ASTRONAUTICS
1966-1975
ASTRONAUTICS
1966-1975

FEBRUARY 1976
INTRODUCTION

This bibliography represents selected works from the holdings of the Air Force Academy Library, exclusive of periodical articles. Robert S. Shaffer, Senior Reference Librarian, was the compiler. Alicia McCoy prepared the manuscript for the printer.

For references to astronautics information printed prior to 1966 see Special Bibliography No.5, Astronautics, 1961, and No.34, Astronautics 1960-1966, or this series. Copies of these bibliographies are available upon request to the undersigned.

CLAUDE J. JOHNS, JR., Lt Col, USAF
Director of Academy Libraries
# Table of Contents

**Part I**  
HISTORICAL, INTRODUCTORY, SELECTED POPULAR WORKS  

1

**Part II**  
DICTIONARIES, GLOSSARIES & CHRONOLOGIES  

3

**Part III**  
INTERNATIONAL ASTRONAUTICS PROGRAMS  

5

**Part IV**  
BENEFITS FROM SPACE; ECONOMICS OF SPACE EXPLORATION  

7

**Part V**  
SPACE VEHICLE TRAJECTORIES; COMMUNICATIONS AND GUIDANCE  

10

**Part VI**  
MANNED SPACE PROJECTS including LUNAR LANDINGS  

12

**Part VII**  
UNMANNED VEHICLES  

15

**Part VIII**  
SPACE ENVIRONMENT, ASTROPHYSICS  

17

**Part IX**  
SPACE RESCUE  

20

**Part X**  
VEHICLE AND SYSTEMS DESIGN, RELIABILITY  

21

**Part XI**  
PROPULSION; AUXILIARY POWER SOURCES  

24

**Part XII**  
SPACE LIFE SCIENCES (Also see MANNED SPACE PROJECTS)  

26

**Part XIII**  
TOWARD TOMORROW  

28

**Part XIV**  
FOR FURTHER INFORMATION  

30
PART I
HISTORICAL, INTRODUCTORY, SELECTED POPULAR WORKS


Launch vehicles and spacecraft follow page 188.


Summarized tables, accomplishments of each significant mission.


PART II
Dictionaries, Glossaries and Chronologies


Petrovich, G. V., ed. Soviet encyclopedia of space flight. Moscow: MIR, 1969. (Ref TLE 1029 S72)


PART III
INTERNATIONAL ASTRONAUTICS PROGRAMS

Batelle Memorial Institute, Columbus, Ohio. Columbus Laboratories. Handbook of Soviet space-science research. New York


Giani, Orio. L'Europe et l'espace. Lausanne: Centre de Recherches Européennes, 1968. (TLE 1031.7 .E7 G43)


The Soviet encyclopedia of space flight. Translated from the Russian. Moscow: Mir Publishers, 1969. (Ref TLE 1029 S72)

Soviet space programs, 1966-70: goals and purposes, organization 
resources... (92nd Congress, 1st sess., 1971. Senate doc. 
12938-2)

(For 1971 supplement see Govt Doc Y4. Ae8 506/971)
PART IV

BENEFITS FROM SPACE


Advances in satellite meteorology. v. 1- Translations of various Russian texts. New York: Wiley, 1973- (QC 879.4 A38) Emphasis is on weather observation from meteorological satellites.


ECONOMICS OF SPACE


Holman, Mary A. The political economy of the space age. Palo Alto, Ca.: 1974. (TLE 1031 H747)

PART V
SPACE VEHICLE TRAJECTORIES


California Institute of Technology, Pasadena. Jet Propulsion Laboratory. The PARTNER VI and VII flight paths and their determination from tracking path data. (JPL TM 73-469) Pasadena, Ca.: 1970. (TIE 1051 M3 C154)


COMMUNICATIONS AND GUIDANCE


PART VI

MANNED SPACE FLIGHT,
INCLUDING LUNAR LANDINGS


U.S. National Aeronautics and Space Administration. APOLO SOVUS test project USA-USSR fact sheet. Release no. 75-9, Jan. 10, 1975. (Reference Service Desk)

Summarizes the mission and gives biographies of crew members.

