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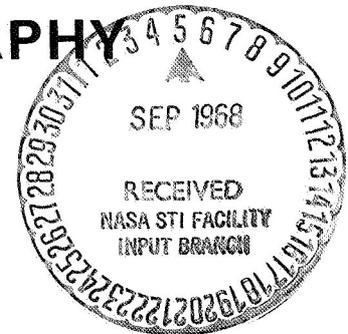
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BIBLIOGRAPHIES ON AEROSPACE SCIENCE

A CONTINUING BIBLIOGRAPHY
WITH INDEXES



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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NASA Continuing Bibliographies are annotated and indexed compilations of abstracts of reports and journal articles on aerospace subjects. The subjects are selected for their relationship to current developments in the space program and in response to an established interest by the aerospace community. Continuing Bibliographies are updated periodically by supplements.

PUBLICATIONS IN THE CONTINUING BIBLIOGRAPHY PROGRAM

High Energy Propellants	NASA SP-7002
Lunar Surface Studies	NASA SP-7003
Communications Satellites	NASA SP-7004
Bibliographies on Aerospace Science	NASA SP-7006
Lasers and Masers	NASA SP-7009
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NASA SP-7006 (03)

BIBLIOGRAPHIES ON AEROSPACE SCIENCE

A CONTINUING BIBLIOGRAPHY
WITH INDEXES

A selection of annotated references to unclassified bibliographies introduced into the NASA information system during the period May, 1966–December 1967.



Scientific and Technical Information Division
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WASHINGTON, D. C.

JULY 1968

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INTRODUCTION

What *Bibliographies on Aerospace Science* is

This publication is the third supplement to the continuing bibliography on *Bibliographies on Aerospace Science* (NASA SP-7006). It contains references to reports and journal articles announced in the NASA abstract journals during the period May, 1966 through December, 1967. 574 references are included.

Previous bibliographies in this series are NASA SP-7006 (January 1962–May 1964), NASA SP-7006(01) (June 1964–February 1965), and NASA SP-7006(02) (March 1965–April 1966).

Scope of Bibliography

References to bibliographies, literature searches, abstract compilations, literature reviews and surveys, and report listings are included. Technical reports containing comprehensive reference listings are also referenced.

Organization of Bibliography

The bibliography is arranged in Abstract and Index Sections. The Abstract Section contains bibliographic citations and informative abstracts for the references selected from *STAR* (*Scientific and Technical Aerospace Reports*), *IAA* (*International Aerospace Abstracts*), and *Aerospace Medicine and Biology* (NASA SP-7011). The *STAR* abstracts are listed first, followed by the *IAA* and the *Aerospace Medicine and Biology* abstracts. Each set of abstracts is arranged in ascending accession number order.

The Index Section contains two indexes, subject and personal author, in that order.

How to Use this Bibliography

Reports are referenced in the *STAR* Abstracts section. Published literature items are referenced in the *IAA* Abstracts and the *Aerospace Medicine and Biology* Abstracts sections. The subject index may be used to locate references to specific topics or technical areas; the personal author index may be used to locate references to reports or articles written by a particular individual.

Availability of the Documents Cited

STAR References (N67-10000 Series)

NASA Documents. NASA documents (identified by an asterisk in the citation) are available without charge to:

1. NASA Offices, Centers, contractors, grantees, and consultants.
2. Other U.S. Government agencies and their contractors.
3. Libraries in the United States that have arrangements with NASA to maintain collections of NASA documents for public use.
4. Other organizations in the United States having a need for NASA documents in work related to the aerospace program.
5. Foreign governmental or academic organizations that have established reciprocal arrangements for the exchange of publications with NASA, that have current agreements for scientific and technical cooperative activities with NASA, or that have arrangements with NASA to maintain collections of NASA documents for public use.

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European requesters may purchase NASA documents from ESRO/ELDO Space Documentation Service, European Space Research Organization, 114, av. de Neuilly. 92-Neuilly sur Seine, France.

Non-NASA Documents. Department of Defense documents (identified by the "AD" number in the citation) are available without charge to U.S. Government-sponsored research and development activities from the Defense Documentation Center (DDC), Cameron Station, Alexandria, Virginia 22314. Department of Defense documents are not available from NASA.

Advisory Group for Aerospace Research & Development (AGARD) reports that are not copyrighted will be made available on the same basis as NASA documents.

Other non-NASA documents are provided by NASA without charge only to NASA Offices, Centers, contractors, subcontractors, grantees, and consultants. Foreign non-copyrighted documents will be provided by NASA to U.S. Government Agencies and their contractors.

Documents that have been placed on microfiche (a transparent sheet of film, approximately 4×6" in size, capable of containing an orderly arrangement of 60 or more pages of information reduced to micro images) are identified with the symbol #. Microfiche are available on the same basis as hard copy.

For reference purposes, NASA documents listed in the *STAR* Abstracts section of this bibliography may be consulted at one of the organizations listed on the inside back cover. Commercial-type publications listed may be consulted in libraries or purchased from publishers or booksellers.

The public may purchase NASA documents from either of the following sales agencies as specifically identified in the abstract section:

Clearinghouse for Federal Scientific and Technical Information
(CFSTI)
Springfield, Virginia 22151
Superintendent of Documents, U.S. Government Printing Office
(GPO)
Washington, D.C. 20402

Documents available from CFSTI are sold in hard copy and microfiche form. If a printed hard copy is not available, a facsimile copy is provided. The symbols "HC" and "MF" are used in the abstract section to designate the copy available: "HC" (hard copy) for full size or facsimile; "MF" for microfiche. A unit price policy has been established by CFSTI: \$3.00 for printed hard copy or facsimile copy; \$0.65 for microfiche.

The public may request non-NASA documents by writing to the source or other information systems. Other bibliographic information, e.g., report number, etc., rather than the NASA accession number (i.e., N67-12345) should always be provided when requesting such a document from its source.

IAA References (A67-10000 Series)

All cited documents are available from the AIAA Technical Information Service as follows: Paper copies are available at \$3.00 per document up to a maximum of 20 pages. The charge for each additional page is \$0.25. Microfiche are available at the rate of \$0.50 per microfiche for documents identified by the symbol # following the accession number.

A number of publications, because of their special characteristics, are available only for reference in the AIAA Technical Information Service Library.

Minimum air-mail postage to foreign countries is \$1.00.

Please refer to the accession number, e.g., A67-12345, when requesting documents.

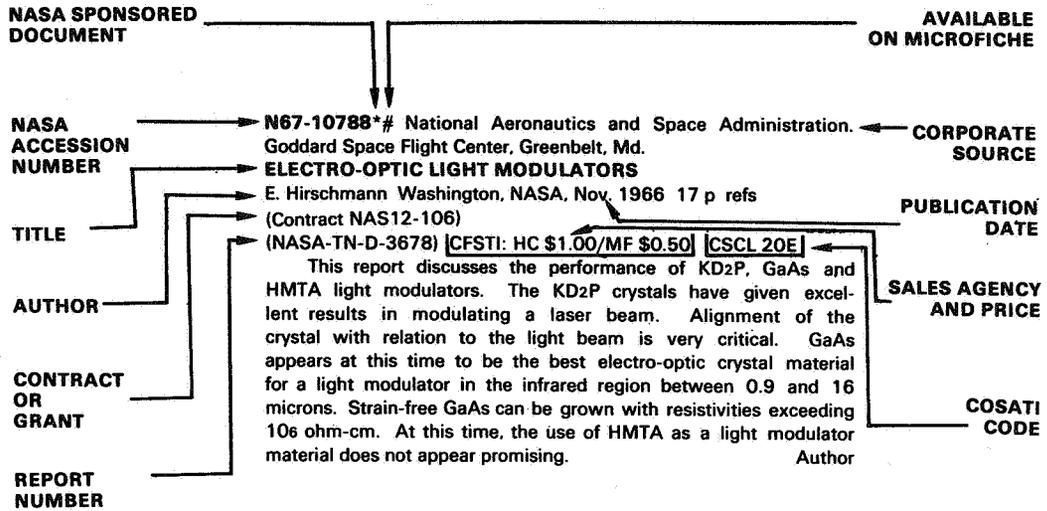
Address all inquiries and requests to:

Technical Information Service
American Institute of Aeronautics and Astronautics, Inc.
750 Third Avenue
New York, N.Y. 10017

Aerospace Medicine and Biology References (A67-80000 Series)

Journal articles and books included in this section are available in libraries, where they may be borrowed or consulted.

TYPICAL STAR CITATION AND ABSTRACT



TYPICAL /AA CITATION AND ABSTRACT

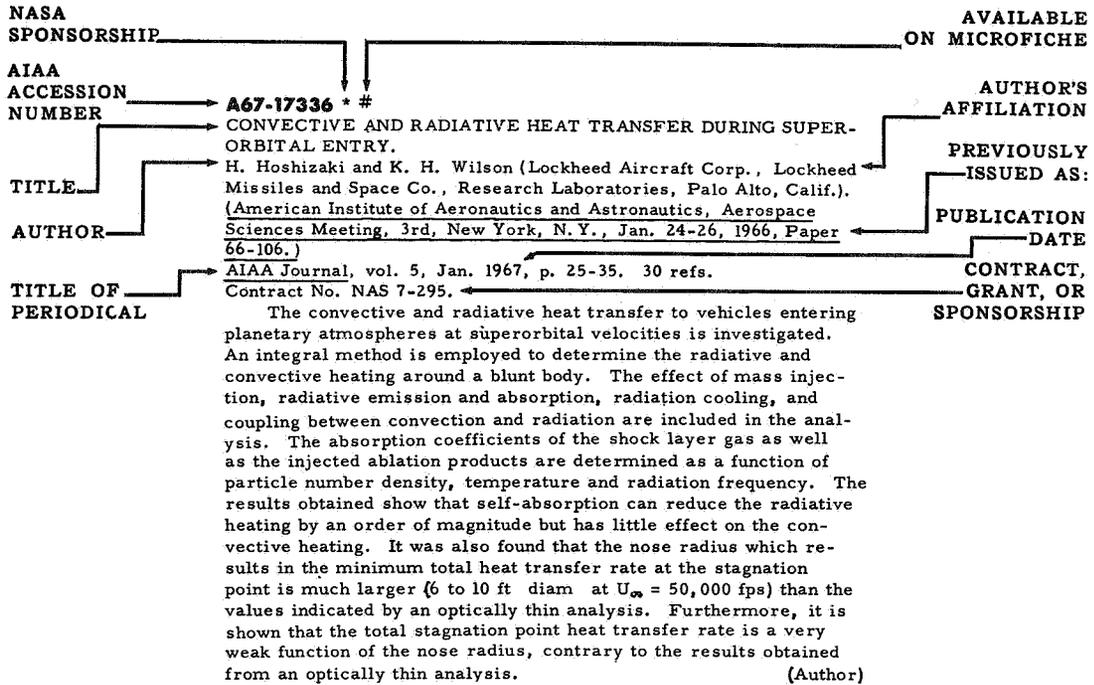
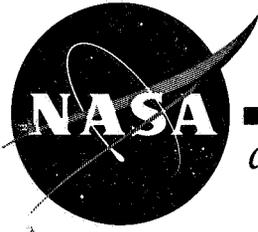


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BIBLIOGRAPHIES ON AEROSPACE SCIENCE

a continuing bibliography with indexes JULY 1968

1966

STAR ABSTRACTS

N66-21592# Deutsche Versuchsanstalt für Luft- und Raumfahrt, Porz (West Germany). Wissenschaftlichen Sekretariat. **DVL REPORTS AS OF DECEMBER 31, 1965 [DVL-BERICHTSVERZEICHNIS. STAND 31. DEZEMBER 1965]** Bibliography

P. Bruders Jan. 1966 73 p refs In GERMAN (Rept.-500) CFSTI: HC \$3.00/MF \$0.75

This bibliography contains a numbered index and brief annotated entries of all publications that were published by the German Institute for Air and Space Flight during the years 1964 and 1965. Appendices list publications by the Research Institute for Jet Propulsion Physics, and from the Aero Science Institute in Munich. G.G.

N66-21674 International Business Machines Corp., San Jose, Calif. Research Lab.

THEORY OF STABILITY AND CONTROL FOR DISTRIBUTED PARAMETER SYSTEMS An Annotated Bibliography P. K. C. Wang *In its* Papers on the Control of Distributed Parameter Aeroelastic Systems Nov. 1965 p 141-164 refs (See N66-21666 11-01) CFSTI: HC \$5.00/MF \$1.00

A bibliography providing an up-to-date collection of references pertaining to the theory of stability and control for distributed parameter systems is presented. The bibliography only includes those works which deal directly with distributed systems in the form of partial differential equations or integral equations, and excludes all those works which deal only with the approximate forms of distributed systems without justification for the validity of approximation. Also excluded are works pertaining to distributed parameter systems which are desirable by ordinary differential-difference equations. The bibliography is divided into sections; the first section is devoted primarily to works on the theory of optimum control of distributed parameter systems and the second section is devoted to works on the theory of stability for such systems. This division is merely for the purpose of clarification and does not represent the intent of divorcing stability theory completely from optimum control theory. M.R.W.

N66-21675*# National Aeronautics and Space Administration. Washington, D. C.

NASA SPECIAL PUBLICATIONS, SPRING 1966 Bibliography

1966 41 p refs

(NASA-TM-X-57334) CFSTI: HC \$2.00/MF \$0.50 CSCL 05B

Presented is a compilation of monographs, state-of-the-art summaries, conference proceedings, handbooks, source books, histories, chronologies, charts, and selected bibliographies, as well as works directly resulting from NASA's Technology Utilization Program. The last group of publications reports innovations born of the needs of space exploration that are of potential worth to nonaerospace industry. The collection of scientific and technical information is derived from or valuable to the manifold activities of the National Aeronautics and Space Administration. M.R.W.

N66-21744# Technisch Documentatie en Informatie Centrum Voor de Krijgsmacht, The Hague (Netherlands).

SURVEY OF LITERATURE ON MILITARY MEDICINE [LITERATUURVERZICHT MILITAIRE GENEESKUNDE]

15 Feb. 1966 28 p refs In DUTCH, ENGLISH, FRENCH and GERMAN *Its* Vol. 12, No. G-127

CFSTI: HC \$2.00/MF \$0.50

Contains abstracts and bibliographic notes on atomic-biologic-chemical warfare, psychology and psychiatry, air flight medicine, internal medicine, surgery, pharmacology and toxicology, radiology, and medical news. Transl. by J.O.

N66-21959# Max-Planck-Institut für Biophysik, Frankfurt am Main (West Germany).

RADIATION EFFECTS ON LIVING TISSUES AND ORGANISMS. SERIES C: BIBLIOGRAPHIES, SECTION 4, NUMBER 21

W. Stahlhofen comp. Apr. 1965 92 p refs (AED-C-04-21)

Approximately 330 references are given to reports and journals published during 1964. Separate author and subject indexes are included. NSA

N66-22170# Technisch Documentatie en Informatie Centrum voor de Krijgsmacht, The Hague (Netherlands).

REVIEW OF LITERATURE ON FLIGHT TECHNOLOGY [LITERATUURVERZICHT, LUCHTVAART-TECHNIEK]

12 Feb. 1966 23 p refs *Its* Vol. 2, No. L-7

CFSTI: HC \$1.00/MF \$0.50

Abstracts and bibliographic notes are included on model description, flight properties and accomplishments, manufacturing materials, panel systems and instrumentation, airports, navigation and air traffic control, training and personnel, aerodynamics, strength and vibration research, loads, air pocket vehicles, and technical news. Transl. by J.O.

N66-22384# Air Force Cambridge Research Labs., Bedford, Mass. Space Physics Lab.

BIBLIOGRAPHY OF LUNAR AND PLANETARY RESEARCH, 1960-1964

J. W. Salisbury, ed. Jan. 1966 530 p refs *Its* Spec. Rept.-40 (AFCRL-66-52; AD-628792) CFSTI: HC \$8.30/MF \$2.25

A bibliography of lunar and planetary research articles published during the time period 1960-1964 is presented with both subject and author listings. The major subject categories are: astrobology, comets, meteorite craters and cratering effects, meteors and meteorites, the moon, origin of the solar system, the planets, and tektites. Each article is abstracted.
Author (TAB)

N66-22528# Harvard Univ., Cambridge, Mass. Div. of Engineering and Applied Physics.

PROGRAM IN THE MATERIALS SCIENCES, JULY 1964-SEPTEMBER 1965

Nov. 1965 78 p refs

(Contract ARPA SD-88)

(AD-627300) CFSTI: HC \$3.00/MF \$0.75

As part of a program being conducted in the materials sciences, this report contains a list of papers recently submitted for publication and abstracts of research activities in the areas of solid state physics, metallurgy, solid mechanics, chemistry, and geology.
R.N.A.

N66-22589# Army Materials Research Agency, Watertown, Mass. Materials Technology Div.

A REPORT GUIDE TO ULTRASONIC ATTENUATION LITERATURE Bibliography

Ernest H. Rodgers Dec. 1965 70 p refs

(AMRA-MS-65-09; AD-627565) CFSTI: HC \$3.00/MF \$0.75

This compilation provides a simple and fast access to information on the subject of Ultrasonic Attenuation, and also to provide sufficient information in the form of abstracts and word descriptors to make the listing useful.
Author (TAB)

N66-22854# Technisch Documentatie en Informatie Centrum voor de Krijgsmacht, The Hague (Netherlands).

ELECTROTECHNICS Title Index, 1965 [ELECTRO-TECHNIEK Titel Index, 1965]

[1965] 157 p In DUTCH

(TDCK-44365) CFSTI: HC \$4.00/MF \$1.00

A bibliography is presented on telecommunication, electronics, radar, electromagnetic radiation, geometry, information processing, analog computers, computer software and hardware, computer application, measurement and control, miniaturization, interference and reliability, oscillators and amplifiers, components and materials, filters and networks, feeding, and focusing.
N.E.N.

N66-22875# Technisch Documentatie en Informatie Centrum voor de Krijgsmacht, The Hague (Netherlands).

SURVEY OF LITERATURE ON SHIP BUILDING AND NAVIGATION [LITERATUURVERZICHT. SCHEEPSBOUW EN SCHEEPVAARTECHNIEK]

15 Feb. 1966 29 p refs In DUTCH, ENGLISH, GERMAN and FRENCH *Its* Vol. 1, No. S-179

CFSTI: HC \$2.00/MF \$0.50

The following topics are discussed: (1) *Ship Types*—new navy ships in future planning, a surface effect ship for the American merchant marine, and large bulk carriers; (2) *Resistance and Steering*—methods to decrease steering friction; (3) *Stability*—retractable fin for ship stabilization; (4) *Stress*

and *Vibration*—stress measurement for propeller model, ship-board vibrations, and stable construction of tankers; (5) *Design and Construction*—effects of ship maneuvers on machinery and interior planning; (6) *Instrumentation*—high-pressure electro-hydraulic steering gear; (7) *Wharfs and Construction*—experimental research for naval construction; (8) *Engines*—recycle power plant, and package turbine plant; (9) *Ship Movement at Sea*—fluid flow calculations; *Navigation*—Doppler navigation system, and automatic collision warning and radar evaluation instrumentation; (10) *Rescue Methods*—launching of lifeboats; (11) *Materials*—plastics for ship building, and steel welding; and *Miscellaneous*—handbook for a seaman, detection of tank leakage, cavitation mechanics, weather effects, etc.
Transl. by G.G.

N66-22953# Technisch Documentatie en Informatie Centrum Voor de Krijgsmacht, The Hague (Netherlands).

OCEANOGRAPHY, NAVIGATION Literature Digest

Feb. 1966 37 p *Its* Vol. 3, No. ON 17

CFSTI: HC \$2.00/MF \$0.50

An annotated bibliography with abstracts is presented on oceanography and navigation. Topics in oceanography include: (1) institutes and research problems; (2) hydrography and descriptive oceanography; (3) physical oceanography; (4) sea water chemistry; (5) oceanographic and hydrographic equipment; and (6) technical news and book reviews. Areas of study in navigation cover: (1) general sea, air, land, and space navigation problems; (2) integrated electronic navigation equipment; (3) radio navigation equipment; (4) navigational radar, and radar plotting instruments; (5) general navigation instruments and aids; and (6) technical news and book reviews.
D.T.

N66-23025*# Joint Publications Research Service, Washington, D. C.

SOVIET-BLOC RESEARCH IN GEOPHYSICS, ASTRONOMY, AND SPACE, NO. 130

18 Apr. 1966 76 p refs Transl. into ENGLISH from Russian (JPRS-35095; TT-66-11147-130) CFSTI: \$3.00

Abstracts are presented for Sino-Soviet-bloc research studies dealing with astronomy, meteorology, oceanography, terrestrial geophysics, and the upper atmosphere and space. Also included are news articles and several reports of scientific conferences.
M.W.R.

N66-23317# California Univ., Davis. Coll. of Engineering. **DEFORMATION, VIBRATION, AND STABILITY OF SHELLS—PARTIALLY ANNOTATED BIBLIOGRAPHY**

R. D. Mc Ghie Jun. 1965 72 p refs Prepared for Lawrence Radiation Lab., Livermore, Calif. *Its* Rept. Series LRL-7009400, Issue 1

(Contract W-7405-ENG-48)

(UCRL-13187) CFSTI: HC \$3.00/MF \$0.75

The citations are listed in three major subject sections: rings and cylindrical shells, spherical shells, and conical shells. Within each section, the citations are listed by the year of publication. An author index is also included. The bibliography covers the period 1957 to 1965.
NSA

N66-23403# Lincoln Lab., Mass. Inst. of Tech., Lexington. **SCATTERING AND ATTENUATION BY PRECIPITATION PARTICLES 26th Reference Bibliography**

Carol A. Boudreau and Melvin L. Stone 11 Aug. 1965 72 p refs

(Contract AF 19(628)-5167)

(ESD-TDR-65-598; AD-628200) CFSTI: HC \$3.00/MF \$0.75

This bibliography is offered to encourage the further application of radar meteorological techniques and data in connection with the study of the effects of hydrometeors, precipitation, clouds and fog on microwave propagation. It combines material developed in regard to weather radar research with the more conventional works on attenuation. In addition to the weather radar material, the bibliography includes references on thermal radiation from precipitation, cloud physics, and dielectric and scattering properties of hydrometeors. Some of the references are pertinent to the study of propagation at optical wavelengths and are useful in evaluating the performance of laser communications systems. The 494 references included are from the literature published between January 1950 and October 1964. TAB

N66-23444* National Aeronautics and Space Administration, Goddard Space Flight Center, Greenbelt, Md.

COIL SYSTEMS FOR UNIFORM MAGNETIC FIELDS

Robert E. Gebhardt and Donald L. Waidelich (Md. Univ.) *In its* The Goddard Summer Workshop Program in Analysis of Space Data and Meas. of Space Environments [1963] 75 p Suppl. to Final Rept. (See N66-23406 12-34) CFSTI: HC \$8.42/MF \$2.75 (X-100-65-407(S))

Air-core coil systems for the production of relatively weak magnetic fields are discussed in terms of theory, applications, and previous research findings. Parameters for square and octagonal/coil systems with integral turn-ratios are tabulated, and a comparison is made of the axial distances obtained for various spacings of coils. Annotated references are included for recently completed researches, and additional references are included for nineteenth century findings. M.W.R.

N66-23445# Illinois Univ., Urbana. Dept. of Theoretical and Applied Mechanics.

ELASTIC PLATES: ANNOTATED BIBLIOGRAPHY, 1930-1962

George E. Sliter, Robert J. Nikolai, and Arthur P. Boresi Dec. 1963 230 p refs *Its* Rept.-2 (Grants NSF G-14647; NSF GP-903) (T+AM-257)

Annotated references related to elastic plates are divided into sections on equilibrium, buckling, and dynamics. The bibliography contains information on the classical theory of isotropic, homogeneous, thin plates; and reviews literature on anisotropic, sandwich and other nonhomogenous, thick, and stiffened plates. Buckling references deal with unstiffened and stiffened plates, as well as sandwich plates and postbuckling behavior. References are given for buckling under thermal or dynamic loads. Vibrations and wave motion and impact are referenced under the section heading of dynamics; and plates of both specific and arbitrary geometry are included. M.W.R.

N66-23461* National Aeronautics and Space Administration, Washington, D. C.

AEROSPACE MEDICINE AND BIOLOGY—A CONTINUING BIBLIOGRAPHY

Mar. 1966 176 p (NASA-SP-7011(221) CFSTI: HC \$1.00/MF \$1.00 CSCL 06

Abstracted data are presented on studies dealing with the biological, physiological, psychological, and environmental effects on man during and after simulated or actual flight in the earth's atmosphere or in interplanetary space. Similar

studies on biological organisms of lower order are included, along with such related topics as sanitary problems, pharmacology, toxicology, safety and survival, life support systems, exobiology, and personnel factors. Subject, corporate source, and personal author indexes are also listed. M.G.J.

N66-23600* Southwest Research Inst., San Antonio, Tex. **FURTHER STUDIES OF LIQUID SLOSHING IN ROCKET PROPELLANT TANKS** Final Report, 25 Mar. 1961-31 Dec. 1965

H. Norman Abramson Dec. 1965 26 p refs (Contract NAS8-1555; SwRI Proj. 02-1072) (NASA-CR-74507) CFSTI: HC \$2.00/MF \$0.50 CSCL 20K

An annotated bibliography with abstracts is presented on liquid sloshing in fuel tanks. Areas of study include: investigation of slosh characteristics in cylindrical compartmented and spherical tanks; evaluation of various aspects of baffle performance and effectiveness; and an exploratory study of dome impact under launch abort or orbital docking conditions. Recommendations are made for the study of the nonlinear aspects of lateral sloshing. A second bibliography without abstracts is also presented on liquid dynamics in rocket propellant tanks. D.T.

N66-23690# Technisch Documentatie en Informatie Centrum voor de Krijgsmacht, The Hague (Netherlands).

POLLUTION IN AIRCRAFT FUELS [DE VERONTREINIGING VAN VLIEGTUIGRANDSTOFFEN, BIBLIOGRAFIE] Bibliography

B. M. B. Holleman 29 Apr. 1965 18 p refs (TDCK-42045) CFSTI: HC \$1.00/MF \$0.50

An annotated bibliography is presented on microbiological corrosive effects on structural aircraft materials, jet fuel contaminants, microbiological contamination of fuels, and fungi and bacterial activity in fuels. N.E.N.

N66-23849* National Aeronautics and Space Administration, Washington, D. C.

HIGH ENERGY PROPELLANTS—A CONTINUING BIBLIOGRAPHY, WITH INDEXES

Apr. 1966 98 p (NASA-SP-7002(02)) CFSTI: HC \$1.00/MF \$0.50 CSCL 211

A selection of annotated references to unclassified reports and journal articles relating to high energy propellants that were introduced into the NASA information system during the period January through December 1965, are presented. The references are part of a continuing bibliography, and are concerned with research and development studies on solid, liquid, and hybrid propellants and oxidizers. The bibliography also covers related topics such as propellant handling and storage, combustion characteristics, toxicity, and hazards and safety measures. A subject index and personal author index are included. L.S.

N66-24202# Extraterrestrial Research Center, Ann Arbor, Mich.

APOLLO APPLICATIONS PROGRAM Bibliography

Apr. 1966 618 p Prepared for Gen. Dyn./Convair

An annotated bibliography is presented for experiments related to the Apollo Applications Program. The major portion of the reference material is devoted to earth orbit experiments, and includes reviews of studies dealing with the atmosphere and astronomy, biomedicine and astronaut behavior, communications and navigation, earth sciences and resources, subsystem development, and related physical

sciences. Lunar orbit and surface experiments are reviewed; and cover such subjects as electromagnetic sensing, gravity, and micrometeorite measurements, and the various scientific disciplines. Also included are a number of general references, relating to flights, problems in space, and unmanned probes.
M.W.R.

N66-24424# United Kingdom Atomic Energy Authority, Harwell (England). Information Branch.

BIBLIOGRAPHIC REVIEW OF SELF-DIFFUSION IN METAL OXIDES

P. A. Cumming and P. J. Harrop Oct. 1965 32 p refs (AERE-BIB-143) HMSO: 4s

A bibliography, with an author index, is given for literature on the determination of self-diffusion coefficients in simple metallic oxides. Publication dates range from 1946 through October, 1965. A table is presented of useful diffusion data, including the frequency factor and the activation energy calculated from the Arrhenius temperature dependence equation for the rate of diffusion.
D.T.

N66-24445# Grumman Aircraft Engineering Corp., Bethpage, N. Y. Research Dept.

SIGNAL PROCESSING OF PULSED SONAR IN A REVERBERANT MEDIUM Bibliography

W. Abramowitz and A. Crews Feb. 1966 57 p refs (RM-311)

An annotated bibliography is presented which deals with sonar signal processing in a reverberant medium and includes papers on related material. The publications are grouped by subject matter and include among others adaptive techniques, ambiguity functions, correlation, linear and matched filters, stochastic processes, nonparametric methods, power spectral analysis, and statistical methods. Promising approaches to sonar reverberation are given along with papers of a tutorial, survey, or philosophical nature.
E.A.O.

N66-24556# General Dynamics/Convair, San Diego, Calif.
BIBLIOGRAPHY OF RESEARCH AND DEVELOPMENT REPORTS ON THE CENTAUR PROGRAM FOR THE THIRD QUARTER 1965

C. L. Stevens 15 Nov. 1965 138 p refs (GDC-ACW64-027F)

A bibliography is presented of research and development reports on the Centaur program. Included are reports on acceptance tests, actuators, adapters, antennas, autopilots, batteries, bulkheads, cables, computers, configuration, connectors, control systems, destructors, electric and electronic equipment, fairings, firing and flight tests, ground support equipment, guidance systems, gyros, handling, helium, hydraulic systems, hydrogen peroxide, instrumentation systems, insulation, launching, loads, maintenance, flight parameters, pneumatic systems, pressurization systems, programmer, propellant and propulsion systems, pumps, quality control, range safety systems, reliability tests, safety, separation systems, specifications, static tests, stress analysis, structures, Surveyor, switches, telemetry, test equipment, testing, tracking system, trajectories, transducers, valves, and weight and balance.
R.N.A.

N66-24564# Library of Congress, Washington, D. C. Aerospace Technology Div.

HIGH-PURITY METALS, PART II Surveys of Communist World Scientific and Technical Literature

Alex Zurichenko 16 Feb. 1966 30 p refs Annotated bibliography (ATD-66-17)

This annotated bibliography was compiled from Soviet-Satellite open sources published 1964-1965. The entries are arranged chronologically and divided into two parts by year: Part A (1964) comprises 31 entries and Part B (1965) includes 40 entries. References are included on: zinc, electron paramagnetic resonance, single crystal growing, chemiluminescence, lithium, boron, selenide, mechanical heat treatment, arsenic, tantalum, graphite, bismuth, cesium, rhenium, mercury, iron, vacuum furnace, induction furnace, lead, indium, zone recrystallization, vanadium compound, gallium, manganese, titanium, beryllium, cerium, single crystal, boron compound, sulfur, uranium, vacuum refining, yttrium, molybdenum, gold, semiconducting material, electrolytic refining, thallium, phosphorus, silicon, antimony, tin. Author

N66-24690*# National Aeronautics and Space Administration, Goddard Space Flight Center, Greenbelt, Md.

STERILIZATION—A SELECTED BIBLIOGRAPHY FROM THE LITERATURE RETRIEVAL SYSTEM, SPACE BIOLOGY BRANCH

Mar. 1966 25 p refs (NASA-TM-X-55457; X-450-66-53) CFSTI: HC \$1.00/MF \$0.50 CSCL 06F

An annotated bibliography is presented with topical headings. These headings include: (1) clean rooms; (2) decontamination; (3) sterilization methods, i.e., air filtering, chemicals, and heat; (4) methods and statistics for detection and monitoring of microorganisms; (5) spacecraft sterilization; and (6) survival, i.e., viability of microorganisms.
D.T.

N66-24707# Naval Postgraduate School, Monterey, Calif.
MATHEMATICS: A SELECTED LIST OF MATERIALS IN THE LIBRARY OF THE U. S. NAVAL POSTGRADUATE SCHOOL COMPILED AS A GUIDE TO FACILITATE THE USE OF THE COLLECTION

E. R. Larson Jan. 1966 13 p refs (TR-58; AD-627708) CFSTI: HC \$1.00/MF \$0.50

The bibliography is intended as a guide to the collection of the U.S. Naval Postgraduate School Library in the field of mathematics. It is not a comprehensive listing of such material but is highly selective and reflects the holdings of the library. In many cases the publications listed are representative of other materials also in the School Library. Author (TAB)

N66-24791# Chicago Univ., Ill. Enrico Fermi Inst. for Nuclear Studies.

HIGH ENERGY PHYSICS RESEARCH USING A 460 MeV SYNCHROCYCLOTRON Final Report

Herbert L. Anderson 14 Jul. 1965 15 p refs (Contract N6Ori-020)

(AD-618067) CFSTI: HC \$1.00/MF \$0.50

Doctoral dissertations are listed for students who conducted their research with the cyclotron. Also given is a chronological list of published research.
TAB

N66-24855# Army Cold Regions Research and Engineering Lab., Hanover, N. H.

BIBLIOGRAPHY ON SOIL DYNAMICS

R. K. Bernhard Sep. 1965 127 p refs (CRREL-SR-89; AD-477379)

The scientific approach to a study of soils as an indispensable engineering material is rather new, and its subdivision into soil statics and soil dynamics is of still newer origin. In attempting to answer the question, 'Why soil dynamics' it might be useful to recall the history of testing materials other

than soil. The study of steel specimens subjected to slowly increasing static loads was followed by the introduction of vibratory or dynamic loads, which led to the discovery of fatigue effects. A cross-fertilization of both methods took place, contributing to a new concept in instrumentation and recently expanding into the field of solid-state physics. Similarly, the investigation of soil dynamics will feed information back into soil statics and result in a better understanding of both areas from the practicing engineer's point of view, the impetus to study soil dynamics is due mainly to the increased speeds and loads of present-day vehicles affecting subsoils, the practice of dynamic precompaction of subsoils, and the discrimination between subsurface explosions (nuclear) and earthquakes.

TAB

N66-24895# Technisch Documentatie en Informatie Centrum voor de Krijgsmacht, The Hague (Netherlands)

SURVEY OF LITERATURE ON ELECTROTECHNOLOGY [LITERATUURVERZICHT ELECTROTECHNIEK]

7 Mar. 1966 40 p refs In ENGLISH, GERMAN, and DUTCH
Its Vol. 15, No. E-482

CFSTI: HC \$2.00/MF \$0.50

Abstracts on various aspects of research and development studies in the field of electronics are given. Among the topics covered are: telecommunications, international radio administration, waveguides and traveling wave devices; radar equipment, systems, and uses; electromagnetic radiation measurement and propagation; information handling; computer codes, algorithms, algebraic manipulation, logic and circuit design; control and data evaluation techniques; miniature integrated circuits; interference and noise; and electronic equipment and materials.

N.E.N.

N66-24904# Technisch Documentatie en Informatie Centrum Voor de Krijgsmacht, The Hague (Netherlands).

