934.

673. Congress, House, Committee on Government Operations,
Organization and Management of Missile Programs.
Hearings before a Subcommittee of the Committee.
Washington: U.S. Govt. Print. Off., 1960. 228p.
(86th Cong., 2d Sess.)

Consists of testimony given by top officials of the Department of Defense and Air Force at hearings, May 3, 4, 6, 1960.

674. Congress, House, Committee on Science and Astronautics, Basic Scientific and Astronautic Research in the Department of Defense. A Report of the Committee and Subcommittees Nos. 1, 2, 3, and 4. Washington: U.S. Govt. Print. Off., 1959. 33p. (86th Cong., 1st Sess. House Report, no. 1182)

Covers military astronautics research in the Department of Defense, the three armed services, and the Advanced Research Projects Agency.

675. Congress, House, Committee on Science and Astronautics, Defense Space Interests. [Hearings Mar. 17-23, 1961]. Washington: U.S. Govt. Print. Off., 1961. 220p.

Consists of testimony given by top officials in the three armed services on space organization in the Department of Defense and its implications for the national space program, NASA, and the Space Council. Includes several appendixes on Dept. of Defense and NASA agreements and directives.

676. Congress, House, Committee on Science and Astronautics, Military Astronautics (Preliminary Report). Washington: U.S. Govt. Print. Off., 1961. 37p. (87th Cong., 1st Sess. House Report, no. 360)

Based on hearings held March 17-23, 1961; to determine the proper organization to support astronautics research and development and explore NASA-Dept. of Defense relations.

677. Congress, House, Committee on Science and Astronautics, The Practical Values of Space Exploration. Report . . . Pursuant to H. Res. 133. Washington: U.S. Govt. Print. Off., 1960. 54p. (86th Cong., 2d Sess. House Report, no. 2091)

This report was undertaken to explain to the American taxpayer why so many of his dollars are going into the American effort to explore space and the various benefits--economic, national security, educational, etc.--that he is likely to derive from the effort. Text includes many bibliographical footnote references. Revised edition issued in 1961 (87th Cong., 1st Sess. House Report, no. 1276, 74p)

678. Congress, House, Committee on Science and Astronautics, Science, Astronautics, and Defense: the 1961 Review of Scientific and Astronautic Research and Development in the Department of Defense. Staff Report. Washington: U.S. Govt. Print. Off., 1961. 68p. (87th Cong., 1st Sess.)

A Committee print which covers military astronautics research in the Department of Defense and the three armed services.

679. Cuneo, John R., Winged Mars. Harrisburg, Pa.:

Military Service Publ. Co., 1942-47. 2 v.

Comprehensive history of the development of aircraft as a military weapon. Includes v.1, "The German Air Weapon, 1870-1914" and v.2, "The Air Weapon, 1914-1916." V. 1 contains "Bibliography I," pp. 283-306, which lists approximately 500 footnote references, and "Bibliography II," pp. 307-309, which lists approximately 50 additional references. V. 2 contains "Notes," pp. 379-456, which lists chapter footnotes and "References," pp. 459-472, which lists 292 additional items.

680. Department of the Army, Army Library, Military Aspects of Space Exploration; a Selected List of Titles.

Washington: Army Library, 1958. 55p. (Its
Special Bibliography no. 16)

An annotated bibliography of 300 unclassified titles on the military implications of space arranged by broad subject category. Covers both Soviet and American aspects. Items included published primarily in the 1950s.

681. Estep, Raymond, An Aerospace Bibliography. Maxwell

Air Force Base, Ala.: Documentary Research

Division, Aerospace Studies Institute, Air

University, 1962. 158p. (Air University Documentary Research Study, AU-290-61-RSI)

A bibliography of 3,100 briefly annotated references to books and articles in nearly one hundred periodicals. Arranged alphabetically under 48 broad subject categories with subject and author indexes. Combines in one volume the coverage formerly furnished in an Air Power Bibliography (Maxwell Air Force Base, 1956 and 1959) and later in A Space Bibliography (Maxwell Air Force Base, 1959). Covers air power references from 1957 to January 1962 and space references from 1959 to January 1962. All references are to material in the Air University Library at Maxwell Air Force Base, Ala. Supplement, An Aerospace Bibliography (Maxwell Air Force Base, Ala., 1965), covers book and periodical literature for the years 1962-1964.

682. Glines, Carroll V., The Compact History of the United States Air Force. New York: Hawthorn Books, 1963. 339p.

History of military aeronautics in the United States including the U.S. Air Force and the U.S. Army Air Forces. Covers development in World Wars I and II and the Korean War. Bibliography, pp. 327-28, lists 31 book titles.

683. Golovine, Michael N., Conflict in Space: a Pattern of War in a New Dimension. New York: St. Martin's Press, 1962. 146p.

Surveys the evolution of warfare strategy from bomber to missile forces and the consequent development of both offensive and defensive aerospace weapons and the aerospace industries. The author's thesis is that only the moving of conflict into space can

avoid total annihilation and that Europe should press forward in space research and change the character of NATO. Bibliography, p. 143, lists nine titles.

684. Hauschild, Reinhard, and Hellmut H. Führung,

Raketen; die erregende Geschichte einer Erfindung.

Einführung von Pascual Jordan. Bonn: Athenaüm--
Verlag, 1958. 135p.

History of the military use of rocket weapons during the past 1,000 years. Bibliography, p. 133, lists 18 German book titles.

685. Hébrard, Jean A. L., L'Aviation des Origines à nos

Jours. Paris: R. Laffont, 1954. 375p.

History of aviation from earliest times to 1954 with special emphasis on military aviation in World Wars I and II. Bibliography, pp. 358-360, lists approximately 75 references to French books.

686. Hébrard, Jean A. L., Vingt-cinq Années d'Aviation

Militaire (1920-1945). Pref. de Henri Bouché.

Paris: A. Michel, 1946-47. 2 v.

Comprehensive two-volume history of air warfare primarily in Europe. Includes v. 1, "La Genese du Drame Aérien de 1940," and v. 2, "La Guerre Aérienne, 1939-1945." Bibliography, pp. 473-475, lists approximately 50 French book and journal article references.

687. Hennessy, Juliette A., The United States Army Air Arm, April 1861 to April 1917. Montgomery, Ala.: USAF Historical Division, Research Studies Institute, Air University, 1958. 260p. (USAF Historical Studies, no. 98)

Recounts the development of aviation in the United States Army from the first use of balloons in 1861 to 1917 when the U.S. entered World War I. Includes "Bibliographical Note," p. 256.

688. Higham, Robin D., An Introduction to Maritime, Naval, and Aeronautical History. Chapel Hill: University of North Carolina Press, 1960. 48p. (Library Study Outlines, v. 1, no. 3)

A reading guide prepared by the Naval and Air Historian, Department of History, University of North Carolina. "Aeronautical Literature," pp. 36-47, lists approximately 100 annotated works on the history of aviation from World War I to 1960. Includes references on the Royal Air Force, the Luftwaffe, Japanese air services, and aviation and airships.

689. Holley, Irving B., Buying Aircraft: Materiel Procurement for the Army Air Forces. Washington: Department of the Army, 1964. 643p. (United States Army in World War II Series) (For sale by U.S. Govt. Print. Off.)

A thorough study of aircraft procurement during World War II, with copious footnoting and a Bibliographical Note, pp. 583-587. Appendixes list Membership in the Aeronautical Chamber of Commerce, 1938; Wartime Producers of Aircraft; and Major Producers of Aircraft Engines: July 1940-August 1945.

690. Holley, Irving B., Ideas and Weapons: Exploration of the Aerial Weapon by the United States During WWI; a Study in the Relationship of Technological Advance, Military Doctrine, and the Development of Weapons. New Haven, Conn.: Yale University Press, 1953. 222p. (Yale Historical Publications)

"Bibliographical Note," pp. 178-209, discusses the primary sources available in the United States for this study. Discusses manuscript materials, national archives, - official records of the period, Air Force files, as well as published material such as that of the War Department, Congress, foreign official publications, and periodical literature.

691. Manchester, Eng., Public Libraries, Books for Cadets in the A.T.C. Manchester, Eng.: Manchester Public Libraries, 1941. 31p.

Although compiled for Air Training Cadets, this short bibliography lists a number of works which deal with military aeronautics in World War II and especially with England's first year in the war.

692. Medaris, John B., and Arthur Gordon, Countdown for Decision. New York: Putnam, 1960. 303p.

An analysis of the administrative aspects of the U.S. missile program, 1955-1960, by the head of the Army Ballistic Missile Agency and Army Ordnance Missile Command. Critical of U.S. space and missile program and claims that bureaucratic snarls prevented the U.S. from launching the first artificial satellite 13 months before the Soviet Union launched the first Sputnik.

693. Moore, Samuel T., U.S. Airpower; Story of American Fighting Planes and Missiles from Hydrogen Bags to Hydrogen War-Heads. New York: Greenberg, 1958. 196p.

Traces the growth and development of American military air power from the use of balloons in the Civil War to the present development of missiles.

694. Postan, M. M., et al., Design and Development of Weapons: Studies in Government and Industrial Organization. London: H.M. Stationery Office and Longmans, Green, 1964. 579p. (History of The Second World War; United Kingdom Civil Series)

Includes material on aircraft, gas turbines, jet propulsion, and rockets. Based largely on British official documents.

695. Skinner, Richard M., and William Leavitt, eds.,
Speaking of Space: the Best from Space Digest.
Boston: Little, Brown, 1962. 278p.

Consists of approximately 30 essays by prominent authorities in widely differing specialties on various aspects of space exploration, including man's place in the universe, and the social, political, and military impact of space exploration.

696. Slukhai, Ivan A., Russian Rocketry: A Historical Survey, edited by P. August. Translated by E. Vilim. Jerusalem: Israel Program for Scientific Translations, 1968. 149p. (NASA Technical Translation TTF-426 and also TT-67-51363)
(For sale by Clearinghouse for Federal Scientific and Technical Information, Springfield, Va.)

Translation of Rakety i Traditsii (Moscow: Voennoe Izdatel'stvo Ministerstva Oborony SSSR, 1965). History of the military use of rockets in Russia from 1800 to date. Bibliography, p. 149, lists 14 Soviet publications.

697. Squier, George O., The Present Status of Military Aeronautics. [New York: American Society of Mechanical Engineers, 1908]. 1571-1641p.

Reprinted from Journal of the American Society of Mechanical Engineers; v. 30 (December 1908); published also in the

Society's Transactions, v. 30, 1908, pp. 639-721. Includes discussion of the military dirigible in several countries, the various types of airplanes, and the influence of aeronautics on warfare. Bibliography, pp. 1624-1640, lists 320 French, German, and English language titles from late 18th to early 20th centuries. Written by a major in the Signal Corps, U.S. Army.

698. Straubel, James H., et al., eds., Space Weapons: a Handbook of Military Astronautics. New York: Praeger, 1959. 245p.

Deals with military astronautics, ballistic missiles and space weapons and their relationship to American national security and civilization in general. Annotated bibliography, pp. 227-239, emphasizes rockets.

699. Thayer, Frederick C., Air Transport Policy and National Security. Chapel Hill: University of North Carolina Press, 1965. 352p.

This work, which started out as a dissertation for the University of Denver's Graduate School of International Studies, explores the interrelationships of the political, military, and economic aspects of both military airlift policy and commercial air transport policy. Bibliography, pp. 319-338, lists books, government publications, journal titles, and unpublished materials.

700. Weatherill, Francis W., Air Training: a Booklist
for the Air Training Corps and for School Libraries.

London: The Library Association, School

Libraries Section, 1942. 15p.

"Stories of Flying in the War, 1914-18,"
pp. 11-12, lists 24 books. "The R.A.F.
Today," pp. 12-13, lists 23 books and
"Famous Flights, etc.," pp. 13-14, lists 22
titles. "Historical" section, pp. 14-15,
lists seven book titles.

Political and Legal

701. Abt, Clark C., The Problems and Possibilities of Space Arms Control. Bedford, Mass.: Raytheon Co., 1961. 52p.

A detailed analysis of political, military, and scientific problems of the world of 1971 without space arms control and the possibilities for space arms control in each of these areas.

702. Air Force Academy Assembly, 6th, U.S. Air Force Academy, 1964, Outer Space: Final Report. Colorado Springs, Colo.: The Academy, 1964. 94p.

Cosponsored by the American Assembly, Columbia University, New York, and the United States Air Force Academy, Colorado. Consists of papers from five sessions of a congress on astronautics held at the Air Force Academy. Includes "Politics and Outer Space: A Perspective," by Lincoln P. Bloomfield; "The New Age of Discovery," by James E. Webb; and "The Prospects of Outer Space," by Richard C. Bowman and John J. Phillips.