Press conference on APOLO-SOVUS test project USA-USSR. Washington: 1:30 p.m., 11 April 1975. (TIE 1051 .A7 U5).


Report covers 272 days of the SKYLAB mission. Three different crews manned the laboratory for 171 days.
U.S. National Aeronautics and Space Administration. Lyndon B.
Johnson Space Center. APOLLO program summary report. Houston,
Texas: Lyndon B. Johnson Space Center, 1975 (in processing)
In over 400 pages this report summarizes the major
activities of APOLLO from development flights through
APOLLO 17 -- over an 11 year period.


U.S. National Aeronautics and Space Administration. Office of Public
1973? (Govt. Doc. NAS 1.19:100)
Excellent illustrations, highlights of manned space flights,
5/5/61-12/17-1972)

Zeitler, Edward O. and Rogers, T. G., comps. The GEMINI program:
physical sciences experiments summary. (NASA TM X - 58075)
(TLE 1051 .G3 245)
PART VII

UNMANNED VEHICLES

(TLE 1030 Q28)

(OS 541 L38)

(Oversize OS 541 M58)
MARINER Spacecraft in 1965, 1969 and 1971-72, "VIKING in 75-75. "Will man be on Mars in the next century?"

Translation of Les sciences de la terre à l'heure des satellites.

(TLE 1121 S53)

Strong, James. Search the solar system; the role of unmanned interplanetary probes. New York: Crane, Russak, 1973. (TLE 1740 S923)
An interesting chapter on the 10th moon of Saturn, Janus, begins on p.138.

Project to land instruments on Mars. Particular emphasis on search for evidence of extraterrestrial life. Cost escalation figures are given.


(Govt. Doc. NAS 1.21:4901)

15


Wilson, James H. Return to Venus. Pasadena, Ca.: Jet Propulsion Laboratory, California Institute of Technology, 1968. (TLE 1051 .M3 W74)
PART VIII

SPACE ENVIRONMENT, ASTROPHYSICS


Cicerone, R. J. et al. Assessment of possible environmental effects of space shuttle operations. (NASA CR-129003, also issued as N 75-24162) (Report Literature Room, and hard copy being processed.)

Cooper, Henry S. F. Moon rocks. New York: Dial, 1970. (QB 591 C77)


Osterbrook, Donald E. *Astrophysics of gaseous nebulae*. San Francisco Ca.: W. H. Freeman, 1974. (QB 855 P87)


---


---


PART IX

SPACE RESCUE


A short secondary level book that describes rescue system that have been considered-some in cooperation with the USSR. Attention is given to "close calls". Drawn from NASA and industry sources, Ergaust proposes that development of the SPACE SHUTTLE appears to be a promising approach to true space rescue capability.


Earlier symposia were held in New York, 1968, and in Var del Piazza, 1969. Summaries in English, French and Russian. (TIE 1021 T61 year)

PART X

VEHICLE AND SYSTEMS DESIGN, RELIABILITY


Fly, Lawrence D. Return from space: an explanation of re-entry, problems and factors of re-entry vehicle design and performance. Springfield, Ill.: C. C. Thomas, 1966. (TLE 1080 E52)

Hering, Robert G. Thermophysics and spacecraft thermal control. Cambridge, Mass.: MIT Press, 1974. (TLE 1126.3 H54)


Papers of 1969 meetings are catalog in same call number without the final date.


21


—. Design handbooks for aerospace systems.

DH 1-1 General index and reference.

DH 1-3 Personnel subsystems.

DH 1-4 Electromagnetic compatibility.

DH 1-5 Environmental engineering.

DH 1-6 System safety.

DH 1-8 Microelectronics.