SURVEY OF LITERATURE ON AVIATION TECHNOLOGY [LITERATUURVERZICHT LUCHTVAARTTECHNIEK]

26 Feb. 1966 24 p refs In ENGLISH, GERMAN, and DUTCH
Its Vol. 14, No. L-292

CFSTI: HC \$1.00/MF \$0.50

Abstracts are presented of reports on helicopter design, research, and development in the areas of fuels, rotors, and turbofans; stability and control; air traffic control, navigational systems and equipment; escape parachutes and rocket catapults; and aerodynamics.

N.E.N.

N66-24932*# National Aeronautics and Space Administration, Washington, D. C.

LUNAR SURFACE STUDIES A Continuing Bibliography, With Indexes

Apr. 1966 70 p

(NASA-SP-7003(02)) CFSTI: HC \$1.00/MF \$0.75 CSCL 03B

An annotated bibliography is presented with abstracts, and author and subject indexes. Specific topics include the theory of lunar origin, the lunar atmosphere, and the physical characteristics of the lunar surface, e.g., topography, geology, cartography, and stratigraphy. Techniques of lunar observation, measurement, and analysis are covered, along with instrumentation and equipment used in lunar investigations.

D.T.

N66-25124# Aktiebolaget Atomenergi, Stockholm (Sweden).
RADIATION EFFECTS ON SOLID, URANIUM BASED NUCLEAR FUEL MATERIALS, VOLUME 5, NUMBER 3 A Bibliography

W. Uhlmann Nov. 1965 56 p refs

(VODIT-16(5.3))

Fifty-four references are given to journals and reports published from 1963 through May 1965. The references are arranged under the headings: uranium metal; alloys; carbide; oxide; nitride; dispersion fuels; and coated particle fuels.

NSA

N66-25125# Aktiebolaget Atomenergi, Stockholm (Sweden).

HEAT TRANSFER ANALOGIES

Ajay Bhattacharyya Nov. 1965 66 p refs

(AE-201)

Descriptions of various analogs used to study different steady-state and unsteady-state heat transfer problems are given. The analogs covered are: hydraulic; membrane; geometric electrical; and network. A comparison of the different analogs is presented in the form of a table. 81 references are cited.

Author (NSA)

N66-25178 Library of Congress, Washington, D. C. Aerospace Technology Div.

MATERIALS FOR HIGH-TEMPERATURE ENERGY CONVERTERS, ANNOTATED BIBLIOGRAPHY Surveys of Soviet Scientific and Technical Literature

Michael Slesarenko 25 Feb. 1966 45 p refs

(ATD-66-20)

This annotated bibliography was compiled from Soviet open sources published 1960-1965. The 68 entries are arranged alphabetically by first author only. An author index is provided at the end of the report for the convenience of the user. Pertinent information covered includes the following: solid solution, phase diagram, radioisotope thermoelectric generator, single crystal, pn junction, discharge plasma, transition metal, magnetic field, plasma device, binary nickel-base solid solution, indium antimonide, tellurides, arsenides, anodes, thermionic cathodes, tungsten-hafnium system, electron analogue of indium arsenide, niobium-doped rutile, germanium telluride valence-band structure, thin semiconducting films, manganese-silicon alloys, uranium and zirconium carbides, physico-chemical properties of tungsten-rhenium thermoelectrodes, refractory nitrides, manganese selenide, lanthanum and cerium sulfides, aluminum antimonide, thermionic energy converters, thermionic diode, silicides, binary cobalt-base solid solutions, plasma thermoelectric element, iridium effect on palladium, lithium effect on recombination in n-type silicon, autothermionic cathodes.

Author

N66-25179# Library of Congress, Washington, D. C. Aerospace Technology Div.

SPACECRAFT UTILIZING THE LIFTING REENTRY TECHNIQUE. PART II. SECTION I: COMPREHENSIVE REPORT. SECTION II: ANNOTATED BIBLIOGRAPHY

Victor Klein, Alexis Baratoff, and Ivan M. Soukhanov 1 Apr. 1966 325 p refs

(ATD-66-34)

This report is based on Soviet-Satellite open sources published 1957-1964, although some earlier articles are included. Theoretical studies in lifting reentry are reviewed. Part I (reentry and recovery of Soviet manned space vehicles) dealt with descriptions of launchings, flights, and reentries of Vostok-type space vehicles. Part II comprises a comprehensive report, and an annotated bibliography. Although the two sections are bound in one volume, they are independently paginated and have separate tables of contents. Section I is a comprehensive review of sources on theoretical and experimental studies of problems in fields of space sciences, i.e., problems of lifting and ballistic hypervelocity flight, and atmospheric reentry techniques. There are four parts following

the introduction: high-speed aerodynamics and gas dynamics, high-speed aerothermodynamics, high-speed flight mechanics, and strength of flight-vehicle components (thin and sandwich plates and shells). A brief conclusion is given. Section II is an annotated bibliography containing 861 entries arranged by subject: aeromechanics of high-speed flows, aerothermodynamics of high-speed flows, flight mechanics, strength of space vehicle components, and miscellaneous. Within each subject group, the entries are further arranged chronologically by year of publication and source. There are three appendices to Section II: Appendix A. list of source abbreviations, Appendix B. glossary of abbreviations, and Appendix C. alphabetical index of authors and associations. Author

N66-25192# Joint Publications Research Service, Washington, D. C.

SOVIET-BLOC RESEARCH IN GEOPHYSICS, ASTRONOMY, AND SPACE, NO. 131

2 May 1966 70 p refs Transl. into ENGLISH from Russian (JPRS-35295; TT-61-11147-131) CFSTI: \$3.00

A compilation of abstracts, summaries, and full translations of articles on astronomy, meteorology, oceanography, terrestrial geophysics, and upper atmosphere and space research is presented. Complete bibliographic information accompanies each article. C.T.C.

N66-25204# Oak Ridge National Lab., Tenn.
NUCLEAR THEORY INDEX FOR 1964

M. J. Martin and H. Ogata, ed. [1965] 106 p refs (TID-22771) CFSTI: \$2.50

This booklet presents bibliographic references for nuclear theory papers. Generally; only articles dealing with the low energy aspects of nuclear theory are indexed. Meson effects are included only as they relate specifically to nuclear properties usually associated with low energy phenomena. Major categories are nuclear structure, models, properties, and reactions; electromagnetic radiation; beta decay and parity; alpha decay; tables and computational aids; and special topics. C.T.C.

N66-25282# TRW Systems, Redondo Beach, Calif.
THE SOVIET SPACE PROGRAM: A SELECTIVE BIBLIOGRAPHY Special Literature Survey No. 16

L. R. Magnolia, comp. 9 Mar. 1966 16 p refs (TRW-9990-7235-TO-000)

An annotated bibliography of selected titles is presented on Soviet space research. Topics include: manned space flight; far side of the moon; ionospheric physics; physiological responses of animals and men to the space environment; various and sundry logs of Soviet space activities; satellite observations of the Soviet high altitude thermonuclear explosion; earth magnetosphere measurements; cosmic radiation; solar physics; Soviet Mars and Venus projects; and earth radiation belts. D.T.

N66-25306# National Aeronautics and Space Administration, Washington, D. C.

AEROSPACE MEDICINE AND BIOLOGY—A CONTINUING BIBLIOGRAPHY, MARCH 1966

Apr. 1966 143 p refs (NASA-SP-7011(23)) CFSTI: HC \$4.00/MF \$1.00 CSCL 06

An annotated bibliography is presented on aerospace medicine and biology. The subject coverage concentrates on the biological, physiological, psychological, and environmental

effects to which man is subjected during and following simulated or actual flight in the earth's atmosphere or in interplanetary space. Also included are references describing similar effects on biological organisms of lower order, and related topics such as sanitary problems, pharmacology, toxicology, safety and survival, life support systems, exobiology, and personnel factors. R.N.A.

N66-25478# Technische Documentatie en Informatie Centrum voor de Krijgsmacht, The Hague (Netherlands).

H.E.R.O. (HAZARDS ELECTRO MAGNETIC RADIATION TO ORDNANCE) Bibliography

W. G. van Voss 15 Jan. 1966 45 p refs (TDCK-43958) CFSTI: HC \$2.00/MF \$0.50

An annotated bibliography is compiled from the open literature in connection with the HERO program (Hazards Electromagnetic Radiation to Ordnance). Concerned primarily with hazards created by the ignition of explosive devices by electromagnetic radiation, the bibliography is divided into five chapters: (1) *Fundamental Reports*, (2) *Proceedings of the Second HERO Congress in 1963*, (3) *Measuring of Electromagnetic Radiation*, (4) *HERO Testing*, and (5) *Construction of Explosive Devices with RF Shielding*. M.W.R.

N66-25479# Radio and Space Research Station, Slough (England).

WORLD DATA CENTRE C: ROCKETS AND SATELLITES. LIST OF REPORTS AND REPRINTS RECEIVED DURING THE PERIOD 1 JULY-30 DECEMBER 1965

[1965] 12 p refs CFSTI: HC \$1.00/MF \$0.50

Reports relating to rocketry, satellites, and space probes which were received by the World Data Center C between July 1 and December 30, 1965, are listed according to subject. Titles and sources are presented for researches dealing with orbits, tracking, data recovery, gravitational and magnetic fields, radiation, the atmosphere, ionospheric radio wave propagation, meteors, biomedicine, astronomy and plasma physics. M.W.R.

N66-25549# National Aeronautics and Space Administration, Washington, D. C.

COMMUNICATIONS SATELLITES Bibliography, Feb. 1965-Jan. 1966

May 1966 85 p refs (NASA-SP-7004(02)) CFSTI: HC \$1.00/MF \$0.75 CSCL 22B

An annotated bibliography on communications satellites is presented with abstracts, and author and subject indexes. Such diverse topics are referenced as: television broadcasting, telemetry, outer-space systems, multi-station systems, and medium height random orbit systems. The economic and legal implications of communications satellites are represented. References are also included which describe the history and operation of individual satellites as Advent, Courier, Echo, Relay, Score, Syncom, and Telstar, and well as several satellites used for meteorological studies. D.T.

N66-25578# National Aeronautics and Space Administration, Washington, D. C.

AEROSPACE MEDICINE AND BIOLOGY A Cumulative Index to the 1965 Issues of a Continuing Bibliography

April 1966 725 p refs (NASA-SP-7011 (20)) CFSTI: HC \$7.00/MF \$3.50 CSCL 06E

Cumulative subject, corporate source, and author indexes are presented for the aerospace medicine and biology continuing bibliography. The subject index contains "see" and "see also" cross references. D.T.

N66-25596# Technisch Documentatie en Informatie Centrum voor de Krijgsmacht, The Hague (Netherlands).

A REVIEW OF LITERATURE ON FACTORY TECHNOLOGY [LITERATUUROVERZICHT, WERKPLAATSTECHNIEK]

Feb. 1966 25 p refs In GERMAN, ENGLISH, DUTCH, and FRENCH /ts Vol. 11, No. W-95
CFSTI: HC \$1.00/MF \$0.50

Abstracts and bibliographic notes are presented on the topics of operations using clamps (turning, sawing, polishing, drilling, spark prevention, and thread fabrication), non-clamp type operations (general, welding, hot and cold forging, presses, depth drawing, and extrusion), other fabrication methods (welding, and warmth and surface treatments), and general information, such as management and organization, rules and regulations, machine parts, and machine tools. Transl. by J.O.

N66-25603# Deutsche Gesellschaft für Flugwissenschaftler E.V., Brunswick (West Germany).

LIST OF REPORTS OF THE GERMAN RESEARCH ESTABLISHMENTS FOR AERONAUTICS AND ASTRONAUTICS FROM 1953 TO MARCH 1964 [VERZEICHNIS DER BERICHTE DER DEUTSCHEN LUFT- UND RAUMFAHRT-FORSCHUNGSANSTALTEN 1953 BIS MARZ 1964]

W. Schulz Sep. 1964 126 p refs In GERMAN; ENGLISH and FRENCH summaries
(DUR-Mitt.-64-01) CFSTI: HC \$4.00/MF \$1.00

This information contains a list of reports published by the German research institutions for Aero- and Astronautics—Aerodynamische Versuchsanstalt Göttingen (AVA); Deutsche Versuchsanstalt für Hubschrauber und Vertikalflugtechnik (DFH), formerly Deutsche Studiengemeinschaft Hubschrauber (DHS); Deutsche Versuchsanstalt für Luft- und Raumfahrt (DFL); Deutsche Versuchsanstalt für Luft- und Raumfahrt (DVL); Flugwissenschaftliche Versuchsanstalt München (FFM), formerly Deutsche Versuchsanstalt für Segelflug (DFS); Forschungsinstitut für Physik der Strahlantriebe (FPS)—after World War II, from 1953 till March 1964. The report series of the different establishments were substituted by a new common series entitled "Deutsche Luft- und Raumfahrt" on April 1st, 1964. This new series consists of two partial ones: "Forschungsberichte" (Reports) and "Mitteilungen" (Information). Author

N66-25613# Massachusetts Inst. of Tech., Cambridge. Engineering Projects Lab.

AN INDEX TO THE TWO-PHASE GAS-LIQUID FLOW LITERATURE, PART III

S. William Gouse, Jr. Jan. 1966 262 p refs
(Contract Nonr-1841(73))
(DSR-8734-6; AD-630295) CFSTI: HC \$6.00/MF \$1.25

A total of 1,453 separate references on certain types of two-phase gas-liquid flow phenomena were found, verified, listed, and indexed by subject and principal author. This literature survey was carried out as one phase of a continuing program to determine the state of the art in two-phase gas-liquid flow phenomena. This is the terminal report of a program that has seen the publication of two prior indices, totaling 5,235 references on two-phase gas-liquid flow. The problem areas of condensation, cavitation, and atomization have been generally excluded, except through error or when references were of such a basic character as to be generally useful. A frequency of citation analysis was carried out to determine which of the 5,235 references have been most frequently cited. Author (TAB)

N66-25640# Consiglio Nazionale delle Ricerche, Rome (Italy). Istituto Nazionale di Ultracustica O. M. Corbino.

DOCUMENTATION OF ULTRACACOUSTICS, RELATIVE TO 1960 [DOCUMENTAZIONE DI ULTRACUSTICA RELATIVA ALL'ANNO 1960]

[1965] 52 p refs In ITALIAN
CFSTI: HC \$3.00/MF \$0.50

An annotated bibliography is presented of ultrasonics literature published in 1960. Areas of classification include: (1) the effects of ultrasonic waves on photon radiation; (2) ultrasonic instruments; (3) ultrasonic velocities, dispersion, and absorption in gases, solids, and liquids; and (4) the physical, chemical, and biological effects of ultrasonic waves.

Transl. by D.T.

N66-25762# Library of Congress, Washington, D. C. Aerospace Technology Div.

ENERGY TRANSFER IN PHOTOBIOLOGY AND PHOTOCHEMISTRY Surveys of Soviet Scientific and Technical Literature

Boris Martsissov 31 Dec. 1965 144 p refs Annotated Bibliog., Pt. 1 and 2
(ATD-B-65-102)

An annotated bibliography on energy transfer in both photosynthesis and vision is prepared from the Soviet open literature published between 1958 and 1963. The references, many with abstracts, are arranged alphabetically by author; and subject, author, and association indexes are appended.

M.W.R.

N66-25763# International Union of Pure and Applied Chemistry, Basle (Switzerland). Commission on High Temperatures and Refractories.

HIGH TEMPERATURE CHEMISTRY AND PHYSICS OF GASES AND PLASMAS Bibliography

L. Brewer, comp. (Calif. Univ., Berkeley) 31 Mar. 1966 34 p refs
(Rept.-18) Available from Natl. Bur. of Standards, Washington, D. C.

References dealing with spectroscopy of interest to high temperature chemistry and with reactions between gases and condensed phases are included in a bibliography on the high temperature chemistry and physics of gases and plasmas. Reports of researches conducted in the United States and abroad are listed according to titles.

M.W.R.

N66-25764# International Union of Pure and Applied Chemistry, Basle (Switzerland). Commission on High Temperatures and Refractories.

HIGH TEMPERATURE CHEMISTRY AND PHYSICS OF MATERIALS IN THE CONDENSED STATE, VOLUME 1966, NUMBER 1, JANUARY-MARCH 1966 Bibliography

J. J. Diamond, ed. (Natl. Bur. of Standards, Washington, D. C.) [1966] 69 p refs

A bibliography is presented of literature from the United States and abroad dealing with the high temperature chemistry and physics of materials in a condensed state. Metallic, non-metallic, and mixed materials are covered. References are listed by titles under the following categories: (1) devices for achieving temperatures above 1500°C; (2) devices for measuring and controlling temperatures above 1500°C; (3) devices for physical measurements above 1000°C; (4) properties, at temperatures below 1000°C, of materials which melt above

N66-25904

1500°C; (5) properties, at temperatures above 1000°C, for materials which melt above 1500°C; (6) properties, at temperatures above 1000°C, for materials which melt below 1500°C; (7) phase equilibria; and (8) reactions at temperatures above 1000°C.
M.W.R.

N66-25904# RAND Corp., Santa Monica, Calif.
COMPUTATIONAL LINGUISTICS: BIBLIOGRAPHY, 1964
David G. Hays and Roxana Ma Mar. 1965 66 p refs
(Contract AF 49(638)-700; Proj. RAND)
(RM-4523-PR; AD-613311) CFSTI: HC \$3.00/MF \$0.75

A bibliography is presented which cites 809 U.S. and foreign articles, reports, and books relevant to the fields of computational linguistics and documentation, with selective coverage in the fields of classification theory, computation and programming, computers and hardware, non-numerical applications of computers, and psycholinguistics. In the area of linguistics, a broad view is taken of structural theory and semantics without being exhaustive.
R.N.A.

N66-25913# Library of Congress, Washington, D. C. Aerospace Technology Div.

PROTECTIVE STRUCTURES AND COMPONENTS Surveys of Communist World Scientific and Technical Literature

Victor Klein Jan. 1966 29 p refs Compilation of abstracts
(ATD-66-3; AD-630325) CFSTI: HC \$2.00/MF \$0.50

An annotated bibliography with abstracts was compiled in response to the following areas of interest: (1) facilities; (2) transportation; (3) launch sites; and (4) packaging, preservation, and storage. Also, information is presented on: (1) special heavy duty tractors; (2) road building under arctic and permafrost conditions; (3) snow compacting machines; (4) ships and barges; and (5) waterways.
D.T.

N66-25994# Atomic Energy Commission, Oak Ridge, Tenn. Div. of Technical Information Extension.

REACTOR SAFETY—A LITERATURE SEARCH

Richard J. Smith comp. Aug. 1965 67 p refs
(TID-3525(Rev. 5, Suppl. 2)) CFSTI: HC \$3.00/MF \$0.75

A total of 671 references to unclassified reports is presented on reactor systems, materials, and operation designed to provide maximum-safety for the reactor, reactor personnel, and environs. Information is included concerning incidents and conditions of operation considered hazardous. Author, reactor, and report number-availability indexes are provided.

Author (NSA)

N66-26016# Kernforschungszentrum, Karlsruhe (West Germany).

LABORATORIES FOR WORK WITH RADIOACTIVE MATERIALS. BIBLIOGRAPHY ON PLANNING, BUILDING, ARRANGEMENT AND EQUIPMENT, PART III [LABORATORIEN FUER ARBEITEN MIT RADIOAKTIVEN STOFFEN. BIBLIOGRAPHIE UBER PLANUNG, BAU, EINRICHTUNG U. AUSRUESTUNG, TEIL III]

G. Brossmann Oct. 1965 120 p refs In GERMAN
(KFK-370)

References (425) are given to journals and reports published from 1955 through 1964.
NSA

N66-26029# Mound Lab., Miamisburg, Ohio
PENTAERYTHRITOLTETRANITRATE: A BIBLIOGRAPHY
Melvin R. Kantz 30 Jul. 1965 20 p refs
(Contract AT(33-1)-GEN-53)
(MLM-1252) CFSTI: HC \$1.00/MF \$0.50

References (176) on pentaerythritol tetranitrate and its homologs are given to journals and reports published from 1958 through 1964. A few pertinent references prior to 1958 are also included. Separate author and subject indexes are given.
NSA

N66-26081# Aerojet-General Nucleonics, San Ramon, Calif.
ARMY GAS-COOLED REACTOR SYSTEMS PROGRAMS: Program Final Report
Mar. 1966 190 p refs
(Contract AT(10-1)-880)
(IDO-28655) CFSTI: \$6.00

The technical accomplishments under the Army gas-cooled reactor systems program are summarized. A brief chronology of the evolution of the program, including the reactor development activity, the design, fabrication and subsequent testing of the ML-1 nuclear power plant and related technological and engineering activities are discussed. The summary is supplemented by a comprehensive bibliography which includes a brief abstract of each referenced report or document.
Author

N66-26171# Library of Congress, Washington, D. C. Aerospace Technology Div.

COMPUTER TECHNOLOGY Surveys of Soviet Scientific and Technical Literature

Joseph J. Podoski and Vladimir Podpaly 25 Jan. 1966 36 p refs Annotated Bibliog.
(ATD-66-12)

This bibliography was compiled from Soviet open sources published 1961-1964. It is the fourth in a series of reports reviewing Soviet developments in computer technology. Information not directly related to the assigned subject has been included because of its broad implications for study in this field. The 254 entries are arranged alphabetically by author within each of the years covered (46 for 1961, 59 for 1962, 59 for 1963, and 90 for 1964). A list of the journals scanned in preparation of the bibliography is included. Other information covered: transistorized amplifier, binary codes, magnetic tape, problem programming, algorithm coding and programming, wide-band thyrite multiplying and dividing device, ferromagnetic films, pneumatic circuits, parametric resonators with ferrite cores, magnetic drum storage unit, transistorized precision integrator, analog-digital converter potentiometer, photoelectronic decoder, pulse divider, magnetic circuit, amplifiers, differentiating and integrating circuits, full-key relay computer, digital-to-analog converter, tunnel-diode detector, nonlinear programming, trigger circuit, flip-flops, functional converter, ferrite storage unit, memory unit, delay line, encoder, and printing device.

Author

N66-26228# Atomic Energy Commission, Washington, D. C. Fallout Studies Branch.

NATURAL ENVIRONMENTAL RADIOACTIVITY An Annotated Bibliography

Alfred W. Klement, Jr. Jul. 1965 143 p refs
(WASH-1061) CFSTI: HC \$4.00/MF \$1.00

Approximately 2000 annotated references are presented to literature on natural environmental radioactivity in the atmosphere, biological materials, soils, and waters.

NSA

N66-26456# Oak Ridge National Lab., Tenn.
**INDEXES TO THE ANALYTICAL CHEMISTRY DIVISION
 ANNUAL PROGRESS REPORTS, 1964-1965**
 Helen P. Raaen and Ann K. Haas, ed. Jan. 1966 72 p refs
 (Contract W-7405-ENG-26)
 (ORNL-3904) CFSTI: HC \$3.00/MF \$0.75

Cumulative key word and author indexes to the annual progress reports from the Analytical Chemistry Division at ORNL are given for the periods following Nov. 15, 1963 including ORNL-3750 and -3889. The Key Word Index was prepared both from the numbered headings that appear within the reports and from the titles of the entries in the Presentation of Research Results and in the Translations. The form of the entries is that of a permuted title index. NSA

N66-26551*# National Aerospace Education Council, Washington, D. C.

AEROSPACE BIBLIOGRAPHY, THIRD EDITION

[1966] 68 p refs

(EP-35) GPO: HC \$0.50; CFSTI: MF \$0.75 CSCL 22A

An annotated bibliography is presented to assist the general reader and the teacher in locating books, teaching aids, films and filmstrips on space flight subjects. For the most part, the books listed are written for the nonspecialist; however, a few semi-technical titles have been included for readers who wish to delve more deeply into specific space flight subjects. The bibliography also includes: listings of pertinent references; teaching aids such as pamphlets, booklets, charts, and pictures; and a list of space periodicals. Additionally lists of sources of information on specific space subjects available from aerospace industry companies are included. H.S.W.

N66-26606# Hughes Aircraft Co., Culver City, Calif.
**A BIBLIOGRAPHY ON POLYTETRAFLUOROETHYLENE
 (TEFLON) PLASTICS**

J. T. Milek, H. E. Wilcox, and M. Bloomfield Nov. 1965 179 p refs

(LS-BIB-65-3)

A bibliography of over two thousand references on polytetrafluoroethylene (teflon) plastics is presented. These include such information as the chemistry, properties (chemical, electrical, mechanical, thermal), applications, polymerization, special properties, fabrication processes, and crystallography of the plastics. C.T.C.

N66-26726# Aeronautical Research Council (Gt. Brit.)

LIST OF CURRENT PAPERS NUMBERS 651-700

London, HMSO, 1965 7 p refs

(ARC-CP-700) CFSTI: HC \$1.00/MF \$0.50

A bibliography is presented of publically available papers on aerodynamics and aeronautics. Author and date of publication are included. D.T.

N66-26727# Aeronautical Research Council (Gt. Brit.)

LIST OF CURRENT PAPERS NUMBERS 701-750

London, HMSO, 1965 7 p refs For abstract see N66-26726

(ARC-CP-750) CFSTI: HC \$1.00/MF \$0.50

N66-26768# Technisch Documentatie en Informatie Centrum voor de Krijgsmacht, The Hague (Netherlands).

REVIEW OF LITERATURE ON METEOROLOGY AND CLIMATOLOGY [LITERATUURVERZICHT METEOROLOGIE KLIMATOLOGIE]

16 Apr. 1966 25 p refs In DUTCH, ENGLISH, and GERMAN Vol. 12, No. M-137

CFSTI: HC \$1.00/MF \$0.50

Abstracts and bibliographic notes are presented on the topics of detection methods and instruments, satellite meteorology, numerical prediction techniques, the mechanics and thermodynamics of air circulation, weather disturbances, temperature, horizontal and vertical air currents, condensation and precipitation, and weather control. Transl. by J.O.

N66-26771# Technisch Documentatie en Informatie Centrum voor de Krijgsmacht, The Hague (Netherlands).

REVIEW OF LITERATURE ON GENERAL MACHINE DESIGN AND CONSTRUCTION [LITERATUURVERZICHT ALGEMENE WERKTUIGBOUW]

25 Apr. 1966 23 p refs In DUTCH, ENGLISH, and GERMAN *Its* Vol. 4, No. AW-33

CFSTI: HC \$1.00/MF \$0.50

Abstracts and bibliographic notes are presented on the topics of diesel engines, gas and steam turbines, steam installations, tools, machine parts and lubrication, materials, and measurement and regulation techniques. Transl. by J.O.

N66-26777# Technisch Documentatie en Informatie Centrum voor de Krijgsmacht, The Hague (Netherlands).

REVIEW OF LITERATURE ON MILITARY MEDICINE [LITERATUURVERZICHT MILITAIRE GENEESKUNDE]

15 Mar. 1966 31 p refs In DUTCH, ENGLISH, GERMAN, and FRENCH *Its* Vol. 12, No. G-128 CFSTI: HC \$2.00/MF \$0.50

Abstracts and bibliographic notes are presented on the topics of chemical-biological-radiological dangers, air force medicine, psychology and psychiatry, internal medicine, surgery, the medical aspects of sea diving, pharmacology and toxicology, sensory physiology, and biomechanics. Transl. by J.O.

N66-26778# Technisch Documentatie en Informatie Centrum voor de Krijgsmacht, The Hague (Netherlands).

REVIEW OF LITERATURE ON ELECTROTECHNOLOGY [LITERATUURVERZICHT ELECTROTECHNIEK]

21 Apr. 1966 33 p refs In DUTCH, FRENCH, GERMAN, and ENGLISH *Its* Vol. 15, No. E-485 CFSTI: HC \$2.00/MF \$0.50

Abstracts and bibliographic notes are presented on the topics of telecommunications, electronics and microwave techniques, electromagnetic radiation, information processing, software and hardware computers and their applications, measurement and regulation techniques, reduction, interference and reliability, oscillators and magnifiers, components and materials, filters and networks, and energy techniques. Transl. by J.O.

N66-26779# Technisch Documentatie en Informatie Centrum voor de Krijgsmacht, The Hague (Netherlands).

REVIEW OF LITERATURE ON AIR NAVIGATION TECHNIQUES [LITERATUURVERZICHT LUCHTVAARTECHNIEK]

12 Apr. 1966 23 p refs In DUTCH, ENGLISH, and GERMAN *Its* Vol. 14, No. L-294

CFSTI: HC \$1.00/MF \$0.50

Abstracts and bibliographic notes are presented on the topics of model descriptions, flight properties and achievements, propulsion, airports, upkeep, navigation and air traffic control, safety, training and personnel, aerodynamics, strength and vibration research, air cushion vehicles, landing gear, paints and finishes, and de-icing. Transl. by J.O.

N66-26780# Technisch Documentatie en Informatie Centrum voor de Krijgsmacht, The Hague (Netherlands).

REVIEW OF LITERATURE ON INDUSTRIAL SCIENCE [LITERATUURVERZICHT DEDRIJFS WETENSCHAPPEN]
13 Apr. 1966 32 p refs In DUTCH, ENGLISH, FRENCH, and GERMAN *Its* Vol. 5, No. EM-97 CFSTI: HC \$2.00/MF \$0.50

Abstracts and bibliographic notes are presented on the topics of general economy, industrial economy (including internal organization, cost analyses, financing, administration, and statistics), personnel (including planning, evaluation, and leadership), and logistics (including acquisitions, storage and moving, and materials planning and control). Transl. by J.O.

N66-26781# Technisch Documentatie en Informatie Centrum voor de Krijgsmacht, The Hague (Netherlands).

REVIEW OF LITERATURE ON ELECTROTECHNOLOGY [LITERATUURVERZICHT ELECTROTECHNIEK]
7 Apr. 1966 33 p refs In DUTCH, ENGLISH, FRENCH, and GERMAN *Its* Vol. 15, No. E-484
CFSTI: HC \$2.00/MF \$0.50

Abstracts and bibliographic notes are presented on the topics of telecommunications, electronics and microwave techniques, radar, electromagnetic radiation, geometry, information processing, software computers and applications, measurement techniques, reduction, oscillators and magnifiers, components and materials, electronic instruments for ships, and halogen lamps. Transl. by J.O.

N66-26815*# Oak Ridge National Lab., Tenn. Radiation Shielding Information Center.

BIBLIOGRAPHY, SUBJECT INDEX, AND AUTHOR INDEX OF THE LITERATURE EXAMINED BY THE RADIATION SHIELDING INFORMATION CENTER—SPACE AND ACCELERATOR SHIELDING

J. Gurney, ed. Nov. 1965 74 p refs
(NASA Order R-104; Contract W-7405-ENG-26)
(NASA-CR-75316; ORNL-RSIC-11) CFSTI: HC \$3.00/MF \$0.75 CSCL 18F

The bibliography contains only articles of the review or summary type and deals with the primary areas of space radiation sources, cross section data, particle transport, and shielding. NSA

N66-26831# Nebraska Univ., Lincoln.
A LITERATURE SURVEY ON INTERFACES, THIN DIELECTRIC FILMS AND SURFACES—1965

N. M. Bashara [1965] 23 p refs Submitted for Publication (Contract Nonr-3718(01))
(AD-631187) CFSTI: HC \$1.00/MF \$0.50

A survey is given of the significant literature on dielectric films and related phenomena to be published in the annual 'Digest of the Literature on Dielectrics,' National Academy of Sciences—National Research Council. Author (TAB)

N66-26846*# National Aeronautics and Space Administration, Washington, D. C.

A SELECTED LISTING OF NASA SCIENTIFIC AND TECHNICAL REPORTS FOR 1965

Mar. 1966 1402 p refs
(NASA-SP-7024) GPO: HC \$2.00; CFSTI: MF \$10.00 CSCL 05B

This document contains a selected listing of NASA scientific and technical reports for 1965 that were previously published in STAR, NASA's semimonthly announcement

journal for the aerospace sciences. Included are bibliographic citations and abstracts arranged by subject categories, and indexes by subject, corporate source, personal author, report/accession number, and accession/report number. R.N.A.

N66-27098# Oak Ridge National Lab., Tenn. Atomic and Molecular Process Center.

BIBLIOGRAPHY OF ATOMIC AND MOLECULAR PROCESSES FOR 1964

C. F. Barnett, D. A. Griffin, M. O. Krause, J. R. Ray, J. W. Hooper, comp. (Georgia Inst. of Tech.) Feb. 1966 233 p refs Prepared in cooperation with Georgia Inst. of Tech. (Contract W-7405-ENG-26) (ORNL-AMPIC-3) Available from Oak Ridge Natl. Lab.

The bibliography contains references of interest to atomic and molecular processes research. Bibliographic sources consisted of fifty-two scientific journals and four abstract journals. The references are classified into fourteen categories and the references in each category are listed alphabetically by author. Author (NSA)

N66-27241*# Jet Propulsion Lab., Calif. Inst. of Tech., Pasadena.

ASTRONAUTICS INFORMATION ABSTRACTS. REPORTS AND OPEN LITERATURE. VOLUME VII, NO. 6

V. S. Anderson, N. Ives, T. P. Mac Donald, B. H. Nichols, and E. C. Sidwell, comp. Jun. 1963 138 p refs
(Contract NAS7-100)

(NASA-CR-75252) CFSTI: HC \$4.00/MF \$1.00 CSCL 22A

A selective compilation of astronautics information abstracts is presented. The report and open literature citations are restricted to the subject of space flight and to applicable data and techniques. Author, subject, and source indexes are included as well as periodical citations. R.N.A.

N66-27506# Atomic Energy Commission, Oak Ridge, Tenn. Div. of Technical Information Extension.

PHYSIOLOGICAL STUDIES EMPLOYING RADIOISOTOPES
Helen L. Ward, comp. May 1965 309 p refs
(TID-3515, Suppl. 1) CFSTI: HC \$6.00/MF \$1.50

References (2578) on the use of radioisotopes in physiological studies are given to scientific literature published during the period 1958–1963. Separate author, isotope, and report number indexes are included. Author (NSA)

N66-27518# Atomic Energy Commission, Oak Ridge, Tenn. Div. of Technical Information Extension.

SUMMARIES OF THE USAEC BASIC RESEARCH PROGRAM IN CHEMISTRY (OFF SITE)

Jan. 1966 158 p refs
(TID-4005, Pt. 2a, 2nd Ed.) CFSTI: HC \$1.75/MF \$1.00

Approximately 200 summaries are given of individual research projects supported by the Office of Chemistry Programs of the Division of Research under its offsite program. Attempts were made to include summaries for all contracts in effect on Dec. 1, 1965. The contract summaries are arranged in alphabetical order by contractor. Subject and author indexes are included. Each summary includes the name and address of the principal investigator, AEC contract number, and the date on which the summary was received. NSA

N66-27560# Max-Planck-Institut für Biophysik, Frankfurt am Main (West Germany). Zentralstelle für Atomkernenergie-Dokumentation.

RADIATION EFFECTS ON LIVING TISSUES AND ORGANISMS. SERIES C: BIBLIOGRAPHIES

W. Stahlfhofen, comp. Jun. 1965 168 p refs *Its* No. 20 (AED-C-04-20)

References (563) are given to reports, books, and journals published from 1962 through 1964. Separate author, report number, and subject indexes are included. NSA

N66-27623*# Library of Congress, Washington, D. C. Science and Technology Div.