703. Adademiia Nauk SSSR, Komissiia po Pravovym Voprosam Mezhplanetnogo Prostranstva, Kosmos i Mezhdunarodnoe Pravo [Outer Space and International Law]. Moscow: Izdatel'stvo Instituta Mezhdunarodnykh Otnoshenii, 1962. 181p.

A discussion, from the Russian point of view, of space law. Bibliography, pp. 245-255, lists Soviet publications on the subject.

704. Arroyo Madrigal Rodolfo, La Actividad del Hombre en el Espacio, Como Fuente de un Nuevo Régimen Jurídico. México: Universidad Nacional Autónoma de México, 1961. 164p.

A thesis. Includes bibliography, pp. 161-164.

705. Bauzá Araújo, Alvaro, Derecho Astronáutico. 2.ed. ampliada y actualizada de "Hacia un Derecho Astronáutico," 1957. Montevideo: Librería A. M. Fernandez, 1961. 295p.

Comprehensive treatise on space law. Includes "Bibliografía," pp. 289-290, lists approximately 35 Spanish titles, and "Esquema en inglés del capítulo viii", pp. 283-288.

706. Caidin, Martin, Overture to Space. New York: Duell, Sloan and Pearce, 1963. 300p.

The author's thesis is that the U.S. had fallen hopelessly behind the Russians in space exploration and he examines all the events leading up to the launching of Sputnik I and how it was possible for the American public to react the way it did to Sputnik I. Written in a breezy, journalistic style with an "Appendix," pp. 273-290, which lists and describes all U.S. space launchings.

707. Christol, Carl Q., International Law of Outer Space.

Newport, R.I.: Naval War College, 1966. 513p.

(Naval War College, Newport, International Law

Studies: 1962, v.55; NAVPERS 15031) (For sale

by U.S. Govt. Print. Off.)

The author, who occupied the chair of International Law at the Naval War College during 1962-63, examines the legal principles and rules influencing and governing the uses of outer space and their interrelated political characteristics. "List of Annexes" pp. 439-488, includes texts of all official documents relating to legal use of outer space.

"Bibliography of Bibliographies Relating to the International Law of Outer Space," pp. 489-490, lists 18 references which cover material published through 1963. "Index of Cases," p. 491, lists 31 mentioned in the text.

708. Cohen, Maxwell, ed., Law and Politics in Space,

Proceedings, McGill Conference on the Law of Outer

Space, 1st., Montreal, 1963. Montreal: McGill

University Press, 1964. 221p.

In addition to the proceedings contributed by the conferees, this volume contains a bibliography, pp. 191-211, which emphasizes communications, pollution and contamination, arms control, and observations (the topics dealt with at the conference). The first part of the bibliography is entitled, "General Bibliographies on Space Law," and lists ten items.

709. Congress, House, Committee on Government Operations,
 Military Operations Subcommittee, Missile and
 Space Ground Support Operations. Hearings. . .
 January 25, 26, and 27, 1966. Washington: U.S.
 Govt. Print. Off., 1966. 164p. (89th Cong., 2d
 Sess.)

Includes testimony given by eight top officials in the National Aeronautics and Space Administration and the Department of Defense on the relationships between national security and rocket technology in these two agencies.

710. Congress, House, Committee on Government Operations,
Missile and Space Ground Support Operations;
 Twenty-Third Report by the Committee on Government
 Operations. Washington: U.S. Govt. Print. Off.,
 1966. 106p. (89th Cong., 2d Sess. House Report,
 no. 1340)

A report on the relationships between the U.S. space program and the U.S. defense program and, in particular, rocket and missile technology programs within the Defense Department and the National Aeronautics and Space Administration.

711. Congress, House, Committee on Science and Astronautics,
Outer Space -- the Road to Peace: Observations on
 Scientific Meetings and International Cooperation. A

Compilation of Data for the Committee. Washington:
U.S. Govt. Print. Off., 1960. 53p. (86th Cong.,
2d Sess.)

A Committee Print which consists of observations of the congressional committee members attending the 10th annual Congress of the International Astronautical Federation in London. Emphasizes the importance of greater international cooperation in the peaceful uses of outer space.

712. Congress, House, Committee on Science and Astronautics,
Report on the Activities of the Committee on Science
and Astronautics. Washington: U.S. Govt. Print.
Off., 1959 to date. Annual.

Report for 1959 issued as Committee print no. 32. Report for 1960 issued as House Report, no. 2215 of the 86th Cong., 2d Sess. This annual record of the activities of the Committee covers such things as NASA budget appropriations and other legislation, investigations and hearings held, and publications issued.

713. Congress, House, Committee on Science and Astronautics,
Space, Missiles, and the Nation. Report. . . .
Pursuant to H. Res. 133. Washington: U.S. Govt.
Print. Off., 1960. 61p. (86th Cong., 2d Sess.
House Report, no. 2092)

Based on testimony of 88 witnesses, mainly from NASA, Dept. of Defense, and State Dept., before the committee. Explores the extent to

which the U.S. space program, like defense, foreign relations, etc., is an element in U.S. world leadership.

714. Congress, House, Select Committee on Astronautics and Space Exploration, International Cooperation in the Exploration of Space Report. Washington: U.S. Govt. Print. Off., 1959. 16p. (85th Cong., 2d Sess. House Report, no. 2709)

Report to Congress which puts forth reasons why the U.S. should seek channels for peaceful cooperation in space exploration. Discusses the Amsterdam Conference, the Soviet attitude, and recommendations for an international body.

715. Congress, House, Select Committee on Astronautics and Space Exploration, Survey of Space Law; Staff Report. Washington: U.S. Govt. Print. Off., 1959. 60p. (86th Cong., 1st Sess. House. Doc., No. 89)

Includes "Bibliography of Space Law," prepared in the Office of the Judge Advocate General of the Air Force, pp. 38-60. One of the most comprehensive bibliographies to date.

716. Congress, Senate, Committee on Aeronautical and Space Sciences, Staff Report, Space Treaty Proposals by the United States and the USSR. Washington: U.S. Govt. Print. Off., 1966. 52p. (89th Cong., 2d. Sess.)

Compares U.S. and Soviet proposals for an outer space treaty on the moon and other celestial bodies made during the summer of 1966 to the U.N. Committee on the Peaceful Uses of Outer Space with the purpose of preparing a final draft treaty for presentation to the U.N. General Assembly Fall 1966. Includes texts of several background documents pp. 27-45, along with a list of previous publications on international space activities by the Committee on Aeronautical and Space Sciences, p. 52.

717. Congress, Senate, Committee on Aeronautical and Space Sciences, United States International Space Programs, Texts of Executive Agreements, Memoranda of Understanding, and Other International Arrangements, 1959-1965. Washington: U.S. Govt. Print. Off., 1965. 575p. (89th Cong., 1st Sess. Senate Doc., No. 44)

Texts cover period from 1959 to 1965 and reflect the various kinds of agreements which govern the international scope of the space efforts of the U.S. and the methods by which cooperation is implemented. Includes NASA, Communications Satellite System (COMSAT), and Smithsonian Astrophysical Observatory agreements.

718. Department of State, Historical Office, Documents on International Aspects of the Exploration and Use of Outer Space, 1954-1962. Staff Report Prepared for the Committee on Aeronautical and Space Sciences, U.S. Senate. Washington: U.S. Govt.

Print. Off., 1963. 407p. (88th Cong., 1st Sess.

Senate Doc., no. 18)

Consists of the texts of approximately 180 official documents pertaining to the international aspects of space exploration, including Presidential statements and letters, congressional acts, treaties; United Nations resolutions, Soviet messages and statements. An earlier version, entitled "International Negotiations Regarding the Use of Outer Space 1957-60" appeared as Pt. III of Legal Problems of Space Exploration; a Symposium by the Library of Congress Legislative Reference Service [Washington: U.S. Govt. Print. Off., 1961. 1392p. (87th Cong., 1st Sess. Senate Doc., No. 20)].

719. Dupree, A. Hunter, Science in the Federal Government:

a History of Policies and Activities to 1940.

Cambridge, Mass.: Harvard University Press, 1957.

460p.

A well documented work on the history of U.S. Government science policy and the relationship between that policy and society. While Government science policy in space is not discussed here, the book does put the relationship between research technology and Government policy into historical perspective. "Chronology," pp. 383-386, lists Government activities in science. Bibliography, pp. 387-441, lists footnote references by chapter.

720. Emme, Eugene M., Impact of Air Power: National

Security and World Politics. New York: Van

Nostrand, 1959. 914p.

A comprehensive, annotated volume of 118 authoritative readings with introductory essays

from a wide range of informed American, English, and other sources on the problems created by the use of air power as an instrument of national policy and by its influence on national security. Each chapter has a list of selected references.

721. Emme, Eugene M., National Air Power and International Politics: a Select Bibliography. Maxwell Air Force Base, Ala.: Studies and Research Branch, Historical Division, Dept. of the Air Force Library, 1950. 191p. (Air University Documentary Research Study)

A list of 1,484 annotated book and periodical article references designed as a key to the significant interrelationships existing between institutions of a national character and the field of international relations with some references dealing with the role of air power in history. The majority of the references appeared during the 1940s. Of special interest is section on "Scientific Research and Development," pp. 97-108.

722. Estradé Rodoreda, S., El Derecho ante la Conquista del Espacio. Prólogo del Prof. Dr. Aldo Armando Cocca. Barcelona: Ediciones Ariel, 1964. 171p.

A comprehensive treatise on space law originally done as the author's thesis at the University of Barcelona. "Bibliografia," pp. 167-171, lists approximately 125 books, official documents, and journal articles, primarily in Spanish and English.

723. Evans, F., and Helen D. Howard, Outlook on Space.

London: G. Allen & Unwin, 1965. 179p.

Examines the growing relationship between international organizations and outer space exploration showing the historical development both of space exploration (from astronomy and science) and internationalism (from activities of the national state). "Bibliography," p. 175, lists 23 English and American book titles.

724. Fataliev, Khalil' M., Dialekticheskii Materializm i

Voprösy Estestvoznaniia [Dialectical Materialism and Problems in Nature Study]. Moscow: Sovetskaia Nauka, 1958. 133p.

Traces the development of the relationships between dialectical materialism and concepts of space and time and the Soviet rationale for space travel. Includes bibliographical footnotes.

725. Frutkin, Arnold W., International Cooperation in

Space. Englewood Cliffs, N.J.: Prentice-Hall, 1965. 186p.

Deals with the history and present status of cooperation between the United States and the Soviet Union in space exploration. The author discusses the relationship between cooperation and the existing political framework. Each section includes copious footnote references.

726. Frye, Alton, Space Arms Control: Trends, Concepts,

Prospects. Santa Monica, Calif.: Rand Corp., 1964. 22p. (Its Paper P-2873)

Considers the national security aspects of the national space effort and emphasizes disarmament and international cooperation in space exploration. Draws extensively on lectures delivered at the University of Minnesota, the University of Southern California, and the Rand Corporation in November 1963.

727. Gál, Gyula, Világurjog. Budapest: Közgazdasági és Jogi Könyvkiadó, 1964. 365p.

Deals with space law. Summaries in English and Russian. Includes bibliography of space law references, pp. 313-325.

728. Galloway, Eilene, International Cooperation for Outer Space. Washington: U.S. Govt. Print. Off., 1965. 580p. (89th Cong., 1st Sess. Senate Doc., No. 56)

Prepared by the author, specialist, Legislative Reference Service, Library of Congress, for the Senate Committee on Aeronautical and Space sciences. A survey of organizations with space and space-related programs and their interrelationships. Covers U.S. policy and program and the programs reported by 39 other countries. Summarizes Western European, U. N., and U. N. specialized agencies' space efforts. Includes international scientific unions with space activities.

729. Goldsen, Joseph M., Outer Space and the International Scene. Santa Monica, Calif.: Rand Corp., 1959. 14p. (Its Paper P-1688)

Slightly edited version of a talk delivered before the First World Congress of Flight, sponsored by the Air Force Association and the aero-space industry in Las Vegas, Nevada, on April 17, 1959. Considers the political, military, economic, legal, and scientific aspects of international cooperation in outer space.

730. Goldsen, Joseph M., ed., Outer Space in World Politics.

New York: Praeger, 1963. 180p.

Consists of a series of lectures given at a conference sponsored by the Rand Corporation in October 1959. Consists of the following papers: "Outer space in world politics," by J. M. Goldsen; "Outer Space and World Peace," by P. Kecskemeti; "The Soviet Union and the Political Uses of Outer Space," by A. L. Horelick; "Public Opinion and the Development of Space Technology: 1957-1960," by G. A. Almond; "The Military Use of Outer Space: Bombardment Satellites," by T. C. Schelling; "The International Implications of Outer-Space Activities," by K. Knorr; "Outer Space and International Politics: a Look to 1988," by K. W. Deutsch. Bibliography, pp. 175-178, lists approximately 28 references.