DH 1-x checklist of general design criteria. Looseleaf, 2nd or third editions. Wright-Patterson Air Force Base, Ohio: 1970-74. (Oversize TLE 112C U57 v,)

U.S. Langley Research Center. Research in aeronautics and space. 2nd ed. Hampton, Va.: Langley Research Center, 1971. (TLE 112C U5) Focus is on activities at this particular center.


Also see NAS 1.21:8018


Brewer, George R. *Ion propulsion; technology and applications.* New York: Gordon and Breach, 1970. (TLE 513 B84)


Holzmann, Richard T. *Chemical rockets, and flame and explosives technology.* New York: Dekker, 1969. (TLE 591 H76)


Nuclear engines for propulsion, lasers, nuclear plasma physics in space missions.

AUXILIARY POWER SOURCES


PART XII
SPACE LIFE SCIENCES

(Many aspects of living in space are covered in the section of this bibliography under MANNED SPACE PROJECTS.)


Aerospace medicine and biology: a continuing bibliography with indexes 1964- (National Aeronautics and Space Administration SP-701) Springfield, Va.: National Technical Information Service, to date. (Report Literature Room)


U.S. 6570th Aerospace Medical Research Laboratories, Behavioral Sciences Laboratory. A bibliography of reports issued ... environmental stress ... Wright Patterson Air Force Base, Ohio: Air Force Systems Command, Aerospace Medical Division, 1966. (Z 5064 .M5 U57)
TOWARD TOMORROW


AAS Goddard Memorial Symposium, 11th ... The second fifteen years in space. (Advances in the astronautical sciences, supplement. Science and technology, v.31) Tarzana, Ca.: Univelt, 1973. (TLE 1021.3 Ali)


In this paragraph, the author describes the role that space policy played on NASA's development. See especially two chapters for the "future".  


(TLE 1033 B823 1971)
PART XIV
FOR FURTHER INFORMATION


Defense PDI & E programs & projects FY 1977. Greenwich, Conn.: DM

See index under "Space" for the research, development, test and evaluation budget. Based on the actual appropriations by Congress in nearly all instances.


International aerospace abstracts. (Produced for the AIAA and the Scientific and Technical Information Office NASA). Published generally on the 1st and 15th of each month, with individual and annual indexes. New York: Technical Information Service American Institute of Aeronautics and Astronautics, Inc., 1961-to date. (5th floor indexes and abstracts)

Covers "the world's published literature in the field of aeronautics and space science and technology." (Periodicals, books, meeting papers and conference proceedings, translations of journals and journal articles)


Includes glossary of terms used in the exploration of space, grants and research contracts as well as space activities of other agencies.

REPORT LITERATURE

Government reports announcements and index. (U.S. Dept. of Commerce, National Technical Information Service) Published every two weeks with cumulated indexes. Springfield Va.: NTIS, 1971 to date. (Report Literature Room)


For on-going research projects see section following Table of Contents in recent issues.

Also see: Checklist of report literature series and access tools in AFA Library, Sept. 1975. Available at Reference Service Desk, 4th floor.

* * * * *

For guides to the periodical literature see especially indexes on 5th floor tables. Air University Library index to military periodicals. Applied science and technology index. Engineering index. Readers' guide to periodical literature.

Indexes and abstract journals often refer you to periodical articles and other sources of information, such as symposia proceedings, scientific reports, monographs, etc.

A comprehensive list arranged by subjects, Indexes and abstract journals in the USAF Academy Libraries ..., May 1975 may be helpful. See especially subjects of AERONAUTICS & ASTRONAUTICS, and ENGINEERING AND TECHNOLOGY. (Reference Service Desk, 4th floor)

* * * * * * *

You may need to use additional, or more recent U.S. Government publications.

To IDENTIFY PERTINENT ITEMS ON ASTRONAUTICS, AND TO FIND THEM IN THE LIBRARY see USAF Academy Library Reference Guide no. 4, U.S. Government publication identification and use. (Reference Service Desk, 4th floor)