AEROSPACE MEDICINE AND BIOLOGY. AN ANNOTATED BIBLIOGRAPHY. CUMULATIVE INDEXES, 1952-1961 LITERATURE, VOLUME I-X

Roman Kenk and Elaine S. Vallière, ed. 1966 194 p refs (NASA-CR-75598) CFSTI: HC \$5.00/MF \$1.25 CSCL 06S

Subject matter, corporate author, and author cumulative indexes are presented in an annotated bibliography on aerospace medicine and biology. Literature published between 1952 and 1961 is indexed in this work which includes all the references published in volumes I through X of *Aerospace Medicine and Biology: An Annotated Bibliography*.

M.W.R.

N66-27624*# Library of Congress, Washington, D. C. Science and Technology Div.

AEROSPACE MEDICINE AND BIOLOGY. AN ANNOTATED BIBLIOGRAPHY. 1958-1961 LITERATURE, VOLUMES VII-X, PART 1

Roman Kenk and Elaine S. Vallière, ed. 1966 448 p refs Sponsored by NASA and AF (NASA-CR-75599) CFSTI: HC \$7.47/MF \$2.25 CSCL 06S

Abstracts of aerospace medicine and biology literature for the years between 1958 and 1961 are presented in a reference book which combines the entries that previously appeared in volumes VII through X of *Aerospace Medicine and Biology: An Annotated Bibliography*. These abstracts are presented alphabetically by author under categories within the headings of general aspects, biology, general physiology, neurophysiology and sensory physiology, psychology and psychiatry, and effect of environmental factors and stresses.

M.W.R.

N66-27625*# Library of Congress, Washington, D. C. Science and Technology Div.

AEROSPACE MEDICINE AND BIOLOGY. AN ANNOTATED BIBLIOGRAPHY. 1958-1961 LITERATURE, VOLUMES VII-X, PART 2

Roman Kenk and Elaine S. Vallière, ed. 1966 865 p refs Sponsored by NASA and AF (NASA-CR-75597) CFSTI: HC \$11.64/MF \$4.00 CSCL 06S

Abstracts of aerospace medicine and biology literature for the years between 1958 and 1961 are presented in a reference book which combines the entries that previously appeared in volumes VII through X of *Aerospace Medicine and Biology: An Annotated Bibliography*. These abstracts are presented alphabetically by author under categories within the general headings of effects of environmental factors and stresses; personnel; medical problems and pharmacology; toxicology; safety, survival, and rescue; and man-machine integration and life support systems. M.W.R.

N66-27720# Picatinny Arsenal, Dover, N. J. Plastics Technical Evaluation Center.

LITERATURE SURVEY ON THERMAL DEGRADATION, THERMAL OXIDATION, AND THERMAL ANALYSIS OF HIGH POLYMERS, II Annotated Bibliography, 1 Oct. 1962-1 Mar. 1965

Dorothy A. Teetsel and David W. Levi Jan. 1966 157 p refs (PLASTEC-10; AD-631655) CFSTI: HC \$4.00/MF \$1.00

A bibliography of references, many of them annotated, is presented. This bibliography is the result of a literature survey on thermal degradation, thermal oxidation and thermal analysis of high polymers. These references cover the period from about 1 October 1962 to 1 March 1965. 702 items are given. These are grouped under general and material headings. A subject index and an index of authors are provided. This bibliography brings PLASTEC Note 7 (AD-423 546) published June 1963, up-to-date. Author (TAB)

N66-28007*# National Aeronautics and Space Administration, Washington, D. C.

AEROSPACE MEDICINE AND BIOLOGY—A CONTINUING BIBLIOGRAPHY, APRIL 1966

May 1966 168 p refs

(NASA-SP-7011(24)) CFSTI: HC \$1.00/MF \$1.00 CSCL 06S

An annotated bibliography on aerospace medicine and biology is presented along with subject, corporate source, and personal author indices. Included are references on the biological, physiological, psychological, and environmental effects to which man is subjected during the following simulated or actual flight in the earth's atmosphere or in interplanetary space. References describing similar effects on biological organisms of lower order are also included. Such related topics as sanitary problems, pharmacology, toxicology, safety and survival, life support systems, exobiology, and personnel factors receive appropriate attention.

R.N.A.

N66-28039*# National Aeronautics and Space Administration, Washington, D. C.

BIBLIOGRAPHIES ON AEROSPACE SCIENCE—A CONTINUING BIBLIOGRAPHY WITH INDEXES, FEBRUARY 1965-APRIL 1966

Jun. 1966 100 p refs

(NASA-SP-7006(02)) CFSTI: HC \$1.00/MF \$0.75 CSCL 05B

An annotated bibliography is presented with abstracts, and subject and author indices. Subject areas include: astronomy and astrophysics; cosmology; lunar and planetary flight and exploration; theoretical orbit and trajectory analyses; aerospace medicine and biology; exobiology; radiation effects on biological systems; physiological and psychological factors; aerodynamics of bodies; and wings, rotors, and control surfaces.

D.T.

N66-28077# Library of Congress, Washington, D. C. Aerospace Technology Div.

COMPUTER TECHNOLOGY Surveys of Soviet Scientific and Technical Literature

Boris Doncov 17 Feb. 1966 41 p refs Compilation of abstracts

(ATD-66-19)

An annotated bibliography with abstracts is presented for digital computer technology. The following areas are included: components, design, applications, and associated

systems. In addition, the use of homogeneous microelectronics computer elements and circuits to perform logic and computing operations is discussed. D.T.

N66-28094# National Research Council of Canada, Ottawa (Ontario).

PUBLICATIONS OF THE DIVISION OF MECHANICAL ENGINEERING AND THE NATIONAL AERONAUTICAL ESTABLISHMENT, SERIES 2, SUPPLEMENT 1

Jan. 1966 22 p refs

CFSTI: HC \$1.00/MF \$0.50

Abstracts are presented for researches dealing with aeronautics and mechanical engineering, and titles are given for various feature articles from quarterly bulletins and for miscellaneous papers. M.W.R.

N66-28100# Technisch Documentatie en Informatie Centrum voor de Krijgsmacht, The Hague (Netherlands).

INFRARED—AN ANNOTATED BIBLIOGRAPHY UP TO 1966

H. Lieffering, comp. Mar. 1966 167 p refs In ENGLISH; DUTCH; FRENCH and GERMAN (TDCK-44741) CFSTI: HC \$5.00/MF \$1.00

This paper contains abstracts of infrared studies: general, emission, transmission, detection, noise, systems, applications, miscellaneous, and bibliographies. Within each chapter the material has been arranged chronologically; an author index is provided. Author

N66-28112# Library of Congress, Washington, D. C. Aerospace Technology Div.

MATHEMATICS OF ANTENNAS—ANNOTATED BIBLIOGRAPHY Surveys of Soviet Scientific and Technical Literature

Leonas Kacinskas 31 Mar. 1966 78 p refs (ATD-66-33)

This annotated bibliography was compiled from Soviet open sources published 1961-1964. It deals with theoretical aspects of antennas. Information is included on: radio wave diffraction determination, pencil-beam antenna, spherical antenna, antenna feeder systems, horn antenna, slot antenna, reflector-type antenna, scanning antenna, electrical beam scanning, directional antenna, aplanatic antennas, circular aperture antenna, plane aperture antenna, antenna loss determination, periscope antenna system, linear antenna, helix-dielectrical antenna, diffraction antenna, dielectric lens antenna, phase center of antennas, and dipole antenna. Author

N66-28118# Library of Congress, Washington, D. C. Aerospace Technology Div.

ELECTROSTATIC AND ELECTROMAGNETIC GENERATORS—ANNOTATED BIBLIOGRAPHY Surveys of Soviet Scientific and Technical Literature

Jordan V. Randjelovic 14 Jan. 1966 30 p refs (ATD-66-10)

This annotated bibliography was compiled from Soviet open sources published 1961-1964. It reviews Soviet developments in electrostatic and electromagnetic generators as reflected in transactions of the various Soviet institutes active in this field. Information not directly related to the assigned subject has been included because of its broad implications for study in this field. The 72 entries are arranged by institute. Arrangement within the institutes is alphabetical

by author. Other information included: claw-shaped pole, contactless synchronous machines, magnetic flux component, inductor machine, synchronous coupling induction system, integrated selsyn motor, contactless d-c generator, semiconductor commutator, multipolar contactless selsyns, polyphase inductor machine, flat and arc-shaped stators, torque motor, double-tooth windings, toothed rotor, contactless d-c tachogenerators, squirrel-cage rotor, controlled induction capacitor motor, low-speed synchronous micromotors, harmonic rotor, asynchronous frequency converter, electric machine windings, magnetolectric generator, parametric motor, reversible induction dynamoelectric amplifier, hysteresis motor, winding wire. Author

N66-28138# United Kingdom Atomic Energy Authority, Culham (England). Research Group.

PLASMA SHEATH Bibliography

L. S. Francis, comp. Jan. 1966 23 p refs (CLM-BIB-6) HMSO: 3s

A bibliography with abstracts is presented on plasma sheaths and probes. Topics covered include: collision effects and collisionless plasmas; electrostatic, ion, moving, and Langmuir probes; ion currents and saturation currents; magnetic and nonmagnetic field effects; ion and electron temperatures, transition and boundary layers; oscillations and waves; low and high pressure effects; and stability, structure, geometry, and diffusion. N.E.N.

N66-28171# United Kingdom Atomic Energy Authority, Risley (England). Library and Information Dept.

BIBLIOGRAPHY ON CAVITATION IN FLUIDS, JANUARY 1963-31 OCTOBER 1965

U. R. M. Chadwick 1966 28 p (TRG-518(R)) HMSO: 3s 6d

Books and pamphlets, reports, and journal articles are listed in a bibliography on cavitation in fluids. The book and pamphlet listing is alphabetically by author; reports are listed by serial reference and/or source; and the journal articles are presented in chronological order, with the latest studies first. M.W.R.

N66-28310# RAND Corp., Santa Monica, Calif.

COMPUTATIONAL LINGUISTICS Bibliography, 1965

David G. Hays, Bozena Henisz-Dostert, and Marjorie L. Rapp Apr. 1966 81 p refs (Contract AF 49(638)-700)

(RM-4986-PR; AD-630985) CFSTI: HC \$3.00/MF \$0.75

A bibliography citing 700 U.S. foreign articles, reports, and books relevant to the fields of computational linguistics and documentation. A selective coverage of classification theory, computation and programming, computers, and hardware, non-numerical applications of computers, and psycholinguistics is included. In the area of linguistics, the editors have taken a broad view of structural theory and semantics. Author (TAB)

N66-28338# Technisch Documentatie en Informatie Centrum voor de Krijgsmacht, The Hague (Netherlands).

TITLE INDEX: TACTICS AND STRATEGY, 1964 [TITEL-INDEX: TAKTIEK EN STRATEGIE, 1964] [1965] 67 p refs In FRENCH, ENGLISH, GERMAN and DUTCH

(TDCK-29264) CFSTI: HC \$3.00/MF \$0.75

Selected bibliography of international publications on military strategy and tactics is presented. Major categories

are: (1) military policy, by regions; (2) nuclear warfare; (3) strategy and tactics of land, sea, and air forces; (4) tactics of the combat arms; (5) ABC warfare; (6) military organization; and (7) communications.

Transl. by K.W.

N66-28713# Hittman Associates, Inc., Baltimore, Md.
THE DEVELOPMENT OF A DYNAMIC THREE DIMENSIONAL ATMOSPHERIC MODEL FOR USE IN THE STUDY OF THE SELECTIVITY OF ORBITAL DECAY (TASK III)
 Albuquerque, N. Mex., Sandia Corp., Jul. 1965 79 p refs
 Prepared for Sandia Corp.
 (Contract AT(29-1)-789)
 (SC-DC-65-1701) CFSTI: HC \$3.00/MF \$0.75

A number of atmospheric models were evaluated for use in the study of the selectivity of orbital decay. It was found that only Anderson's model indicates the variation of density with latitude. A computer program MODEL was written to facilitate the use of this model. The program was used to calculate the density of the atmosphere as a function of several parameters for an altitude range of 90 to 800 km. 137 references.

NSA

N66-29022# Oak Ridge National Lab., Tenn. Nuclear Safety Information Center.
CURRENT NUCLEAR SAFETY LITERATURE—4 Indexed Bibliography
 May 1966 232 p refs
 (Contract W-7405-ENG-26)
 (ORNL-NSIC-14) Available from Oak Ridge Natl. Lab., Tenn.
 Approximately 800 references on nuclear safety are given to reports, journals, books, and patents published during 1964 and 1965. Author and subject indexes are included.

NSA

N66-29246# Boston Univ., Mass. Dept. of Physics.
THEORETICAL RESEARCH ON LASER MODELS Final Report, 1 Feb. 1963-31 Mar. 1966
 Charles R. Willis 28 Feb. 1966 15 p refs
 (Contract AF 19(628)-2460)
 (AFCRL-66-166; AD-632109) CFSTI: HC \$1.60/MF \$0.50
 A theory is developed for the description and understanding of laser behavior from a fundamental microscopic point of view. The model consists of N two-level systems interacting with a radiation field. The problems of collective motion, coherence, dissipation and inhomogeneous broadening are treated. This report consists mainly of the abstracts of six papers dealing with these subjects that have or will appear in scientific journals.

Author (TAB)

N66-29532# United Kingdom Atomic Energy Authority, Harwell (England).
LIST OF PUBLICATIONS AVAILABLE TO THE PUBLIC Cumulation No. 10, Jan.-Dec. 1965
 Feb. 1966 139 p refs
 HMSO: 17s

A compilation of the United Kingdom Atomic Energy Authority publications is presented and contains details of unclassified reports, translations, periodical articles, books, and patent specifications listed during 1965. The publications cover the areas of biology; medicine; agriculture; general, radio, radiation, nuclear, and analytical chemistry; chemical engineering; general engineering; instrumentation; geology and mineralogy; health and safety; industrial applications of

isotopes; mathematics and computers; metallurgy and materials; radiation effects on materials; general, solid state, nuclear, and theoretical physics; plasma physics and controlled fusion research; particle accelerators; reactor physics; and waste disposal.

R.N.A.

N66-29596# New York Univ., N. Y. Dept. of Physics.
CALCULATIONS IN ATOMIC SCATTERING PROBLEMS AND ATOMIC STRUCTURE Final Report, 1 May 1960-1 Feb. 1966

Sidney Borowitz 31 Mar. 1966 10 p refs
 (Contract Nonr-285(49))
 (AD-630172) CFSTI: HC \$1.10/MF \$0.50

Results of studies in the following areas are briefly summarized: (1) derivation of the Thomas-Fermi atomic model from the main body of the Schrodinger equation; (2) low energy scattering of electrons and positrons by atoms; (3) high energy scattering of electrons by atoms. A bibliography of the 46 papers resulting from the studies is included.

TAB

N66-29981# Hughes Aircraft Co., Culver City, Calif. Technical Library Services.
NICKEL-CADMIUM BATTERIES Bibliography, 1940-Dec. 1965
 J. Seremak Apr. 1966 88 p refs
 (LS-BIB-66-1)

Nickel-cadmium batteries and their characteristics are reported in this annotated bibliography. Articles on the following technological aspects are listed: preliminary evaluation; environmental, performance, reliability and life cycle testing; improvement, evaluation and manufacture of advanced development models. Also included for many types of such vented and sealed batteries and cells were abstracts on: charging characteristics, thermodynamic properties, gassing, cryogenic operation, sterilization and radiation effects, recharging methods, sintering, voltage regulation and conversion, positive and negative plate performance, heat dissipation and impedance. Their use as battery power and solar array power systems for satellites, and as portable instruments and acoustic transponders, as well as their application to military, naval, signal corps and spacecraft communication technological requirements are also indicated. Entries are arranged alphabetically under personal or corporate author.

R.LI.

N66-30084*# National Aeronautics and Space Administration, Washington, D. C.
AEROSPACE MEDICINE AND BIOLOGY A Continuing Bibliography with Indexes
 Jun. 1966 193 p refs
 (NASA-SP-7011(25)) CFSTI: HC \$1.00/MF \$1.25 CSCL 06S

Abstracts and indexes are compiled for researches dealing with biological, environmental, physiological, and psychological effects to which man is subjected during simulated and actual space flights. References describing similar effects on lower forms of life are included; and attention is given to such related topics as life support systems, safety and survival, and sanitation. While the emphasis is placed on applied research, there are numerous references to theoretical experiments. This is part of a continuing bibliography which includes abstracts of articles previously announced by the American Institute of Aeronautics and Astronautics, the Library of Congress and NASA.

M.W.R.

N66-30156*# National Aeronautics and Space Administration, Goddard Space Flight Center, Greenbelt, Md.

PARTICLES AND FIELDS RESEARCH Bibliography with Author Index, Jan. 1958-May 1966

Wilmot N. Hess and Gilbert D. Mead, comp. Washington, NASA, 1966 173 p refs

(NASA-SP-7026) CFSTI: HC \$2.50/MF \$0.50 CSCL 20H

An annotated bibliography is presented for rocket and satellite research on energetic particles and on magnetic and electric fields. The material is organized into the following areas: (1) solar wind, comets, and interplanetary medium; (2) interaction of solar wind with earth, moon and planets; (3) radiation belts—experimental, and radiation belts—theoretical and survey papers; (4) artificial radiation belts—Argus and Starfish; (5) auroras; (6) solar cosmic rays; (7) galactic cosmic rays—composition and spectra of primaries; (8) galactic cosmic rays—*origin, modulation, miscellaneous*; (9) geomagnetism and the magnetosphere; (10) the geomagnetic tail; (11) neutrons; and (12) general. An author index is also included. D.T.

N66-30305*# Raytheon Co., Sudbury, Mass. Space and Information Systems Div.

MILLIMETER COMMUNICATION PROPAGATION PROGRAM, VOLUME III Final Report, 1 Nov. 1964-1 Nov. 1965 [1965] 104 p refs

(Contract NAS5-9523)

(NASA-CR-76131; FR-65-334-3; E-733-65-3) CFSTI: HC \$4.00/MF \$0.75 CSCL 17B

An annotated bibliography is given of documents used in and related to the millimeter communication propagation program, for designing experiments to determine the effects of propagating medium on millimeter wave (10 to 100 gigacycles) space-earth communications. The documents are broken down into 10 categories: meteorology, atmospheric propagation, plasma effects, channel characterization, communication system performance, communication system applications, antennas and components, circuits, experimental ground facilities, and other bibliographies. A technical background is included to show how the documents described tie in with the experiment design study, and the contents of the contract reports are given in outline form. L.E.W.

N66-30309# International Geophysical Year World Data Center A, Washington, D. C.

ROCKETS AND SATELLITES Catalogue of Data, 1 Jan. 1964-31 Dec. 1965

Mar. 1966 98 p refs Sponsored by NSF

Reports dealing with sounding rockets, artificial earth satellites, and space probes are listed in a catalog of data received by the World Data Center during 1964 and 1965. Separate author indexes are presented for the various countries from which the reports originated. Subject indexes are categorized under such headings as: positional observations, orbits and trajectories, tracking, atmospheric physics, particles and corpuscular radiation, and magnetic fields. M.W.R.

N66-30341*# National Aeronautics and Space Administration, Goddard Space Flight Center, Greenbelt, Md.

BIOLUMINESCENCE: A SELECTED BIBLIOGRAPHY FROM THE LITERATURE RETRIEVAL SYSTEM, SPACE BIOLOGY BRANCH

G. Eglinton, P. M. Scott, T. Belsky, A. L. Burlingame, W. Richter et al 16 Mar. 1965 67 p refs /ts Ser. No. 6, Issue No. 9 (Grant NsG-101-61)

(NASA-CR-62300) CFSTI: HC \$3.00/MF \$0.75 CSCL 06A

Alkane fractions derived from a Precambrian sediment and associated oil seepage were studied to supplement infor-

mation on the origin of terrestrial life. The materials processed were derived from reference samples of tobacco leaf wax, and a Colorado oil shale. Rock samples were crushed into small chips, thoroughly washed with organic solvent, and pulverized into a fine powder. Hot extraction, or ultrasonic extraction with organic solvent, was then performed. Column chromatography over activated alumina, molecular sieve (5 Å) treatment, and gas-liquid chromatography provided the isolation procedures for the individual hydrocarbons, which were identified by retention time on gas-liquid chromatography and by comparison of infrared and mass spectra. It was concluded that isoprenoid hydrocarbons, including farnesane, pristane, and phytane are present in the marker bed of the Precambrian nonesuch shale formation at the White Pine Mine, Michigan, and in the oil seep associated with it. L.E.W.

N66-30511# Stanford Research Inst., Menlo Park, Calif. **LITERATURE SURVEY PERTAINING TO ELECTRICALLY SMALL ANTENNAS, PROPAGATION THROUGH VEGETATION, AND RELATED TOPICS Special Technical Report No. 17**

John Taylor, Kenneth A. Posey, and George H. Hagan Jan. 1966 287 p refs

(Contract DA-36-039-AMC-00040(E); ARPA Order 371)

(AD-629155) CFSTI: HC \$6.00/MF \$1.50

Bibliographical references, with abstracts wherever possible, are given for reports, papers, and books pertaining to the theory and practical use of electrically small antennas in a variety of environments and locations. References are grouped by content into categories: electrically small antennas; matching circuits and antenna impedances; ground constants; ground proximity loss; burned antennas; propagation over lossy ground; propagation through stratified media; propagation through vegetation; patterns and directivity of antennas over lossy ground; books, bibliographies, and surveys; and general, including historical reviews. A list of authors and an index of cross references between categories are provided. The dates of the references extend from pre-world War II to early 1966, with the preponderant emphasis on the period 1960-1966. Author (TAB)

N66-30548# Boeing Scientific Research Labs., Seattle, Wash. Mathematics Research Lab.

NUMERICAL ANALYSIS AND RELATED LITERATURE FOR SCIENTIFIC COMPUTER USERS, SECOND EDITION

James F. Price Mar. 1966 201 p refs /ts Mathematical Note No. 456

(D1-82-0517; AD-632244) CFSTI: HC \$5.00/MF \$1.25

The second edition of this annotated bibliography lists the contents of over 150 books in English on numerical analysis and related literature. It is meant for the general scientific computer user and not for the research numerical analyst; the descriptions and suggestions are given with this in mind. It is expected that the most useful section will be the 27-page index which tells in which books various topics may be found. There is also a section describing how to look up further information on such topics which may be found in the literature. Author (TAB)

N66-30689# David Taylor Model Basin, Washington, D. C. **LITERATURE SEARCH AND COMPREHENSIVE BIBLIOGRAPHY OF WINGS IN GROUND EFFECT AND RELATED PHENOMENA**

William F. Foshag Mar. 1966 106 p refs

(DTMB-2179; DTMB-AERO-1098; AD-633139) CFSTI: HC \$4.00/MF \$0.75

A comprehensive survey and literature search is made of the general field of wings operating in ground effect and related phenomena. Comments are included of some of the papers published, to present a sketch of the methods of approach of a number of authors. The bibliography presents sources which consider the problem from the theoretical, experimental, and/or applications point of view. Tables are included which provide a convenient breakdown of the various sources, for a quicker method of locating specific references dealing with an area of special interest to the reader.

Author (TAB)

N66-30889# California Univ., Berkeley. Inst. of Engineering Research.

THE MECHANICAL BEHAVIOR OF FOAMED MATERIALS. I: A LITERATURE SURVEY

M. R. Patel and I. Finnie May 1965 42 p refs
(Contract W-7405-ENG-48)

(UCRL-13193; MD-65-4) CFSTI: HC \$2.00/MF \$0.50

The mechanical properties and structure of foamed materials are reviewed. It was concluded that there is not yet a firm enough experimental background to support analytical attempts to predict foam properties from the knowledge of the properties of the base materials. NSA

N66-31063# Atomic Energy Information Service, Frankfurt am Main (West Germany).

HIGH-ENERGY PHYSICS. SERIES C: BIBLIOGRAPHIES, PART 1

K. Mellentin and I. Vierk, comp. Aug. 1965 266 p refs
(AED-C-23-08, Pt. 1)

Approximately 4,000 articles dealing with all aspects of high-energy physics are listed. Author and report number indexes are included. NSA

N66-31064# Atomic Energy Information Service, Frankfurt am Main (West Germany).

HIGH-ENERGY PHYSICS. SERIES C: BIBLIOGRAPHIES, PART 2

K. Mellentin and I. Vierk, comp. Aug. 1965 284 p refs
(AED-C-23-08, Pt. 2)

A bibliography on high energy physics is presented. The references are indexed alphabetically by author and include corporate source and report number. R.N.A.

N66-31239# Technisch Documentatie en Informatie Centrum Voor de Krijgsmacht, The Hague (Netherlands).

DEFENSE CONSTRUCTION [KRIJGSBOUW-KUNDE] Literature Review

4 Jun. 1966 23 p refs In ENGLISH, DUTCH, and GERMAN
/ts Vol. 8, No. K.85

CFSTI: HC \$1.00/MF \$0.50

Abstracts and bibliographic notes are presented on the topics of cement, foundation mechanics and techniques, airports, photogrammetry and land surveying, civilian construction methods, radioactive fallout, and air raid shelters.

Transl. by J.O.

N66-31274# Douglas Aircraft Co., Inc., Santa Monica, Calif.
ELECTRON FRACTOGRAPHY HANDBOOK Final Technical Report, 10 May 1963-31 Jan. 1965

A. Phillips, V. Kerlins, and B. V. Whiteson Wright-Patterson AFB, Ohio, AF Mater. Lab., 31 Jan. 1965 952 p
(Contract AF 33(657)-11127)

(AFML-TR-64-416; AD-612912) CFSTI: HC \$12.10/MF \$3.75

The Handbook is divided into five sections. These are: (1) Techniques—A detailed description of the most commonly used replication techniques, fracture analysis techniques, and a guide to distinguish false or 'artifact' structure. (2) Fracture modes—A guide to the various modes of fracture (or fracture morphology), their appearance in the electron microscope, and a glossary of terms commonly used in electron fractography. (3) Environmental effects—A review of the role of environmental influence on the fracture appearance. (4) Atlas of electron fractographs—A detailed compilation of over 300 specimens failed under known conditions, with the related fractographs. A general index as well as a complete cross-referencing index is also included to provide easy access to information related to specific alloy, strength level, type of test and/or environment and test temperature. (5) Bibliography—A bibliography of open literature related to the field of electron fractography. TAB

N66-31739# Iowa State Univ. of Science and Technology, Ames. Ames Lab.

NUCLEATION AND CRYSTAL GROWTH FROM CERAMIC MELTS Selected Bibliography, 1947-1964

J. E. Burlingame and M. F. Berard Sep. 1965 85 p refs
(Contract W-7405-ENG-82)

(IS-1287) CFSTI: HC \$3.00/MF \$0.75

This bibliography contains 128 references to literature pertaining to the nucleation and growth of crystalline ceramic materials from a melt. An abstract of each publication is provided, and a key word index is included. H.S.W.

N66-31745*# Yale Univ. Observatory, New Haven, Conn.

[INVESTIGATIONS OF THE INTERACTION OF SOLAR FLARE PARTICLE WITH THE CORONAL PLASMA] Final Report

Ludwig Oster [1966] 8 p refs
(Grant NsG-176-61)

(NASA-CR-76457) CFSTI: HC \$1.00/MF \$0.50 CSCL 20H

A brief summary of the publications which originated from this research is presented. One study showed that a resonance at the electron plasma frequency is present which is of the general form required to explain the type III radio bursts from the sun. Quantitative applications showed that the observed intensities and half-widths of type III bursts can be understood by postulating the passage of quite reasonable numbers of fast particles. Brief additional comments are made concerning each of the 20 references which appear in the bibliography. H.S.W.

N66-31870# United Kingdom Atomic Energy Authority, Risley (England). Reactor Group.

BIBLIOGRAPHY ON LIQUID METALS, 1958-1963

S. H. Fenney 1966 110 p refs
(TRG-312(R)) HMSO: 13s

A bibliography is presented on liquid metals, with particular emphasis on sodium and sodium-potassium alloys. The references cover the areas of analysis, purification, compatibility, corrosion, handling, safety, heat transfer, instruments, pumps, and properties. R.N.A.

N66-31914# Technisch Documentatie en Informatie Centrum voor de Krijgsmacht, The Hague (Netherlands).

SONIC BOOM: A LITERATURE SURVEY [SUPERSONE KNALLEN]

May 1966 82 p refs In ENGLISH, FRENCH, GERMAN, and DUTCH

(TDCK-45316) CFSTI: HC \$2.50/MF \$0.75

A bibliography of literature pertaining to effects of supersonic booms caused by shock waves from supersonic aircraft

is presented. The annotated bibliographies cover general descriptions of the sonic boom phenomenon; shock wave theory; shock wave patterns around aircraft; the influence of atmospheric effects (temperature, pressure, and wind on the location and intensity of a sonic boom); ground measurements and effects on buildings, constructions, and other aircraft; operational aspects (factors in navigation and control of supersonic aircraft); and human subjective reactions to the sonic boom.

L.S.

N66-31955# India. Dept. of Atomic Energy, Bombay.
THEORETICAL REACTOR PHYSICS STUDIES Annual Progress Report, 1965

B. P. Rastogi 1966 25 p refs
(AEET-248) CFSTI: HC \$1.00/MF \$0.50

Abstracts of papers, reports and internal notes on various physics problems encountered in reactor design, operation, optimization, and fuel cycle studies are presented. The bibliography is categorized into these areas: general studies, computer codes for studies pertaining to heavy water moderated reactors, neutron thermalization, resonance absorption, transport theory, reactor control, nuclear data and special studies. In an introductory statement, specific achievements from these investigations are pointed out.

H.S.W.

N66-32432*# Autonetics, Anaheim, Calif.
A SELECTED ANNOTATED BIBLIOGRAPHY FOR SPACEBORNE MULTIPROCESSING STUDY

C. F. C. Lyau 31 May 1966 54 p refs
(Contract NAS12-108)
(NASA-CR-76756; T6-1225/3111) CFSTI: HC \$2.50/MF \$0.50 CSCL 09C

This bibliography is prepared to provide readily available references on the work which has been accomplished in industry related to the application of multiprocessor systems to space missions. The bibliography includes references in the following categories: checkout and fault isolation, control systems, distributed logic and SOLOMON computer; space missions and spaceborne processing; time-sharing and multiprocessor multicomputers, and associated subjects. There are 115 references which include reports, papers, periodical articles, and books covering the period 1960 through February 1966.

Author

N66-32450# Atomic Energy Commission, Idaho Falls, Idaho.
Health and Safety Div.

AIRBORNE PARTICLE SIZE ANALYSIS A Composite Bibliography

J. T. Collins, Jr., W. J. Harrie, D. D. Stromberg, and J. L. Powers
May 1966 37 p refs
(IDO-12051) CFSTI: HC \$2.00/MF \$0.50

References (325) are given to reports and journals published from approximately 1841 through 1965. The topics considered include: aerosol behavior and characteristics; aerosol generation; autoradiography; determination of particle size; and instrumentation for collection and separation.

NSA

N66-32493# Air Force Systems Command, Wright-Patterson AFB, Ohio. Foreign Technology Div.

LITERATURE INDEX OF AEROSPACE MEDICINE AND BIOASTRONAUTICS, PUBLISHED IN USSR (1964-1965)
L. I. Boreva and E. M. Zabodovskaya 18 Mar. 1966 68 p refs
Transl. into ENGLISH of the publ. "Ukazatel Literaturny po Aviakosmicheskoy Meditsine i Bioastronavtike, Izdannoy v SSSR (1964-1965)" Moscow, 1965

(FTD-TT-65-1661/1+4; AD-633355) CFSTI: HC \$3.00/MF \$0.75

A bibliography is presented of literature dealing with aerospace medicine and bioastronautics published in the Soviet Union during 1964 and 1965. Entries are presented alphabetically by author, and separately for each year, under the following headings: general aspects; biology; neuro and sensory physiology; psychology and psychiatry; biological, physiological, and psychological effects of environment factors and stresses; personnel; medical problems and pharmacology; toxicology; and man-machine integration and lift support systems. In addition to authors, only titles and sources are presented for the references.

M.W.R.

N66-32573# National Bureau of Standards, Washington, D. C.

GUIDE TO INSTRUMENTATION LITERATURE
Julian F. Smith and W. G. Brombacher 7 Jul. 1965 245 p refs
Supersedes NBS-Circ.-567

(NBS-Misc-Publ.-271; NBS-Circ.-567) GPO: \$1.25

A source list of instrumentation literature, with a subject index, and an index of personal and corporate authors was compiled. It includes related topics, i.e., electronics, computers, and metrology, selected from books, manuals, reference works, and data compilations; publications offering abstracts or indexes; periodicals; bibliographies; buyers' guides and guides to dissertations, patents, and standards.

H.S.W.

N66-32586# Japanese Air Self-Defense Force, Tokyo. Aero-Medical Lab.

BIBLIOGRAPHY OF AVIATION ACCIDENT IN MEDICAL ASPECTS

1 Apr. 1965 229 p refs In JAPANESE and ENGLISH
(Rept.-2) CFSTI: HC \$3.75/MF \$1.25

An annotated bibliography on aerospace medicine, biology, and the medical aspects of aviation accidents is presented. Subjects such as public health, social medicine and hygiene, flight safety, pilot performance, protective materials, and aircraft accident prevention are included.

A.O.

N66-32622*# Republic Aviation Div., Fairchild Hiller Corp., Farmingdale, N. Y.

EFFECT OF DIET AND ATMOSPHERE ON INTESTINAL AND SKIN FLORA. VOLUME II: LITERATURE SURVEY

Phyllis E. Riely and Lorraine S. Gall [1965] 148 p refs
(Contract NAS9-4172)
(NASA-CR-65438) CFSTI: HC \$3.00/MF \$1.00 CSCL 06M

A literature survey on the varied population of differing microorganisms of the human skin is presented that encompasses both aerobic and anaerobic bacteria, yeasts, molds, fungi, actinomyces, and viruses. Included are the specialized skin areas of the anal fold, axilla, external ear, eye, fingernails, scalp, toenails, and umbilicus, but excluded are microorganisms growing on mucous surfaces. Also considered are microbiological sampling studies on groups of men having been confined for various periods of time in a closed environment under ambient atmospheric as well as under 100% oxygen conditions.

G.G.

N66-32647# Japanese Air Self-Defense Force, Tokyo. Aero-Medical Lab.

BIBLIOGRAPHY OF AVIATION MEDICINE IN JAPAN

1 Jul. 1963 318 p refs In JAPANESE
CFSTI: HC \$4.25/MF \$1.75

An annotated bibliography of research in aviation medicine of the past 50 years is presented. Topics such as respiration, body chemistry, and noise are included.

Trans. by J.T.C.

N66-32802# International Union of Pure and Applied Chemistry, Basle (Switzerland). Commission on High Temperatures in Gases and on Plasma Chemistry.

BIBLIOGRAPHY ON THE HIGH TEMPERATURE CHEMISTRY AND PHYSICS OF GASES AND GAS-CONDENSED PHASE REACTIONS

L. Brewer, comp. (Calif. Univ., Berkeley) 30 Sep. 1965 21 p refs

(Rept.-16) Available from Nat. Bur. of Std., Washington, D. C.

A bibliography is presented on the high temperature chemistry and physics of gases and gas condensed phase reactions.

R.N.A.

N66-32870# Commissariat a l'Energie Atomique, Saclay (France). Service Central de Documentation.