731. Goodall, Marcus C., Science and the Politician.

Cambridge, Mass.: Schenkman Pub. Co., 1965. 83p.

Deals with cultural lag, in a somewhat polemical way, between science and state and also with what the author feels is man's failure to evaluate the true place of science in our everyday living. Bibliography, pp. 77-83, consists of fifty annotated references to books.

732. Haley, Andrew G., Space Law and Government.

New York: Appleton-Century-Crofts, 1963. 584p.

Each chapter accompanied by numerous footnotes and references. Appendix V is a bibliography, pp. 528-539. Section V-A, p. 528, is entitled "Bibliographies of Space Literature," and V-b, pp. 529-539, "Selected and Partial Bibliography of the Works of the Author."

733. Hogan, John C., "A Guide to the Study of Space Law,

Including a Selective Bibliography on the Legal and Political Aspects of Space," St. Louis University Law Journal, v. 5 (Spring 1958), pp. 79-107.

Issued also as Rand Corporation Paper P-1290 (Santa Monica, 1958) and reprinted in Space Law: a Symposium, committee print of the Senate Special Committee on Space and Astronautics (Washington, 1959), pp. 291-345. An extensive selected bibliography listing 256 titles from books, law reviews, political journals, scientific and technical journals, both American and foreign.

734. International Commission for Air Navigation, Index

Bibliographique, Bibliographical Index. Paris:

The Commission, 1938. 69p.

An index to the publications and official documents of the Commission published during the period 1922-1938. The commission was superseded by the International Civil Aviation Organization.

735. Jenks, Clarence W., Space Law. New York: Praeger, 1965. 476p.

An expert in international law describes the attempts of scientific bodies to deal with the military, political, and scientific uses of space. Discusses the work done in this area by the United Nations and regional and bilateral arrangements. Pt. II, "The Legal Literature," pp. 93-179, is an excellent review of the literature of space law. "Selected Bibliography," pp. 463-469, lists approximately 140 references primarily in English. Also includes many footnote references throughout the text.

736. Jessup, Philip C., and Howard J. Taubenfeld, Controls for Outer Space and the Antarctic Analogy. New York: Columbia University Press, 1959. 379p.

Pt. III, pp. 191-282, is entitled "International Control for Outer Space." Includes bibliography in the form of bibliographical "Notes," pp. 285-354.

737. Kehrberger, J. Peter, Legal and Political Implications of Space Research. Space Law and Its Background: Political, Military, Economical Aspects and Techno-scientific Problems of Astronautics; a Selective Bibliography of Eastern and Western Sources. Hamburg: Verlag Weltarchiv, 1965. 365p.

Covers literature from 55 nations under the headings legal problems; background and global implications (political and military aspects of space exploration, international

cooperation, national space programs and projects, impact on economy and industry, space communications, space and meteorology, perspectives and prospects, scientific and technological background, life sciences, and space research); activities of nongovernmental institutions; documents and activities of states and international organizations. There is a comprehensive index to abbreviations, transliterations, periodicals, honorary collections, geography, subjects, and authors.

738. Kemp, John M., Evolution Toward a Space Treaty: An Historical Analysis. Washington: National Aeronautics and Space Administration, 1966. 221p. (HHN-64)

Analyzes events leading up to space treaty drafted by U.S. and Soviet negotiators in August 1966 for possible submission to U.N. General Assembly in 1966 or 1967. "Selected Bibliography," pp. 218-221, lists forty books and articles.

739. Ley, Willy, ed., Harnessing Space. Edited and with an Introduction and Commentary. New York: Macmillan, 1963. 314p.

Compiled to point out that space research has other than military applications; the author discusses navigational, meteorological, and communication satellites. Includes bibliography, pp. 304-306, and very brief bibliographies at the end of some of the sections. Historical background of astronautics given in the "Introduction," pp. 15-23, "Chronology of Meteorological-Satellite Events," pp. 234-254, and "Chronology of Communication-Satellite Events," pp. 255-274.

740. Library of Congress, Legislative Reference Service,
Legal Problems of Space Exploration; a Symposium.
Washington: U.S. Govt. Print. Off., 1961. 1392p.
(87th Cong., 1st Sess. Senate Doc., No. 20)

Include numerous bibliographical references and an extensive bibliography entitled "Selected References on the Legal Problems of Space Exploration," compiled by Kenneth Anderson Finch, pp. 1329-1392. "Bibliographies on Space Law" are listed on pp. 1334 to 1336 and include 43 references to bibliographies.

741. Library of Congress, Legislative Reference Service,
Radio Frequency Control in Space Telecommunications.
Prepared for the Committee on Aeronautical and
Space Sciences, U.S. Senate, by Edward Wenk,
Senior Specialist in Science and Technology.
Washington: U.S. Govt. Print. Off., 1960. 235p.
(86th Cong., 2d Sess.)

Explains the critical role played by radio communications in the exploration of outer space for tracking, telemetering, and remote guidance, and the importance of international administrative control. Discussed from the point of view of public policy rather than radio technology.

742. Lipson, Leon, and Nicholas deB. Katzenbach, Report to
the National Aeronautics and Space Administration
on the Law of Outer Space. Chicago: American Bar
Foundation, 1961. 179p.

Includes bibliography of approximately 280 references, pp. 155-179, which covers material from earliest times to November 1958.

743. Mezerik, Avrahm G., ed., Outer Space, UN-US-USSR.

New York: International Review Service, 1960.

52p. (International Review Service, v.6, no. 56)

Reviews the activities of the United Nations, the Soviet Union, and the United States in efforts toward peaceful uses of and disarmament in outer space from 1957 through 1960.

"Appendixes," pp. 39-45, include texts of various U.N. resolutions on the peaceful uses of outer space. "References," pp. 23-24, lists 27 other pertinent U.N. documents.

744. Murray, Bruce C., and Merton E. Davies, A Comparison of U. S. and Soviet Efforts to Explore Mars.

Santa Monica, Calif.: Rand Corp. 1966. 41p.

(Its Paper P-3285)

Compares the scientific objectives, technological achievements, and future programs of both countries to explore Mars. Emphasizes the accomplishments of the U.S. Mariner and the U.S.S.R. Zond and Venik spacecraft. "References and Notes," pp. 39-41, lists 48 Soviet and American newspaper and periodical articles.

745. National Aeronautics and Space Administration,
Conference on the Law of Space and of Satellite
Communications, Chicago, 1963. Proceedings.

Washington: NASA, 1964. 205p. (NASA SP-44)

(For sale by U.S. Govt. Print. Off.)

Proceedings of a conference organized by Northwestern University School of Law, Evanston, Ill., May 1-2, 1963, as part of the Third National Conference on the Peaceful Uses of Space. The formal papers and comments in the first part of the volume represent an attempt to provide a broad perspective of the legal problems that have arisen and will emerge in the space age and to indicate to what degree informal legal thought has reached a consensus or formulated tentative conclusions as to their resolution. The second part of the volume is concerned with monopoly and antitrust aspects, administrative aspects, and international aspects of communications satellite operations. Has bibliographical footnotes.

746. National Archives, Preliminary Inventory of the Records of the House of Representatives Select Committee of Inquiry into Operations of the United States Air Services, 1924-25. (Record group 233)
- Compiled by George P. Perros. Washington: The Archives, 1958. 10p. (Its Publication, no. 59-6. Preliminary Inventories, no. 108)

The records described in this inventory represent approximately 24 cubic feet and include the Committee's hearings and other records generated by the Committee's investigation of government air services.

747. National Archives, Preliminary Inventory of the Records of the Joint Congressional Aviation Policy Board, 1947-48. (Record groups 128) Compiled by Watson G. Caudill and George P. Perros. Washington: The Archives, 1954. 26p. (Its Publication, no. 55-5. Preliminary Inventories, no. 74)

Represents the records generated by the Committee during its investigation of and recommendations for post-war national aviation policy: The records listed here represent approximately 20 cubic feet.

748. Ossenbeck, Frederick J., and Patricia C. Kroeck, eds., Open Space and Peace: a Symposium on Effects of Observation. Stanford, Calif.: Hoover Institution, Stanford University, 1964. 227p.

Symposium sponsored by Sylvania Electric Products and the Hoover Institution on War, Revolution, and Peace, held September 4-6, 1963. Consists of the following 19 papers: "Reconnaissance in Time Perspective, by Stefan T. Possony; "Peaceful Uses of Photo-Reconnaissance Satellites," by Robert N. Colwell; "Satellite Orbits," by James Q. Denton; "Vehicles and Sensors," by John M. Harding; "The Requirements for Information and Systems," by Duncan E. MacDonald; "Utilization of Satellite Observation Systems," by Jerry E. Pournelle; "The Evolution of Space Science," by George P. Miller; "The Implications of Satellite Observation for United States Policy," by Carl H. Amme, Jr.; "The Problem of Opening the Soviet System," by William R. Kintner; "Information on Communist China's Capability and Intentions, and Its Verification,"

by Yuan-Li Wu; "Open Space and the Neutral Nations," by Albert R. Hibbs; "Neutrals -- Their Part in an Open Space System," by Russel Rhyne; "Unilateral Space Observation and the Atlantic Alliance," by Leon Sloss; "Unilateral Space Observation by the U.S.S.R.," by Edward E. Smith; "Multilateral, U.N., or Bilateral Implementation," by John Morse, Jr.; "Space Problems for Lawyers," by Allan N. Littman and James F. Kirkham, "Freedom of Space," by Edward Teller; "The Age of Instant Communications," by Charles L. Goudl; and "The Practicality of United Nations Surveillance," by Martin H. Waldman.

749. Pépin, Eugène, "Bibliographie des Travaux Publiés

sur les Problèmes Juridiques de l'Espace et

Questions Connexes (1910-15 September 1959,"

Revue Francaise de Droit Aérien, v. 13 (October/

December 1959), pp. 325-352.

References (1,909) arranged chronologically under 12 broad subject categories. Reprinted in the author's Les Problèmes Juridiques de l'Espace (Paris: Sirey, 1959), pp. 20-46.

750. Pépin, Eugène, Géographie de la Circulation Aérienne.

Pref. by Edward Warner. Paris: Gallimard, 1956.

341p. (Géographie Humaine, 26)

History of flight from the point of view of its effect on geographical, political, and judicial boundaries. Broadly considers the effect of flight on human relations. Extensive footnotes, pp. 319-326, arranged by chapter.

751. Quadri, Rolando, "Droit international cosmique,"
in Hague, Academy of International Law, Recueil
des cours, 1959, III, v. 98 (1960) pp. 505-597.

Includes bibliographical footnote references
and the following contents: Considerations on
the doctrine of international space law; Nature
of the rules of international space law;
Particular problems.

752. Renstrom, Arthur G., comp., Aeropolitics; a Selective
Bibliography on the Influence of Aviation on
Society. Washington: Library of Congress,
Division of Aeronautics, 1948. 31p.

A list of approximately 450 mainly
American monographs and journal articles
published from 1910-1948 and arranged by
subject category. Deals with air power as
an instrument of national policy and covers
the early history of aviation, the rise of
air power, its military use in World War II,
and its prospects for the future.

753. Renstrom, Arthur G., comp., Principal U.S. Investigations
in Aeronautics, 1918-37. New York, N.Y., 1938. 8p.

Reprinted from Air Law Review, official
journal of the American Academy of Air Law and
the American section of the International
Committee on Radio, v. IX, January 1938. Lists
approximately 70 congressional investigations
held during this period and covering such
subjects as production, war expenditures,
dirigible disasters, air mail, patents, and
safety.

754. Renstrom, Arthur G., comp., United States Aviation Policy; a Selective Bibliography. Washington: Library of Congress, 1947. 58p.

Lists 400 references to books, Government documents, and journal articles published for the most part during the 1940s on the subject of formulating a national air policy. Arranged according to the following subject categories: I. General Materials Pertaining to Aviation Policy; II. Aircraft Industry; III. Air Transportation; IV. Military and Naval Aviation; and V. Government Organization. Bibliography originally prepared for the Congressional Aviation Policy Board.

755. Rettig, Richard A., Bibliography on Science and World Affairs. Prepared for the Foreign Service Institute, U.S. Dept. of State. Washington: Dept. of State, 1964. 179p. (For sale by U.S. Govt. Print. Off.)

Ch. seven, "Outer Space," pp. 106-120, lists approximately 130 references to books and articles on such aspects of space as legal problems, U.S. and U.S.S.R. programs and policies, and U.S.--Soviet relations.

756. Sanger, Eugen, Raumfahrt--Technische berwindung des Krieges. Aktuelle Aspekte der berschall-Luftfahrt und Raumfahrt. Hamburg: Rowohlt, 1958. 142p. (Rowohlts deutsche Enzyklopadie, 59)

Includes bibliography, pp. 137-138, and such topics as military, world political, and cultural aspects of space flight.

757. Schwartz, Leonard E., International Organizations and Space Cooperation. Durham, N.C.: World Rule of Law Center, Duke University, 1962. 108p.

Primarily a directory of public and private organizations engaged in cooperative space activity. Data about the structure, aims, and history is given for each one. Included are Committee on Space Research (COSPAR), International Astronautical Federation, United Nations Committee on Space Research, International Civil Aviation Organization (ICAO), European Space Research Organization, and others.

758. "Selective Bibliography of Space Law," New York Law Forum, v. 4 (July 1958), pp. 372-374.

Lists 77 references to books, law reviews, periodical and newspaper articles, and published speeches and reports.

759. Smirnoff, Michel, "Bibliographie du Droit Astronautique," Revue Générale de l'Air, v. 21 (No. 4, 1958), pp. 392-398.

Lists alphabetically by author 161 books and periodical articles published 1943-1958.

760. Smirnoff, Michel, Svetska Bibliografija Astronautičkog Prava--World Bibliography of Space Law. Belgrad: Institut za Medjunarodnu Politiku i Privredu, 1962. 160p.

In English and Serbian. Covers the period 1910 through 1959 and includes 948 references. Arranged chronologically with alphabetical author and subject index.

761. Teclaff, Ludwik A., "Review of Space Law Literature and Activities," Law Library Journal, v. 54 (August 1961), pp. 208-217.

The bibliography comprises: (1) an annotated list of 91 books and articles arranged alphabetically by author; (2) a classified index.

762. Union List of Air Law Literature in Libraries in Oxford, Cambridge, and London. London: London University, Institute of Advanced Legal Studies, 1956. 54p. (Institute of Advanced Legal Studies Publication, No. 4)

Lists 450 references on air law held by these libraries. Includes books and pamphlets, international conferences and treaties, international organizations, laws and regulations, and periodicals and reports.

763. U.S. Air Force, Judge Advocate General, Space Law Bibliography. Washington: Dept. of the Air Force, 1961. 79p. (Air Force Pamphlet AFD110-1-4)

Lists alphabetically by author: books, periodical and newspaper articles, official speeches, reports, diplomatic documents readily available in libraries in the Washington area. Includes "Bibliographies on Space Law," pp. 6-9.

764. U.S. Treaties, etc., Outer Space Cooperation: Space Science Research Program. Washington: U.S. Govt. Print. Off., 1962. 8p.

Text of an agreement regarding cooperation in a scientific experiment which proposes the placement in orbit around the earth of an Italian satellite from an Italian launching facility by means of a rocket provided by the National Aeronautics and Space Administration. Text in Italian and English.

765. U.S. Treaties, etc., Space Research Program.

Washington: U.S. Govt. Print. Off., 1961. 5p.

Text of agreement which represents a joint effort of United States and Great Britain to cooperate in space research through the use of satellites. Allows for a joint program to study extraterrestrial conditions.

766. Van Dyke, Vernon, Pride and Power; the Rationale of the Space Program. Urbana: University of Illinois Press, 1964. 285p.

Deals with the extent to which the space program is motivated by a desire to enhance American prestige in the world -- the powerful motive of political competition rather than the motive of scientific or technological or economic progress. The author pursues the kinds of questions that Congress and the voters have been asked to consider in relation to the space program. "Historical Development of the Space Program," pp. 9-29. Includes bibliographical footnotes.

767. Zadorozhnyi, Georgii P., Atom, Kosmos, Mirovaia

Politika [Atom, Cosmos, and World Politics].

Moscow: Isdatel'stvo Instituta Mezhdunarodnykh

Otnoshenii, 1958. 79p.

Deals with the political implications of space exploration. Discusses the desire of the Soviet Union to use the cosmos for peace and its fear that the United States military bases in other countries may use missiles and atomic weapons for destructive purposes in space.

768. Wilson, J. Tuzo, I.G.Y.: The Year of the New Moons.

New York: Alfred A. Knopf, 1961. 358p.

An account, by a participating geophysicist, of the international scientific programs conducted during the International Geophysical Year, some of the journeys to remote corners of the world, and the impressive harvest of scientific knowledge gained through these international efforts. Appendixes include 19 tables listing such information as countries participating in the IGY, subjects for investigation together with the international scientific organizations participating, lists of satellites launched during the IGY and their characteristics. A bibliography, "References for Further Reading," pp. 347-350.

Social and Economic

769. American Management Association, The Challenge of Space Technology. New York: The Association, 1960. 35p. (AMA Management Bulletin, no. 7)

Consists of six articles by prominent experts on the economic aspects of space exploration in the U.S. and U.S.S.R. Based on a seminar on "Finding a Place in Your Company in Space-Age Technology," held by the American Management Association in New York City, October 5-7, 1960.

770. Anderson, Frank W., Jr., ed., Great Flying Stories. Introd. by Andrew F. Gordon. New York: Dell Pub. Co., 1958. 256p. (Laurel Edition, LB116)

An anthology of 20 short pieces including excerpts from longer works and short stories dealing with man's conquest of the air. Some of the authors included are Charles A. Lindbergh, James Thurber, Antoine de Saint Exupéry, and William Faulkner. Covers approximately the period from World War I to 1958.

771. Arons, Arnold B., and Alfred M. Bork, eds., Science & Ideas; Selected Readings. Englewood Cliffs, N.J.: Prentice-Hall, 1964. 278p.

An anthology of essays selected to provide some knowledge of the history, nature, and limitations of scientific

thought; to provide the student with some understanding of how science has lessened man's insecurity before nature and how this changed his attitude toward himself, other men, and the physical universe. Includes bibliographical footnotes.

772. Bauer, Raymond, ed., Social Indicators. Cambridge, Mass.: M.I.T. Press, 1966. 357p. (Technology, Space, and Society Series, prepared by the American Academy of Arts and Sciences)

The second volume in a series prepared for the National Aeronautics and Space Administration (first volume is The Railroad and the Space Program: an Exploration in Historical Analogy, edited by Bruce Mazlish. MIT Press, 1965) on the impact of the space program on American society. Deals specifically with the problems and difficulties of anticipating the secondary effects of the space program and the problem of establishing social indicators. Includes numerous footnotes.

773. Bergaust, Erik, Rocket City, U.S.A.: from Huntsville, Alabama to the Moon. New York: Macmillan, 1963. 216p.

A description of Huntsville, Alabama, the city in Alabama's cotton belt which is the center of both the U.S. military and civilian rocket and missile programs. Traces the growth of the Army's rocket program after World War II at the U.S. Redstone Arsenal, Huntsville, and the establishment of NASA's George C. Marshall Space Flight Center, Huntsville.

774. Bernal, John D., Social Function of Science. New York: Macmillan, 1939. 482p.

Comprehensive survey of the place science holds in human life. Covers the history, development, and contemporary status of science and the future possibilities which might result from the reorganization of science teaching and research in universities, industry, and government. Published also in British edition (London: Routledge, 1939). Includes extensive footnote references at the end of each chapter.

775. Bernardo, James V., Aviation in the Modern World: the Dramatic Impact upon our Lives of Aircraft, Missiles, and Space Vehicles. New York: Dutton, 1960. 352p.

Includes such chapter headings as: Man's quest for better transportation, The Influence of aviation upon concepts of the world, and Men and flight: a historical survey. Includes bibliography, pp. 330-338.

776. Black, Archibald, The Story of Flying. Rev. ed.. New York, London: McGraw-Hill, 1943. 272p.

Revised edition of a history of aviation which first appeared in 1940. A good account of the development of commercial flight in the U.S.

777. Bloomfield, Lincoln P., ed., Outer Space: Prospects for Man & Society. Englewood Cliffs, N.J.:

Prentice-Hall, 1962. 203p. (A Spectrum Book, S-AA-5)

Consists of eight essays by prominent authorities on the political, social, and economic impact of space exploration on American life. Originally prepared to provide background for the 1961 Twentieth American Assembly at Arden House, Harriman Campus of Columbia University.

778. Born, Max, "Blessings and Evils of Space Travel,"

Bulletin of the Atomic Scientists, v.22

(October 1966), pp. 12-14.

Examines advantages and disadvantages of the huge investment in space travel from the point of view of mankind in general and also the specialist, sees no real gain for mankind as long as space exploration is used as a tool for national power. Originally published in Neue Deutsche Hefte, v.106, 1965, p. 113.

779. Brookings Institution, Proposed Studies on the Implications of Peaceful Space Activities for Human Affairs. Prepared for the National Aeronautics and Space Administration. Report of the Committee on Science and Astronautics. Washington: U.S. Govt. Print. Off., 1961.

272p. (87th Cong., 1st Sess. House Report, no. 242)

This report recommends for the consideration of NASA a wide range of studies regarding

the social, economic, political, legal, and international implications of the use of space for peaceful and scientific purposes.

780. Bureau of Air Commerce, Aeronautics Reference

Library, Index to the Most Important Articles, not Previously Indexed, Appearing in Magazines, Bulletins and Reports Received in the Library.

Washington: June 1929-July 1934. Monthly (irregular).

Comprises a subject index to journal articles arranged by subject. Each issue contains about 75 references mainly to American commercial aviation articles. Although the subject heading "history" is not included, the index contains references to articles with historical material.

781. Caidin, Martin, Why Space? And How it Serves You

in Your Daily Life. Foreword by Homer E. Newell.

New York: J. Messner, 1965. 208p.

Justifies the space program in terms of its impact, applications, and benefits to industry, medicine, communication, defense, and meteorology today and tomorrow.

782. Campbell, Henry C., "Some Implications for Libraries

of Communication Satellites," Unesco Bulletin

for Libraries, v.21 (May/June 1966), pp. 129-133, 139.

Paper prepared by the librarian of the Toronto Public Libraries for discussion at

the Meeting of Experts on the Use of Space Communication by the Mass Media, held at Unesco House, Paris, 6-10 December 1965. It deals with the effect of communication satellites in both developed and newly developed countries. Includes eight footnote references.

783. Castex, Louis J. M. N., L'Age de l'Air: 25 Ans d'Aviation Commerciale dans le Monde, 1920-1945.
 Préf. de Henri Farman. Paris: E. Chiron, 1945.
 155p.

Deals with the development of worldwide commercial aviation.

784. Castillon de Saint-Victor, Alexis, Le Transport Aérien: de la Machine Volante au Cargo Aérien, de l'Aviation Politique à l'Aviation Économique.
 Paris: Dunod, 1947. 235p.

Treatise on the development of commercial aviation from 1918 to 1947. Ch. II, pp. 19-79, includes "Tres Brev Histoire des Riseaux des Grandes Compagnies Aériennes du Monde."

785. Champion, Harold, Famous Air Routes of the World.
 Maps by Rosalind Bicknell. London: Muller,
 [distributed by Sportshelf, New Rochelle, N.Y.]
 1958. 143p. (Globe Books)

A fairly popular history of commercial aviation primarily in Great Britain and the United States from approximately 1920 to 1958.

786. Civil Aeronautics Administration, Press Digest.

Washington: The Administration, 1938-1942.

Daily.

Consists of brief abstracts of aeronautics items from the daily American (primarily Washington, D.C.) press.

787. Civil Aeronautics Administration, A Selected and Annotated Bibliography on the Social, Political and Economic Aspects of Aviation. Rev. ed.

Washington: U.S. Govt. Print. Off., 1950.

54p.

Lists 234 items of interest to high school and adult reading levels alphabetically by author. Subject index includes the category "history" which lists 44 works. Previous edition published in 1946.

788. Clerc, Georges, L'Aéropostale. Présentée par Madame Mermoz. Paris: Editions de Minuit,

1954. 191p. (Les Grandes Réussites Françaises, 3)

A history of air mail in France in the 1920s and 1930s. Discusses the development of the Compagnie Générale Aéropostale and the achievements of such pioneers as Jean Mermoz, Guillaumet, and Saint Exupéry. Bibliography, p. 192, lists 16 French book titles.

789. Cole, Dandridge M., Beyond Tomorrow: the Next 50 Years in Space, with Space Art Originated by Roy G. Scarfo. Amherst, Wis.: Amherst Press, 1965. 168p.