BIBLIOGRAPHY ON APPLICATIONS OF ELECTRON BEAM TECHNIQUES IN METALLURGY [LES APPLICATIONS METALLURGIQUES DU BOMBARDMENT ELECTRONIQUE]

Marie-Genevieve le Levier Apr. 1966 54 p refs In FRENCH (CEA-BIB-43)

References (259) are given to journals and reports published from 1960 through 1965. Separate author and subject indexes are included.

NASA

N66-33034# United Kingdom Atomic Energy Authority, Harwell (England). Chemical Engineering Div.

REPORTS ON TWO-PHASE HEAT TRANSFER ISSUED BY A.E.R.E., HARWELL

L. B. Cousins May 1966 24 p refs

(AERE-BIB-150) HMSO: 3s

This paper lists and summarizes the reports and publications issued by the two-phase heat transfer section of the Chemical Engineering Division. The reports are divided into two main sections: (1) Burnout and heat transfer studies on steam-water systems. (2) Hydrodynamic studies on air-water systems.

Author

N66-33135# International Atomic Energy Agency, Vienna (Austria).

NEUTRON DETECTORS

May 1966 411 p refs *Its* Bibliog. Ser. No. 18

CFSTI: HC \$7.10/MF \$2.25

A bibliography on neutron detectors is presented, which covers the period 1947-1965 and contains 1989 references. Source material appears in six categories: neutron detectors, neutron spectrometry, neutron source calibration, books and survey articles, and neutron dosimetry. Author and subject indexes accompany the abstracted material.

S.P.

N66-33163# International Union of Pure and Applied Chemistry, Basle (Switzerland).

BIBLIOGRAPHY ON THE HIGH TEMPERATURE CHEMISTRY AND PHYSICS OF GASES AND PLASMAS

L. Brewer, comp. (Calif. Univ., Berkeley) 30 Jun. 1966 20 p refs

(Rept.-19) Available from Natl. Bur. of Std., Washington, D. C.

A bibliography on the high temperature chemistry and physics of gases and plasmas is given. Spectroscopic studies, and reactions between gases and condensed phases are emphasized. Areas covered include quantum mechanics, ionized states, excited states, spectral line intensities, rotational and vibrational bands of chemical bonds, polarization, resonance fluorescence, dissociation energies, vapor pressures, kinetics, thermodynamics, and mechanisms.

L.S.

N66-33165# International Union of Pure and Applied Chemistry, Basle (Switzerland).

BIBLIOGRAPHY ON THE HIGH TEMPERATURE CHEMISTRY AND PHYSICS OF MATERIALS IN THE CONDENSED STATE, VOLUME 1966, NUMBER 2

J. J. Diamond, ed. (Natl. Bur. of Std., Washington, D. C.) Jun. 1966 85 p refs

Available from Natl. Bur. of Std., Washington, D. C.

A bibliography on the high temperature chemistry and physics of metallic, non-metallic, and mixed materials in the condensed state is given. The subject areas covered are divided into: (1) devices for achieving temperatures above 1500°C, (2) devices for measuring and controlling temperatures above 1500°C, (3) devices for physical measurements at temperatures above 1000°C, (4) properties of metallic, non-metallic, and mixed materials which melt above 1500°C, at temperatures below 1000°C, (5) properties of metallic, non-metallic, and mixed materials which melt above 1500°C, at temperatures above 1000°C, (6) properties of metallic and non-metallic materials which melt below 1500°C, at temperatures above 1000°C, (7) phase equilibria, (8) reactions at temperatures above 1000°C, and (9) books.

L.S.

N66-33234# Library of Congress, Washington, D. C. Aerospace Technology Div.

COMPUTER TECHNOLOGY Surveys of Soviet Scientific and Technical Literature

Boris Doncov 1 Apr. 1966 46 p refs Compilation of abstracts (ATD-66-37; AD-633892) CFSTI: HC \$2.00/MF \$0.50

The 38 abstracts are arranged alphabetically by author within each of the following categories: components (5 entries), design (10 entries), applications (11 entries), and associated systems (12 entries). A bibliography comprising 38 entries is included. Other information included: tunnel diode memory cell, transfluxors, parametron, three-phase pulse generator, switching diode, cryotron memory unit, digital computer, digital computer storage of meteorological information, document information retrieval system, analog computer, program control, computer photoreaders, automatic programming, automatic control, analog-digital multipliers, magnetic tape signal coding, digital counter, computer circuit.

Author (TAB)

N66-33255# Naval Research Lab., Washington, D. C.

EXPLODING WIRE RESEARCH, 1774-1963

J. R. Mc Grath May 1966 19 p refs

(NRL-MR-1698; AD-633623) CFSTI: HC \$1.00/MF \$0.50

A review of exploding wire phenomena (EWP) research is presented. This review covers the work performed from 1774 to the most current publication. Representative and significant studies are cited to indicate the difficulties associated with EWP research and the recent progress made in overcoming them.

Author (TAB)

N66-33390*# Battelle Memorial Inst., Columbus, Ohio.

ELECTRONIC PACKAGING: A BIBLIOGRAPHY

J. W. Klaphere, W. H. Veazie, J. C. Holt, and J. L. Easterday Redstone Arsenal, Ala., Redstone Sci. Inform. Center, 31 Mar. 1966 95 p refs Prepared for NASA

(Contract DA-01-021-AMC-11706(Z))

(NASA-CR-76570; RSIC-534) CFSTI: HC \$3.00/MF \$0.75 CSCL 09A

This annotated bibliography of selected reports, journal articles, and manufacturers' literature on electronic packaging, provides a literature basis for electronic packaging engineers, to design more reliable, maintainable, and adaptable electronic equipment for aerospace application. Subject indexing is provided by properties and environmental effects on packaging

N66-33446

materials, discrete parts to module packaging, integrated circuits to module packaging, module packaging to assembly, housing and mounting, packaging products, and interconnection techniques. Author and corporate author indexes are included. Author

N66-33446* # National Aeronautics and Space Administration, Washington, D. C.

AEROSPACE MEDICINE AND BIOLOGY—A CONTINUING BIBLIOGRAPHY WITH INDEXES, JUNE 1966

Jul. 1966 196 p refs

(NASA-SP-7011(26)) CFSTI: HC \$1.00/MF \$1.25 CSCL 06S

An annotated bibliography with indexes is presented to serve as a current abstracting and announcement medium for references on aerospace medicine and biology. Subject coverage includes biological, physiological, psychological, and environmental effects on man during and following simulated or actual flight in the earth's atmosphere or in interplanetary space. References describing similar effects on biological organisms of lower order are also included. Such related topics as sanitary problems, pharmacology, toxicology, safety and survival, life support systems, exobiology, and personnel factors are considered. In general, emphasis is placed on applied research, but references to fundamental studies and theoretical principles related to experimental development are also recorded. S.P.

N66-33720* # National Aeronautics and Space Administration, Washington, D. C.

BIBLIOGRAPHY ON GROUND-WATER POLLUTION AND WASTE WATER PURIFICATION [BIBLIOGRAFIE GROND-WATERVERONTREINIGING EN AFVALWATERZUIVERING]

G. De Vries July, 1966 57 p refs Transl. into ENGLISH from Dutch

(NASA-TT-F-10215) CFSTI: HC \$2.50/MF \$0.50 CSCL 08H

This bibliography is meant as an introduction to literature on the subject of ground water pollution and waste water purification. It contains: abstracts from articles and reports, a list of Dutch institutions engaged in water purification and the quality of open water and ground water in Holland, and a list of the most important periodicals on this subject. Author

N66-33780# Library of Congress, Washington, D. C. Aerospace Technology Div.

THE EFFECT OF ACCELERATIONS ON THE VESTIBULAR ANALYZER Surveys of Foreign Scientific and Technical Literature

Janice L. Smith 3 Jun. 1966 29 p refs (ATD-66-62)

This bibliography was compiled from Soviet open sources published 1955-1966 together with 5 Western sources. It is the first report in a series and deals with the effect of angular, impact, and Coriolis accelerations on the vestibular mechanism. The bibliography is divided into two sections. The first section consists of 112 items which were considered of primary interest. The second part contains 27 items considered of secondary interest because they contained elementary or background information or had only a few relevant paragraphs. Pertinent information included: diagnostic value of labyrinthine reactions, changes in the frequency spectrum of an encephalogram during vestibular and optokinetic stimulation, cortical regulation of vestibular reactions, stimulation of the vestibular apparatus of a dog, development of conditioned vestibular reflexes, biological and physiological studies in rocket and satellite flights, physiological effects of gravitation, spatial orientation, equipment for study of the vestibular analyzer, effect of prolonged acceleration motion sickness, vestibular training. Author

N66-33881# Academia R. P. R., Bucharest (Romania). Institutul de Fizica Atomica.

NEUTRON TRANSPORT THEORY—BIBLIOGRAPHY

Teodor Rosescu, comp. 1965 135 p Submitted for Publication

(IFA-FR-48)

Included is a list of 1200 references covering the period 1930-Aug. 1965 on neutron transport theory. NSA

N66-33952# General Dynamics Corp., San Diego, Calif. General Atomic Div.

DIFFUSION OF FISSION PRODUCTS (AND TRANSMUTATION PRODUCTS) IN NONFUEL MATERIALS A Review

M. T. Simnad and L. R. Zumwalt 15 Dec. 1965 186 p refs

(Contract AT(04-3)-187)

(GA-6542) CFSTI: HC \$5.00/MF \$1.00

A review is presented on the kinetics and mechanism of diffusion of fission products and transmutation products in nonfuel (nonfissile) materials. The topics covered include theoretical studies and the derivation of the diffusion equations, the influence of irradiation damage, and the formation of inert gas bubbles. The materials in which the diffusion processes were studied include dispersion-type fuel bodies, cladding and structural materials, and moderator, reflector, and control materials. These are reviewed under the classifications metallic, ceramic, and carbon materials. The concomitant changes in some other properties as a result of the diffusion of fission products and transmutation products are also discussed. Author (NSA)

N66-33985# Joint Publications Research Service, Washington, D. C.

PHYSIOLOGICAL METHODS IN COSMONAUTICS

R. M. Bayevskiy 18 Aug. 1966 321 p refs Transl. into ENGLISH of the book "Fiziologicheskiye Metody v Kosmonavtike" Moscow, 1965 p 1-300

(JPRS-37096; TT-66-33525) CFSTI: \$7.00

A monograph covering a broad sphere of problems related to the field of obtaining medical-biological information from space flights is presented. A brief historical review of physiological studies in outer space conducted with balloons, aircraft, rockets, artificial earth satellites, and spacecraft is given. The methods and means of space physiology as applicable to a flight experiment, and general aspects of physiological measurements during space flights through the use of physiological measuring-information systems are discussed. Individual physiological techniques (electrocardiography, phonocardiography, seismocardiography, kinetocardiography, arterial oscillography and sphygmography, actography, electromyography, electroencephalography, and other methods) used during flight experiments with animals and cosmonauts are also discussed. In addition, a bibliography of material relating to the subject area is given. L.S.

N66-34225# College of Aeronautics, Cranfield (England).

AN ANNOTATED BIBLIOGRAPHY OF PRESENTATION OF INFORMATION IN AIRCRAFT COCKPITS

J. G. Fox, I. Ferguson, and I. D. C. Andrew London, Min. of Aviation, May 1966 80 p refs

(COA-M&P-73; S&T-Memo-3/66; AD-634575) CFSTI: HC \$3.00/MF \$0.75

Lists references to reports and published papers on all aspects of presenting information to pilots. Abstracts are given of work particularly relevant to cockpit instrument design. Only work reported since 1940 is listed; for earlier work the reader is referred to "A History of Aircraft Cockpit Instrumentation" by Nicklas (1958). References are listed alphabetically by

author under six broad headings: general; methodology and criteria; pilot requirements; display presentation; system presentation; and pilot acceptance and training. The possibilities and directions for future research are discussed.

Author (TAB)

N66-34366*# National Aeronautics and Space Administration, Washington, D. C.

INDEX TO NASA TECH BRIEFS, JANUARY-JUNE 1966
Aug. 1966 62 p refs

(NASA-SP-5021(03)) CFSTI: HC \$1.00/MF \$0.75 CSCL 05 B

An annotated bibliography is presented of NASA Tech Briefs, along with subject and number indexes. Annotations are given under the following categories: (1) *Electrical (Electronic)*, (2) *Physical Sciences (Energy Sources)*, (3) *Materials (Chemistry)*, (4) *Life Sciences*, and (5) *Mechanical*. M.W.R.

N66-35013*# Jet Propulsion Lab., Calif. Inst. of Tech., Pasadena.

RESEARCH AND ADVANCED DEVELOPMENT PUBLICATIONS OF THE JET PROPULSION LABORATORY, FISCAL YEAR 1965

1 Jul. 1966 25 p

(NASA-CR-77377) CFSTI: HC \$1.00/MF \$0.50 CSCL 05 B

A total of 864 publications were quantitatively analyzed and are presented in tabular form by category, by NASA funding offices, and by subprograms in these offices. A list of the publications in the open literature during FY-65 is appended, including such topics as gas kinetics, dyadic analysis of space-time congruences, photoelectric spectrophotometry of selected southern stars, rocket measurement of the photoelectron-excited ultraviolet daylight, and polymeric semiconductors. L.E.W.

N66-35078# Naval Ordnance Lab., Corona, Calif.

BIBLIOGRAPHY ON THE HALL EFFECT THEORY, DESIGN, AND APPLICATIONS, SUPPLEMENT 2

W. R. Turnbull 1 Jun. 1966 33 p refs

(NOLC-659; AD-635197) CFSTI: HC \$3.00/MF \$0.50

This supplement continues the international survey of unclassified scientific papers and reports on research and development of the Hall effect, and on electronic devices based on the Hall effect to 1 April 1966. The basic document was NAVWEPS report 7233 (AD-283 808); Supplement 1 was NAVWEPS Report 8168 (AD-420 105). Author (TAB)

N66-35163# Library of Congress, Washington, D. C. Aerospace Technology Div.

LIQUID-METAL EMBRITTLEMENT Surveys of Soviet Scientific and Technical Literature

Alex Zurichenko 4 Apr. 1966 29 p refs Annotated Bibliog. (ATD-66-38)

This annotated bibliography was compiled from Soviet open sources published 1959-1965 with one entry from January 1966. An author index is provided at the end of the report. Pertinent information included: copper alloy testing in mercury salt solution, creep process, diffusion and solubility coefficients of molten metals, polycrystalline metal, tin recrystallization, alloy steel nonselective corrosion, surface tension reduction in solid metals, softening action of aggressive melts on solid metal, steel cyclic torsion in low-melting metals, adsorption-induced reduction of strength, irradiation effect on mechanical properties, anisotropy of electron and gamma irradiation effect on deformation process, metal corrosion fatigue, effect of low melting coating on mechanical properties of metals, metal diffusion in liquid copper. Author

N66-35193# Radio and Space Research Station, Slough (England).

WORLD DATA CENTRE C: ROCKETS AND SATELLITES LIST OF REPORTS AND REPRINTS RECEIVED DURING THE PERIOD 1st JANUARY, 1966-30th JUNE, 1966

[1966] 18 p refs

CFSTI: HC \$1.00/MF \$0.50

A bibliography is presented on topics related to satellites, probes, and rockets. The areas include space research, paths, tracking, data recovery, instrumentation, applications, interplanetary probes, gravitational and magnetic fields, radiation, atmosphere and ionosphere, radiowave propagation, meteors, and astronomy. N.E.N.

N66-35277# United Kingdom Atomic Energy Authority, Harwell (England). Information Branch.

X-RAY FLUORESCENCE ANALYSIS. PART I: BIBLIOGRAPHY

H. A. Stoddart and W. A. Dowden May 1966 224 p refs

AERE-BIB-136) HMSO: 27s

A bibliography on X-ray fluorescence analysis is presented. The references cover the book, periodical, report, and conference literature from 1957 to the end of 1964. C.T.C.

N66-35485# Library of Congress, Washington, D. C. Aerospace Technology Div.

NUCLEAR WEAPONS EFFECTS Surveys of Soviet Scientific and Technical Literature

Yuri Ksander 19 Apr. 1966 35 p Compilation of abstracts /ts Rept.-3

(ATD-66-45; TT-66-61761; AD-635477) CFSTI: HC \$2.00/MF \$0.50

The report is arranged in three sections. Section I discusses the structure and parameters of shock waves in gases. Section II discusses propagation of strong shock waves and their interaction with materials. The third section discusses shock waves in the stars and interstellar space. TAB

N66-35545# Picatinny Arsenal, Dover, N. J. Plastics Technical Evaluation Center.

CROSSLINKING, THERMAL AND MECHANICAL PROPERTIES OF THERMOPLASTIC AND PHENOLIC RESIN SYSTEMS A Bibliography

David W. Levi Feb. 1966 49 p refs

(PLASTEC-11; AD-634234) CFSTI: HC \$2.00/MF \$0.50

An annotated bibliography of 184 items is reported on the crosslinking, thermal and mechanical properties of thermoplastic and phenolic resin systems, it is limited to the references in the author's personal file. However, these cover the significant journals in the field, for the years 1960-1965. Complete subject and author indexes are included for the convenience of the user. Author (TAB)

N66-35687*# National Aeronautics and Space Administration, Washington, D. C.

LASERS AND MASERS—A CONTINUING BIBLIOGRAPHY WITH INDEXES, FEBRUARY-APRIL 1966

Jul. 1966 465 p refs

(NASA-SP-7009(01)) CFSTI: HC \$2.50/MF \$2.50 CSCL 20E

Abstracts of reports and articles which appeared during the period February, 1965-April, 1966, in "Scientific and Technical Aerospace Reports", "International Aerospace Abstracts", and "Aerospace Medicine and Biology" are presented. Special attention is given to laser and maser applications as they relate to ranging and communications systems, astronomy and optics, and metalworking. A subject index and a personal author index are included. N.E.N.

N66-35747# Southwest Research Inst., San Antonio, Tex.
A SURVEY OF THE LITERATURE ON LIGHT INITIATION OF SILVER ACETYLIDE-SILVER NITRATE EXPLOSIVE
 Sandor Silverman Dec. 1965 39 p refs
 (TR-1)

Various pertinent properties of a sheet explosive, lead azide, and silver acetylide-silver nitrate explosives are compared; results show that the impulse obtained from the silver acetylide-silver nitrate is about a factor of 44 less than that of lead azide, and a factor of 90 less than the sheet explosive. Other promising applications are listed as explosive forming of metals; dynamic material testing; military applications; and use as a primary explosive. Literature pertaining to light initiation of explosives are assessed, and a reference bibliography is included. Five methods of obtaining the spectral radiant energy incident upon the explosive are also discussed. Proposed recommendations for further research on silver acetylide-silver nitrate explosive include particle size reduction; dyes for increase light energy absorption; and baffles for isolating shock overpressure effects and emitted light on the propagation rate. M.G.J.

N66-36130*# National Aeronautics and Space Administration, Washington, D. C.

PLANETARY ATMOSPHERES—A CONTINUING BIBLIOGRAPHY, FEBRUARY—MAY 1966

Aug. 1966 135 p refs With Indexes
 (NASA-SP-7017(01)) CFSTI: HC \$1.50/MF \$1.00 CSCL 03B

A continuing annotated bibliography, together with personal author and subject indices, on planetary atmospheres is presented. Most of the entries pertain to investigations of Mars and Venus, many of which are the result of the successful probes of the atmospheres of Venus by Mariner II and Mars by Mariner IV. A limited number of references to the atmospheres of Jupiter, Mercury, and Saturn is also included. References to such specific topics as the theory of planetary origins, extraterrestrial environment, planetary exploration and spacecraft entry, and the physical properties of the planets are provided. Pertinent references to the techniques of planetary observation and measurement, e.g., those involving photography, photometry, spectroscopy, astronomy, and meteorology, are also given. R.N.A.

N66-36196# Gt. Brit. Ministry of Aviation, London. Technical Information and Library Services.

GLASS-REINFORCED PLASTIC LAMINATES AND REINFORCING GLASS FIBERS AND FLAKES Bibliography

E. R. Adams, comp., Jul. 1965 83 p refs
 (TIL/BIB/97)

References (289) are given to reports on glass-reinforced plastics, laminates of such reinforced plastics, and glass for reinforcement of plastics published from 1948 to 1965. Separate author and subject indexes are included. NSA

N66-36251# Federal Aviation Agency, Oklahoma City, Okla. Office of Aviation Medicine.

AVIATION MEDICINE REPORTS: AN ANNOTATED CATALOG OF OFFICE OF AVIATION MEDICINE REPORTS, 1961 THROUGH 1965

Mary Ellen Allen and Stanley R. Mohler Jan. 1966 34 p refs
 (AM-66-1)

An annotated catalog of Office of Aviation Medicine Reports is presented as a quick reference for those engaged in civil aviation and related activities. It provides an applied summary, Author Index, and Subject Index of each OAM Report published from 1961 through 1965. Author

N66-36373*# National Aeronautics and Space Administration, Washington, D. C.

AEROSPACE MEDICINE AND BIOLOGY A Continuing Bibliography, Jul. 1966

Aug. 1966 178 p refs With Indexes
 (NASA-SP-7011(27)) CFSTI: HC \$1.00/MF \$1.25 CSCL 06S

This continuing bibliography serves as an abstracting and announcement medium for references on aerospace medicine, exobiology, radiation effects on biological systems, physiological and psychological factors, life support systems, human engineering, protective clothing and equipment, crew training and evaluation, and piloting. Subject, corporate source, and personal author indexes are included. H.S.W.

N66-36375# Federal Aviation Agency, Washington, D. C. Library Services Div.

ACCESS TO AIRPORTS—SELECTED REFERENCES

Louise K. Annus comp. Aug. 1966 11 p refs *Its* Bibliog. List No. 12

This partially annotated bibliography contains 38 references to literature concerning air, motor, rail, and water transportation to domestic airports. H.S.W.

N66-36882# Harvard Univ., Cambridge, Mass.

BIBLIOGRAPHY OF RESEARCH ON LOWERING OF IONIZATION POTENTIALS IN PLASMAS (APPENDIX)

S. G. Brush and B. H. Armstrong (IBM, Palo Alto, Calif.) *In* Joint Inst. for Lab. Astrophys. The Lowering of the Ionization Potential and Related Probl. of the Equilibrium Plasma 15 Jul. 1966 21 p refs (See N66-36869 22-25)

An annotated bibliography is presented on the theory and experiment regarding the effect of interactions with other particles on the ionization potential of an atom. The reports are grouped according to partition function cutoff, calculations using partition function cutoffs, and effective ionization potential in a plasma. M.G.J.

N66-37124# National Bureau of Standards, Washington, D. C. Physical Chemistry Div.

A BIBLIOGRAPHY ON ION-MOLECULE REACTIONS JANUARY 1900 TO MARCH 1966

F. N. Harlee, H. M. Rosenstock, and J. T. Herron 28 Jun. 1966 46 p refs
 (NBS-TN-291) GPO: \$0.30

The present document is a bibliography on reactions of chemical interest. The bibliography is listed in a chronological-alphabetic arrangement and includes 431 titles and references taken from the published literature since 1900. The coverage is limited to reactions between ions and molecules leading to changes in the atomic composition of either the projection ion or target molecule. No attempt has been made to completely cover resonant charge exchange or elastic scattering. Author

N66-37136*# Israel Program for Scientific Translations, Ltd., Jerusalem.

BIBLIOGRAPHY OF THE PRINTED AND MANUSCRIPT WORKS OF K. E. TSIOLKOVSKII ON ROCKETRY AND SPACE FLIGHT

B. N. Vorob'ev, S. A. Sokolova, and N. I. Rogacheva *In its* Soviet Rocketry 1966 p 193-202 refs (See N66-37126 22-28)
 CFSTI: HC \$3.75/MF \$1.25

Russian and English titles are presented in this annotated bibliography covering 143 publications and manuscripts. An explanatory list of Russian abbreviations is included. M.G.J.

N66-37183# Naval Research Lab., Washington, D. C. Library Branch.

DIRECT ENERGY CONVERSION LITERATURE ABSTRACTS

Jun. 1966 122 p refs

(AD-635584) CFSTI: HC \$4.00/MF \$0.75

A collection of references from various sources covering the current literature on thermoelectricity, thermionic emission, photoelectric processes, magnetohydrodynamics, electrochemical processes, energy storage, and energy sources.

Author (TAB)

N66-37304*# American Univ., Washington, D. C.

INVESTIGATION OF ELECTROCHEMISTRY OF HIGH ENERGY COMPOUNDS IN ORGANIC ELECTROLYTES. BIBLIOGRAPHY ON PROPYLENE CARBONATE, γ -BUTYROLACTONE, AND RELATED SUBJECTS Supplement to Third Progress Report

J. P. Marciszyn, Jr. and R. T. Foley 12 Sep. 1966 55 p refs

(Grant NGR-09-003-005)

(NASA-CR-78235) CFSTI: HC \$2.50/MF \$0.50 CSCL 07C

This bibliography lists references in the open literature that will assist in investigations of the electrochemistry of high energy compounds in organic electrolytes. Included are references on lactones, and the purification, properties, synthesis, and reactions of butyrolactones.

H.S.W.

N66-37431# System Development Corp., Santa Monica, Calif. **INFORMATION SCIENCE AND TECHNOLOGY FOR 1966, PART I Bibliography**

Frances I. Neeland 1 Jul. 1966 54 p refs

(TM-3008/001/00; AD-635200) CFSTI: HC \$3.00/MF \$0.50

The continuing bibliography is intended primarily for the use of the authors of chapters in 'Annual Review of Information Science and Technology.' The style of entries has been modified to suit the author's requirements. In order to reduce the gaps left in the 1965 issues, this part of the bibliography incorporates additional 1965 references cited by the authors of the first volume of the 'Review.'

Author (TAB)

N66-37532# General Technical Services, Inc., Yeadon, Pa. **INFORMATION SCIENCE: OUTLINE, ASSESSMENT, INTERDISCIPLINARY DISCUSSION**

Arthur S. Iberall Arlington, Va., Army Res. Office, Jun. 1966 91 p refs

(Contract DA-49-092-ARO-114)

(AD-635809) CFSTI: HC \$3.00/MF \$0.75

This report provides an assessment and introduction to the interdisciplinary literature of three aspects of Information Science, in annotated bibliography form. These are: communication networks; human information processes, principally language and information retrieval; and the large cybernetic systems such as the human brain and central nervous system.

Author (TAB)

N66-37621# Los Alamos Scientific Lab., N. Mex.

BIBLIOGRAPHY ON KINETICS OF THE OXIDATION-REDUCTION REACTIONS OF URANIUM, NEPTUNIUM, PLUTONIUM, AND AMERICIUM IN AQUEOUS SOLUTIONS

Marilyn Treiman, comp., 6 Jun. 1966 12 p refs

(Contract W-7405-ENG-36)

(LA-3507) CFSTI: HC \$1.00/MF \$0.50

Seventy-six references from NSA, 1958 to March 1966, on kinetics of the oxidation-reduction reactions of uranium, neptunium, plutonium, and americium in aqueous solutions

are presented. The references are listed numerically by NSA abstract number.

NSA

N66-37801# Advisory Group for Aerospace Research and Development, Paris (France).

INDEX TO AGARD PUBLICATIONS 1962-1963, SUPPLEMENT NUMBER ONE

A. G. Vannucci and J. C. Dunne, comp. 1964 167 p refs

CFSTI: HC \$3.25/MF \$1.00

A bibliographic listing is presented of AGARD literature reports, AGARDographs, non-serial publications, manuals, general assembly proceedings, and unpublished papers. Consolidated subject, author, and report and document number indexes are provided.

A.G.O.

N66-37863# General Technical Services, Inc., Yeadon, Pa.

ANNOTATED INTERDISCIPLINARY BIBLIOGRAPHY OF THE PHYSICAL SCIENCES

Samuel Z. Cardon Jul. 1966 72 p refs

(Contract DA-49-092-ARO-114)

(REPT.-2; AD-635810) CFSTI: HC \$3.00/MF \$0.75

The report is an annotated bibliography of reference works in physical science in general, in interdisciplinary science, and in non-disciplinary science - i.e., history, philosophy, logic, and metaphysics of science.

Author (TAB)

N66-38125# Library of Congress, Washington, D. C. Aerospace Technology Div.

TRACKING OF MISSILES AND SPACE VEHICLES Surveys of Foreign Scientific and Technical Literature, Mar. 1965-Feb. 1966

13 Jun. 1966 193 p refs Compilation of Abstracts /ts Rept.-25 (ATD-66-66)

This compilation of abstracts contains 176 references to the world literature on ion clouds and ionospheric perturbations, radio emission and antennas, the use of lasers and masers in radio astronomy, and VLF propagation phenomena. Complete bibliographic information accompanies each abstract.

H.S.W.

N66-38185# Air Force Systems Command, Wright-Patterson AFB, Ohio. Foreign Technology Div.

USSR—BIRTHPLACE OF AERODYNAMICS

N. S. Arzhanikov and V. N. Mal'tsev 9 May 1966 36 p refs Transl. into ENGLISH from the Book "Aerodinamika" Moscow, Gos. Izd. Oboronnoy Prom., 1965 p 1-17; 470-473 (FTD-MT-65-497; TT-66-62031; AD-637054) CFSTI: HC \$2.00/MF \$0.50

Contents: Development hydroaerodynamics in XVIII and XIX centuries in Russia; N. Ye. Zhukovskiy and S. A. Chaplygin—founders of contemporary aerodynamics; leading role of Soviet scientists in development of aerodynamics.

TAB

N66-38220# Aerospace Medical Div. Personnel Research Lab. (6570th), Lackland AFB, Tex.

ABSTRACTS OF PERSONNEL RESEARCH REPORTS. VI: 1954-1965

Jo Ann Elson, comp. Dec. 1965 107 p refs

(PRL-TR-65-23; AD-636607) CFSTI: HC \$4.00/MF \$0.75

The volume includes abstracts of the 374 technical reports issued by the Personnel Research Laboratory January 1954 through December 1965. They cover studies in selection, classification, and utilization of Air Force personnel; systematizing information flow in support of personnel planning; methods of describing, evaluating, and structuring Air Force jobs; and development of

N66-38287

procedures for improving the quality of Air Force personnel.
Author (TAB)

N66-38287# Michigan Univ., Ann Arbor. Inst. of Science and Technology.

VESIAC MONTHLY BULLETIN OF VELA UNIFORM RESEARCH PUBLICATIONS

15 May 1966 26 p refs *Its* Vesiac Bull. no. 40
(AD-635571) CFSTI: HC \$6.00/MF \$0.50

Bibliography of research publications on seismology and seismic detection. TAB

N66-38289# Picatinny Arsenal, Dover, N. J. Plastics Technical Evaluation Center.

DIELECTRIC PROPERTIES OF POLYMERS-A BIBLIOGRAPHY, 1955-1966

David W. Levi and Dorothy A. Teetsel May 1966 34 p refs
(Plastec-12; AD-635799) CFSTI: HC \$2.00/MF \$0.50

A bibliography of 216 items is reported on the dielectric properties of polymers. It is limited to the references in the author's personal file. However, these cover the significant journals in the field, for the years 1955-1966. Complete subject and author indexes are included for the convenience of the user.

Author (TAB)

N66-38597# Oak Ridge National Lab., Tenn.

CURRENT NUCLEAR SAFETY RESEARCH AND DEVELOPMENT PROJECTS Research and Development Report No. 2

J. R. Buchanan and N. F. Cross Jun. 1966 535 p refs
(Contract W-7405-ENG-26)

(ORNL-NSIC-10) CFSTI: HC \$6.50/MF \$2.25

A guide is presented to research and development activities in nuclear safety for the specialists and scientists associated with Nuclear Research and Development contract (NSIC). A summary is presented to describe the purpose, need, and scope of each program. The contracts are grouped into 19 categories as established by NSIC for cataloging nuclear safety information. NSA

N66-38610# Oak Ridge National Lab., Tenn.

PUBLICATIONS, REPORTS, AND PAPERS FOR 1965 FROM OAK RIDGE NATIONAL LABORATORY

K. O. Johnsson and Ann S. Haas, ed. Jun. 1966 350 p refs
(Contract W-7405-ENG-26)

(ORNL-3300, Vol. 5) CFSTI: HC \$4.00/MF \$1.75

A bibliographic reference to technical information is presented. About half of the listed entries have appeared in technical journals or technical reports. Papers presented at professional society meetings are listed along with books, portions of books, and theses prepared by staff members. A key word index and an author index are included. NSA

N66-38723*# National Aeronautics and Space Administration.

John F. Kennedy Space Center, Cocoa Beach, Fla.

A SELECTIVE BIBLIOGRAPHY, 1949-1965

V. A. Rapetti Jul. 1966 28 p

(NASA-TM-X-57967) CFSTI: HC \$2.00/MF \$0.50 CSCL 05B

This is a brief bibliography of articles tracing chronologically the development of the Kennedy Space Center from the time of its inception as guided missile site in 1949. Stressed are the expansion of facilities and organizational development through 1965. K.W.

N66-38975*# Lockheed Missiles and Space Co., Sunnyvale, Calif.

THE LITERATURE OF LOW G PROPELLANT BEHAVIOR

G. A. Hastings, D. W. Hill, H. M. Satterlee, and J. G. Seebold
27 Sep. 1966 43 p refs

(Contract NAS9-5174)

(NASA-CR-65539; LMSC-A835805) CFSTI: HC \$2.00/MF \$0.50 CSCL 20D

Comments are made on 200 references to publications in the fields of low-g fluid mechanics and heat transfer which appeared during and after 1959. Major emphasis is given to the development of the theory of capillary fluid mechanics, and references which provide details regarding the results and history of development of this theory are identified. The publications selected in this bibliography are presented because of their practical importance to spacecraft designers, or because they were fundamental in the development of modern capillary fluid mechanics. The commentary is divided into seven sections dealing with propellant location and interface shape, interface stability, reorientation, sloshing, propellant containment and ullage control, draining, and heat transfer. Additional related topics are covered, and experimental techniques are discussed in the majority of the experimental investigations mentioned in the commentary. The bibliographic citations are grouped by calendar year, and listed alphabetically. H.S.W.

N66-39002# Air Force Systems Command, Wright-Patterson AFB, Ohio. Foreign Technology Div.

ORGANIZATION AND METHOD OF THEMATIC SEARCH AND CREATION OF INFORMATION PRECEDING NEW DEVELOPMENTS

G. I. Gol'dgamer *In its* Sci. Tech. Inform. 21 Feb. 1966 p 1-21 (See N66-39001 24-34) CFSTI: HC \$2.00/MF \$0.50

Described are experiences of a scientific research institute gained in the field of thematic information search in support of technological projects, research, and investigations. Emphasized is the importance of obtaining information prior to the start of a project, and the effect of searches on subsequent development is demonstrated. Discussed are problems of planning and methods of preparation, including: (1) indicators of thematical literature; (2) reviews; (3) bibliographies and annotations; and (4) translations. K.W.

N66-39434# Library of Congress, Washington, D. C. Aerospace Technology Div.