The author describes what he thinks the next fifty years will be. Most of the developments he sees as a result of the space program which will include colonies on other planets. A broad view of the impact of astronautics on civilization. Bibliography, p. 168, lists 11 references.

790. Congress, Senate, Committee on Aeronautical and Space Sciences, Educational Programs of NASA. Hearings . . . on Facilities, Training, and Research Grants Programs of the National Aeronautics and Space Administration, November 21 and 22, 1963. Washington: U.S. Govt. Print. Off., 1964. 152p. (88th Cong., 1st Sess.)

Consists of testimony given by seven witnesses on the NASA-initiated grant programs to universities to strengthen the entire American education system.

791. Cook, Hartley K., The Birth of Flight: an Anthology. London: G. Allen & Unwin, 1941. 204p.

Somewhat "off-beat" anthology of anecdotes on the history of flight from earliest times to approximately 1910.

792. De Leeuw, Hendrik, Conquest of the Air: the History and Future of Aviation. New York: Vantage Press, 1960. 300p.

History of flight from earliest times to the space age. Part four, "International Airlines," pp. 149-224, discusses the development of the great commercial airlines. Bibliography, pp. 295-296, lists approximately 40 references to books and journals.

793. Diamond, Edwin, The Rise and Fall of the Space Age. Garden City, N.Y.: Doubleday, 1964. 158p.

An editor of Newsweek magazine puts forth a trenchant thesis that space exploration quickly became a cold war operation and the moon an adjunct of East-West competition, an antidote to economic stagnation, and a new form of political pork barrel.

794. Etzioni, Amitai, The Moon-doggle: Domestic and International Implications of the Space Race. Garden City, N.Y.: Doubleday, 1964. 198p.

A professor of sociology at Columbia University contends that the so-called "space race" threatens the vitality of American science, undermines our security, and hinders the development of our economy, mainly because of a lack of long-range perspectives.

795. Federal Aviation Administration, Library Services Division, Aircraft Noise and Its Problems; Selected

References. Washington, The Administration,
1962. 20p. (Its Bibliographic List, no. 6)

A bibliography on one of the social problems created by aeronautics. Lists approximately 120 American and British journal article references on various aspects of the problem, including community problems, and the legal aspects. Published by the division under its earlier name: Library Branch.

796. Federal Aviation Administration, Library Services
Division, Economic Aspects of the Supersonic
Transport; Selected References. Washington,
The Administration, 1962. 7p. (Its Bibliographic
List, no. 5)

Consists of approximately 100 American and British journal article references to both private and public views on the subject. Published by the division under its earlier name: Library Branch.

797. Feur, Lewis S., The Scientific Intellectual: the
Psychological & Sociological Origins of Modern
Science. New York: Basic Books, 1963. 44lp.

Traces the evolution of the scientific intellectual as a human type and the conditions which have made for rationality in men. Includes "The Ethic of the Copernican Revolution," pp. 116-144, and "The Scientific Intellectual in the United States," pp. 319-392. Has chapter bibliographies.

798. Flying Tales from "Blackwood." With a Foreword

by Sir Dermot A. Boyle. Edinburgh: W. Blackwood,
1957. 268p.

A collection of 17 short stories dealing with man's conquest of the air, each one originally published in Blackwood's Magazine. Covers approximately the period 1907 to 1957.

799. Fortune, The Space Industry: America's Newest

Giant. By the Editors of Fortune. Englewood
Cliffs, N.J.: Prentice-Hall, 1962. 193p.

Consists of 11 essays by different writers on various aspects of the interrelationships between business and space exploration. Deals especially with the development of the aerospace industries.

800. Gartmann, Heinz, Flügel unseres Jahrhunderts: das

Abenteuer der Luftfahrt. München: P. Müller,
1955. 240p. (Die Welt von Heute, 6.Bd.)

History of aviation in the 20th century, with special emphasis on the development of commercial air transport.

801. Goldsmith, Maurice, and Alan MacKay, eds., Society

and Science. New York: Simon and Schuster,
1965. 236p.

A collection of 15 essays published in honor of the twenty-fifth anniversary of and to show the influence of J. D. Bernal's

work, The Social Function of Science. Includes essays by such scientists as C. P. Snow, P. M. S. Blackett, and Bernal. Many essays include bibliographical footnote references.

802. Goodwin, Harold L., The Images of Space. Coordinating Editor: James V. Bernardo. New York: Holt, Rinehart and Winston, 1965. 189p. (Holt Library of Science)

Deals with the values, objectives, and methods of the space program. The author, who was with NASA, discusses such subjects as the relationship between public opinion and the national space program, the reaction of the American public to Russian achievements in space, and the reaction of Europeans, as reflected in the European press, to American achievements. Bibliographical references included in "Notes and Comments," pp. 179-184.

803. Goodwin, Harold L., Space: Frontier Unlimited. Princeton, N.J.: Van Nostrand, 1962. 144p. (Van Nostrand Searchlight Books, 8)

The author, Director of Office of Program Development, NASA, examines such topics as the practical applications of space exploration, political, and military effects, and the impact on society. Bibliography, pp. 140-141, lists 12 references.

804. Great Britain, Ministry of Transport and Civil Aviation, Library, Civil Aviation Technical Press Summary. London: The Ministry, 1948 to

date. Semimonthly.

Title changed from MCA Library Introduces, Dec. 22, 1949; from Technical Press Summary, Oct. 15, 1953. An annotated index to journal articles in the field of civil aviation. Some issues contain entries under the heading "history." Some issues also contain Recent Additions on Civil Aviation which also lists items under "history."

805. Herzberg, Max J., Merrill P. Paine, and Austin M.

Works, eds., Happy Landings. Boston, New York: Houghton-Mifflin, 1943. 398p.

Includes 25 prose selections from 20th century literature on the experience of flying. Some authors included are W. H. Auden, Saint Exupéry, Anne Morrow Lindbergh, and Igor Sikorsky. Bibliography, pp. 390-397, lists approximately 80 references to flight in literature. Less complete edition (321p.) published in 1942.

806. Holton, Gerald, Science and Culture: a Study of Cohesive and Disjunctive Forces. Cambridge, Mass.: Houghton Mifflin, 1965. 348p. (The Daedalus Library, v.4)

Comprises 16 articles with brief bibliographies by various specialists. Most were previously published in the Winter 1965 issue of Daedalus and all explore the role of science in the contemporary world. The Integrity of Science, a report by the American Association for the Advancement of Science

Committee on Science in the Promotion of Human Welfare, pp. 291-332, raises questions about the space program and how it is affected by political and social situations.

807. Hunsaker, Jerome C., Aeronautics at the Mid-Century. New Haven: Yale University Press, 1952. 116p. (The Terry Lectures)

After discussing the technical innovation of flight, an aeronautical engineer indicates the increasing use and effect of aviation in trade, travel, culture, and politics. Includes many footnotes throughout the text.

808. Impact of Science on Society, v.1, Apr./June 1950 to date. Paris: United Nations Educational, Scientific and Cultural Organization. Quarterly.

Editions in Arabic, English, and French. Each issue contains a few articles by different experts on various aspects of science and its impact on society. Covers such topics as computers, space, science policy, automation, etc. Indexed in Chemical Abstracts and Public Affairs Information Service.

809. International Congress, "The Man and Technology in the Nuclear and Space Age," Milan, 1962. Rendiconti del Congresso internazionale "L'uomo e la tecnica nell'era nucleare e spaziale,

Milano, 18-21 aprile 1962. Proceedings of
the International Congress "The Man and
Technology in the Nuclear and Space Age,"
 Rome: 1963. 807p.

Organized on the occasion of the 2d International Exhibit of Space Exploration and of the 40th Milan Samples Fair by the Associazione internazionale uomo nello spazio, in collaboration with Associazione Scienze Astronautiche and others. Articles and summaries in German, English, French, Italian, or Spanish. Many articles include bibliographies. Although most of the papers are technical, some, such as the following, might be of interest to the historian: "Space Exploration in Japan, 1960-62," by H. Itokawa; "Possibilities for Life in the Universe," by J. Kleczek; "'European I' Space Sounding Vehicle," by G. A. Partel; and "Civil Applications of Space Flight in Europe," by G. K. C. Pardoe.

810. Josephson, Matthew, Empire of the Air: Juan Trippe
and the Struggle for World Airways. New York:
 Harcourt, Brace, 1944. 236p.

Somewhat popular account of the development of Pan American Airways and the story of its founder, Juan Terry Trippe. Good for an appraisal of post World War II aviation, the question of freedom of the skies, air power politics, and the case history of Juan Trippe. A portion of the material appeared as a series of five articles in the Saturday Evening Post, August 14 to September 21, 1943.

811. Kelly, Charles J., The Sky's the Limit, the History of the Airlines. New York: Coward-McCann, 1963. 317p.

History of the large commercial airlines in the United States. Includes jet transport. Emphasizes the political and economic aspect of the subject. "Bibliography," pp. 305-308, lists brief chapter bibliographies.

812. Levy, Lillian, ed., Space, Its Impact on Man and Society. New York: Norton, 1965. 228p.

Contains the following 22 contributions on the social impact of space exploration: "The Politics of the Space Age," by Lyndon B. Johnson; "Education for Space," by James E. Webb; "Labor in the Age of Space," by Joseph A. Beirne; "Space- the Government and the Economy," by Stanley H. Ruttenberg; "The Aerospace Industry: Response and Responsibility to Our National Goals," by Martin Goland; "Space and Disarmament," by William C. Foster; "Does the Military Have a Role in Space?", by General Bernard A. Schriever; "The Law in Outer Space," by Nicholas deB. Katzenbach; "Atomic Power: The Key to Supremacy in Space," by Glenn T. Seaborg; "Career Opportunities in the Space Age," by R. W. Retterer; "Choosing Careers for the Space Age," by John H. Glenn, Jr.; "The Domestic Side of Space: A Challenge to Women," by Lillian Levy; "From Outer Space--Advances for Medicine on Earth," by Hubertus Strughold; "A Look at the Weather from Outer Space," by S. Fred Singer; "International Satellite Communications," by Thompson H. Mitchell; "Space Age Communications: A Better View to Understanding," by James C. Hagerty; "Space and Language," by Richard B. France;

"The Moral Dilemma of the Space Age," by Abraham J. Heschel; "The Higher Promise of Space Exploration," by Francis J. Heyden; "Religious Responsibility in the Space Age," by James A. Pike; "Conflict in the Race for Space," by Lillian Levy; and "The Unlimited Future," by John Paul Stapp.

813. McCurdy, Howard, List of Doctoral Theses Since 1961 on the Management of Aerospace Activities.

Washington: National Aeronautics and Space Administration, [1967], 6p. (HHN-67)

Lists 40 relevant American theses abstracted in Dissertation Abstracts from January 1961 to August 1966. This list supplements NASA Headquarters Historical Note 61 (HHN-61), List of Academic Theses Since 1961 Related to the History of Aeronautics and Astronautics, by Charles M. Atkins.

814. Mallan, Lloyd, Secrets of Space Flight. Greenwich, Conn.: Fawcett Publications, 1956. 144p.

Consists of several articles on various aspects of space flight written in a slick, popular manner but "Development of the Space Suit," pp. 40-55, does contain some historical information.

815. Mansfield, Harold, Vision, the Story of Boeing: a Saga of the Sky and the New Horizons of Space.
New York: Duell, Sloan and Pearce, 1966. 383p.

Popular, general history of the Boeing Aircraft Company, Seattle, from 1916-1966,

by the firm's director of advertising and public relations. Earlier printing appeared in 1956 (389p.) with title: Vision: a Saga of the Sky.

816. Mazlish, Bruce, ed., The Railroad and the Space Program; an Exploration in Historical Analogy. Cambridge, Mass.; London: M.I.T. Press, 1965. 223p. (Technology, Space and Society; Series Prepared by the American Academy of Arts and Sciences)

An attempt to anticipate, by historical analogy, the possible long-range consequences of the space program for American society. A series of eight essays by academic historians in which the political, economic, social, technological, and imaginative effects of the space effort are anticipated or compared with the American experience with railroads in the nineteenth century. Profuse footnote references.

817. National Aeronautics and Space Administration, Conference on Space, Science, and Urban Life, Oakland, Calif., 1963. Proceedings. Washington: NASA, 1964. 254p. (NASA SP-37) (For sale by U.S. Govt. Print. Off.)

Proceedings of a conference held at Oakland, Calif., in March 1963, on the applicability of the national space program, and the knowledge resulting from aerospace research, to the problems of urban growth.

818. National Aeronautics and Space Administration,
Conference on Space-Age Planning, Chicago,
1963. Proceedings. Washington: NASA, 1963.
301p. (NASA SP-40) (For sale by U.S. Govt.
Print. Off.)