LUNAR DIMENSIONS—ANNOTATED BIBLIOGRAPHY Surveys of Foreign Scientific and Technical Literature

Joseph Jarvis and Daniel W. Michaels 5 Aug. 1966 26 p refs
(ATD-B-66-96)

This annotated bibliography was compiled from Soviet open sources published 1964-1966 and one Chicom open source published in 1965. It is the second in a series and it reflects Soviet developments from about mid-1965 in investigating lunar revolution, rotation, libration, and mapping techniques. Pertinent information included: velocity profile of the Moon, libration effect based on meridian observations of lunar diameters in Greenwich in

N66-39463# IIT Research Inst., Chicago, Ill. Technology Center.

BIBLIOGRAPHY, OPTIMUM MECHANICAL DESIGN SYNTHESIS, VOLUME II Final Report

W. D. Pilkey Jun. 1966 1238 p refs

(Contract DA-31-124-ARO(D)-243)

(AROD-4957-6; M6089; AD-637595) CFSTI: HC \$21.38/MF \$5.25

Optimum mechanical design synthesis: Bibliography. TAB

N66-39528*# National Aeronautics and Space Administration, Washington, D. C.

AEROSPACE MEDICINE AND BIOLOGY—A CONTINUING BIBLIOGRAPHY WITH INDEXES, AUGUST 1966

Sep. 1966 217 p refs

(NASA-SP-7011(28)) CFSTI: HC \$1.00/MF \$1.25 CSCL 06S

Annotated references, subject and personal author indexes are presented in this bibliography on aerospace medicine and biology. Emphasis is placed on the biological, physiological, psychological, and environmental effects to which man is subjected during and following simulated and actual flight in the earth's atmosphere or in interplanetary space. Included are: NASA entries identified by their STAR accession numbers (N66-10000 series); AIAA entries identified by their IAA accession numbers (A66-10000 series); and LC entries identified by a number in the A66-80000 series. G.G.

N66-39842# Technisch Documentatie en Informatie Centrum voor de Krijgsmacht, The Hague (Netherlands).

SHORT-RANGE, MEDIUM-RANGE AND LONG-RANGE RADIO-NAVIGATION

H. J. Bos, comp. May 1966 138 p refs In ENGLISH, DUTCH and GERMAN

(TDCK-44957) CFSTI: HC \$4.00/MF \$1.00

This bibliography contains a literature survey, comprising 238 abstracts of published papers and reports on the subject of radio navigation. The available material is presented chronologically in three chapters, for short-, medium-, and long-range applications respectively. An introduction and an author index are included.

Author

N66-39945# National Bureau of Standards, Washington, D. C. **DIMENSIONAL METROLOGY. SUBJECT-CLASSIFIED WITH ABSTRACTS THROUGH 1964**

Irvin H. Fullmer, comp. 1 Aug. 1966 317 p refs *Its* Misc. Publ.-265

GPO: \$3.00

This bibliography covers two of the three principal divisions of dimensional metrology, namely (1) linear, angular, and geometrical measurements of solid bodies, and (2) in-process control of sizes. About 3600 references are classified under main subject headings in 12 sections, which are further divided into 102 subsections covering 100 subjects. The 12 main subjects are (1) general metrology, physical and dimensional; (2) length and diameter interferometry; (3) mechanical measurements of length and diameter; (4) length line standards calibration, including tapes; (5) dimensional measuring instrument design; (6) angle measurement; (7) measuring deviations from geometrical regularity; (8) profile measurement; (9) screw and threads measurement; (10) gear measurement; (11) thin film measurement; and (12) measurement and production techniques for accurate in-process control of size and form. The references have abstracts and are arranged chronologically in each subsection. The bibliography is an attempt to organize existing knowledge in this field. Author

N67-10180# Library of Congress, Washington, D. C. Aerospace Technology Div.

ORGANIC SEMICONDUCTORS—ANALYTICAL SURVEY Survey of Soviet Scientific and Technical Literature

Serge Markov 20 Apr. 1966 53 p refs

(ATD-66-49)

An analytical survey on the electrical properties of organic semiconductors and photoconductors is presented. Emphasis is placed on semiconducting polymers prepared from the monomers of polyvinylenes, and polynitriles. The preparation of semiconducting polymers, as well as of the polyvinylene-polynitrile copolymer is reviewed. In the annotated bibliography section the 40 entries are grouped under the headings: polyvinylenes, polynitriles, and polyvinylene-polynitriles. Material has also been included on the preparation of such products, known or potential, and their structure, morphology, and magnetic properties insofar as these are associated with electrical properties. R.L.I.

N67-10369# Illinois Univ., Urbana. Dept. of Physics.

NUCLEAR PHYSICS Final Report

30 Aug. 1966 60 p refs

(Contract Nonr-1834(05))

(AD-638349) CFSTI: HC \$3.00/MF \$0.75

The report consists primarily of a listing of the faculty and graduate students involved in the research, and of the Ph.D. theses, published journal articles, and technical reports which contain substantial information which was not otherwise published. These results of research are presented in this report by projects or areas in the following sections: Cyclotron Research Program; Frauenfelder Group Program in Low-Energy Physics; Theoretical Nuclear Physics; The Betatron Laboratory Program; High-Energy Events in Nuclear Emulsions; Nuclear Magnetic Resonance; Nuclear Effects at Low Temperatures; Atomic Physics Experiments. TAB

N67-10472# European Atomic Energy Community, Brussels (Belgium).

EURATOM INFORMATION, VOLUME 10, NO. 10

Oct. 1966 204 p refs In ENGLISH, GERMAN, FRENCH, ITALIAN, and DUTCH CFSTI: HC \$6.00/MF \$1.25

This bibliography covers scientific reports, papers, and articles in abstracted form that were issued as results of the activities carried out by the Euratom joint nuclear research center, and the research conducted by contractors. Publications are grouped into: biology and medicine; chemistry; engineering and equipment; mathematics and computers; metals; ceramics, and other materials; physics; and reactor technology. Also included is a cumulative list of contracts and reports, and an author index. G.G.

N67-10634# Oak Ridge National Lab., Tenn. Reactor Chemistry Div.

A LITERATURE REVIEW OF MASS SPECTROMETRIC-THERMOCHEMICAL TECHNIQUE. SUPPLEMENT I

J. D. Redman Jul. 1966 41 p refs

(Contract W-7405-ENG-26)

(ORNL-TM-989, Suppl. I) CFSTI: HC \$2.00/MF \$0.50

Bibliographies are presented on thermochemical properties of gaseous species by mass spectrometry, techniques and instrumentation applicable to thermochemical mass spectrometry, and thermodynamic properties of Be and alkali metal halides. NSA

1967

STAR ABSTRACTS

N67-10654

N67-10654# Atomic Energy Information Service, Frankfurt am Main (West Germany).

BIBLIOGRAPHIES IN NUCLEAR SCIENCE AND TECHNOLOGY. SECTION 12: NUCLEAR SCIENCE LITERATURE OF THE EASTERN COUNTRIES

Benno Ensslen, comp. (Kernfor Schungsanlage) 1966 198 p refs In GERMAN and ENGLISH (AED-C-12-13, pT. III)

A list is presented of approximately 750 papers dealing with various aspects of quantum field theory, Regge poles and related topics, cosmic radiation, elementary particles, and radiation detection instruments and methods. NSA

N67-10814# United Kingdom Atomic Energy Authority, Culham (England). Research Group.

CONFERENCES ON PLASMA PHYSICS AND NUCLEAR FUSION RESEARCH

L. S. Francis, comp. Mar. 1966 28 p refs (NP-16154)

A list is presented of 76 conferences and similar meetings of direct relevance to fusion research. The meetings were held during 1952 through 1965. NSA

N67-10841# Oak Ridge National Lab., Tenn. Biology Div.

REPAIR OF DNA

R. B. Setlow [1966] 31 p refs Presented at the Intern. Symp. on Regulatory Mech. in Nucleic Acid and Protein Biosyn., Lunteren, Netherlands, 5-10 Jun. 1966

(Contract W-7405-ENG-26) (ORNL-P-2240; CONF-660620-1) CFSTI: HC \$2.00/MF \$0.50

Biological and physico-chemical evidence for the existence of repair systems for DNA is reviewed. Results of studies of the response of viruses, bacteria, and mammalian cells to uv and X-radiation are summarized. It is concluded that the biological data indicate that repair systems operate to remove damage from DNA. Reaction mechanisms involved are discussed and the biological systems and the physico-chemical lesions that have been related to the various steps involved in repair by excision are cataloged. NSA

N67-10967# Ohio State Univ. Research Foundation, Columbus. **PROPERTIES OF SOLIDS AT LOW TEMPERATURES, PHASE I Final Report**

J. G. Daunt Dec. 1965 5 p refs (Contract Nonr-495(20))

(AD-624824) CFSTI: HC \$1.00/MF \$0.50

A bibliography of technical reports, articles, and papers on the subject of properties of solids at low temperatures, is presented. L.E.W.

N67-10981# National Engineering Science Co., McLean, Va. **A BIBLIOGRAPHY ON STORM SURGES AND RELATED SUBJECTS**

C. L. Bretschneider and G. S. Pick 1 Aug. 1966 51 p refs (Contract Nonr-4177(00))

(SN-134-12; AD-639101) CFSTI: HC \$3.00/MF \$0.50

Bibliography on storm surges and related subjects. TAB

N67-10983# Army Materials Research Agency, Watertown, Mass. **A REPORT GUIDE TO ULTRASONIC TESTING LITERATURE. VOLUME II: MONOGRAPH SERIES**

Ernest N. Rodgers and Charles P. Merhib Jun. 1966 121 p refs

(AMRA-MS-66-05; AD-638749) CFSTI: HC \$4.00/MF \$0.75

The main objective of this compilation is to provide a simple and fast access to information on the subject of ultrasonic testing and also to provide sufficient information in the form of abstracts and word descriptors to make the listing useful. TAB

N67-11116# Federal Aviation Agency, Washington, D. C. Library Services Div.

AIRCRAFT NOISE AND SONIC BOOM, SELECTED REFERENCES Bibliographic List No. 13

Louis K. Annus, comp. Oct. 1966 112 p refs

Various aspects of design problems, operational experiences, and human responses to aircraft noise and sonic boom are covered in a partially annotated bibliography on aircraft noise and sonic boom. References are included on meteorological effects of and structural responses to sonic boom, a section is devoted to helicopter noise, and personal author and corporate source indexes are tabulated for all of the references. M.W.R.

N67-11179# Naval Weapons Lab., Dahlgren, Va. **COMPUTER ASSISTED INSTRUCTION: A SELECTED BIBLIOGRAPHY AND KWIC INDEX**

Gerald L. Engel and Wade J. Temple Aug. 1966 48 p refs (K-49/66; AD-638892) CFSTI: HC \$2.00/MF \$0.50

Information on computer assisted instruction, including any means by which the educational processes are furthered by the use of a computer, are collected and catalogued in this annotated bibliography. The bibliography is referenced by a key word in context (KWIC) index, which was adopted to ease updating of the material and access by the users. Although the report confines itself primarily to the problem of tutorial interaction, the topics of programmed texts, teaching machines, and learning theory are also included. L.E.W.

N67-11391*# National Aeronautics and Space Administration, Washington, D. C.

AEROSPACE MEDICINE AND BIOLOGY A Continuing Bibliography with Indexes

Oct. 1966 232 p refs

(NASA-SP-7011(29)) CFSTI: HC \$1.00/MF \$1.25 CSCL 06S

A continuing bibliography related to the physiological, psychological, and environmental effects of interplanetary space and the earth's atmosphere on man is presented. References describing similar effects on biological organisms of lower order are also included. The abstracted material contains such topics as sanitary problems, pharmacology, toxicology, safety and survival, life support systems, exobiology, and personnel factors. In general, emphasis is placed on applied research, however, fundamental studies and theoretical principles are included. S.P.

N67-11714# Princeton Univ., N. J. Plasma Physics Lab. **CUMULATIVE LISTING OF PLASMA PHYSICS LABORATORY (5TH EDITION)**

Jul. 1966 90 p refs Includes Suppl.

(Contract AT(30-1)-1238)

(MATT-400; MATT-469) CFSTI: HC \$3.00/MF \$0.75

A cumulative listing is presented of reports and publications issued by the Princeton University Plasma Physics Laboratory from its inception in July 1951 (under the name Project Matterhorn) to date. NSA

N67-11860*# Maryland Univ., College Park.

PROGRAM TO COMPILE AND EVALUATE DIFFUSIVITY AND VISCOSITY DATA First Annual Report

Nov. 1966 164 p refs

(Contract NGR-20-002-053)

(NASA-CR-79930) CFSTI: HC \$5.00/MF \$1.00 CSCL 20D

Progress is reported in the following studies: (1) data evaluation of the diffusion coefficients of the systems He-N₂, Ar-N₂, and Ne-Ar, during which diffusion measurements were correlated as a function of temperature and results were weighted according to method; (2) evaluation of the liquid phase molecular transport

coefficients, which includes both aqueous and non-aqueous solvent systems with ionizing solutes; (3) diffusion of gases in polymer-diluent systems, which discusses the various sources that were used in a literature search; (4) diffusion in inorganic solids, where a literature search was concentrated on self-diffusion in the silver and alkali halides; and (5) compilation and evaluation of turbulent transport data, which includes heat, porous media, boundary layers, mass, and momentum transport in conduits within confined flow, and jets, streams, meteorological, and oceanographic flow within the free flow field. Bibliographies are presented for each study. K.W.

N67-11944*# National Aeronautics and Space Administration, Washington, D. C.

LUBRICATION, CORROSION AND WEAR—A CONTINUING BIBLIOGRAPHY WITH INDEXES, APRIL 1965—AUGUST 1966

Oct. 1966 302 p refs

(NASA-SP-7020(01)) CFSTI: HC\$3.75/MF\$1.50 CSCL 13H

This supplement to the original issue of the continuing bibliography on "Lubrication, Corrosion and Wear" presents a selection of annotated references to unclassified reports and journal articles that have been announced in Scientific and Technical Aerospace Reports, or in International Aerospace Abstracts. References reflect the design and development of equipment and materials for use in a space environment and cover such topics as lubricating systems; design and performance of bearings; special applications of lubricants; stress corrosion and fatigue cracking in metals and alloys; friction and wear characteristics of materials, and types of corrosion and techniques of corrosion prevention. A subject index and a personal author index are included. G.G.

N67-12001# Joint Publications Research Service, Washington, D. C.

SOVIET BLOC RESEARCH IN GEOPHYSICS, ASTRONOMY, AND SPACE, NO. 144

16 Nov. 1966 91 p refs Transl. into ENGLISH from Russian

(JPRS-38677; TT-61-11147-144) CFSTI: \$3.00

Reported is an annotated bibliography of Soviet-Bloc research in astronomy, meteorology, oceanography, terrestrial geophysics, and upper atmospheric and space science. S.C.W.

N67-12013# Joint Publications Research Service, Washington, D. C.

BIBLIOGRAPHY ON BIOASTRONAUTICS

L. I. Boreva and E. M. Panoya, comp. 16 Nov. 1966 110 p refs Transl. into ENGLISH of the booklet "Ukazatel' Literaturny, Aviakosmicheskaya Meditsina, Bioastronautika" Moscow, 1966 p 3-107

(JPRS-38661; TT-66-35086) CFSTI: \$4.00

A bibliography of scientific literature on aerospace medicine and bioastronautics is reported. Cited are research in the following areas: biological, physiological and psychological effects of the space environment; problems of man-machine and life support systems; medical problems and pharmacology; toxicology; problems associated with selecting and training personnel; and research methods, biotelemetry, and data processing. S.C.W.

N67-12023# Library of Congress, Washington, D. C. Aerospace Technology Div.

ELECTRICAL AND COMPUTER SYSTEMS Surveys of Foreign Scientific and Technical Literature, 1964-1965

15 Jun. 1966 151 p refs Compilation of Abstracts

(ATD-66-72)

An annotated bibliography of Soviet electrical and computer systems technology is reported. Included are abstracts and translations of articles in the following areas: hydraulic computer

elements (fluid to electrical interface devices); microelectronics; and communications and coding techniques. S.C.W.

N67-12059*# Battelle Memorial Inst., Columbus, Ohio.

DAMPING CAPACITY OF MATERIALS, VOLUME I

Robert E. Maringer Redstone Arsenal, Ala., Redstone Sci. Inform. Center, 3 Jan. 1966 390 p refs Jointly Supported by NASA

(Contract DA-01-021-AMC-11706(Z))

(NASA-CR-80143; RSIC-508) CFSTI: HC \$7.00/MF \$1.75 CSCL 20K

A brief introduction to the field of damping capacity in materials and an extensive, annotated bibliography is presented. The introductory material includes the fundamentals of damping, general methods of measuring internal friction of damping capacity, and some representative damping properties. The bibliography contains over 2300 references to pertinent literature published from 1955 through 1965, and is cross-indexed by both author and subject. In addition, computer searches were run by Defense Documentation Center and by the National Aeronautics and Space Administration for location of pertinent literature published during the last four years. Articles, books, and papers are listed alphabetically by the author's last name. (Where there is more than one author, the alphabetical listing is by last name of first author.) Reports are listed alphabetically by the corporate author, that is, by the corporation, company, or agency from which the report originated. Author

N67-12060*# Battelle Memorial Inst., Columbus, Ohio.

DAMPING CAPACITY OF MATERIALS, VOLUME II

Robert E. Maringer Redstone Arsenal, Ala., Redstone Sci. Inform. Center, 3 Jan. 1966 391 p refs Jointly Supported by NASA

(Contract DA-01-021-AMC-11706(Z))

(NASA-CR-80144; RSIC-508) CFSTI: HC \$7.00/MF \$1.75 CSCL 20K

An extensive, annotated bibliography on materials damping accompanied by a short introduction to damping capacity in metals, is presented. Information on the fundamentals of damping, general methods of measuring internal friction or damping capacity, and some representative damping properties are supplied. R.L.

N67-12062*# National Aeronautics and Space Administration, Marshall Space Flight Center, Huntsville, Ala.

FY 1966 SCIENTIFIC AND TECHNICAL REPORTS, ARTICLES, PAPERS, AND PRESENTATIONS

Oct. 1966 43 p refs

(NASA-TM-X-59077; MS-1-66-02) CFSTI: HC \$2.00/MF \$0.50 CSCL 05B

A bibliography is given of the formal NASA technical reports, the papers published in technical journals, and the presentations made by Marshall Space Flight Center personnel and their contractors FY66. Author, title, and date and place of presentation or publication are included. L.E.W.

N67-12157*# Missouri Univ., Columbia. Business and Public Administration Research Center.

RESEARCH AND REGIONS. A KWIC INDEXED BIBLIOGRAPHY

John C. Murdock and Judith Graves, comp. [1966] 228 p refs

(Grant NGR-26-004-012)

(NASA-CR-8009)

A bibliography of works that include relevant references to location and regional development and to the economics and administration of research is presented. The publication illustrates a novel application of data processing techniques to the broader problems of information retrieval in economics. Its aim is to provide material for certain specialized areas in economics and administration and to apply recently developed computerized techniques to the field of economics and administration. S.P.

N67-12279*# National Aeronautics and Space Administration, Washington, D. C.

BRAZING AND BRAZING ALLOYS—A BIBLIOGRAPHY
1966 59 p refs

(NASA-SP-5026) CFSTI: HC \$3.00/MF \$0.50 CSDL 13H

The material presented was selected from a retrospective search of NASA's Scientific and Technical Information Division's data bank, and was carefully reviewed to include only those items which have specific industrial application. It includes alloys, basic and technical papers, fabrication and development methods, and testing and evaluation. The emphasis throughout is on application of new technology. A list of several significant representative entries, and an index according to applications are included.

N.E.N.

N67-12457# Michigan Univ., Ann Arbor. Inst. of Science and Technology.

VESIAC MONTHLY BULLETIN OF VELA UNIFORM RESEARCH PUBLICATIONS

15 Mar. 1966 19 p refs *Its Vesiac Bull. No. 38*
(AD-631056) CFSTI: HC \$1.60/MF \$0.50

A bibliography of technical reports and translations directly related to the field of seismology is presented. Informative abstracts are included with each citation.

A.G.O.

N67-12491# Library of Congress, Washington, D. C. Aerospace Technology Div.

ULTRAHIGH PRESSURE STUDIES AND CRYSTAL GROWTH TECHNIQUES Surveys of Foreign Scientific and Technical Literature

John J. Kourilo 17 May 1966 64 p refs Analytical Survey
(ATD-66-56; AD-635495) CFSTI: HC \$3.00/MF \$0.75

This report is divided into two main parts (analytical evaluation of data and annotated bibliography), each having three sections. The three sections are: general studies, ultrahigh pressure studies, and crystal growth techniques, in that order. Section 3 was further subdivided, for the purpose of retrieval, into six chapters according to the category of the growth technique. The chapters are: A. Growth from melts; B. Growth from solution (flux); C. Hydrothermal growth; D. Growth from vapor phase; E. Epitaxial growth of thin films; F. Other growth techniques. The report includes material dealing with ultrahigh pressure studies and techniques of single crystal growth (including deposition of single crystalline thin films) of the elemental semiconductors and semiconducting, lasing, luminescent, ferroelectric, ferromagnetic, piezoelectric, dielectric, and other inorganic compounds which may be of interest for aerospace technology.

Author (TAB)

N67-12625# National Engineering Lab., Glasgow (Scotland).

HEAT BIBLIOGRAPHY, 1964

I. Murray, ed. Edinburgh, HMSO, 1965 516 p refs
CFSTI: HC \$8.15/MF \$2.25

Included in this heat bibliography are references to analogies; atomic energy; automatic control; bibliographies and books; boilers and boiling; chemical and physical properties of pure substances; chemical engineering; combustion; computation; condensation; condensers; conduction; convection; cooling; corrosion and fouling; diffusion; dimensions, units, and standards; direct conversion; distillation; dryers; economics; evaporation; experimental and operational techniques; fins and extended surfaces; fluid flow; fluidized and packed beds; freezing and melting; furnaces; gas turbines; general works on heat transfer, heat exchange, and thermodynamics; hazards; heat engines; heat exchangers; heat pumps; heat transfer coefficients; heat transfer media; unsteady heat transfer; heating and ventilation of buildings; insulation; materials with special properties; magnetohydrodynamics; mathematics; meteorology; multiphase flow; data and methods of measuring physical properties; theoretical physical properties; power plant; radiation; refrigeration; solar heat; surface effects; and thermodynamics.

R.N.A.

N67-12720*# National Aeronautics and Space Administration, Washington, D. C.

NASA SPECIAL PUBLICATIONS THROUGH JULY 1966
1966 45 p refs

CFSTI: HC \$2.00/MF \$0.50 CSDL 05B

Publications of NASA through July 1966 are catalogued under the headings of: (1) General Series; (2) Handbooks, Data Compilations, Charts, and Tables; (3) Histories and Chronologies; (4) Technology Utilization Series; (5) Publications for Office of Manned Space Flight; and (6) Bibliographies and Other Reference Works. The general series section includes reports on recent space exploration activities, accounts of conferences, and state-of-the-art reviews in some scientific and technical fields. Bibliographies on industrial utilization of results of NASA space programs are included along with the special and continuing bibliographies. This semiannual listing presents titles with annotations in a reverse chronological order, as well as a subject index covering all of the publications.

M.W.R.

N67-12721# National Academy of Sciences—National Research Council, Washington, D. C.

EXTRATERRESTRIAL LIFE: AN ANTHOLOGY AND BIBLIOGRAPHY

Elie A. Shneur (Utah Univ.) and Eric A. Ottesen, comp. 1966
497 p refs

(NAS-NRC-1296A) Available from NAS-NRC, Washington, D. C.: \$6.00

Articles and bibliography on the origins and evolution of terrestrial and extraterrestrial life and on Mariner IV and sounding rocket observations of Mars are presented. For individual titles see N67-12722—N67-12756.

N67-12756# National Academy of Sciences—National Research Council, Washington, D. C.

BIBLIOGRAPHY ON EXTRATERRESTRIAL LIFE AND RELATED SUBJECTS

In its Extraterrest. Life 1966 p 383-478 refs (See N67-12721 03-04) Available from NAS-NRC, Washington, D. C.: \$6.00

Almost two thousand references to the world literature on extraterrestrial life, natural sciences, and astronomy are presented. The section on extraterrestrial life covers subjects such as interplanetary and interstellar communication and travel; criteria for, origin, and evolution of life; and adaptation of organism, contamination and panspermia, life detection, and sterilization. Chemical reactions, molecular asymmetry and optical activity, photosynthesis, microbiology, geology, and ecology are covered in the section dealing with natural sciences. Planetary environments, atmospheres, and surfaces; the sun and solar system; and asteroids, meteorites, and comets are included under the astronomy section.

M.W.R.

N67-12862# Iowa State Univ. of Science and Technology, Ames.

BIBLIOGRAPHY OF MASS SPECTROSCOPY LITERATURE, COMPILED BY COMPUTER METHOD

J. Capellan, H. J. Svec, and C. R. Sage Mar. 1966 399 p refs
(Contract W-7405-ENG-82)

(IS-1335) CFSTI: HC \$4.25/MF \$1.75

More than 1500 articles in the field of mass spectroscopy are listed as a result of computer searching of more than 340,000 scientific articles during late 1964, 1965, and early 1966. The 108 papers presented at the 13th Annual Conference on Mass Spectrometry and Allied Topics held in St. Louis, Missouri, May 16-25, 1965 are included in the listing. A bibliography, an author index, and a permuted title (KWIC) index are contained in the report. An explanation of how to use each section is presented.

Author (NSA)

N67-13023*# National Aeronautics and Space Administration, Marshall Space Flight Center, Huntsville, Ala.
MARS SURFACE FORMATION, SURFACE MATERIALS, AND TERRAIN

Herbert H. Hoop Redstone Arsenal, Ala., Redstone Sci. Inform. Center. 30 Sep. 1966 104 p refs
 (NASA-TM-X-59177; RSIC-592) CFSTI: HC \$4.00/MF \$0.75 CSCL 03B

This summary and annotated bibliography is a selection of the more accepted literature from the enormous quantity which covers the range of hypotheses as to Mars surface formation, surface material, and terrain. Various hypotheses and the few generally accepted facts are discussed. Included is a selected bibliography, author index, and subject index. Author

N67-13156# Sperry Gyroscope Co., Ltd., Bracknell (England).
AUTOMATIC LANDING AND AUTOPILOTS

Nov. 1964 12 p refs

An annotated bibliography including articles published between October 1962 and November 1964 is given in the field of automatic landing and autopilots. An author index is included. L.E.W.

N67-13182*# National Aeronautics and Space Administration, Washington, D. C.
AEROSPACE MEDICINE AND BIOLOGY-A CONTINUING BIBLIOGRAPHY WITH INDEXES, OCTOBER, 1966

Nov. 1966 180 p refs
 (NASA-SP-7011(30)) CFSTI: HC \$1.00/MF \$1.00 CSCL 06S

A selection of annotated references to unclassified reports and journal articles in aerospace medicine and biology is presented that were introduced into the NASA information system during October, 1966. Emphasis is placed on biological, physiological, psychological, and environmental effects to which man is subjected during the following simulated or actual flight in the earth's atmosphere or in interplanetary space. G.G.

N67-13220# Douglas Aircraft Co., Inc., Santa Monica, Calif. Missile and Space Systems Div.
FLOW SEPARATION IN HIGH-SPEED FLIGHT: A REPORT BIBLIOGRAPHY

F. I. Clayton and J. E. Wuerer Sep. 1966 103 p refs
 (DAC-59101)

A report bibliography is presented listing by year reports that contain information pertinent to the flow separation problem. A brief synopsis of the information contained in each report is tabulated. Author

N67-13322# Gmelin-Institut fuer Anorganische Chemie und Grenzgebiete, Frankfurt am Main (West Germany). Zentralstelle fuer Atomkernenergie-Dokumentation.
BIBLIOGRAPHIES IN NUCLEAR SCIENCE AND SECTION 22: NUCLEAR SHIP PROPULSION

J. N. Paro comp. (Reactor Centrum, The Hague) Jun. 1966 48 p refs
 (AED-C-22-06)

A compilation of 113 references is presented on the application of nuclear reactors and radioisotopes to surface and underwater ship propulsion. Author, report number, and subject indexes are included. NSA

N67-13684 RCA Victor Co., Ltd., Montreal (Quebec). Research Labs.
APPLICATIONS OF THE TRANSPORT COEFFICIENTS IN A PLASMA

Issie P. Shkarofsky *In its Plasma Phys. Res. and Eng.* 1966

Many diverse subjects are discussed briefly, with an extensive bibliography to more detailed literature included. The subjects covered include: (1) electrical conductivity in shock heated argon; (2) the accepted use of the generalized Appleton-Hartree equation for the refractive index in ionospheric work; (3) verification of the prediction that the electron temperature is higher than the ion temperature above the D-layer ionosphere; (4) damping of waves near the electron cyclotron frequency; (5) the diffusion of plasma across a sufficiently low magnetic field; (6) the electrical and heat conductivity coefficients in the limit of zero current and (7) temperature determination from electrical conductivity measurements. Other applications given are: method of calculation of transport coefficients for an arbitrary variation of the electron-neutral collision frequency, not necessarily a power law; relaxation times for an anisotropic temperature; damping of plasma oscillations; and equilibrium electron temperature in ohmic heating. Also mentioned are recent work in the fields of: application to resistive, shear, etc. instabilities; plasma wave corrections to the transport coefficients; and hydrothermomagnetic waves. Author

N67-13969# Atomic Energy Information Service, Frankfurt Am Main (West Germany).
BIBLIOGRAPHIES IN NUCLEAR SCIENCE AND TECHNOLOGY. SECTION 06: INSTRUMENTS AND MEASURING TECHNIQUES IN NUCLEAR PHYSICS [BIBLIOGRAPHIEN ZUR KERNFORSCHUNG UND KERntechnik. SEKTION 06: MESSINSTRUMENTE UND MESSVERFAHRENEN IN DER KERNPHYSIK]

K. Debertin, comp. May 1966 196 p refs In GERMAN
 (AED-C-06-14)

Bibliographies are presented on instruments and techniques in nuclear physics. Also included are report number, patent, author, and subject indexes. NSA

N67-14274# International Astronautical Federation, Paris (France). International Inst. of Space Law.
WORLDWIDE BIBLIOGRAPHY FOR THE YEAR 1965 OF SPACE LAW AND RELATED MATTERS

Jun. 1966 65 p refs
 (IISL-BIBL.-2) CFSTI: HC \$3.00/MF \$0.75

A total of 596 refs to books and articles of 246 periodicals, published in 29 countries, are contained in this bibliography. They refer to organs dealing with space law, outline the progress in the conquest of space, the development and general principles of space law and relate to different activities and uses of space (out of the 596 refs mentioned, 172 concern telecommunications). ESRO

N67-14313# Library of Congress, Washington, D. C. Aerospace Technology Div.
SPACECRAFT UTILIZING THE LIFTING AND BALLISTIC REENTRY TECHNIQUES. PART II: REVIEW OF THEORETICAL STUDIES IN LIFTING AND BALLISTIC REENTRY

Victor Klein and Alexis Baratoff 31 Aug. 1966 119 p refs
 (ATD-66-106)

A comprehensive review is presented of papers published in foreign scientific sources on theoretical and experimental studies relating to the problems of high speed lifting and ballistic flights, and atmospheric entry techniques. Also included is an annotated bibliography with references to articles on aeromechanics of high speed flows, including supersonic and hypersonic aerodynamics, aerothermodynamics of high speed flows, including aerothermophysics and aerothermal structural responses; flight mechanics, including aerodynamic performance and reentry dynamics; and strength of space vehicle components, including static stress and strain analyses, and dynamic stress and strains. R.N.A.

N67-14374# Smithsonian Astrophysical Observatory, Cambridge, Mass.

INDEX TO SAO SPECIAL REPORTS NUMBERS 1 THROUGH 199, OCTOBER 14, 1957-FEBRUARY 3, 1966

7 Nov. 1966 120 p refs

This index covers the materials published in the SAP Special Reports Numbers 1 through 199, issued between October 14, 1957, and February 3, 1966. It supersedes the Index of Special Reports 1 through 150, published June 30, 1965. Included are an abstract index, author index, title index, and significant references to individual satellites. Author

N67-14419*# Thessaloniki Univ. (Greece).

PROBLEMS OF STELLAR DYNAMICS

George Contopoulos /in Wis. Univ. Lectures in Appl. Math. Vol. 5: Space Math, Pt. 1 1966 p 169-258 refs (See N67-14410 05-30) CFSTI: HC\$6.00/MF\$1.50

The techniques used in stellar dynamics research are reviewed. The virial theorem, Poincaré's recurrence theorem, and Hopf's theorems with respect to the n-body system are discussed. The gravitating continuum approach for a large number of stars in a stellar system is described with respect to the distribution function, integrals of motion, and galactic orbits. The statistical method is used for calculating the time of relaxation or mean free path of a stellar system, and the study of the velocity and density distribution of a cluster. N.E.N.

N67-14687# California Univ., Livermore. Lawrence Radiation Lab.

ELASTIC AND INELASTIC PROTON-PROTON SCATTERING: A BIBLIOGRAPHY

Carlotta V. Schauer 28 Mar. 1966 24 p refs

(Contract W-7405-ENG-48)

(UCRL-14716) CFSTI: HC\$1.00/MF\$0.50

A selective bibliography is presented on elastic and inelastic proton-proton scattering covering the period 1960 to January 1966. References were compiled from Chemical Abstracts, Nuclear Science Abstracts, and Physics Abstracts. NSA

N67-14703# Air Force Systems Command, Wright-Patterson AFB, Ohio. Foreign Technology Div.

THE CEREBRAL CORTEX AND THE FUNCTION OF THE VESTIBULAR APPARATUS

E. Sh. Ayrapet'yants and V. A. Kislyakov 29 Jul. 1966 53 p refs Transl. into ENGLISH from Kora Bol'shikh Polushariy i Funktsiya Vestibulyarnogo Apparata, An SSSR (Moscow), 1962 p 1-4, 604-619

(FTD-TT-66-30; TT-66-62447; AD-640313) CFSTI: HC \$3.00/MF \$0.50

The basic theories and works of Rudolph Magnus are reviewed, and questions arising from his work are considered. Factual material accumulated in the Soviet Union during three decades relating to the problem of the cerebral cortex and the function of the vestibular apparatus is presented with an extensive bibliography. Alterations in vestibular reactions after extirpation of the cerebral cortex and with various influences on it are discussed, and the question of localization of the cortical terminus of the vestibular analyzer is considered. The study of the cortical regulation of vestibular reactions according to the method of conditioned reflexes is also assessed. L.E.W.

N67-14740# Air Force Cambridge Research Labs., Bedford, Mass. Terrestrial Sciences Lab.

BIBLIOGRAPHY OF EXPERIMENTAL ROCK DEFORMATION, SECOND EDITION, PART II

R. E. Riecker Aug. 1966 15 p refs /ts Spec. Rept. No. 35 (II)

(AFCRL-65-740(II); AD-640320) CFSTI: HC\$1.00/MF\$0.50

This first supplement to the Bibliography of Experimental Rock Deformation, Second Edition, (AD-627 002) AFCRL-65-740, October 1965, lists 111 cross-referenced research articles taken from scientific journals and books. The listings include the following 29 categories: Apparatus, Brittle Behavior, Calcite, Calibration, Conductivity, Creep, Dislocations, Fabric, Friction, General, Ice, Marble, Olivine, Phase Studies, Quartz, Recrystallization, Resistance, Sedimentary Rocks, Seismic Velocities, Shear, Shock, Strain Rate, Surveys, Viscosity, and X-ray. Author (TAB)

N67-14907*# Aerojet-General Corp., Sacramento, Calif.

260-IN.-DIA MOTOR FEASIBILITY DEMONSTRATION PROGRAM Final Program Summary Report, Jun. 1963-Apr. 1966

8 Apr. 1966 55 p refs

(Contract NAS3-6284)

(NASA-CR-72127) CFSTI: HC\$3.00/MF\$0.65 CSCL 21H

The design of 260 inch diameter solid rocket motors, and the performance of motors 260-SL-1 and 260-SL-2 during static firing tests, are described. Problems occurring in the program with regard to fabrication of the chamber; nozzle materials; the insulation system; the liner; propellants, grain, and casting; core design and fabrication; and aft-end ignition, are discussed; and solutions to the problems are given. Test firing results with subscale motors are also presented, and information is given concerning facilities used, and schedules. A bibliography of all reports prepared on the program during the period March 1, 1965 through April 8, 1966 is listed. L.S.

N67-14934*# National Aeronautics and Space Administration, Washington, D.C.

THIS NEW OCEAN. A HISTORY OF PROJECT MERCURY

Loyd S. Swenson, Jr., James M. Grimwood, and Charles C. Alexander 1966 694 p refs

(NASA-SP-4201) GPO: HC\$5.50; CFSTI: MF\$7.15 CSCL 22B

A detailed account is given of the managerial and technological history of Project Mercury. Preliminary progress in rocketry and research in space medicine, aerodynamics, and thermodynamics from the end of the Second World War to the inception of the first U.S. manned satellite project is recounted emphasizing the contributions of individual minds and small groups of experimentalists. The technological and managerial aspects of Project Mercury are related, including organizing, contracting, innovating, manufacturing, training, and testing, giving insight into the enormity and intricacy of modern government-managed technological programs. The fulfillment of Project Mercury is described, beginning with the suborbital flight of astronaut Alan B. Shepard, Jr., proceeding through the completion of the orbital qualification of the Mercury spacecraft and the Atlas rocket, and ending with the four manned orbital missions. Details are given on the functional organization of Project Mercury, workflow organization, flight data, cost summaries, and tracking net, and an extensive bibliography is included. L.E.W.

N67-14958# Naval Research Lab., Washington, D. C.

AN ANNOTATED BIBLIOGRAPHY OF RECENT PAPERS AND REPORTS ON THE SUBJECT OF AMBIENT TEMPERATURE AQUEOUS STRESS-CORROSION CRACKING OF TITANIUM AND TITANIUM ALLOYS

E. P. Dahlberg Oct. 1966 8 p refs

(ARPA Order 878)

(NRL-BIBL-29; AD-642128) CFSTI: HC\$3.00/MF\$0.65

A listing is presented of sixteen recent papers and reports which deal with stress-corrosion cracking studies of titanium and titanium alloys. The complication is limited to cracking phenomena in aqueous solutions at or near room temperature. A brief summary of the important aspects of each report is included. Author (TAB)

N67-14995# RAND Corp., Santa Monica, Calif.
BIBLIOGRAPHY ON AUTOMATION AND TECHNOLOGICAL CHANGE AND STUDIES OF THE FUTURE
 Annette Harrison Oct. 1966 25 p refs
 (P-3365-1; AD-640300) CFSTI: HC \$1.00/MF \$0.50

The Paper comprises a list of works collected for two ongoing RAND projects: Automation and Technological Change, and a related informal study of future national and international problems.
 TAB

N67-15160# Advisory Group for Aerospace Research and Development, Paris (France).
A SURVEY ON PANEL FLUTTER
 D. J. Johns Nov. 1965 139 p refs Presented at the 21st Meeting of the AGARD Struct. and Mater. Panel, Nancy, Nov. 1965 *Its* Advisory Rept.-1
 CFSTI: HC \$4.00/MF \$1.00

This report presents a survey of panel flutter research in the NATO countries as determined by visits during 1965, including a discussion on panel flutter criteria, certain conclusions, and recommendations for future work. Discussed are the results of the visits to individual research establishments and workers. An extensive (288 references) bibliography on panel flutter is given. Selected additional references on static panel aeroelastic behaviour are included.
 Author

N67-15294# Air Force Systems Command, Wright-Patterson AFB, Ohio, Foreign Technology Div.
RADIATION PHENOMENA IN ION CRYSTALS
 K. Shvarts 18 Apr. 1966 18 p refs Transl. into ENGLISH from Latvijas PSR Zinatnu Akad. Vestis (RIGA), no. 4, 1964 p 30-37
 (FTD-TT-65-1734; TT-66-62421; AD-640257) CFSTI: HC \$1.00/MF \$0.50

Research at the Physics Institute of the Latvian Academy of Sciences in the following areas is summarized: (1) energy transmission processes for basic substance to impurity and structural defects; (2) electric charge transmission processes in crystals; (3) microstructure of impurity centers and its change under the effect of radiation; (4) energy accumulation processes and creation of radiation defects.
 Author (TAB)

N67-15846*# National Aeronautics and Space Administration, Goddard Space Flight Center, Greenbelt, Md.
OGO PROGRAM-BIBLIOGRAPHY
 George H. Ludwig, ed 30 Sep. 1966 84 p refs *Its* Issue 66-1 (NASA-CR-81210) CFSTI: HC \$3.00/MF \$0.65 CSCL 22A

An extensive bibliography, including abstracts and experiment descriptions, is presented for the Orbiting Geophysical Observatories (OGOs) I, II, III, E, and F. The bibliography includes published and unpublished scientific and technical papers, articles, and documents on OGO spacecraft and experiments.
 L.E.W.

N67-16056*# Jet Propulsion Lab., Calif. Inst. of Tech., Pasadena.
PUBLICATIONS OF THE JET PROPULSION LABORATORY JULY 1965 THROUGH JULY 1966
 Royal L. Woods, comp. 15 Dec. 1966 87 p refs
 (Contract NAS7-100)
 (NASA-CR-81252; JPL-BIBL-39-7) CFSTI: HC \$3.00/MF \$0.65 CSCL 22A

An annotated bibliography prepared by the Jet Propulsion Laboratory covers technical reports and memorandums, the *Space Programs Summary*, astronautics information literature search, and JPL reporting in the open, domestic, and foreign literature. To facilitate use of this bibliography, numerical and subject indexes are included.
 R.L.I.

N67-16121# Naval Civil Engineering Lab., Port Hueneme, Calif.
REINFORCED PLASTICS AS STRUCTURAL MATERIALS
 R. A. Breckenridge, L. R. Russell, and C. K. Paul Nov. 1966 59 p refs
 (R-491; AD-642097) CFSTI: HC \$3.00/MF \$0.65

A survey was made of existing knowledge regarding the use of reinforced plastics as the load-carrying members in structural systems. Examples are given of existing applications in large buildings, motels, houses, special uses marine surface craft, deep submersible hulls, and in other areas. A review is made of structural shapes that are commercially available. The basic materials, i. e., resins and reinforcements, are briefly discussed, and the various methods of combining them into a finished item are mentioned. The physical properties are summarized, and the areas of potential degradation are discussed. Problems in the design of reinforced plastics are considered. The areas in which there appears to be good potential for increased structural applications are presented; those that might be of greatest interest to NFEC include (1) antenna-support systems, (2) waterfront structures and facilities, (3) structures in remote areas that require shipping or that present maintenance problems, and (4) advanced-base structures that must be built under the pressure of military exigency. Author (TAB)

N67-16124# RAND Corp., Santa Monica, Calif.
DEVELOPMENT OF DISCRETE DIGITAL SIMULATION LANGUAGES
 Philip J. Kiviat 22 Sep. 1966 10 p refs Submitted for Publication (P-3453; AD-640069) CFSTI: HC \$3.00/MF \$0.65

The article deals with a particular type of simulation: the use of numerical and logical models to represent discrete changes of state of a system as it moves through time. Simulation models of this type are usually formulated symbolically using flow charts or logic diagrams, coded in some programming language, and run on a digital computer. The report presents the history, current status and possible future of discrete digital simulation languages -- computer languages that are used for describing the structure and dynamics of discrete-time systems.
 Author (TAB)

N67-16361# Human Engineering Labs., Aberdeen Proving Ground, Md.
GROUP BEHAVIOR IN CONFINEMENT: REVIEW AND ANNOTATED BIBLIOGRAPHY
 Alfreda B. Honigfeld Oct. 1965 116 p refs
 (TM-14-65; AD-640161) CFSTI: HC \$3.00/MF \$0.65

Field and laboratory confinement studies were reviewed to evaluate existing information and to identify areas where future research is needed. The studies reviewed deal with confining two or more people in a restricted space for a prolonged period of time; particular attention was devoted to how such conditions degrade performance. Few of the studies bear on the Army's chief interest in confinement: how men will perform during and after prolonged confinement in armored vehicles. The review concludes by recommending ways to make future studies of confinement more directly relevant to the Army's interest.
 Author (TAB)

N67-16466# New York Univ., N. Y. Courant Inst. of Mathematical Sciences.
BIBLIOGRAPHY OF SCHLICHT FUNCTIONS
 S. D. Bernardi May 1966 169 p refs
 (Contract Nonr-285(46))
 (IMM-351; AD-642657) CFSTI: HC \$3.00/MF \$0.65

This bibliography contains 1694 references to the publications of more than 570 authors which have appeared in approximately 220 mathematical journals in the U. S. A., the Soviet Union, England, Germany, France, Japan, and in many other countries. It includes many symposiums, colloquiums, congresses, dissertations, abstracts, technical reports, lecture notes, and books dealing with the theory of analytic univalent (Schlicht) and multivalent mappings.

of simply and multiply-connected domains. This survey covers the years 1907 (when the first substantial results were published) through 1965. Most of the papers listed in the bibliography have been reviewed in the Mathematical Reviews or in the Zentralblatt für Mathematik or in the Jahrbuch über die Fortschritte der Mathematik, and the volume and page number of the review is indicated at the end of each reference. The various results in the theory of Schlicht functions have been classified into sixty-eight subtopics. Each subtopic is followed by a list of those references in the bibliography containing information pertaining to that subtopic. Moreover, following each reference in the bibliography is a list of those subtopics which are discussed in that reference. Also given is a list of expository papers, and a list of those papers on Schlicht functions which appear in twenty-two mathematical journals that are readily available to the American public.

Author (TAB)

N67-16470# Picatinny Arsenal, Dover, N. J. Plastics Technical Evaluation Center.

SUBJECT INDEX, BIBLIOGRAPHY, AND CODE DESCRIPTION OF TECHNICAL CONFERENCE PAPERS ON PLASTICS: 5 MARCH 1965-10 MARCH 1966

Joan B. Titus and Arnold E. Molzon Jul. 1966 137 p refs (PLASTEC-27; AD-641666) CFSTI: HC \$3.00/MF \$0.65

The papers presented at technical conferences on plastic materials and related technology, within a one year period ending 10 March 1966 are listed, indexed by subject, and compiled by material, type of technical data, and military application. Over 690 papers from 20 conferences are covered. Included are a

bibliography, author index, summary of new material developments, and a list of applications and programs sponsored by the Department of Defense and the National Aeronautics and Space Administration.

Author (TAB)

N67-16477# Naval Ordnance Lab., White Oak, Md.

THE WATER ENTRY PROBLEM WITH BIBLIOGRAPHY

W. E. Parr 31 Aug. 1966 65 p refs

(NOLTR-66-173; M-65; AD-641176) CFSTI: HC \$3.00/MF \$0.65

The report is a survey of the water entry problem and its various mathematical formulations. Included are discussions on the incompressible case, the compressible case, the linearized incompressible, the linearized compressible, reflected linearized incompressible, Lagrangian, two-dimensional and axially-symmetric cases. Also discussed are the source and dipole formulations, calculation of added masses, similar solutions, problems related to water entry, and a note of caution concerning the conservation of mass in an infinite region. Finally, a fairly extensive bibliography is given primarily covering theoretical work on the water entry and related problems.

Author (TAB)

N67-16494# Armed Forces Radiobiology Research Inst., Bethesda, Md.

GAMMA RAY SPECTRAL ANALYSIS A Selected Bibliography

G. F. Mason Sep. 1966 26 p refs

(AFRRI-SP66-10; AD-643127) CFSTI: HC \$3.00/MF \$0.65

This bibliography is a collection of references which deals with the analysis of gamma spectra by all methods. Entries are limited to those sources which deal with the actual analysis phase of gamma spectroscopy but some details are present concerning equipment and sample preparation because many groups have published systems in their entirety. In every case, however, there is a section on data analysis after acquisition. Some references contain theoretical material necessary for the development of an operating system, or the results of studies of theoretical methods. All of the references are from the period 1956 to 1966. An author index is included.

Author (TAB)

N67-16523# Oak Ridge National Lab., Tenn. Nuclear Safety Information Center.

INDEXED, BIBLIOGRAPHY OF CURRENT NUCLEAR SAFETY LITERATURE—5

Jun. 1966 214 p refs

(Contract W-7405-ENG-26)

(ORNL-NSIC-16) CFSTI: HC \$3.00/MF \$0.65

Approximately 900 references are given to reports, journals, and books published through Jan. 1966. Nineteen categories are included for information relevant to the analysis and control of hazards associated with nuclear reactors, operations involving fissionable materials, and the products of nuclear fission. Primary emphasis is on safety in reactor design, construction, and operation; however safety considerations in reactor fuel fabrication, spent-fuel processing, nuclear waste disposal, and related operations are also included.

NSA

N67-16540*# Oak Ridge National Lab., Tenn.

BIBLIOGRAPHY OF THE COMPUTER CODES LITERATURE EXAMINED BY THE RADIATION SHIELDING INFORMATION CENTER

Betty F. Maskewitz, Betty L. McGill, and Jane Gurney Jul. 1966 64 p refs

(NASA Order R-104(10); Contract W-7405-ENG-26)

(NASA-CR-81301; ORNL-RSIC-15) CFSTI: HC \$3.00/MF \$0.65

Literature is covered which describes not only shielding computer codes, but nuclear codes in a fringe area of shielding, and some miscellaneous information which might be of general interest. The reports are grouped according to the originating installations, with the report number listed in alphabetical and/or numerical order. The computer for which a code was written and the programming language in which it was written are indicated.

NSA

N67-16554*# National Aeronautics and Space Administration, Washington, D. C.

AEROSPACE MEDICINE AND BIOLOGY—A CONTINUING BIBLIOGRAPHY WITH INDEXES, NOVEMBER 1966

Dec. 1966 153 p refs

(NASA-SP-7011(31)) CFSTI: HC \$3.00/MF \$0.65 CSDL06S

The bibliography with abstracts concentrates on the biological, physiological, psychological, and environmental effects on man during simulated or actual space flight. Similar effects on lower order organisms, and the related topics of sanitary problems, pharmacology, toxicology, safety and survival, life support systems, exobiology, and personnel factors are also included. Emphasis is on applied research.

N.E.N.

N67-16579*# Aeronutronic, Newport Beach, Calif.

STUDY OF THE AUTOMATED BIOLOGICAL LABORATORY PROJECT DEFINITION. VOLUME V: EXOBIOLGY BIBLIOGRAPHY

Temple W. Neumann 10 Sep. 1965 158 p refs

(Contract NASw-1065)

(NASA-CR-81311; U-3237, Vol. V) CFSTI: HC \$3.00/MF \$0.65 CSDL06C

An annotated bibliography dealing with various aspects of the problem of detecting extraterrestrial life is presented. The material is to be used with respect to the automated biological laboratory (ABL) program for exploring life on Mars. The bibliography is divided up into the following sections: (1) general analytical methods, (2) automatic techniques, (3) calorimetry, (4) carbon analysis, (5) chromatography, (6) computer applications, (7) fluorescence studies, (8) gas analysis, (9) instruments and devices, (10) life, (11) macromolecule studies, (12) Mars, (13) mass

spectrometry, (14) microbiological studies, (15) optical rotation studies, (16) soil constituent analysis, (17) space probes, (18) spectrometry, and (19) synthesis of organic compounds. The references cited are mainly compiled from September 1964 to April 1965, and the majority of abstracts are those of the authors themselves. An author index is included. L.S.

N67-16587# TRW Systems, Redondo Beach, Calif.
MANNED EXPLORATION, COLONIZATION AND EXPLOITATION OF THE LUNAR SURFACE Selective Bibliography
 L. R. Magnolia 10 Oct. 1966 9 p refs *Its Lit. Survey* 26
 (TRW-99900-6045-T000; AD-641973) CFSTI: HC \$3.00/MF \$0.65

The report lists 124 references which are all available to the public. TAB

N67-16599# Martin Co., Denver, Colo.
CENTER FOR HIGH ENERGY FORMING Fifth Quarterly Report, Jul. 1-Oct. 1, 1966
 G. A. Thurston 1 Oct. 1966. 110 p refs Prepared Jointly with Denver Univ.
 (Contract DA-19-066-AMC-266(X))
 (AMRA-CR-66-0516; AD-641407) CFSTI: HC \$3.00/MF \$0.65

The first section describes the studies performed on shock hardening and strain rate effects. The second section discusses efforts in predicting strains in blanks formed into dies and in experimental work in material ductility in explosive forming and in blank stabilization. The third section contains a complete report of a literature survey of shock hardening effects on 18 per cent nickel maraging steel. Author (TAB)

N67-16660# Tufts Univ., Medford, Mass. Inst. for Psychological Research.
HUMAN FACTORS ENGINEERING BIBLIOGRAPHIC SERIES. VOLUME I: 1940-1950 LITERATURE
 Paul G. Ronco Aberdeen Proving Ground, Md., Human Eng. Labs., May 1966 1642 p refs
 (Contracts Nonr-494(13); DA-18-001-AMC-1004(X))
 (AD-639906) CFSTI: HC \$3.00/MF \$0.65

The bibliography is the first in a planned series of bibliographies of literature pertinent to the field of human factors engineering. It covers literature from the time period of 1940 through 1959. The bibliography consists primarily of: (1) an index to the human factors literature, and (2) the annotated bibliography. Author (TAB)

N67-17119 Atome Industriel, Chatillon-sous-Bagneux (France).
STUDY OF THE APPLICATION OF ACTIVABLE TRACERS [ETUDE SUR L'APPLICATION DES TRACEURS ACTIVABLES]
 C. Bondy Brussels, EURATOM, Sep. 1966 133 p refs In FRENCH; ENGLISH summary
 (Contract EURATOM-029-64-7 IRAF)
 (EUR-3128.f)

Our study on activable tracers contains a collection of bibliographical and theoretical data and a report on experiments based on these data. The list of reference works on uses already made of activable tracers is, in principle, complete up to 1 May 1965. A table of comparative theoretical and experimental values on the activation of elements that can be used as tracers enables the searcher to pick out, in each practical case, the one or more tracers that may provide the key to his problem. A theoretical review of highly diluted solutions and a number of experiments on the uptake and aging of tracers provide examples of the test to be applied to each of the theoretically suitable tracer substances.

A bibliographical and theoretical study shows how a liquid phase can be labelled in the presence of its vapor. Calculation examples contribute a mathematical basis from which to predict and then interpret each experiment on the true scale. A section on methods of utilizing activable tracers concludes the work. Author

N67-17138* North American Aviation, Inc., Los Angeles, Calif.
DEVELOPMENT OF NONDESTRUCTIVE TESTING TECHNIQUES FOR HONEYCOMB HEAT SHIELDS. VOLUME II: LITERATURE, INDUSTRIAL SURVEY, AND BIBLIOGRAPHY
 G. Martin, J. F. Moore, and J. W. Rocke 31 Aug. 1966 170 p refs
 (Contract NAS8-11733)
 (NASA-CR-81525; NA-66-912; Vol. II) CFSTI: HC \$3.00/MF \$0.65 CSCL 13H

Literature and industrial surveys of pertinent nondestructive testing techniques and equipment were conducted in support of a development program for nondestructive testing of honeycomb heat shields. Literature relating to ultrasonic, radiographic, and other methods of nondestructive testing was collected, reviewed, and indexed. A partially annotated bibliography of pertinent literature was prepared and included with the reported survey results. The literature and industrial surveys, in addition to the contractor's conducted effort, were evaluated and formed the basis for the experimental nondestructive test development program. Author

N67-17619*# General Dynamics/Convair, San Diego, Calif.
A SURVEY OF WELDING AND INSPECTION TECHNIQUES FOR 2219-T81 ALUMINUM ALLOY Interim Report
 W. E. Witzell, M. S. Hersh, and R. T. Anderson Jan. 1967 60 p refs
 (Contract NAS3-7951)
 (NASA-CR-72097; GDC-ZZL-66-043) CFSTI: HC \$3.00/MF \$0.65 CSCL 13H

A literature search and industry survey were conducted to determine the best techniques for the welding and inspection of type 2219-T81 aluminum alloy. While no general consensus was obtained for optimum weld or weld repair techniques, relatively imperfection-free welds were reported from automatic techniques such as gas tungsten arc and gas metal arc. The only consistently noted imperfection was porosity. More difficulties were detected for manual weld repairs, particularly when multiple repairs were made in the same area. While various techniques have utility for specific applications, it is concluded that no single known system can consistently identify and measure flaws or cracks in welded structures with sufficient accuracy to be useful for fracture mechanics analyses. Nondestructive testing is discussed in terms of current research and development, instrumentation, and new technology and test methods. M.W.R.

N67-17630*# National Aeronautics and Space Administration, Washington, D. C.
AEROSPACE MEDICINE AND BIOLOGY—A CONTINUING BIBLIOGRAPHY WITH INDEXES, DECEMBER 1966
 Jan. 1967 158 p refs
 (NASA-SP-7011(32)) CFSTI: HC \$3.00/MF \$0.65 CSCL 06S

Biological, physiological, psychological, and environmental effects of simulated or actual flight in the earth's atmosphere or in interplanetary space are covered in the continuing bibliography entitled *Aerospace Medicine and Biology*. Annotated references are included for all the unclassified reports and journal articles in these subject categories that were introduced into the NASA information system during December 1966. M.W.R.

N67-17920

N67-17920# Air Force Academy, Colo.
THE FRANK J. SEILER RESEARCH LABORATORY
Jul. 1966 56 p
(AD-641986) CFSTI: HC\$3.00/MF\$0.65

Topics include: Introduction to the Mission, background and accomplishments of the Frank J. Seiler Research Laboratory at the United States Air Force Academy; publications and presentations during FY, 66; current research projects; bibliographies of staff members. Research is being carried out in the following general areas; system optimization, programming and control; fluid dynamics; physical and organic chemistry. TAB

N67-17935# Library of Congress, Washington, D. C. Aerospace Technology Div.
PROPULSION TECHNOLOGY Monthly Survey No. 1
Oct. 1966 57 p refs
(ATD-66-121)

This monthly survey is based on current open sources of the Eurasian Communist countries. It is the first in a series of monthly reports and it deals with air breathing and rocket propulsion technology and the related nonchemical aspects of combustion. The report is divided into three sections. Section I (Review of the literature of the Warsaw-Pact countries) covers three types of information: Air breathing propulsion (1. Rotating engines-15 articles; 2. Non-rotating engines-3 articles); rocket propulsion (1. Liquid rocket propulsion-9 articles); combustion engineering (1. Subsonic combustion of fuel and air-8 articles; 2. Supersonic combustion of fuel and air-1 article; 3. Combustion of liquid rocket propellants-4 articles; 4. Combustion of solid rocket propellants-5 articles). Section II (Review of Communist Chinese literature) covers only air breathing propulsion with three articles and a monograph review. Section III (Appendix) lists 27 available translations and 20 source documents. Author

N67-17966*# North Carolina State Coll., Raleigh.
BIBLIOGRAPHY ON OPTICAL INFORMATION AND DATA PROCESSING
J. P. Moffatt, A. T. Shankle, and F. J. Tischer, comp. Nov. 1966 77 p refs
(Grant NGR-34-002-038)
(NASA-CR-81662; RR-3) CFSTI: HC \$3.00/MF \$0.65 CSDL 09B

A review of the literature on optical information and data processing was prepared to assist those working in this field to locate quickly literature pertinent to a specialized subject. The whole subject area is divided into 22 subtopics in order to accomplish this purpose. Subtopic areas such as correlation analysis, diffraction, electromagnetics, holography, interferometry, matched filtering, pattern recognition, television, photography, and modulation are included. A.G.O.

N67-17997# Joint Inst. for Lab. Astrophysics, Boulder, Colo.
RECENT WORK ON STELLAR INTERIORS A BIBLIOGRAPHY OF MATERIAL PUBLISHED BETWEEN 1958 AND MID-1966

Edward Langer, Margaret Herz, and J. P. Cox 9 Dec. 1966 122 p refs
(Contract DA-31-124-ARO(D)-139; Grant NSF GP-4859; Project DEFENDER)
(NASA-CR-81654; JILA-88) CFSTI: HC \$3.00/MF \$0.65 CSDL 03B

A bibliography of recently published material on stellar interiors is presented and includes references to texts and other general material as well as articles on physical conditions and processes in stellar interiors, proto-stars and evolution prior to nuclear burning, equilibrium star models and evolution during nuclear burning, evolutionary stages beyond nuclear burning, and rapidly changing stars. Also included are a table of stellar models and an author index. R.N.A.

N67-18126*# George Washington Univ., Washington, D. C.
BIBLIOGRAPHY ON CLEAN ROOMS
Donald E. Wright Nov. 1966 64 p refs
(Contract NSR-09-010-027)
(NASA-CR-81783) CFSTI: HC\$3.00/MF\$0.65 CSDL 06M

Contamination control technical details are provided through bibliographic information. Emphasis is on clean room operations for surgical instrumentation and electronics applications. Author and permuted title indexes are included. R.L.I.

N67-18182# National Bureau of Standards, Washington, D. C.
BIBLIOGRAPHY ON THE HIGH TEMPERATURE CHEMISTRY AND PHYSICS OF MATERIALS IN THE CONDENSED STATE, JULY-AUGUST 1966
J. J. Diamond, ed. Sep. 1966 67 p refs *Its* No. 3

A bibliography is presented which deals with devices for achieving, measuring, and controlling temperatures above 1500°C, and devices for physical measurements at temperatures above 1000°C. Also included are literature on metallic, nonmetallic, and mixed materials properties, phase equilibria, and reactions at temperatures above 1000°C. A.G.O.

N67-18184# National Bureau of Standards, Washington, D. C.
BIBLIOGRAPHY ON THE HIGH TEMPERATURE CHEMISTRY AND PHYSICS OF GASES AND PLASMAS
L. Brewer, comp. (Calif. Univ., Berkeley) 30 Sep. 1966 34 p refs *Its* No. 20

A bibliography on spectroscopy of interest to high temperature chemistry and on reactions between gases and condensed phases is presented. C.T.C.

N67-18376 Hamburgisches Welt-Wirtschafts-Archiv (West Germany).
LEGAL AND POLITICAL IMPLICATIONS OF SPACE RESEARCH Bibliography
H. Peter Kehrberger, comp. Verlag Weltarchiv GmbH, 1965 432 p refs

A selective bibliography of Eastern and Western Hemispheric sources concerning the legal and political implications of space research is presented. The material relates to space law and its background; and political, military, and economical aspects and technological-scientific problems of astronautics. Documents and activities of states and international organizations are referred to. L.S.

N67-18378 International Astronautical Federation, Paris (France). International Inst. of Space Law.
WORLDWIDE BIBLIOGRAPHY FOR THE YEAR 1964 OF SPACE LAW AND RELATED MATTERS [BIBLIOGRAPHIE MONDIALE POUR L'ANNEE 1964 DE DROIT SPATIALE ET MATIERES CONNEXES]
Aug. 1965 43 p refs In FRENCH and ENGLISH
(IISL-BIBL-1) Available from Inter. Astronautical Federation, Paris: \$3.00

References to books and articles of periodicals, published in Argentina, Austria, Belgium, Brazil, Bulgaria, Canada, Chile, West Germany, Greece, Hungary, India, Italy, Japan, Netherlands, Norway, Poland, Rumania, Spain, Switzerland, Czechoslovakia, Turkey, UK, USA, Uruguay, USSR, Venezuela, Yugoslavia, are contained in this bibliography. They refer to organs dealing with space law, outline the progress in the conquest of space, the development and general principles of space law and relate to different activities and uses of space as well as to military problems. ESRO

N67-18473# Joint Inst. for Nuclear Research, Dubna (USSR).
Lab. of Nuclear Problems.

ASTATINE [ASTAT (OBZOR)]

V. D. Nefedov, Yu. V. Noreseev, M. A. Topopova, and V. A. Khalkin
1966 35 p refs In RUSSIAN Submitted for publication
(JINR-P-2895)

A review is presented on the preparation and properties
of astatine. Data on new inorganic and organic astatine forms are
included. NSA

N67-18509* National Aeronautics and Space Administration,
Marshall Space Flight Center, Huntsville, Ala.

ADHESION IN THE SPACE ENVIRONMENT

H. E. Pattee and R. E. Monroe Huntsville, Ala., Redstone Sci.
Inform. Center, 31 Oct. 1966 149 p refs Prepared by Battelle
Mem. Inst. Sponsored jointly by Army Missile Command
(Contract DA-01-021-AMC-14693(Z))

(NASA-TM-X-59395; RSIC-607) CFSTI: HC\$3.00 CSCL 13H

This report presents a comprehensive literature survey of
adhesive bonding (cold welding) in the space environment. Space
characteristics are summarized and experimental methods for
reproducing these conditions are investigated. Information is
particularly directed towards electronics and the metals used for
electrical contacts. A total of 124 references are cited along with
a selected bibliography of 44 citations. Author

N67-18519*# Vanderbilt Univ., Nashville, Tenn. Dept. of
Chemistry.

**THE STATUS OF ULTRACHEMICAL ANALYSIS FOR
SEMICONDUCTORS Final Report**

Robert V. Dilts and Larry C. Hall 15 Dec. 1966 215 p refs
(Contract NAS8-20196)

(NASA-CR-82011) CFSTI: HC\$3.00/MF\$0.65 CSCL 07D

A literature review on the state-of-the-art of ultrachemical
analysis of materials of interest to the field of semiconductors is
presented, and details are given on atomic absorption spectroscopy,
emission spectroscopy, and neutron activation methods. The general
theory for each method is described, and recent developments,
instrumentation, materials and sources used, and applications are
discussed. Typical results are tabulated, recommendations are
indicated, and extensive bibliographies are included. Among the
conclusions are: (1) Atomic absorption spectroscopy is accurate,
sensitive, and eminently suitable for semiconductor material analysis.
(2) Emission spectroscopy is an excellent technique and permits
the rapid direct analysis of solid samples. (3) Activation analysis
the most general, sensitive method for elemental detection and is
expected to be more flexible, sensitive, and faster in the near
future. N.E.N.

N67-19037*# National Aeronautics and Space Administration,
Marshall Space Flight Center, Huntsville, Ala.

INDUSTRIAL SURVEY OF ELECTRONIC PACKAGING

J. L. Easterday, D. A. Kaiser, and C. H. Burley Redstone Arsenal,
Ala., Redstone Sci. Inform. Center, 30 Nov. 1966 135 p refs
(Contract DA-01-021-AMC-14693(Z))

(NASA-TM-X-59418; RSIC-614) CFSTI: HC \$3.00/MF \$0.65
CSCL 09A

Information provided is a review of electronic packaging
techniques ranging from the mounting of parts (discrete or
integrated circuit) to a complete black box. Module configurations
discussed include planar printed-circuit boards, stick modules,
cordwood, mylar tapes for part mounting, and variations of these.
Package configurations have been aimed at reducing the number
of layers in multilayer printed-circuit boards. Techniques include
book type modules interleaving printed-circuit boards, slotted guides
in housings, and precompressed stacks of printed-circuit board
assemblies. The package housings may be cast, dip brazed,
automatically milled from solid stock, or light sheet metal covers.

Many types of interconnection techniques are in use including
multilayer circuitry other than conventional printed-circuit boards.
Eyelets and plated-through holes are usually reinforced by filling,
redundancy, etc. No great variations in potting methods were
noted except for radio frequency modules. However, problems of
nonuniform density were indicated. Author

N67-19109*# Pittsburgh Univ., Pa. Dept. of Electrical Engineering.
**THE STABILITY THEORY OF SOLUTIONS TO PARTIAL
DIFFERENTIAL EQUATIONS: A BIBLIOGRAPHICAL
SURVEY**

Gabe R. Buis and William G. Vogt 31 Jan. 1967 21 p refs
(Grant NGR-39-011-039)

(NASA-CR-82662) CFSTI: HC\$3.00/MF\$0.65 CSCL 12A

A bibliographical survey of recent contributions to the stability
theory of solutions to partial differential equations is reported.
Although some results employing approximate methods are
mentioned, the main emphasis is on the use of Lyapunov's Direct
Method. Closely related results on the existence and uniqueness
of solutions to partial differential equations employing the theory
of distributions or generalized functions are also given. Author

N67-19139*# Michigan Univ., Ann Arbor. Radiation Lab.
**STUDY OF PLASMA SHEATH ASSOCIATED WITH
COMMUNICATIONS BLACKOUT Final Report, Jun.
1963-Dec. 1966**

Andrejs Olte 31 Dec. 1966 3 p refs /ts Tech. Rept.-5825-10-T
(Grant NsG-472)

(NASA-CR-66280) CFSTI: HC\$3.00/MF\$0.65 CSCL 20N

This bibliography lists all technical reports issued in connection
with the study of plasma sheath association in communications
blackout. Work covered the following re-entry connected phenomena:
(1) Radiation of a unit electric line source through a concentric
axially slotted plasma sheath; (2) radiation of a magnetic line source
excited cylinder through a slotted plasma sheath; (3) terminal
admittance of a wedge guide that excites a perfectly conducting
cylinder which is enclosed by a slotted shell and a plasma sheath;
and (4) the importance of electrokinetic waves on the antenna
surface current distribution. G.G.

N67-19730# Picatinny Arsenal, Dover, N. J. Plastics Technical
Evaluation Center.

FERROCENE POLYMERS: AN ANNOTATED BIBLIOGRAPHY

David W. Levi Sep. 1966 33 p refs

(PLASTEC-15; AD-643025) CFSTI: HC\$3.00/MF\$0.65

An annotated bibliography of 46 items is reported on ferrocene
polymers. It is limited to the references in the authors personal
file. However, these cover the significant journals in the field, for
the period 1956-1966. Complete subject and author indexes are
included. Author (TAB)

N67-19900*# National Aeronautics and Space Administration,
Washington, D. C.

**AEROSPACE MEDICINE AND BIOLOGY—A CONTINUING
BIBLIOGRAPHY WITH INDEXES, JANUARY 1967**

Feb. 1967 223 p refs

(NASA-SP-7011(34)) CFSTI: HC\$3.00/MF\$0.65 CSCL 06S

As part of a continuing bibliography on aerospace medicine
and biology, a selection of annotated references is presented on the
biological, physiological, psychological, and environmental effects
to which man is subjected during the following simulated or
actual flight in the earth's atmosphere or in interplanetary space.
References describing similar effects on lower organisms are also
included along with such related topics as sanitary problems,
pharmacology, toxicology, safety and survival, life support systems,
exobiology, and personnel factors. Emphasis is on applied research,
but references to fundamental studies and theoretical principles
related to experimental development are included. Subject, corporate
source, and personal author indexes are appended. R.N.A.