Proceedings of the general sessions of the Third National Conference on the Peaceful Uses of Space, held in Chicago, May 1963. Participants included representatives of NASA, industry, and universities. Twenty-nine papers are presented under these broad headings: National Space Program, University-Industry Partnership in Space Projects, How Space Activities Are Changing the Economy, Consumer Goods Opportunities From Space Research, Placement and Management of Research and Development Projects, and Opportunities and Challenges in Space Procurement. Published August 1963.

819. National Aeronautics and Space Administration,
Transforming and Using Space--Research Knowledge,
Ten Diversified Views. Washington: NASA, 1964.
110p. (NASA SP-5018) (For sale by U.S. Govt.
Print. Off.)

Ten papers selected from a symposium and workshop sponsored by NASA and the University of California, Los Angeles, June 2, 1964, to acquaint engineers, executives, and marketers in nonaerospace industries with new approaches, knowledge, and technology generated by Government-sponsored aerospace research.

820. Moore, Byron, The First Five Million Miles.

New York: Harper, 1955. 276p.

The author's experience during 30 years (1925-1955) as a pilot. Virtually a history of the beginning and development of commercial aviation in the United States. Covers airlines, pilots, safety, weather, communications, hostesses, ticketing and finance.

821. Mumford, Lewis, The Transformation of Man. New

York: Harper, 1956.

Pp. 174-176 include some critical comments on the significance of the space age in the total span of man's history by a noted authority.

822. The Mystery of Other Worlds Revealed. Greenwich,

Conn.: Fawcett Publications, 1952. 144p.

Comprises several articles on rockets and space flight. Includes "Space Travel in History, Fiction, and Film," pp. 94-107, by Lloyd Mallan.

823. NASA-Industry Program Plans Conference, Washington,

D.C., Proceedings. 1st and 2nd, 1960-1963.

Washington: National Aeronautics and Space Administration, 1960-1963. 2v. (For sale by U.S. Govt. Print. Off.)

Consists of the papers presented at two conferences held to provide industrial

management with an overall picture of the NASA space program. The 1960 conference consists of 22 papers while the 1963 conference consists of 34 papers on the scientific and technical contents of various phases of the NASA program. Issues for 1963 published as NASA SP-29.

824. National Aeronautics and Space Administration,
Conference on New Technology, Lewis Research
Center, 1964. Proceedings. Washington: NASA,
 1964. 156p. (NASA SP-5015) (For sale by U.S.
 Govt. Print. Off.)

Proceedings of a conference on technology utilization held at Lewis Research Center, June 4-5, 1964, to discuss ways of transferring applicable space-research knowledge to the industrial community.

825. National Conference on the Peaceful Uses of Space,
Proceedings. 1st, 1961. Washington: U.S.
 Govt. Print. Off., 1961 to date. (NASA SPs)

Proceedings of the first conference held at Tulsa, May 26-27, 1961, and published July 1961, describe the NASA program and its potential applications. Proceedings of the second conference, (NASA SP-8) held May 1962 were published December 1962. Proceedings of the third conference (NASA SP-40) Conference on Space Age Planning (which see), held in May 1963, were published August 1963. Proceedings of the fourth (NASA SP-51) conference held in Boston, April 29-May 1, 1964, were published in

October 1964 and include papers on such topics as "Space and The Nation," "Congress and Science," "Living in Space," and "Working in Space."

826. Ogburn, William F., The Social Effects of Aviation.

Boston: Houghton Mifflin, 1946. 755p.

This work is an attempt to anticipate the future social effects of transportation invention. It discusses the effort of aviation on such topics as the family, cities, religion, government, and international relations. Bibliography, pp. 725-737, lists books, pamphlets, and journal articles.

827. Pardoe, Geoffrey K., The Challenge of Space. London:

Chatto & Windus, 1964. 145p.

Primarily descriptive but section entitled, "The Justification of Space Flight," pp. 8-18, examines such topics as the uses of space, political implications of space flight, the influence of space flight on technology, etc. Section entitled "Space Project Organisations," pp. 108-131, discusses the organization for space research in the U.S., U.S.S.R., Europe, and other countries.

828. RAND Corporation, Astronautics and its Applications.

Santa Monica, Calif.: RAND, 1958. 442p.

(Its Report RM2289)

Prepared at the request of the Select Committee on Astronautics and Space Exploration, House of Representatives, Eighty-fifth Congress. Contents include such topics as: Space

environment, Cost factors and ground facilities, Current programs, Astronautics in the U.S.S.R., and Astronautics in other countries. Includes bibliography, pp. 405-442, which lists references according to chapter arrangement.

829. Renstrom, Arthur G., Comp., Air Cargo, [New York: Institute of the Aeronautical Sciences] 1943.
6p.

Reprinted from Aeronautical Engineering Review, v.2 (October, 1943). Covers the period 1940-1943 and covers American journal article references to the use of planes for cargo transport. Includes approximately 540 references.

830. Renstrom, Arthur G., Postwar Aviation . . . A Selective Bibliography on Peacetime Plans and Problems. New York: Institute of the Aeronautical Sciences, 1944. 19p.

Approximately 1,700 references to journal and newspaper articles, reports, conferences, and congressional hearings on worldwide aviation, mainly covering the period 1940-1944 and arranged by broad subject category. Reprinted from Aeronautical Engineering Review, December 1943, pp. 47-65, 191, and January 1944, pp. 21-41.

831. Ruzic, Neil P., The Case for Going to the Moon.
Foreword by Arthur C. Clarke. New York:

Putnam, 1965. 240p.

Deals with the economic feasibility of going to the moon and the practical value that mining, manufacturing, etc., would have for humans. Originally appeared as a series of monthly installments in Industrial Research.

832. Sharp, C. Martin, D. H.: an Outline of de Havilland History. London: Faber and Faber, 1960. 419p.

A history of the De Havilland Aircraft Company, Ltd., of Great Britain from approximately 1908 to 1958.

833. Smith, Stephen H., Rocket Mail Catalogue and Historical Survey of First Experiments in Rocketry. 2d Rev. ed. Corrections and Additions by Max Kronstein and J. Dellenbag. Jamaica, N.Y.: F. Billig, 1955. 68p. (Billig's Specialized Catalogues, v.8)

In effect a history of efforts to carry mail by rocket. Country by country listing of postage stamps and covers issued with a descriptive note for each. Covers primarily the period of the 1930s. In some instances contemporary newspaper sources are quoted. First edition published (Allahabad: Imperial Stamp Co.) in 1943.

834. Still, Henry, Will the Human Race Survive? New York: Hawthorn Books, 1966. 272p.

Pt. III: "Space," pp. 171-251, examines the possibilities of space travel as solutions

to such problems as overcrowding and overpopulation on earth. Bibliography, p. 260, lists 13 book titles in English.

835. "Symposium on Space; Has Man's Conquest of Space Increased or Diminished His Stature?" in Great Ideas Today, 1963. Chicago: Encyclopedia Britannica, 1963. pp. 1-82.

A scientist and four nonscientists--Herbert J. Muller (historian), Aldous Huxley (novelist), Hannah Arendt (political philosopher), Paul Tillich (theologian), and Harrison Brown (physical scientist)--express their views concerning the efforts of space exploration on the stature of man.

836. Taubenfield, Howard J., Space and Society: Studies for the Seminar on Problems of Outer Space, Sponsored by the Carnegie Endowment for International Peace. Dobbs Ferry, N.Y.: Oceana Publications, 1964. 172p.

Contents include "Values and Goals of Space Exploration," by Leonard Silk, and "The Status of Competing Claims to Use Outer Space: an American Point of View," by Howard J. Taubenfeld. Includes bibliographical footnotes.

837. U.S. Air Force Academy, Library, Outer Space. [Colorado Springs, Colo.]: The Academy, 1963.

18p. (Its Special Bibliography Series,
no. 28)

Prepared by members of the library staff in conjunction with the Department of Political Science for use by participants at the Sixth Air Force Academy Assembly held April 1-4, 1964. Lists approximately 130 titles from the Academy library on the economic, social, and military implications of space exploration.

838. Walton, Clarence C., ed., The Business of Space:

a Symposium Conducted at the Graduate School
of Business, Columbia University. Participants:

Robert Jastrow, C. M. Blair, and Robert L. Barre.

Introd. by William E. Petersen. New York:

Columbia Graduate School of Business, 1963.

30p. (Columbia Business School Series, no. 3)

Comprises three lectures, "NASA and the American Future," pp. 3-10, by Robert Jastrow; "Space Communications and the Contribution of Telstar," pp. 11-18, by C. M. Blair; and "Social and Economic Implications of the Space Program," pp. 19-30, by Robert L. Barre.

839. Ward, John W., "The Meaning of Lindbergh's Flight,"

in Studies in American Culture; Dominant Ideas
and Images, edited by Joseph J. Kwiatt and Mary C.

Turpie. Minneapolis: University of Minnesota Press, 1960. pp. 27-40.

Discusses the symbolic and cultural significance of Lindbergh's flight. With ample quotations from contemporary newspaper accounts, the author puts forth the idea that in Lindbergh's flight, America celebrated both the sufficiency of the individual and the machine (which increasingly enforces collectivized behavior). The author raises the question of whether it is possible to have both the freedom of the individual and the power of an organized society.

840. Wells, Helen T., comp., The Publications of Dr. Hugh L. Dryden. Rev. ed. Washington: NASA, 1966. 16p. (HHN-59)

A chronological list of 200 publications of the first NASA Deputy Administrator from his Johns Hopkins Ph.D. thesis in 1919 to a paper published in November 1965, from basic contributions to physics to the social implications of science, engineering, and public policy. Especially includes public addresses during the NASA time period, 1958-1965. A comment edition was published in March 1966.

841. Weston, John F., Defense-Space Market Research. Cambridge, Mass.: M.I.T. Press, 1964. 186p.

A survey of the defense-space industry and the environment in which it operates by 17 experienced contributors. "Selected References," pp. 176-183, lists approximately 80 references to titles published in the U.S.

842. "Wings and Rockets, a Report on Aerospace,"

New York Times, Nov. 20, 1966, section 12,

pp. 1A-20A.

Published to coincide with the meeting the following week in Boston of the American Institute of Aeronautics and Astronautics. This special report contains information on the aerospace industries and various aspects of the economic impact of space exploration. Also included is an article on Robert H. Goddard entitled, "The Father of Modern Rocketry," p. 6A, by Milton Lehman.

843. Woolf, Harry, ed., Science as a Cultural Force.

Baltimore: Johns Hopkins Press, 1964. 110p.

Contents include the following five essays on various aspects of science and civilization: "Science in Society," by Harry Woolf; "Toward a Research-Reliant Society: Some Observations on Government and Science," by James R. Killian, Jr.; "Technology and Society," by Jerome B. Wiesner; "Science and Man's Place in the Universe," by Michael Polanyi; and "Presupposition in the Construction of Theories," by Gerald Holton. Includes bibliographical footnotes.

HISTORY OF RELATED INSTITUTIONS

United States

844. Akens, David S., Historical Origins of the George C. Marshall Space Flight Center.

Huntsville, Ala.: George C. Marshall Space Flight Center, 1960. lv. (various paging)
(MSFC Historical Monograph, no. 1)

Deals with the history of the Center and the various antecedents of the Center from 1930 to 1960. Includes bibliographical footnote references.

845. Ambrose, Mary Stone, "The National Space Program, Phase I: Passage of the 'National Aeronautics and Space Act of 1958.'" Washington: The American University, unpublished Master's Thesis, 1960. 176p.

Background and legislative history of the Space Act, with information on Dr. Robert H. Goddard, German and U.S. space societies, the International Geophysical Year, and Sputnik. A copy of the Act appears as Appendix I. Selected bibliography, pp. 164-171.

846. Ambrose, Mary Stone, The National Space Program, Phase II: Implementation of the National Aeronautics and Space Act of 1958. Washington:

NASA, 1961. 303p.

A study of NASA's first two years of operations with emphasis on the programming and budgeting aspects. Selected bibliography, pp. 293-300.

847. Briddon, Arnold E., and Ellmore A. Champie, Federal Aviation Agency Historical Fact Book: A Chronology, 1926-1963. Washington: The Agency, 1966. 130p. (For sale by U.S. Govt. Print. Off.)

A chronology of outstanding aeronautical events from 1926-1963, with emphasis on FAA. Appendixes include organizational, budget, and Federal aid information for the Agency and its predecessors. Indexed. Bibliography of U.S. Government and other publications, pp. 107-109.