N67-19943*# National Aeronautics and Space Administration, Marshall Space Flight Center, Huntsville, Ala.

FERROCENE AND FERROCENE DERIVATIVES

William P. McNutt and Charles V. Pittman, Jr. 30 Sep. 1966
430 p refs Jointly supported by Army Missile Command
(NASA-TM-X-59478; RSIC-591) CFSTI: HC \$3.00/MF \$0.65
CSCL 07C

This is an annotated bibliography covering ferrocene and its derivatives from 1962 to August 1966. Several review articles are listed which describe the unique characteristics of ferrocene since its discovery in 1951, its reactions, and some of its uses. Approximately 550 citations are listed. Author

N67-20145# Staatliche Zenrale fuer Strahlenschutz, Berlin (East Germany).

BIOLOGICAL-CHEMICAL RADIATION PROTECTION, II
[BIOLOGISCH-CHEMISCHER STRAHLENSCHUTZ, II]
Summary Report

R. Huber May 1966 28 p refs In GERMAN
(SZS-5/66)

A bibliographic review is presented of data on the effectiveness of various radioprotective substances. The radioprotective agents considered are SH compounds and derivatives, amines, amino acids, vitamins, hormones, and some unclassified compounds. NSA

N67-20203# Hunter Coll., New York
DIVINYLBENZENE BIBLIOGRAPHY Interim Report

Richard H. Wiley 3 Nov. 1966 96 p refs
(Contract AT(30-1)-3644)
(NYO-3644-10) CFSTI: HC \$3.00/MF \$0.65

One thousand one hundred and nineteen references on divinylbenzene are presented. They were collected from Beilstein and Chemical Abstracts through volume 62. NSA

N67-20306# Royal Aircraft Establishment, Farnborough (England).
DIFFUSION IN METALS IN GENERAL AND ALUMINUM
AND ITS ALLOYS IN PARTICULAR: A BIBLIOGRAPHY

Janet Dudley, comp. London, Min. of Aviation, Nov. 1966 22 p refs
(RAE-LIB-BIBL-265) CFSTI: HC \$3.00/MF \$0.65

This bibliography contains references to books, reports and periodical articles concerning diffusion published between 1960 and 1966. These references were found in Nuclear Science Abstracts, A.S.M. Review of Metal Literature, Metallurgical Abstracts, NASA Star, Science Abstracts B, Abstracts Journal of Metallurgy A and B, B.N.F.M.R.A. Bulletin, and Chemical Abstracts. They are arranged in alphabetical order of authors in two sequences: Diffusion in Metals in General and Diffusion in Aluminium and its Alloys. Author

N67-20307# Kernforschungsanlage, Juelich (West Germany). Zentralbibliothek.

THE PHYSICAL AND PHYSICO-CHEMICAL PROPERTIES OF KRYPTON, A BIBLIOGRAPHY [KRYPTON PHYSIKALISCHE UND PHYSIKALISCH-CHEMISCHE EIGENSCHAFTEN, EINE LITERATURZUSAMMENSTELLUNG]

E. Paul and G. Gehrke Sep. 1966 22 p refs In GERMAN
(JUL-BIBL.-11) CFSTI: HC \$3.00/MF \$0.65

A 209-title bibliography covering the period from 1940 through 1966 is presented. The following sources were used: *Chemical Abstracts*, *Chemisches Zentralblatt*, *Nuclear Science Abstracts*, *Physics Abstracts*, and *Physikalische Berichte*. Transl. by K.W.

N67-20359# Lockheed-Georgia Co., Marietta.
PLAN FOR THE DEVELOPMENT OF ALL WEATHER LANDING SYSTEM RELIABILITY ANALYSIS AND CRITERIA, PHASE I

L. A. Adkins, L. D. Schiller and M. C. Thatro Jan. 1966 117 p refs
(Contract FA-65WA-1376)
(RD-66-2; ER-8316; AD-644417) CFSTI: HC \$3.00/MF \$0.65

The report outlines the basic plan and approach which will be used for generation of an AWLS assessment criteria and evaluation methodology. The criteria and methodology to be formulated will be for application on the category III AWLS ground-based system, which will be phase II of the study program, and for the airborne portions of the system, which will be treated in phase III of the program. Of particular significance is the consideration of safety, reliability, and total performance evaluation. The phase I report presents a complete bibliography on AWLS technology. In addition, treatment is presented on the applications of reliability, human factors, safety, quantification, and total performance for the evaluation of all weather landing systems. Author (TAB)

N67-21371# Library of Congress, Washington, D. C. Aerospace Technology Div.

ORGANIC SEMICONDUCTORS: COMPREHENSIVE REPORT Surveys of Foreign Scientific and Technical Literature
Serge Markov 30 Jun. 1966 57 p refs
(ATD-66-84; TT-67-60340; AD-644463) CFSTI: HC \$3.00/MF \$0.65

The comprehensive report is based on Soviet open sources published 1960-1965 with a few sources published earlier. It is the third report of a series covering Soviet literature on organic semiconductors. The subject of this series is basically Soviet research on the electrical properties of organic semiconductors and photoconductors. Material has also been included dealing with the preparation of such products, known or potential, and with their structure, morphology, and magnetic properties insofar as these are associated with electrical properties. The report concludes the topic of polymers with a continuous system of double bonds in the backbone. It covers polyarylenes, polyazoarylenes, polyazines, polymeric Schiff bases, polymers with pyridinyl, vinyl, and phenyl groups in the backbone, onium polymers, and aniline black and similar substances. TAB

N67-21612# Atomic Weapons Research Establishment, Aldermaston (England).

ANALYTICAL CHEMISTRY MANUALS. A BIBLIOGRAPHY AND INDEX TO THEIR CONTENTS
W. A. Dowden Oct. 1966 114 p refs
(AWRE/LIB/BIB/15) HMSO: 15s

A bibliography of manuals of collected analytical methods, issued as reports, with indexes to the substances determined, materials analyzed, and miscellaneous procedures is presented. The references are in report number order. Author (NSA)

N67-21615# United Kingdom Atomic Energy Authority, Harwell (England). Information Branch.

COMPENDIUM OF REFERENCES TO STUDIES OF THE PROPERTIES OF LIQUID METAL BINARY SYSTEMS WHICH RELATE TO THEIR STRUCTURE

B. W. Mott, M. E. Downey, and P. A. Cumming Sep. 1966 58 p refs
(AERE-BIB-151) HMSO: 8s

The references are compiled in alphabetical order of chemical symbol for the components of each system. Papers dealing solely with experimental work on thermodynamic properties were omitted as these are available elsewhere. NSA

N67-21748# Kernforschungsanlage, Juelich (West Germany), Zentralbibliothek.

BIBLIOGRAPHIES DEALING WITH NUCLEAR SCIENCES [LITERATURZUSAMMENSTELLUNGEN AUS DEN GEBIETEN DER KERNWISSENSCHAFTEN]

M. Wittenberg, comp. Oct. 1964 12 p refs In GERMAN (JUL-BIBL-7) CFSTI: HC \$3.00/MF \$0.65

A bibliography is presented on the following topics for application to nuclear science: biology and medicine; geology; mineralogy; radiation protection; instrumentation; isotope techniques; mathematics and computers; metals, ceramics, and other materials; physics; reactor technology; and fallout disposal. Under the main divisions, such topics are included as: excretion of amino acids, decontamination measures, corrosion inhibition of technetium, surface evaluation by gas chromatography techniques, X-ray spectrometry, lattice structure of uranium hydride, radiation effect on calcite, pipe lines for liquid hydrogen, pressure drop and heat transfer in two-phase flow, and measurement of high doses of gamma radiation.

Transl. by R.L.I.

N67-21815# Florida Univ., Gainesville. Dept. of Pathology
BIBLIOGRAPHY OF THE TOXICOLOGY OF NICKEL CARBONYL

F. William Sunderman, Jr. 1 Jul. 1966 6 p refs (Contract AT(40-1)-3461) (ORO-3461-8a) CFSTI: HC \$3.00/MF \$0.65

A list of 46 references to information on the toxicology of nickel carbonyl is given. NSA

N67-21817# Florida Univ., Gainesville. Dept. of Pathology.
BIBLIOGRAPHY OF NICKEL CARCINOGENESIS

F. William Sunderman, Jr. 1 Jul. 1966 7 p refs (Contract AT (40-1)-3461) (ORO-3461-8b) CFSTI: HC \$3.00/MF \$0.65

Sixty-three references pertaining to the carcinogenic effects of nickel are presented. Papers on clinical and experimental studies are included, as well as those treating occupational parameters of respiratory tract carcinogenesis. NSA

N67-21871# System Development Corp., Santa Monica, Calif.
A BIBLIOGRAPHY ON INFORMATION SCIENCE AND TECHNOLOGY FOR 1966, PART III Technical Memorandum
Frances Neeland 25 Nov. 1966 98 p (TM-3008/003/00-PT-3; AD-645442) CFSTI: HC \$3.00/MF \$0.65

The primary aim of this continuing bibliography is to assist the authors of the chapters in Annual Review of Information Science and Technology in discovering the existence or determining the identity of documents relevant to their topics. The style of entries also reflects the authors requirements. The Abbreviations and Index for Periodicals Cited is cumulative for parts I through III. Author (TAB)

N67-22095# National Bureau of Standards, Washington, D. C.
HIGH TEMPERATURE CHEMISTRY AND PHYSICS OF MATERIALS IN THE CONDENSED STATE, OCTOBER-DECEMBER 1966 Bibliography

J. J. Diamond, ed. Basel (Switzerland), Intern. Union of Pure and Appl Chem., Dec. 1966 77 p refs *Its* Vol. 1966, No. 4

The bibliography includes: measuring instruments and devices for achieving temperatures above 1500°C; physical and chemical properties at temperatures below and above 1000°C of metallic and nonmetallic materials with melting points below and above 1500°C; phase equilibria data; and reactions at temperatures above 1000°C. N.E.N.

N67-22173*# General American Transportation Corp., Niles, Ill., Research Div.

RESEARCH AND DEVELOPMENT STUDY RELATED TO THE SYNTHESIS OF FORMALDEHYDE FROM CO₂ AND H₂ Quarterly Progress Report, Aug.-Oct. 1966

P. Budininkas, R. W. Ferris, and G. A. Remus Oct. 1966 32 p refs

(Contract NAS2-3889) (NASA-CR-73070-1; QPR-1) CFSTI: HC \$3.00/MF \$0.65 CSCL 07C

The results of a general literature survey, and a review of the methods of formaldehyde synthesis are presented. The synthesis procedures revealed in the search are: (1) direct formation of formaldehyde; (2) formation of methanol with subsequent conversion to formaldehyde; and (3) production of methane which can be then oxidized to formaldehyde. Each method is discussed with respect to the advantages and disadvantages in space conditions and limitations. The oxidation of methane to formaldehyde was considered the most promising, and details are given on the general method, using solid catalysts, and using gaseous catalysts. Included are extensive tables of references for these latter methods. N.E.N.

N67-22178* Honeywell, Inc., Minneapolis, Minn.

INFRARED HORIZON DEFINITION A State-of-the-Art Report
Raymond J. Kirk, Bruce F. Watson, Edward M. Brooks, and Robert O'B. Carpenter (GCA Corp.) Apr. 1967 259 p refs

(Contract NAS1-6010) (NASA-CR-722) CFSTI: HC \$3.00/MF \$0.65 CSCL 17G

The present knowledge and theories of the earth's radiance characteristics, techniques for analysis of radiance profile variations, and performance of radiance detector equipment were examined. Meteorology, atmospheric physics, and horizon profile modeling and synthesis were analyzed. Special atmospheric conditions which could cause variations in the 15 micron horizon profile, including concentration variations of water vapor, ozone, carbon dioxide cloud conditions, and thermal variations, are described in detail. Theoretical horizon radiance profiles were synthesized from basic meteorological factors and the work was examined as it relates to computing horizon radiance profiles from atmospheric temperature profiles. Varying transmissivity data, atmospheric refraction, Doppler broadening, and absence of local thermodynamic equilibrium were also examined. Variations in the profiles as a function of temperature, clouds, atmospheric circulations, spatial and temporal parameters, and wavelengths were also assessed. Data from the Irate, X-15, D-61, Kodak, Tiros, and Nimbus programs were analyzed, along with several balloon radiance measurement programs. Author

N67-22382# Rocky Flats Div., Dow Chemical Co., Golden, Colo.
ANNOTATED BIBLIOGRAPHY OF THE CHEMISTRY AND PHYSICS OF AMERICIUM

H. W. Miller 5 Dec. 1966 70 p refs (Contract AT(29-1)-1106)

(RFP-770) CFSTI: HC \$3.00/MF \$0.65

Chemistry areas covered include the (1) history, (2) vapor pressure, (3) thermodynamics, (4) metals and alloys, (5) crystal structure, (6) magnetic susceptibility, (7) electronic configuration, (8) absorption, emission, and infrared spectroscopy, (9) separation and purification, (10) instrumental analysis, (11) higher valence states, (12) kinetics and disproportionation, (13) complexes, (14) compounds, (15) electrochemistry, (16) source preparation, (17) processing, and (18) production of americium. Physics areas covered include the (1) nuclear spectroscopy, (2) decay, (3) specific activity of the half-life, (4) nuclear spin-magnetic moments, (5) nuclear cross sections, (6) fission, (7) source preparations, and (8) isotope production the transuranium element. Author and subject indexes for the bibliographic literature are also included. L.S.

N67-22410# Joint Publications Research Service, Washington, D. C.

THE PROBLEM OF SERVICING COMPLEX TECHNICAL SYSTEMS, 1

Ye. Yu. Barzilovich *In its* Tech. Cybernetics, No. 6, 1966 14 Feb. 1967 p 102-125 refs (See N67-22401 11-10) CFSTI: HC\$3.00/MF\$0.65

A brief review is offered of basic works in the area of control of reliability of complex technical systems during operation and design. Author

N67-22461# British Hydromechanics Research Association, Cranfield (England).

A BIBLIOGRAPHY ON CONTAMINATION AND FILTRATION, WITH PARTICULAR REFERENCE TO OIL HYDRAULIC SYSTEMS

G. M. Barratt and T. E. Brock, comp. Apr. 1966 63 p refs (BIB-19) CFSTI: HC\$3.00/MF\$0.65

This bibliography contains 178 references arranged in chronological order, dealing with contamination and filtration in oil hydraulic systems. Some items dealing with micron filtration of lubricants, coolants and fuels have been included but emphasis has been placed on problems connected with oil hydraulic fluids and components. Some abstracts are given. Author

N67-22462 British Hydromechanics Research Association, Cranfield (England).

A BIBLIOGRAPHY ON SIPHONS AND SIPHON SPILLWAYS

T. E. Brock and A. L. King, comp. Mar. 1966 30 p refs (BIB-21)

The bibliography contains references to books and journals. Several entries have abstracts included. N.E.N.

N67-22471 Atomic Energy Centre, Lahore (Pakistan).

SOLAR ENERGY—A BIBLIOGRAPHY OF SELECTED LITERATURE

M. M. Rafique, F. A. Afzal, and M. Saleem Sep. 1966 83 p refs (AECL-Pak/Library/15) CFSTI: HC\$3.00/MF\$0.65

References to unclassified reports and published literature are presented on the subject of solar energy. Major areas of interest covered include cells, collectors, converters and concentrators, economics, energy source of the future, measurements, space applications, stills, and pumps, power, and mechanical engineering. Abstracts are included for most of the references. L.E.W.

N67-22582*# Massachusetts General Hospital, Boston.

CORRELATIONS BETWEEN SPECIFIC HUMAN BRAIN LESIONS AND MEMORY CHANGES

Robert G. Ojemann *In Neurosci. Res. Program Bull.*, Vol. 4 (Suppl.) 15 July 1966 p 1-70 refs (See N67-22581 11-04) CFSTI: HC\$3.00/MF\$0.65

A critical survey is presented of the literature that correlates a specific loss of brain tissue with the details of the memory deficit or lack of it. Cases related to surgical removal, disease, or congenital absence are considered. Changes in memory are described in three general categories: a loss of ability to store recent memory, as measured by the inability to learn or record ongoing day-to-day events; amnesia for events immediately prior to the loss of brain tissue, with the period varying from less than a day to several months; and memory for events occurring several years before the lesion. Clinical case histories are presented on lesions associated with medial temporal lobe, lateral temporal lobe, entire temporal lobe, fornix, hippocampus, commissures, thalamus, hypothalamus, third ventricle and adjacent structures, frontal lobe, corpus callosum and cerebral commissures, and multiple brain regions. The various tests of memory functions which were used are described. An annotated bibliography is included. M.G.J.

N67-22679# Naval Weapons Lab., Dahlgren, Va.

COMPUTER ASSISTED INSTRUCTION: A SELECTED BIBLIOGRAPHY AND KWIC INDEX

Gerald L. Engel Jan. 1967 86 p refs Supersedes NWL-K-49/66 (NWL-K-3/67; NWL-K-49/66; AD-645654) CFSTI: HC\$3.00/MF\$0.65

This technical memorandum supercedes Technical Memorandum No. K-49/66 (AD-638 892). All entries found in K-49/66 are in this memorandum together with references to one hundred additional articles and reports. This technical memorandum also provides an annotated bibliography, referenced by a Key Work In Context (KWIC) index to selected articles on Computer Assisted Instruction (CAI). Author (TAB)

N67-22758*# National Aeronautics and Space Administration, Goddard Space Flight Center, Greenbelt, Md.

MAGNETIC SHIELDING

D. L. Waidelich *In its* 1966 Session of the Goddard Summer Workshop [1967] p 277-286 refs (See N67-22741 11-34) CFSTI: HC\$3.00/MF\$0.65

To reduce the effect of the earth's magnetic field for the testing of components and spacecraft in very low magnetic fields, a literature survey is presented on shielding against static magnetic fields. Some attention is devoted to shielding against low frequency fields as well. R.L.I.

N67-22759*# National Aeronautics and Space Administration, Goddard Space Flight Center, Greenbelt, Md.

THE PRODUCTION OF UNIFORM MAGNETIC FIELDS BY COMPENSATED SOLENOIDS

D. L. Waidelich *In its* 1966 Session of the Goddard Summer Workshop [1967] p 287-294 refs (See N67-22741 11-34) CFSTI: HC\$3.00/MF\$0.65

For application to the magnetic field testing of cylindrical objects such as sounding rocket or a long thin spacecraft, a longer and larger compensated solenoid was developed to produce a more uniform magnetic field. This brief literature review includes an extensive, annotated bibliography. R.L.I.

N67-22760*# National Aeronautics and Space Administration, Goddard Space Flight Center, Greenbelt, Md.

TWO PLASMA PROBE TECHNIQUES

D. L. Waidelich *In its* 1966 Session of the Goddard Summer Workshop [1967] p 295-300 refs (See N67-22741 11-34) CFSTI: HC\$3.00/MF\$0.65

A brief survey was made of the work done on two plasma probe techniques, one of which was the plasma resonance probe. The other probe technique embodies the idea of using the second derivative of the current-voltage characteristic of the Langmuir probe as a means of finding the electron energy distribution function of a plasma. An extensive bibliography accompanies the brief technical history of these two techniques. R.L.I.

N67-22767*# National Aeronautics and Space Administration, Goddard Space Flight Center, Greenbelt, Md.

THE PRODUCTION OF UNIFORM GRADIENT MAGNETIC FIELDS

D. L. Waidelich *In its* 1966 Session of the Goddard Summer Workshop [1967] p 389-392 refs (See N67-22741 11-34) CFSTI: HC\$3.00/MF\$0.65

A brief literature survey outlines the production of uniform gradient magnetic fields in coil systems. A rather extensive annotated bibliography accompanies it. R.L.I.

N67-22885*# National Aeronautics and Space Administration, Washington, D. C.
AEROSPACE MEDICINE AND BIOLOGY—A CONTINUING BIBLIOGRAPHY, FEBRUARY, 1967

Mar. 1967 48 p refs
 (NASA-SP-7011(35)) CFSTI: HC\$3.00/MF\$0.65 CSCL 06S

The bibliography with abstracts is composed of entries formerly announced in *Scientific and Technical Aerospace Reports*, and *International Aerospace Abstracts*, and those made available by the Library of Congress. The subject coverage concentrates on the biological, physiological, and environmental effects to which man is subjected during and following simulated or actual flight in the earth's atmosphere or in interplanetary space. A subject index, corporate source index, and personal author index are included.
 N.E.N.

N67-22896*# National Aeronautics and Space Administration, Washington, D. C.
AEROSPACE MEDICINE AND BIOLOGY — A CONTINUING BIBLIOGRAPHY, 1966

Jan. 1967 929 p refs
 (NASA-SP-7011(33)) CFSTI: HC\$3.00/MF\$0.65 CSCL 06S

A cumulative index is presented for the past 12 issues of a continuing bibliography on aerospace medicine and biology. The publication includes entries from NASA's *Scientific and Technical Aerospace Reports* and *International Aerospace Abstracts* and is indexed by subject, corporate source, and personal author. S.P.

N67-22922# Kernforschungsanlage, Juelich (West Germany).
THERMIONIC [THERMIONIK]

D. Wickmann Aug. 1963 23 p refs In GERMAN
 (JUL-BIBL-1) CFSTI: HC\$3.00/MF\$0.65

A bibliography is presented of works on the use of thermionic cells in reactors. The listing includes titles on high temperature fuel elements, particularly on cladding and canning. The list was compiled from articles published in eight pertinent periodicals since January 1963.
 Transl. by K.W.

N67-22943# Nagoya Univ. (Japan). Research Information Center.
COMPUTER EXPERIMENTS WITH CHARGED PARTICLES, CHARGED FLUIDS AND PLASMAS: A CLASSIFICATION AND BIBLIOGRAPHY

Charles K. Birdsall Dec. 1966 29 p refs
 (IPPJ-54) CFSTI: HC\$3.00/MF\$0.65

An attempt was made to list and classify some papers dealing with results in computer experiments with charged particles, charged fluids, and plasmas. The references are listed by applications, charged particle model, and charged fluid model. Definitions related to computer experiments are given. Finally a chronological bibliography is included, which applies primarily to the motion of charged particles and charged fluids both in self and applied electric and magnetic fields.
 L.E.W.

N67-22963# Royal Aircraft Establishment, Farnborough (England).
A BIBLIOGRAPHY OF STRIP TRANSMISSION LINE REFERENCES

Bryan A. B. Hodgson, comp. London, Min. of Aviation, Nov. 1966 29 p refs
 (RAE-LIB-BIBL-269) CFSTI: HC\$3.00/MF\$0.65

The bibliography covers microstrip or open strip line, double ground-plate lines or triplate, and wire-above-ground lines, and includes a selection of component references.
 Author

N67-22969# Technisch Documentatie en Informatie Centrum voor de Krijgsmacht, The Hague (Netherlands).
NETWORK PLANNING—SCANS/PERT—CPM/RAMPS. BIBLIOGRAPHY [NETWERKPLANNING—SCANS/PERT/CPM/RAMPS. BIBLIOGRAPHIE]

F. P. van Eck Nov. 1966 62 p refs
 (TDCK-46624) CFSTI: HC\$3.00/MF\$0.65

A bibliography with abstracts is presented of works on network analysis, its application in general, and its specific application in the construction of ships, aircraft, spacecraft, buildings, and in military operations. Included are the systems SCANS, PERT, CPM, and RAMPS. Works published from 1964 through 1966 are represented.
 Transl. by K.W.

N67-23085 Gt. Brit. Ministry of Aviation, London.
VARIABLE-MAGNETIZATION FERRITE DEVICES: A BIBLIOGRAPHY

Bryan A. B. Hodgson, comp. Nov. 1966 11 p refs
 (RAE-LIB-BIBL-268) CFSTI: \$3.00

This bibliography contains a list of 55 references to variable-magnetization ferrite devices, mounted in waveguide, strip-transmission line and coaxial line. Pulse-magnetized, i.e. latching devices, are not included. The references have been collected from all available sources, and cover the period 1935–1966. An author index is appended.
 Author

N67-23199# United Kingdom Atomic Energy Authority, Harwell (England). Information Branch.

NUCLEON-NUCLEON SCATTERING (EXPERIMENTAL ASPECTS)—A BIBLIOGRAPHY, 1961–1966

J. L. Hall Aug. 1966 48 p refs
 (AERE-BIB-149) HMSO: 7s

The bibliography includes published articles and unclassified reports on the experimental aspects of nucleon-nucleon (p-p and n-p) scattering at all energies, for the period covered by abstracting journals published between August, 1961 and June 1966. Anti-particles are not included.
 NSA

N67-23321*# National Aeronautics and Space Administration, Washington, D. C.

THE INTERNAL STRUCTURE AND PHYSICS OF THE EARTH

V. A. Magnitskiy Apr. 1967 455 p refs Transl. into ENGLISH of the book: "Vnutrenneye Stroyeniye i Fizika Zemli" Moscow, Izd. Nedra, 1965

(NASA-TT-F-395) CFSTI: HC\$3.00/MF\$0.65 CSCL 08K

Presented are contemporary concepts regarding the internal structure of the Earth, shell formation processes, and future evolution. Attention is concentrated on crust formation and on mantle-crust interaction. Planetary thermics and structure and physical properties of the shell material are discussed on the basis of data from seismology, gravimetry, and observations of natural oscillations and tides within the Earth. Terrestrial rheology, the behavior of the mantle at high pressures and temperatures, and phase transitions at high pressure are treated. Analyzed are the hypotheses regarding the basic boundaries within the terrestrial sphere. Zone melting in the mantle is examined, and an attempt is made to provide a theoretical basis for explaining the vertical movements in the crust and to clarify crust evolution.
 K.W.

N67-23421 Joint Publications Research Service, Washington, D. C.

THE TECHNOLOGY OF COMPUTER PRODUCTION

S. A. Mayorov 7 Feb. 1967 16 p refs Transl. into ENGLISH from the book "Tekhnologiya Proizvodstva Vychislitel'nykh Mashin" Moscow, Izd. Mashinost., 1965

(JPRS-39826; TT-67-30474)

The foreword, chapter abstracts, and bibliography of a publication pertaining to computer technology for scientific research and economic planning are presented. Much of the book is devoted to examination of the production of specific elements, assemblies, and modules for small-dimension digital computers employing semiconductor and ferrite elements.
 S.P.

N67-23427 Library of Congress, Washington, D. C. Aerospace Technology Div.

COMPUTER TECHNOLOGY Surveys of Foreign Scientific and Technical Literature

Boris Doncov 30 Dec. 1966 61 p refs Compilation of Abstracts (ATD-66-145)

Pertinent information included: a multichannel autocompensating multiplier/divider unit, analog-digital signal comparison circuit, use of digital logic elements in analog machines designed for solving boundary problems, EASP-S electronic random process analyzer, BESM-6 computer complex, memory units, long-time memory system, M-20 digital computer, system for information transfer between digital and analog computers, gathering primary video information with slow-scan TV facilities, singlechannel digital optimizer, information referral center, code converters, and relay-type contactless regulator.

Author

N67-23450# National Bureau of Standards, Washington, D. C.
BIBLIOGRAPHY ON ATOMIC TRANSITION PROBABILITIES
B. M. Glennon and W. L. Wiese 22 Apr. 1966 104 p refs Supersedes NBS-Monograph-50
(NBS Misc. Publ.-278; NBS-Monograph-50) CFSTI: HC \$3.00/MF \$0.65

A revised and updated bibliography on atomic transition probabilities is presented. The papers are arranged according to elements and stages of ionization, and the method employed and class of transitions are indicated behind each reference. Only articles on discrete transitions, both permitted and forbidden, are listed. Also included is a supplementary list of important papers dealing with transition probabilities from a general point of view, and a table of comprehensive papers not included in the element list.

Author

N67-23460# Joint Publications Research Service, Washington, D. C.

SOVIET-BLOC RESEARCH IN GEOPHYSICS, ASTRONOMY, AND SPACE

17 Feb. 1967 135 p refs
(JPRS-39945; TT-61-11147-150) CFSTI: HC \$3.00/MF \$0.65

An annotated bibliography is presented on research in the following areas: astronomy, meteorology, oceanography, terrestrial geophysics, upper atmosphere, and space science. Among the topics covered are: magnetic fields, lunar surface, clouds and precipitation, solar activity, weather forecasting, ocean currents, seismic waves, meteorites, and radio waves.

S.P.

N67-23463# International Union of Pure and Applied Chemistry, Basle (Switzerland). Commission on High Temperatures and Refractories.

BIBLIOGRAPHY ON THE HIGH TEMPERATURE CHEMISTRY AND PHYSICS OF GASES AND PLASMAS

L. Brewer, comp. (Calif. Univ., Berkeley) 31 Dec. 1966 21 p refs

(Rept.-21) Available from Natl. Bur. of Std., Washington, D. C.

A bibliography containing references to literature on spectroscopy of interest to high temperature chemistry, and reactions between gases and condensed phases is presented. R.N.A.

N67-23468# Minnesota Univ., Minneapolis. Cosmic Ray Group.
RESOURCE BIBLIOGRAPHY ON COSMIC RAYS AND RELATED SUBJECTS

J. R. Winckler and D. J. Hofmann Dec. 1966 63 p refs (CR-89)

An annotated bibliography is presented which contains references to material in the field of cosmic radiation and related subjects. Included are references to original papers representing milestones in cosmic ray research, review articles, published cosmic

ray symposia, books on cosmic rays or related subjects, popular books and articles, chapters in physics text books, and films on cosmic rays and related subjects. The appendices contain a list of review articles, books, and conference proceedings on solar physics; and a reference to a comprehensive bibliography in the particles and fields area. R.N.A.

N67-23549# Oak Ridge National Lab., Tenn.
BIBLIOGRAPHY, SUBJECT INDEX, AND AUTHOR INDEX OF THE LITERATURE EXAMINED BY THE RADIATION SHIELDING INFORMATION CENTER

S. K. Penny, D. K. Trubey, and J. Gurney May 1966 591 p refs Supersedes ORNL-RSIC-2; ORNL-RSIC-5; see N65-26999 (Contract W-7405-ENG-26)

(ORNL-RSIC-5, Rev. 1; ORNL-RSIC-5; ORNL-RSIC-2) CFSTI: HC \$3.00/MF \$0.65

This is the fourth cumulative edit of the literature concerned with nuclear reactors, nuclear weapons, and radioisotopes selected by the Radiation Shielding Information Center. NSA

N67-24380# Kansas State Univ., Manhattan. Inst. for Environment Research.

THE CHIMPANZEE A Topical Bibliography

Frederick H. Rohles, Jr. Feb. 1967 77 p refs
(ARL-TR-67-4; AD-647768) CFSTI: HC \$3.00/MF \$0.65

In June 1962, The Chimpanzee, A Topical Bibliography was published as Aeromedical Research Laboratory Technical Documentary Report (AD-282 661). The first addenda was published in October, 1963, as Aeromedical Research Laboratory Technical Documentary Report (AD-423 069). This report is published as the second addenda and lists 477 new references in chimpanzee research and methodology. Author (TAB)

N67-24486# Naval Applied Science Lab., Brooklyn, N. Y. Material Sciences Div.

BIBLIOGRAPHY AND INDEX OF NAVAL APPLIED SCIENCE LABORATORY TECHNICAL REPORTS ON HIGH STRENGTH STEEL Technical Progress Report, 1959-1966

Frank Ginsberg and Irving L. Stern 14 Feb. 1967 68 p refs
(PR-5; AD-647872) CFSTI: HC \$3.00/MF \$0.65

A bibliography and subject index was prepared of Naval Applied Science Laboratory technical reports covering pertinent information on 80,000 psi to 210,000 psi yield strength steels, with emphasis on HY-80 and HY-130 weldments. Work in these reports deals with transfer of basic laboratory data to production applications. Primary areas of concern are weldability, welding procedures and materials, static and dynamic mechanical properties (including large scale fatigue), explosion bulge, forming, stress relieving and residual stresses. Author (TAB)

N67-24682# Oak Ridge National Lab., Tenn.
INDEX TO NUCLEAR SAFETY. A TECHNICAL PROGRESS REVIEW BY CHRONOLOGY, PERMUTED TITLE, AND AUTHOR, VOLUME 1, NO. 1 THROUGH VOLUME 7, NO. 4
Jan. 1967 65 p refs

(Contract W-7405-ENG-26)

(ORNL-NSIC-31) CFSTI: HC \$3.00/MF \$0.65

The KWIC (Keyword In Context) nuclear safety index is one in which article titles are permuted around the various significant words contained therein. The index is presented in three sections consisting of a chronological list of articles, a permuted title index, and an author index. Emphasized are all phases of reactor development and operation, and the various associated radiation effects. C.T.C.

N67-24874# Parke Mathematical Labs., Inc., Carlisle, Mass.
MATHEMATICAL RESEARCH ON CODING THEORY Final Report, Feb. 1964–Nov. 1966

Dec. 1966 23 p

(Contract AF 19(628)-3826)

(AFCRL-67-0010; AD-646876) CFSTI: HC\$3.00/MF\$0.65

The report presents a summary of the research performed under the contract in the field of Coding Theory. Since the work performed has been amply documented in the 23 technical memoranda and 9 scientific reports issued and available upon request, this report gives a chronological list of the publications with a summary of and/or comment on their content. The main effort (represented by 11 technical memoranda and 8 scientific reports) was directed toward an axiomatic theory of error-correcting, variable length codes.

TAB

N67-24942# Stanford Research Inst., Menlo Park, Calif.
A BRIEF SURVEY OF PREPROCESSING FOR PATTERN RECOGNITION Interim Report, Jul.–Oct. 1966

Peter E. Hart Griffiss AFB, N. Y., RADC, Jan. 1967 45 p refs

(Contract AF 30(602)-3945)

(RADC-TR-66-819; AD-647275) CFSTI: HC\$3.00/MF\$0.65

The report is a literature survey in which 35 papers treating the preprocessing problem in pattern recognition are summarized and reviewed. Papers of both an analytical and a practical nature are included and a bibliography of 97 entries is provided.

Author (TAB)

N67-25292# American Bar Foundation, Chicago, Ill.
THE LAW OF OUTER SPACE

Leon Lipson and Nicholas de B. Katzenbach *In* Library of Congr. Legal Probl. of Space Exploration: A Symp. 1961 p 779–983 refs Sponsored by NASA (See N67-25221 13-34)

A detailed report prepared by the American Bar Foundation for the National Aeronautics and Space Administration analyzes the problems related to international law for outer space and presents abstracts and indexes dealing with space law and other relevant topics. A general description of existing literature, analyses of various proposals, and an appraisal of the law of outer space and the problems that will have to be resolved are included. Brief summaries of the writings quoted in the report are presented by topic headings under two sections; the first contains abstracts that have directly discussed problems of space law, while the second section deals with technical aspects of space and astronautics or with areas of law that are relevant. There are two indexes to correspond to these sections and to permit references to the appropriate abstracts. A table which designates abstract-to-source and abstract-to-footnote permits the exact location of the information, and a bibliography is included.

M.W.R.

N67-25294# Library of Congress, Washington, D. C. Legislative Reference Service.