848. Burkhardt, Robert, The Federal Aviation Administration. New York: Frederick A. Praeger, 1967. 249p.

Part of a series published by Praeger on U.S. Government departments. Surveys the history of the FAA and its predecessors, including the development of aeronautics and its administration from the Federal level, problems, and current programs. Short bibliography, pp. 245-246.

849. Cochrane, Rexmond C., Measures for Progress: A History of the National Bureau of Standards. Washington: Department of Commerce, 1966. 703p.

A history of the first 50 years of the National Bureau of Standards, bringing the

story up to 1951. Treats in chronological fashion the prehistory, the founding, the early years, and the gradual development of NBS. The 14 appendixes summarize such subjects as legislation, appropriations, personnel, publications, land purchases, and buildings. There is a Bibliographic Note, pp. 673-681.

850. Congress, House, Committee on Foreign Affairs,
Relative to the Establishment of Plans for the
Peaceful Exploration of Outer Space. Hearing
 before the Subcommittee on National Security
 and Scientific Developments Affecting Foreign
 Policy . . . on H. Con. Res. 326 . . . May 20,
 1958. Washington: U.S. Govt. Print. Off.,
 1958. 34p. (85th Cong., 2d Sess.)

Consists largely of testimony given by Loftus Becker, Dept. of State; Robert Dechert, DOD; Kenneth Keating, Senator in Congress; and John McCormack, Representative in Congress, on events leading up to the preparation of a bill for a national space program.

851. Congress, House, Committee on Science and Astronautics,
Future National Space Objectives; Staff Study
for the Committee on NASA Oversight. Washington:
 U.S. Govt. Print. Off., 1966. 439p. (89th
 Cong., 2d Sess.)

Committee print. A study of the information derived from responses to the question, "Where

should our National space program be going in the 1970's?" The Subcommittee on NASA Oversight queried NASA management, NASA Center Directors, aerospace industrial management, and the Department of Defense. "A Selected Bibliography of Future Space Program Planning," pp. 435-439, lists thirty-three references.

852. Congress, House, Committee on Science and Astronautics,
The NASA-DOD Relationship; Report of the Subcommittee
on NASA Oversight of the Committee on Science and
Astronautics. Washington: U.S. Govt. Print.
Off., 1964. 97p. (88th Cong., 2d Sess.)

A Committee print which explores the various aspects of organizing and managing a national space program, including the need for clear-cut national objectives and the interrelationships between NASA and DOD.

854. Congress, House, Committee on Science and Astronautics,
Posture of the National Space Program; Report.
Washington: U.S. Govt. Print. Off., 1963.
68p. (87th Cong., 1st Sess.)

A Committee print based on Committee hearings, February and March 1963. A review of the progress of the national space program in achieving its objectives over the previous year.

855. Congress, House, Committee on Science and Astronautics,
Review of the Space Program, Hearings [Jan. 20-
Mar. 7, 1960]. Washington: U.S. Govt. Print.

Off., 1960. 3pts. (964p.) (86th Cong.,
2d Sess.).

Pt. I includes the testimony of 20 U.S. space experts, Pt. II, 22, and Pt. III, six. Discussion centers around the adequacy of the U.S. space program and includes testimony from some of the major contractors in industry.

856. Congress, House, Committee on Science and Astronautics,
Space Posture, Hearings [Feb. 25-Mar. 1, 1963].

Washington: U.S. Govt. Print. Off., 1963.

238p. (88th Cong., 1st Sess.)

Includes testimony of ten top U.S. space experts in review of the status of NASA's space effort in anticipation of consideration by Congress of NASA's budget request for fiscal year 1964.

857. Congress, House, Committee on Science and Astronautics,
Status of Missile and Space Programs; Report.

Washington: U.S. Govt. Print. Off., 1959.

10p. (86th Cong., 1st Sess.)

A Committee print which includes testimony from NASA, Army, Navy, and Air Force witnesses on the status of the U.S. program.

858. Congress, House, Committee on Science and Astronautics,
To Amend the National Aeronautics and Space Acts

of 1958. Hearings [Mar. 8-Apr. 4, 1960]. . . .

on H. R. 9675 . . .

Washington: U.S. Govt. Print. Off., 1960.

579p. (86th Cong., 2d Sess.)

Includes testimony of 24 top U.S. military and civilian space experts pertinent to the first major reviews of the Space Act of 1958. Much of it deals with astronautics patents.

859. Congress, House, Committee on Science and Astronautics, Ways and Means of Effecting Economies in the National Space Program. Hearings [July 24-Aug. 16, 1962] Washington: U.S. Govt. Print. Off., 1962. 193p.

Includes testimony from 12 experts in the space field--both contractors and NASA representatives. Deals with appropriations and expenditures and public contracts.

860. Congress, House, Committee on Science and Astronautics, Ways and Means of Effecting Economies in the National Space Program; Report. Washington: U.S. Govt. Print. Off., 1963. 19p. (87th Cong., 2d Sess.)

A Committee print which considers cost-savings possibilities in the national space program and the enormous implications the budgets for space projects will have for the national economy.

861. Congress, House, Select Committee on Astronautics and Space Exploration, The Next Ten Years in

Space, 1959-1969; Staff Report. Washington:

U.S. Govt. Print. Off., 1959. 22lp.

Consists of testimony given to Congress by 55 leading European and American authorities on space.

862. Congress, House, Select Committee on Astronautics and Space Exploration, The United States and Outer Space; Report. Washington: U.S. Govt. Print. Off., 1959. 4lp. (85th Cong., 2d Sess. House Report, no. 2710)

Summarizes the accomplishments of the Committee and makes recommendations with respect to the national space program. "Chronology," pp. 17-41, lists major events of the year related to outer space.

863. Congress, Senate, Committee on Aeronautical and Space Sciences, Investigation of Governmental Organization for Space Activities. Hearings [March 24-May 7, 1959] before the Subcommittee on Governmental Organization for Space Activities of the Committee on Aeronautical and Space Sciences. Washington: U.S. Govt. Print. Off., 1959. 762p. (86th Cong., 1st Sess.)

Includes testimony of 13 U.S. space experts on the organization, responsibilities,

activities of Government agencies involved in space with a view to eliminating possible waste.

864. Congress, Senate, Committee on Aeronautical and Space Sciences, NASA Authorization for Fiscal Year 1962. Hearings . . . on H.R. 6874, an Act to Authorize Appropriations to the National Aeronautics and Space Administration for Salaries and Expenses, Research and Development, Construction of Facilities, and for other Purposes, June 7, 8, and 12, 1961. Washington: U.S. Govt. Print. Off., 1961. 282p. (87th Cong., 1st Sess.)

Includes testimony of 12 witnesses, mainly from NASA, as well as 53 charts, pp. 34-121, of NASA programs and projects.

865. Congress, Senate, Committee on Aeronautical and Space Sciences, NASA Scientific and Technical Programs. Hearings . . . on the Scientific and Technical Programs of the National Aeronautics and Space Administration, February 28 and March 1, 1961. Washington: U.S. Govt. Print. Off., 1961. 521p. (87th Cong., 1st Sess.)

Consists of testimony of 29 expert witnesses from NASA on the various programs

currently being conducted by NASA. Serves as briefings and reviews for the Senate Committee prior to the Committee's examination of NASA's budget request.

866. Congress, Senate, Committee on Aeronautical and Space Sciences, Scientists' Testimony on Space Goals. Hearings on Testimony of Scientists on Goals of the Nation's Space Program. June 10 and 11, 1963. Washington: U.S. Govt. Print. Off., 1963. 260p. (88th Cong., 1st Sess.)

Consists of statements made by the following scientists: Dr. Philip Abelson, Dr. Lloyd V. Berkner, Dr. Lee A. DuBridge, Dr. H. H. Hess, Dr. Polykarp Kusch, Dr. Joshua Lederberg, Dr. Colin Pittendrigh, Dr. Simon Ramo, Dr. Martin Schwarzschild, Dr. Frederick Seitz, Dr. Harold Urey, and Dr. Warren Weaver.

867. Cox, Donald W., The Space Race: from Sputnik to Apollo, and Beyond. Foreword by the Hon. J. W. Fulbright, Chairman of the U.S. Senate Committee on Foreign Relations. Philadelphia: Chilton Books, 1962. 393p.

A political history of the first five years of the space age, 1957-1961, and an examination of the activities in the White House, The Pentagon, and NASA, which made it possible for the U.S.S.R. to lead in the space race.

868. Crum, William L., Lunar Lunacy and Other Commentaries.

Philadelphia: Dorrance, 1965. 284p.

A discussion of the U.S. space program in terms of its cost and impact on the national economy. It is the author's view that the benefits from space exploration do not equal the cost and that the need for restricting space exploration should be appraised.

869. Denis, Richards, and Hilary St. George Saunders,

Royal Air Force, 1939-1945. London: H.M.

Stationery Office, 1953-1954. 3v.

A history of the Royal Air Force operations and the policy governing them, which was "officially commissioned, and is based throughout on official documents, to which full access was given by the Air Ministry." Contains numerous diagrams, maps, and plates and 13 tabular appendices.

870. Griffith, Alison, The National Aeronautics and Space

Act: A Study of the Development of Public Policy.

Introduction by Vice President Lyndon B.

Johnson. Washington: Public Affairs Press, 1962.

119p.

Principal chapters are entitled "The Inquiry," "Work of the Staff," "Problems and Issues," "The House Bill," "The Senate Bill," and "The Conference [Bill]". Includes chronology, pp. 8-16, and references and bibliography, pp. 103-115.

871. Hartman, Edwin P., Adventures in Research: A History of the Ames Research Center of the National Aeronautics and Space Administration, 1940-1965. Moffett Field, California: Ames Research Center, Comment Draft, 1968, to be published as NASA SP-4302 in 1969. 775p.

A three-part, 25-year history of the Center, plus an account of background events from the formation of the National Aeronautical Advisory Committee in 1915 and the founding of its Ames Aeronautical Laboratory in 1940. List of references, 728-747.

872. Hirsch, Lester M., ed., Man and Space. New York: Pitman, 1966. 202p.

An anthology comprised of approximately 30 essays, mainly by space exploration leaders on how they themselves feel about what is right and what is wrong with the current American space program. Each section includes a list of themes and research topics. Bibliography, pp. 200-202, lists about 75 books.

873. Keller, David M., A History of the NACA Langley Laboratory, 1917-1947. Washington: NASA, Comment Draft, 1968. 348p.

A 30-year history of the forerunner of the Langley Research Laboratory, as a case study of government sponsorship of scientific research. Focuses on the story of the men who conducted the bulk of the fundamental aerodynamic research in the United States for more than two decades; also

describes research activities. List of references, pp. 323-348, cites bibliographical guides, NACA documents and technical reports and other government documents, memoirs, secondary sources, periodicals, and interviews.

874. Keller, David M., Fifty Years of Flight Research. A Chronology of the Langley Research Center, 1917-1966.
 Comment Edition. Washington: National Aeronautics and Space Administration, 1966.
 112p. (HHN-65)

Consists of five very well documented chapters covering events prior to the establishment of Langley (1901-1916), to the early years, and to Langley as a NASA research center. Appendices pp. 95-100, include the text of the law establishing Langley and lists of chairmen and members of NACA. "List of References," pp. 101-103, lists 27 references to books, dissertations, and NASA Historical Office archival material.

875. Kennedy, John F., Space Center, Library, A Selective Bibliography, 1949-1965. Cape Kennedy, Fla.: The Center, 1966. 24p.

This chronological bibliography of approximately 100 annotated references to journal and newspaper articles shows the development of the Kennedy Center and the Air Force Missile Test Center.

876. Library of Congress, Legislative Reference, Science Policy Research Division, The Office of Science and

Technology, Report prepared for the Military Operations Subcommittee of the Committee on Government Operations, United States House of Representatives. Washington: U.S. Govt. Print. Off., 1967. 326p. (90th Cong., 1st Sess.)

A Committee print, Chapter III of which includes a section entitled "National Aeronautics and Space Council", pp. 58-59, which discusses the relationships between the Council and the Office of Science and Technology. Further discussion included in Chapter V, "Example 16. Space", pp. 129-134. Has profuse footnote references.

877. Library of Congress, Science and Technology Division,

List of Selected References on NASA Programs.

Prepared for the National Aeronautics and Space Administration. Washington: NASA, 1962. 236p.
(NASA SP-3)

Contains a list of selected publications, speeches, and releases of NASA and congressional documents relating to NASA activities from October 1958 through 1961.

878. National Aeronautics and Space Administration,

Historical Sketch of NASA. Washington: NASA, 1965.

56p. (NASA EP-29) (For sale by U.S. Govt. Print. Off.)

879. National Aeronautics and Space Administration, Major Activities in the Programs of the National Aeronautics and Space Administration, October 1, 1958--[to date]. Washington: U.S. Govt. Print. Off., 1960. 180p. Official NASA semi-annual report to the Congress.

Comprises a summary of current NASA programs; a detailed discussion of progress in NASA projects; and appendixes which include memberships of congressional and NASA committees, lists of research grants and contracts, and the NASA financial statement for the period.

880. National Aeronautics and Space Administration, NASA-University Conference on the Science and Technology of Space Exploration, Chicago, 1962. Proceedings. Washington: NASA, 1962. 2v.
(NASA SP-11) (For sale by U.S. Govt. Print. Off.)

State-of-the-art papers on NASA programs presented to the scientific and technical community at a conference held in Chicago, November 1-3, 1962. Some papers include bibliographies. In addition NASA has published under separate cover 16 subject groups of these conference papers (NASA SP-13 - NASA SP-28) as follows: SP-13, Geophysics and Astronomy in Space Exploration; SP-14, Lunar and Planetary Sciences in Space Exploration; SP-15, Celestial Mechanics and Space Flight Analysis; SP-16, Data Acquisition from Spacecraft; SP-17, Control, Guidance, and Navigation of Spacecraft; SP-18, Bioastronautics; SP-19, Chemical Rocket Propulsion; SP-20, Nuclear

Rocket Propulsion; SP-21, Power for Spacecraft; SP-22, Electric Propulsion for Spacecraft; SP-23, Aerodynamics of Space Vehicles; SP-24, Gas Dynamics in Space Exploration; SP-25, Plasma Physics and Magnetohydrodynamics in Space Exploration; SP-26, Laboratory Techniques in Space Environment Research; SP-27, Materials for Space Operations; SP-28, Structures for Space Operations. An abridged edition of the proceedings was also published (NASA EP-5, 1963, 91p.) with the title NASA and the Universities, Principal Addresses at the General Sessions.

881. National Aeronautics and Space Administration, Report to the Space Science Board on Space Science and Applications Programs. Washington: NASA, 1966. 215p.

Presents past accomplishments for the period 1958-1966 and planned flights and investigations of the NASA program. Includes major satellite and space probe launchings as well as future programs in physics, astronomy, biological satellites, manned space science, and the university program. Also includes information on costs.

882. Nieburg, H. L., "The JPL Story," Bulletin of the Atomic Scientists, V.22, (October 1966), pp. 35-38.

Discusses recent history of the Jet Propulsion Laboratory at the California Institute of Technology and its relationship with NASA.

883. Popkin, Roy, The Environmental Science Services Administration, Including: The Coast and Geodetic Survey, The Weather Bureau, The Institute for Telecommunications Sciences and Aeronomy, and Other Related Services.

One of a series of Praeger Library books on U. S. Government departments and agencies, written to give the general reader an understanding of the development, scope, and operation of the executive branch of the U. S. Government. Provides a history of each of the agencies named; a description of their reorganization under ESSA; and discussion of their roles in serving aviation, participating in the nation's war efforts, warning against environmental hazards, and cooperating with other nations and international agencies in the study of the physical environment.

884. Rosenthal, Alfred, Venture Into Space: The Early Years of Goddard Space Flight Center. Washington: NASA, 1968. 273p. (NASA SP-4301) (For sale by U. S. Govt. Print. Off.)

Deals with the Center from its earliest beginnings to 1964. Part I is entitled "Historical Origins of the Goddard Space Flight Center," Part II, "Goddard Space Flight Center Goes to Work." Several Appendices on the Center's historical documents, a chronology, pp. 203-254, and bibliography of publications by and about the Center, pp. 333-339. The bibliography includes selected NASA releases, speeches, technical reports, translations, and congressional documents.

885. Rosholt, Robert L., An Administrative History of NASA, 1958-1963. Washington: NASA, 1966.
381p. (NASA SP-4101) (For sale by U. S. Govt. Print. Off.)

The first of a series of NASA histories sponsored by the NASA Historical Staff. Includes "Classified Bibliography of Sources Cited in this Study," pp. 355-370. Sources cited include, in addition to books, journal and newspaper articles, public laws, congressional documents and publications (including those of the House Committee on Science and Astronautics and the Senate Committee on Aeronautical and Space Sciences), NASA publications and news releases, internal NASA documents and speeches.

886. Smull, Thomas L., The Nature and Scope of the NASA University Program. Washington: NASA, 1965. 39p. (NASA SP-73) (For sale by U. S. Govt. Print. Off.)

Description and discussion of university research and training programs sponsored by NASA. Background and philosophy are given. Includes bibliography, p. 39.

887. Space Science Summer Study, University of Iowa, 1962,
A Review of Space Research; the Report of the Summer Study Conducted under the Auspices of the Space Science Board of the National Academy of Sciences. Washington: National Academy of

Sciences-National Research Council, 1962. Various paging. (National Research Council. Publication 1079)

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Describes Soviet space exploration, 1957-1961.

891. Burchett, Wilfred G., and Anthony Purdy, Cosmonaut Yuri Gagarin, First Man in Space. London: A. Gibbs & Phillips, 1961. 187p.

Includes, in addition to material on Gagarin's life and historic flight, an evaluation of the Soviet space program, its history and problems. Also includes an interview by the authors with Yevgeny Ferdorov, Secretary of the U.S.S.R. Academy of Sciences, and one of the leaders of the Soviet space program.

892. Burchett, Wilfred G., and Anthony Purdy, Gherman Titov's Flight into Space. London: Hamilton, 1962. 156p. (A Pantheon Book)

Essentially a biography of Cosmonaut Titov. Also includes an interview with Vasillii Parin, head of the Soviet Union's space medical team.

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Crowell-Collier, 1963. 280p.

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894. Commonwealth Spaceflight Symposium, 1st, London,
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York: Academic Press, 1960. 365p.

Contents include: "Britain's Place in Interplanetary Exploration," by J. E. Allen; "The Economics of Spaceflight," by D. W. Morley; "Commonwealth University Participation," by T. R. F. Nonweiler; "Canadian Facilities," by P. A. Lapp and A. E. Maine; and "General Review of a British Spaceflight Programme Based on Blue Streak," by G. K. C. Pardoe. Includes bibliographies at the end of each article.

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Hugh L. Dryden, Deputy Administrator, NASA;
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896. Congress, House, Committee on Science and Astronautics,
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Washington: U. S. Govt. Print. Off., 1967.
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experts on the state of the art in the Soviet
Union.

898. Congress, Senate, Committee on Aeronautical and
Space Sciences, Soviet Space Program, 1962-65;
Goals and Purposes, Achievements, Plans, and

International Implications. Staff Report.

Washington: U. S. Govt. Print. Off., 1966.

920p. (89th Cong., 2d Sess.)

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899. USSR: Missiles, Rockets, and Space Efforts; a

Bibliographic Record, 1956-1960. Washington:

The Department, 1960. 49p. (Its Pamphlet 70-5-8.)

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901. Ducrocq, Albert, Le Fabuleux Pari sur la Lune,
12 Septembre 1959, Paris: R. Laffont, 1961. 234p.
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902. Krieger, Firmin J., Behind the Sputniks: A Survey of Soviet Space Science. Washington: Public Affairs Press, 1958. 380p.

Comprises articles and papers, supplemented by new materials, which originally appeared as RAND Research Memoranda RM 1760 and RM 1922 which formed Pt. I and II of a series entitled "A Casebook on Soviet Astronautics," dated June 21, 1956, and June 21, 1957, respectively. Includes "Bibliography of Soviet Books, Monographs, and Periodicals on Space," in two parts, pp. 339-376, arranged alphabetically by author and covering period 1928-1957. Pt. I lists books and monographs dealing with historical, scientific, and technical aspects of rocketry and astronautics. Pt. II contains references drawn from various Russian newspapers, popular magazines, and serious technical journals.

903. Krieger, Firmin J., Recent Soviet Advances in Aerospace Technology. Santa Monica, Calif.: RAND Corp., 1962. 25p. (RAND Memorandum RM 3053-PR)

A description of the recent developments of the Soviet aerospace program. Covers various programs aimed at manned interplanetary travel. This paper was presented as part of the National Tracking and Command of Aerospace Vehicles Symposium held by the Institute of the Aerospace Sciences in San Francisco, February 19-21, 1961. Includes bibliography, p. 2.

904. Krieger, Firmin, J., Soviet Astronautics: 1957-1962. Santa Monica, Calif.: RAND Corp., 1963. 16p. (RAND

Memorandum RM 3595-PR)

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905. Krieger, Firmin J., Soviet Space Experiments and Astronautics. Santa Monica, Calif.: RAND Corp., 1961. 42p. (RAND Paper P-2261)

This paper was presented as part of a Symposium on Russian Progress in Aerospace Sciences held by the Institute of the Aerospace Sciences in Los Angeles on April 4, 1961. Reviews Russian achievements in space exploration by means of rockets. Includes bibliography, pp. 41-42.

906. Liapunov, Boris V., Problema Mezhplanetykh Puteshestvii v Trudakh Otechestvennykh Uchenykh [Problems of Interplanetary Flight in the Papers of Russian Scientists]. Moscow: Pravda, 1951. 22p.

Deals mainly with a discussion and quotes from the work of K. E. Tsiolkovskii, F. A. Tsander, and IU. V. Kondratiuk. Includes brief bibliography of nine items, p. 24.

907. Library of Congress, Aerospace Information Division,
Top Personalities in the Soviet Space Program,
Comprehensive Analysis Based on Soviet Open
Literature, 1930-64. Washington: The Library,
1964. 43p. (Its AID Report U-64-49)

Abundant references scattered throughout the text, which is mainly on the following three top scientists in the Russian space program: Sergey Pavlovich Korolev, Valentin Petrovich Glushko, and Mikhail Klavidiyevich Tikhonravov. Bibliography, pp. 25-29, lists 57 references to Soviet publications in the Library of Congress.

908. Library of Congress, Aerospace Information Division,
U.S.S.R. Missile and Rocket Program; Bibliography.
Washington: The Library, 1961. 66p. (Its AID
Report 61-12)

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Data on the Soviet Space Program; Analytical
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ATD Report P-65-11)

Contains a selection of Soviet technical papers and gives a view of some space-exploration problems as they existed in mid-1964. These include (1) guidance systems, (2) human factor in space flight, (3) pressure suits and spaceship cabins, (4) coming trends in aerospace vehicle design, and (5) bioastronautics, simulated space flights, communications, and space vehicles. Bibliography, pp. 24-25, lists 20 references to Soviet literature.

910. Library of Congress, Aerospace Technology Division,

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Washington: The Library, 1965. 16p. (Its

ATD Report P-65-37)

Contains a selection of Soviet technical papers and gives a view of some space-exploration problems as they existed at the end of 1964. These include (1) Soviet space biology, (2) supersonic and hypersonic aircraft, (3) the Voskhod spacecraft, and (4) Soviet exploration of the moon. Materials from which this report was completed are available in the Aerospace Technology Division of the Library of Congress. Bibliography, pp. 15-16, lists 26 references to Soviet literature.

911. Library of Congress, Aerospace Technology Division,

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1961. 116p. (Its AID Report 61-136)

Consists principally of an annotated bibliography of Sedov's writings. Sedov is

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912. Library of Congress, Aerospace Technology Division,
Materials on Vostok-5, Vostok-6, and Polet-1
Flights: Comprehensive Report. Washington:
The Library, 1964. 65p. (Its ATD Report
P-64-57)

A report based on Soviet open literature on VOSTOK V, VOSTOK VI, and POLET I manned space flights. Bibliography, pp. 55-60, lists 98 references to Soviet literature. "Appendix," pp. 61-22, contains general data on the Vostok series of manned space flights and "References to Appendix," pp. 63-65, is a bibliography of 36 items.

913. Library of Congress, Aerospace Technology Division,
Soviet Long-Range Space-Exploration Program:
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1966. 29p. (Its ATD Report 66-57)

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914. Library of Congress, Aerospace Technology Division,
Soviet Space Exploration as Viewed by East

German Specialists; Comprehensive Report.

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915. Mallan, Lloyd, Russia's Space Hoax: The Documental
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Publishing Co., 1966. 112p. (Science and
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916. S**nger, Eugen, Forschung Zwischen Luftfahrt und
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W. Pustet, 1956. 93p.

A brief survey of aeronautical and astronautical research covering such things as its problems, organization, and financing.

917. Sputniks Breaking into Cosmos. New Delhi:

Information Dept. of the USSR Embassy in India,
1957. 78p. (Booklets on the Soviet Union)

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918. Ursul, Arkadii D., Sotsializm i Kommunizm--

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A271]

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90p. (NASA HHN-82)

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921. Zaehring, Alfred J., Soviet Space Technology.
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