GUIDES TO THE STUDY OF COMMUNIST VIEWS ON THE LEGAL PROBLEMS OF SPACE EXPLORATION AND A BIBLIOGRAPHY

Robert D. Crane *In its* Legal Probl. of Space Exploration: A Symp. 1961 p 1011–1036 refs (See N67-25221 13-34)

A review of research in Communist countries on the legal problems of space exploration and allied subjects is considered to be, without exception, politically oriented to their basic ideology. Various attempts to further international developments are noted; and the most explicit statement of Soviet policy is considered to have been made in Stuttgart, Germany, where the deputy chairman of the Space Law–Scientific Research Commissions is reported to have said that legal questions of outer space have become primarily a political problem and that every sovereign state has the right to prevent espionage in outer space. Source materials and research organizations are discussed for the Soviet Union and her satellites, and a bibliography is included.

M.W.R.

N67-25315# Library of Congress, Washington, D. C. Legislative Reference Service.

SELECTED REFERENCES ON THE LEGAL PROBLEMS OF SPACE EXPLORATION

Kenneth Anderson Finch, comp. *In its* Legal Probl. of Space Exploration: A Symp. 1961 p 1329–1392 refs (See N67-25221 13-34)

An alphabetical listing, primarily by author, is presented of selected references on the legal problems inherent in space exploration. A category within this alphabetical listing covers bibliographies on space law, and a number of unsigned articles are included alphabetically by their topic. References from all over the world are given.

M.W.R.

N67-25392# Battelle-Northwest, Richland, Wash.
ELECTRICAL ANESTHESIA TECHNIQUES

R. L. Wilbur Nov. 1966 28 p refs

(Contract AT(45-1)-1830)

(BNWL-317) CFSTI: HC\$3.00/MF\$0.65

An attempt to clarify the terminology and to correlate the work of many investigators in electrical anesthesia is presented. Topics discussed are basic definitions of electrical sleep, narcosis, and anesthesia; electronics; electrodes; and physiological responses.

NSA

N67-25397# Argonne National Lab., Ill. Lab. Animal Information Center.

LABORATORY ANIMAL SCIENCE—A REVIEW OF THE LITERATURE FOR JANUARY–MARCH 1966

Robert J. Flynn Jun. 1966 55 p refs

(Contract W-31-109-ENG-38)

(ANL-7300) CFSTI: HC\$3.00/MF\$0.65

This annotated bibliography contains 123 references to journal articles on laboratory animal management, technology and medicine. A species index is included.

NSA

N67-25426# Oak Ridge National Lab., Tenn.
A BIBLIOGRAPHY ON TRACER DIFFUSION IN METALS: PART III. SELF AND IMPURITY DIFFUSION IN ALLOYS

John Askill, comp. Feb. 1967 29 p refs

(Contract W-7405-ENG-26)

(ORNL-3795, Pt. III) CFSTI: HC\$3.00/MF\$0.65

Frequency factors, activation energies, and other data for tracer self and impurity diffusion in alloys were compiled from the literature reported between 1938 and December 1965. An authors' index is included.

Author (NSA)

N67-25509# California Univ., Livermore. Lawrence Radiation Lab.

JAPANESE RESEARCH IN PHYSICS AND CHEMISTRY INDEX AND TRANSLATED CONTENTS OF BRUSSEIRON-KENKYU (1943–1962)

Stephen Brush, Penelope Bloom, Raphaela Kingsbury, and Shuji Ozawa 30 Jun. 1965 170 p refs

(Contract W-7405-ENG-48)

(UCRL-14288) CFSTI: HC\$3.00/MF\$0.65

The journal Busseiron–Kenkyu published research papers in physics and chemistry during the period 1943 to 1962. The tables of contents of each of the 169 issues published, translated into English, and a comprehensive subject index to all the articles are presented. All the articles were checked in Chemical Abstracts and the abstract number is indicated in those cases where there was an abstract of the Busseiron–Kenkyu article, or of an article with a similar title in another journal. The subjects covered by these articles are indicated in the following list of those categories to which 40 or more titles were assigned in the index: magnetic properties (including antiferromagnetism, ferromagnetism, and paramagnetism), polymers, electric and dielectric properties, transport

N67-25560

theory, quantum chemistry, statistical mechanics, electrons, liquid helium and Bose-Einstein systems, metals and solid state, phase transitions, semiconductors, cooperative phenomena including order-disorder transitions and the Ising model, alkali halide and ionic crystals, and quantum mechanics. Author (NSA)

N67-25560# Commissariat a l'Energie Atomique, Saclay (France). Centre d'Etudes Nucleaires.

ISOTOPIC GENERATOR INFORMATION CENTRE Newsletter No. 2

Nov. 1966 32 p refs

(NP-16437) CFSTI: HC\$3.00/MF\$0.65

A review with comments on the UKAEA/ENEA Symposium on Industrial Applications for Isotopic Generators and the list of papers presented at the International Symposium on Industrial Applications for Isotopic Power Generators are presented. Also, a bibliography containing 57 references on dynamic conversion as applied to isotopic sources and a bibliography containing 37 references on recently published information on applications of radioisotopes are included. NSA

N67-25562 Atomic Energy Centre, Lahore (Pakistan).

INFRARED TECHNOLOGY—A BIBLIOGRAPHY

M. M. Rafique and M. Saleem Apr. 1966 35 p refs

(AEC-PAK/LIB-13)

A bibliography is presented which contains 391 references to literature on infrared detectors, radiations, applications and systems, scanners, and photography. R.N.A.

N67-25566 Atomic Energy Centre, Lahore (Pakistan).

LASERS—A BIBLIOGRAPHY

M. M. Rafique Mar. 1966 92 p refs

(AECL-PAK/LIB-12)

A bibliography is presented which contains 1152 references to literature on the technology, uses, and applications of lasers. R.N.A.

N67-25616# Oak Ridge National Lab., Tenn.

INDEXED BIBLIOGRAPHY OF CURRENT NUCLEAR SAFETY LITERATURE—7

Nov. 1966 173 p refs

(Contract W-7405-ENG-26)

(ORNL-NSIC-20) CFSTI: HC\$3.00/MF\$0.65

Included are references collected since 1963 by the Nuclear Safety Information Center. The bibliographic items are sorted into 19 categories of nuclear safety information and selector-term and author indexes are included. NSA

N67-25630# Purdue Univ., Lafayette, Ind. Dept. of Chemistry.

HOT ATOM CHEMISTRY SYMPOSIUM Third Informal International, 1-2 Apr. 1966

F. Schmidt-Bleek Apr. 1966 68 p

(Grant AF-AFOSR-1031-66)

(AFOSR-67-0338; AD-646657) CFSTI: HC\$3.00/MF\$0.65

The third informal symposium on Hot Atom Chemistry was held at Purdue University on 1-2 April 1966, sponsored in part by the Air Force Office of Scientific Research. About 100 people attended, including several from Europe, South America, and Japan. Of the 47 papers presented, one large group dealt with tritium systems, and several papers dealt with the application of recoil reactions to studies of fission yields. Other areas of interest were carbon-11 reactions in simple hydrocarbons, ionic solid systems, and atomic beam techniques. Abstracts on each paper presented are given in the report. Author (TAB)

N67-25641*# George Washington Univ., Washington, D. C.

SCIENTIFIC PUBLICATIONS OF THE BIOSCIENCE PROGRAM DIVISION. VOLUME I: BEHAVIORAL BIOLOGY

Frances Hong, L. A. Kulp, and M. F. Werber 20 Mar. 1967 94 p refs

(Grant NSR-09-010-027)

(NASA-CR-62040) CFSTI: HC\$3.00/MF\$0.65 CSCL 06C

Bibliographical data are presented on the citations representing the publication efforts of the grantees and contractors of the Bioscience Program Division. Literature citations are listed chronologically and according to the authors' surname. To provide access to these references, both an author index and permuted title index are included. Laboratory addresses of the senior authors are provided. Publication sources are analyzed, and publication frequencies of the major subject fields are graphically represented. Four other volumes offer similar information on Environmental Biology, Exobiology, Physical Biology, and Planetary Quarantine and Bioscience Communications. M.G.J.

N67-25642*# George Washington Univ., Washington, D. C.

SCIENTIFIC PUBLICATIONS OF THE BIOSCIENCE PROGRAM DIVISION. VOLUME II: ENVIRONMENTAL BIOLOGY

Frances Hong and L. A. Kulp 20 Apr. 1967 73 p refs (For Abstract See N67-25641 13-04)

(Grant NSR-09-010-027)

(NASA-CR-62041) CFSTI: HC\$3.00/MF\$0.65 CSCL 06C

N67-25689# Royal Inst. of Tech., Stockholm (Sweden). Div. of Electron and Plasma Physics.

REPORTS FROM THE DIVISIONS OF ELECTRON AND PLASMA PHYSICS. INDEXES AND ABSTRACTS, 1966

31 Dec. 1966 10 p refs

(Rept.-66-20) CFSTI: HC\$3.00/MF\$0.65

A bibliography with abstracts covering 19 reports on electron and plasma physics issued by the Royal Institute of Technology in 1966. The bibliography includes some reports from earlier dates but published only in 1966. ESRO

N67-25719# Israel Program for Scientific Translations, Ltd., Jerusalem.

PRINCIPLES OF COMPUTER-SYSTEM DESIGN

E. V. Evreinov and Yu. G. Kosarev *In its Computer Elem. and Systems*, Nos. 1-9, 1962-1963 1966 p 207-225 refs (See N67-25701 13-08)

The problems which must be solved if a computer system (CS) design technique is to be developed are assessed, and some common principles of this technique are analyzed. These problems are identified as involving methods of solution used in the CS, the development of the computing medium, and the development of communication channels between the CS and external sources of information. The principal features of complex systems (CC) are listed, with the CC divided into two classes depending on the volume of the input: (1) CC with a limited volume of data; and (2) CC with an unlimited input. The general technique of studying complex systems is outlined, and the most urgent problems connected with the technique of computer media development are identified. A bibliography pertaining to computer and computer system design is included. M.G.J.

N67-25856# Advisory Group for Aerospace Research and Development, Paris (France).

INDEX TO AGARD PUBLICATIONS, 1952-1963, SUPPLEMENT NO. 2

J. C. Dunne (Min. of Aviation) and A. G. Vannucci, comp. 1965 106 p refs

CFSTI: HC\$3.00/MF\$0.65

This second Supplement to the AGARD Publications Index 1952-1963 presents a bibliographical listing of AGARD literature published in 1965; some material issued in 1966 has also been included, where this aids continuity. The general arrangement of material within this Supplement follows that of Supplement Number One, 1964. However, this current supplement sees for the first time the inclusion of two new series of AGARD Publications, AGARD Conference Proceedings and AGARD Advisory Reports. These new series have been introduced in accordance with AGARD's new policy on the standardization of its publications, details of which are given on the following page. The subject, author, and report and document number indexes provided in this Supplement relate only to the material listed in this Supplement. Author

N67-26015*# National Aeronautics and Space Administration, Washington, D. C.

NASA SPECIAL PUBLICATIONS, SPRING 1967

1967 54 p refs

(NASA-TM-X-59679) CFSTI: HC \$3.00/MF \$0.65 CSCL 22B

Reported is an annotated bibliography of special publications issued through December 1966 which reflect the manifold activities of the National Aeronautics and Space Administration. Among these publications are reports on recent results in space exploration, detailed accounts of significant conferences and symposia, and state-of-the-art reviews in various scientific and technical fields. Included are such works as a 10-volume summary of significant achievements in the various space science disciplines, and a 681-page illustrated history of Project Mercury. Publications are arranged under the following general headings: general series; handbooks, data compilations, charts, and tables; technology utilization series; histories and chronologies; publications for Office of Manned Space Flight; and bibliographies and other reference works. Also included are a subject and title index. S.C.W.

N67-26078*# National Aeronautics and Space Administration, John F. Kennedy Space Center, Cocoa Beach, Fla.

FUEL CELLS—A SELECTED BIBLIOGRAPHY, 1964-1966

Jan. 1967 49 p refs

(NASA-TM-X-59662; GP-311) CFSTI: HC \$3.00/MF \$0.65 CSCL 10A

A bibliography is presented on fuel cells for space applications which lists materials available in the Kennedy Space Center library. C.T.C.

N67-26080*# National Aeronautics and Space Administration, Marshall Space Flight Center, Huntsville, Ala.

STUDIES OF RANDOM NOISE: AN ANNOTATED BIBLIOGRAPHY

Herbert P. Eckstein Redstone Arsenal, Ala., Redstone Sci. Inform. Center, Dec. 1966 47 p refs

(NASA-TM-X-59657; RSIC-619) CFSTI: HC \$3.00/MF \$0.65 CSCL 17B

This bibliography contains a selection of papers, most of them annotated, on noise and the effects of noise on signals. Consequently, several surveys of information theory and papers dealing with interdependent aspects are included. Sources of the contemplated noise were either environmental or inherent in the equipment, which includes effects of both the atmosphere and other transmitters. Accordingly, several studies include non-Gaussian, as well as Gaussian noise. Author

N67-26180*# David Sarnoff Research Center, Princeton, N. J. Astro-Electronics Applied Research Lab.

REVIEW AND EVALUATION OF PAST SOLAR CELL DEVELOPMENT EFFORTS

K. Brodman, P.A. Crossley, G. T. Noel, and M. Wolf Dec. 1966 32 p refs

(Contract NASw-1427) (NASA-CR-84008) CFSTI: HC \$3.00/MF \$0.65 CSCL 10A

The work performed to date on the historical documentation phase of this project is described. The literature search objectives, and methods are detailed. The indexing system used to provide easy access to the material which has been assembled is described. A bibliography is given which lists papers and reports that have been obtained, and also those that have been determined to be required and have not yet been obtained. Author

N67-26190 Royal Aircraft Establishment, Farnborough (England). **A BIBLIOGRAPHY OF PULSE-MAGNETIZED FERRITE DEVICE REFERENCES**

Bryan A. B. Hodgson, B.A. comp. Dec. 1966 9 p refs (RAE-LIB-BIBL-270)

This bibliography contains a list of 33 references to ferrite devices actuated by current pulses. These devices include phase-shifters, switches and circulators, in waveguide, coaxial line and strip transmission line. The devices, in general, work in the frequency range 1 to 30 gigacycles. The references have been taken from all available sources, and were mainly published in the last six years. An author index is appended. Author

N67-26218# Library of Congress, Washington, D. C. Aerospace Technology Div.

THE THEORY OF DETONATION, THE COMBUSTION MECHANISM, AND THE PROPERTIES OF EXPLOSIVES

Surveys of Foreign Scientific and Technical Literature Seraphim Parandjuk 30 Jun. 1966 31 p refs Compilation of abstracts

(ATD-R-66-80; AD-647288) CFSTI: HC \$3.00/MF \$0.65

The compilation of 29 abstracts includes information on: explosion effect on a substance, iponit-new safe explosive, electromagnetic method of detonation, shock wave ignition of gun powder, self-ignition of thermite mixtures, powder combustion, during harmonic pressure changes, ignition and combustion of condensed substances, safety factors and quantity of electric detonations, detonation parameters of condensed explosives. Author (TAB)

N67-26297*# National Aeronautics and Space Administration, Marshall Space Flight Center, Huntsville, Ala.

SPACE VEHICLE NAVIGATION, GUIDANCE, AND CONTROL

R. Langston Redstone Arsenal, Ala., Redstone Sci. Inform. Center, 16 Jan. 1967 507 p refs Supported jointly with Army Missile Command

(NASA-TM-X-59660; RSIC-611) CFSTI: HC \$3.00/MF \$0.65 CSCL 17G

This report contains a summary of space vehicle guidance, and control plus an extensive bibliography of the subject area. This report is intended to encompass only the interplanetary portion of the space vehicle flight. However, some fringe information in the area of orbital flight is included in the bibliography which may be applicable to interplanetary flight. Author

N67-26319 Library of Congress, Washington, D. C. Aerospace Technology Div.

ELECTROMAGNETIC WAVE PROPAGATION AND THE UPPER ATMOSPHERE. SURVEYS OF FOREIGN SCIENTIFIC AND TECHNICAL LITERATURE

George Steblez 29 Dec. 1966 37 p refs /ts Ser. Rept. No. 3 (ATD-66-144)

This compilation of abstracts is based on Soviet open sources published 1965-1966. It is the third in a series of reports reviewing Soviet research on electromagnetic wave propagation and the upper atmosphere. Information not directly related to the assigned subject has been included because of its broad implications for study in this field. The 28 abstracts are arranged alphabetically by author within each of the following categories:

ionosphere, exosphere, and magnetosphere (13 entries); ionospheric perturbations by explosions, satellite and missile passage, solar radiation, etc. (11 entries); satellite and missile experiments (1 entry); aurora and geomagnetic disturbances (3 entries). A bibliography is presented at the end of the report. Pertinent information included: F and E layers, wideband antenna, rate of ion formation at high altitudes, ionospheric inhomogeneities, solar x radiation, auroral absorption of radio waves, radar observations of aurora borealis. Author

N67-26351 Library of Congress, Washington, D. C. Aerospace Technology Div.

SUPPORT FACILITIES AND EQUIPMENT FOR MISSILE AND SPACE SYSTEMS Surveys of Foreign Scientific and Technical Literature, 1 Apr.-30 Sep. 1966

J. A. Gwyer 30 Nov. 1966 54 p refs
(ATD-66-139; Rept.-13) CFSTI: \$3.00

This compilation of abstracts is based on Soviet and satellite open sources published 1965-1966. The report contains materials relevant to power lines, air-field proximity, special-purpose trailers, heavy-duty and special vehicles, special swamp or mud vehicles, availability to facilities, railroad—new construction of main and branch lines, railroad construction techniques, tank cars, rail cars carrying cylindrical objects, ship, and facilities. Author

N67-26454*# Army Missile Command, Huntsville, Ala.

MERCURY ATMOSPHERE AND SURFACE

Herbert H. Hoop 31 Jan. 1967 86 p refs
(NASA-CR-84113; RSIC-633) CFSTI: HC \$3.00/MF \$0.65 CSCL 03B

This summary and bibliography is a selection of the more accepted literature from the sizable quantity which covers the range of hypotheses as to rotation of the planet Mercury, temperature, atmosphere, surface, and terrain. Various hypotheses and the few generally accepted facts are discussed. Included is a selected bibliography and author index. Author

N67-26503*# George Washington Univ., Washington, D. C. Biological Sciences Communication Project.

NASA CONTRACT LISTINGS OF PUBLICATIONS UNDER THE BEHAVIORAL BIOLOGY PROGRAM

L. A. Kulp, Frances Hong, and Shiela Rollins, comp. Feb. 1967 52 p refs
(Contract NSR-09-010-027)

(NASA-CR-84161) CFSTI: HC \$3.00/MF \$0.65 CSCL 06S

The publications resulting from research supported, at least in part, by the Behavioral Biology Branch of the National Aeronautics and Space Administration's Bioscience Program Division are listed. A few publications, however, predate the establishment of this office but are included because they resulted from efforts which were subsequently subsumed under this program branch. Each project, indexed alphabetically according to principal investigator, reveals the published activity of each contractual endeavor. Author

N67-26600*# National Aeronautics and Space Administration, Washington, D. C.

COMMUNICATIONS SATELLITES

May 1967 96 p refs
(NASA-SP-7004(03)) CFSTI: HC \$3.00/MF \$0.65 CSCL 22B

The contents include references to such topics as television broadcasting, telemetry, outer-space systems, multi-station systems, and medium-height, random-orbit systems. The economic and legal implications of communications satellite systems are represented. References are also included which describe the history and operation of individual satellites such as Advent, Courier, Echo, Relay, Score, Syncom, and Telstar, as well as several satellites used for meteorological studies. Each entry in the bibliography consists of a citation and an abstract. A subject index and a personal

author index are included. These indexes use the notation of content (NOC), a one-sentence description of the contents of a document, rather than the title to aid the user in locating pertinent entries. Author

N67-26674# Air Force Cambridge Research Labs., Bedford, Mass. Space Physics Lab.

BIBLIOGRAPHY OF LUNAR AND PLANETARY RESEARCH - 1965

J. W. Salisbury, ed. Jan. 1967 183 p refs /its Special Reports, No. 55
(AFCRL-67-0043; AD-648463)

A bibliography of lunar and planetary research articles published during 1965 is presented with both subject and author listings. The major subject categories are: astrobiology, comets, meteorite craters and cratering effects, meteors and meteorites, the moon, origin of the solar system, the planets, and tektites. Each article is abstracted. Author (TAB)

N67-26949# Army Materials Research Agency, Watertown, Mass. Materials Testing Lab.

A REPORT GUIDE TO ULTRASONIC TESTING LITERATURE, VOLUME III

Charles P. Merhib and Ernest H. Rodgers Dec. 1966 85 p refs
(AMRA-MS-66-11, Vol. III, AD-648905) CFSTI: HC \$3.00/MF \$0.65

The main objective of this compilation is to provide a simple and fast access to information on the subject of ultrasonic testing and also to provide sufficient information in the form of abstracts and word descriptors to make the listing useful. Author (TAB)

N67-27161# Picatinny Arsenal, Dover, N. J. Plastics Technical Evaluation Center

ENCAPSULATION OF ELECTRONIC PARTS IN PLASTICS—A REVIEW

Arnold E. Molzon Feb. 1967 67 p refs
(PLASTEC-29; AD-648420) CFSTI: HC \$3.00/MF \$0.65

The advances and trends in the plastics encapsulation of electronic parts and circuits are reviewed. In less than 20 years this industry has developed into a high production operation. Included in this report are: types of plastics used, material requirements and material consumption. Known material suppliers and equipment suppliers are listed and their products identified. Also tabulated are 47 pertinent specifications, 111 contracts (with reports), and 53 government laboratory reports. These reflect the materials research and development in the Department of Defense, in NASA, and in industry. The availability of information is also discussed. The report contains a bibliography of 207 items on encapsulation. TAB

N67-27224*# National Aeronautics and Space Administration, Washington, D. C.

HIGH ENERGY PROPELLANTS—A CONTINUING BIBLIOGRAPHY WITH INDEXES

Apr. 1967 146 p refs
(NASA-SP-7002(03)) CFSTI: HC \$3.00/MF \$0.65 CSCL 21H

Presented is a selection of annotated references to unclassified reports and journal articles announced in *Scientific and Technical Aerospace Reports (STAR)*, *International Aerospace Abstracts (IAA)*, and *Aerospace Medicine and Biology (NASA SP-7011)*. Emphasis is given to references which are concerned with research and development studies on solid, liquid, and hybrid propellants and oxidizers, but the bibliography also provides extensive coverage of propellant handling and storage, combustion characteristics, toxicity, hazards, and safety measures. Each entry in the bibliography consists of a citation and an abstract. All reports and articles cited were introduced into the NASA Information System during the period January through December, 1966. A subject index and a personal author index are included. Author

N67-27296*# National Aeronautics and Space Administration
Washington, D. C.

CUMULATIVE INDEX TO NASA TECH BRIEFS, 1963-1966

Feb. 1967 166 p refs

(NASA-SP-50321 (04)) CFSTI: HC\$3.00/MF\$0.65 CSCL 13

Technological innovations published in NASA Tech Briefs between 1963 and 1966 are presented in a cumulative index. Short abstracts are included for each of the tech briefs under the five major categories of *Electrical (Electronic)*, *Physical Sciences (Energy Sources)*, *Materials (Chemistry)*, *Life Sciences*, and *Mechanical*. An alphabetized subject index is included, as are an originator/tech brief number index and a tech brief/originator number index.

M.W.R.

N67-27297*# National Aeronautics and Space Administration,
Washington, D. C.

LUNAR SURFACE STUDIES—A CONTINUING BIBLIOGRAPHY WITH INDEXES

Apr. 1967 66 p refs

(NASA-SP-7003(03)) CFSTI: HC\$3.00/MF\$0.65 CSCL 22A

A continuing bibliography on Lunar Surface Studies contains references to research in the theory of lunar origin, the lunar atmosphere and geological and topographical characteristics, lunar observation techniques, and instrumentation and equipment. The abstracts are presented chronologically, from February 1966 through January 1967, in two groups: those previously announced in the Scientific and Technical Aerospace Reports of NASA, and those from the International Aerospace Abstracts. Both a subject and an author index are included.

M.W.R.

N67-27450# Kernforschungszentrum, Karlsruhe (West Germany).
Institut fuer Angewandte Reaktorphysik.

FAST BREEDER REACTORS, THEIR PRINCIPLES, THEIR DEVELOPMENT, AND THEIR ROLE IN A NUCLEAR ECONOMY [SCHNELLE BRUTREAKTOREN, IHR PRINZIP, IHRE ENTWICKLUNG UND IHRE ROLLE IN EINER KERN-ENERGIEWIRTSCHAFT]

Wolf Haefele Oct. 1966 32 p refs In GERMAN
(KFK-480)

The principles, development, and role of fast breeder reactors in a nuclear economy are outlined on the basis of a bibliographic study. The Karlsruhe fast breeder project is discussed in some detail. The studies made in Holland, Belgium, and the United States on fast breeder reactors are briefly indicated.

NSA

N67-27618*# General Electric Co., Schenectady, N. Y.
FLUID AMPLIFIER STATE-OF-THE-ART REPORT. VOLUME II-A: BIBLIOGRAPHY

M. J. Osborn Washington, NASA, May 1967 310 p refs
(Contract NAS8-5408)

(NASA-CR-734) CFSTI: \$3.00 CSCL 13G

An annotated bibliography is presented on pure fluid (no-moving-part) devices and supporting technology. It cites 550 references of which 477 have been abstracted. A special effort was made to include references from outside of the United States. There has been a noticeable increase in foreign fluidic literature.

Author

N67-27645*# Oklahoma State Univ., Stillwater.
STATISTICAL METHODS AND SUBJECTIVE PROBABILITY Status Report

Leroy Folks [1967] 34 p refs
(Grant NGR 37-002-031)

(NASA-CR-84487) CFSTI: HC\$3.00/MF\$0.65 CSCL 12A

Accomplishments are reported in a program aimed at using existing research in decision theory, subjective probability, Bayesian inference, and related areas to devise workable methods which use in a formal way the prior information. These accomplishments include a bibliography of subjective probability and Bayesian

procedures, and regression analyses concerned with variance of posterior marginal distributions, prior distributions for positive slopes, and prior distributions for slopes known to be in an interval.

C.T.C.

N67-27747 National Bureau of Standards, Boulder, Colo.
Inst. for Basic Standards.

BIBLIOGRAPHY OF LOW ENERGY ELECTRON COLLISION CROSS SECTION DATA

L. J. Kieffer 10 Mar. 1967 96 p refs

(NBS-Misc.-Publ.-289) GPO: \$0.50

A bibliography of low energy electron collision cross section data is presented. Only references which report original measurements or calculations of electron collision cross sections are included. The cross section data for each process are listed by atomic species in order of their atomic number. The data for molecules are listed in arbitrary order.

Author

N67-27748 International Geophysical Year World Data Center
A, Washington, D. C.

CATALOGUE OF DATA IN WORLD DATA CENTER A—ROCKETS AND SATELLITES, 1 JULY-31 DECEMBER 1966

Feb. 1967 28 p refs

The catalog contains summary tables of sounding rocket, earth satellite, and space probe launchings, flight characteristics, and experiments. Included also is a bibliography of reports and reprints on: orbits and trajectories; observation and tracking; instrumentation and data recovery; geodesy and gravity; atmospheric and ionospheric physics and composition; particles and corpuscular radiation; magnetic fields and electromagnetic radiation; astronomy; and biology.

N.E.N.

N67-27774# National Bureau of Standards, Boulder, Colo.
Cryogenics Div.

INFRARED REFLECTANCES OF METALS AT CRYOGENIC TEMPERATURES—A COMPILATION FROM THE LITERATURE

P. F. Dickson and M. C. Jones 14 Oct. 1966 65 p refs

(NBS-TN-348) GPO: \$0.40

Spectral and total reflectances for metals at cryogenic temperatures in the infrared wavelength region are compiled from the literature. Information concerning sample preparation and purity, radiation source, and methods of reflectance measurement are also presented. Observations regarding the effects on reflectance of temperature, oxide layer, wavelength, and sample preparation are given.

Author

N67-28355# Technisch Documentatie en Informatie Centrum
voor de Krijgsmacht. The Hague (Netherlands).

INFRARED: AN ANNOTATED BIBLIOGRAPHY UP TO 1966

H. Lieferring, comp. Mar. 1966 160 p

(TDCK-44741) CFSTI: HC\$3.00/MF\$0.65

Included are abstracts of 426 papers on various aspects of infrared radiation. Nine chapters are arranged as follows: general, emission, transmission, detection, noise, systems, applications, miscellaneous, and bibliographies.

NSA

N67-28366*# Electro-Optical Systems, Inc., Pasadena, Calif.
STUDY TO DEVELOP A TECHNIQUE FOR MEASUREMENT OF HIGH ALTITUDE OZONE PARAMETERS Interim Report

J. A. Duardo 15 May 1967 163 p refs

(Contract NAS12-137)

(NASA-CR-80022; EOS-7087-IR-1) CSCL 04A

Consideration is given to the spectroscopy of ozone, the measurement of its atmospheric concentrations by optical means, its role in atmospheric dynamics, and its potential use as a tracer

for atmospheric winds. The role that ozone plays in meteorological processes is discussed, emphasizing atmospheric wind-ozone relations, and an attempt was made to establish the value of continuous monitoring of the worldwide distribution of ozone to trace large scale air mass motions. Information obtained on ozone spectroscopy and atmospheric measurement, which is pertinent to the analyses in this paper, is summarized. Advanced conceptual methods of ozone measurements from orbiting satellites are also discussed, including passive techniques and active techniques with optical probes. Two ozone measuring techniques were selected as the most promising for use in conjunction with an orbiting spacecraft: a passive technique using differential attenuation of solar radiation and the active probe method utilizing Raman laser radiation. These two methods are discussed in detail and their advantages are pointed out. An extensive bibliography is also included. L.E.W.

N67-28479# Sandia Corp., Livermore, Calif.
LITERATURE SURVEY OF CARBORANE CONTAINING POLYMERS

R. W. Weaver Feb. 1967 30 p refs
 (Contract AT(29-1)-789)

(SCL-DR-67-11) CFSTI: HC \$3.00/MF \$0.65

A survey of the literature of carborane-containing polymers was made. The work of five companies in this field is reviewed. A bibliography of 138 articles and 49 patents is included. Author (NSA)

N67-28509# Harry Diamond Labs., Washington, D. C.
FLUERICS (FLUID AMPLIFICATION). 23: A BIBLIOGRAPHY
 Jan. 1967 179 p refs

(HDL-TR-1338; AD-649629) CFSTI: HC \$3.00/MF \$0.65

A bibliography is presented of flueric (fluid amplification) literature directly applicable to fluid interaction devices (80 pages). Included are directions for using the bibliography, a glossary of terms, patent and disclosures (38 pages), and other directly applicable contributions to the fluidic technology (51 pages). Author (TAB)

N67-28542# Pennsylvania State Univ., University Park.
BIBLIOGRAPHY OF CLASSICAL AND CONTAGIOUS DISCRETE DISTRIBUTIONS

Ganapati P. Patil and Sharadchandra W. Joshi Wright-Patterson AFB, Ohio, ARL, Sep. 1966 278 p refs
 (Contract AF 33(615)-2763)

(ARL-66-0185; AD-651113) CFSTI: HC \$3.00/MF \$0.65

The report provides a bibliography of classical and contagious discrete distributions which lists 2113 publications in statistics and probability discussing discrete distributions in general. Publications in other fields discussing applications of these distributions were also included. Textbooks as a class were excluded, but the more intimate ones were included. Technical reports and dissertations were treated as published papers. A systematic search was made for most of the entries published in English during the period ending 1964. Some of the later publications discovered and found relevant are also included. The original objective of achieving comprehensive coverage of non-English publications was partially abandoned due to lack of adequate resources. Author (TAB)

N67-28556# Air Force Cambridge Research Labs., Bedford, Mass. Solid State Sciences Lab.

LASER DAMAGE: A SELECTED LITERATURE SURVEY
 Carl A. Pitha Feb. 1967 19 p refs /ts Spec. Rept. No. 60
 (AFCLR-67-0137; AD-651210) CFSTI: HC \$3.00/MF \$0.65

This report is a review of selected references dealing with descriptions and possible causes of damage to laser component elements functioning under high-power conditions, or to potential laser component materials exposed to high-power laser beams. Discussed are internal and surface damage, conditions prevailing in materials under lasing conditions, and the mechanisms proposed

to account for the accumulation of sufficient energy for damage to take place; that is, self-focusing, stimulated Brillouin scattering, multiphoton absorption, and microplasma generation. Fifty-seven papers, published in 1964 - 1966, are included in the references. Author (TAB)

N67-28573# Lockheed Missiles and Space Co., Sunnyvale, Calif.
WEIGHTLESSNESS SIMULATION USING WATER IMMERSION TECHNIQUES: AN ANNOTATED BIBLIOGRAPHY
 Helen M. Abbott, John N. Duddy, and Dennis M. Kowall, comp.
 Feb. 1967 72 p refs
 (LMSC-5-24-65-3/SB-65-2, Rev. 1; AD-649861) CFSTI: HC \$3.00/MF \$0.65

The compilation contains 141 selected references pertaining to biomedical and behavioral research involving immersion of human subjects. The references are organized under three principal topics: (1) Physiological Studies, including acceleration, impact protection and physiological responses to weightlessness simulations, (2) Human Engineering Studies, and (3) Techniques and Personal Equipment Requirements for immersion studies. The references are arranged alphabetically by author or title under each separate topic. An Author Index is included as an aid in locating specific investigators and publications. The references cited are considered to be the principal contributions to the literature during the period from 1951 through Jan. 1967, including both open and government sources. Author (TAB)

N67-28768*# Jet Propulsion Lab., Calif. Inst. of Tech., Pasadena.
INTERACTIONS OF SPACECRAFT AND OTHER MOVING BODIES WITH NATURAL PLASMAS

Carol K. Sterkin, comp. Dec. 1965 185 p refs /ts Lit. Search No. 541

(Contract NAS7-100)

(NASA-CR-84819) CFSTI: HC \$3.00/MF \$0.65 CSDL 22A

A bibliography with abstracts is presented on the interactions of moving satellites, rockets, and missiles with the surrounding ionosphere, magnetosphere, and interplanetary plasma. Emphasis is placed on magnetic and electrical phenomena, and on electrical hazards to the spacecraft. The majority of the references concern spacecraft phenomena and related ionospheric instrumentation and data. The areas covered are: spacecraft, aircraft, small projectiles, celestial bodies, interplanetary matter, ionospheric research, and related subjects. N.E.N.

N67-28787*# George Washington Univ., Washington, D. C.
 Biological Sciences Communication Project.

BIBLIOGRAPHY ON APPLICATIONS OF ETHYLENE OXIDE

Donald E. Wright and Anne K. Serrell Jun. 1967 34 p refs
 (Contract NSR-09-010-027)

(NASA-CR-84827) CSDL 07C

The bibliography is presented for engineers and scientists interested in ethylene oxide sterilization, and specifically in a decontaminating cycle of ETO applied to spacecraft surfaces following environmental testing. A permuted title index and an author index are also included. N.E.N.

N67-28860 Technisch Documentatie en Informatie Centrum Voor de Krijgsmacht, The Hague (Netherlands).

INERTIAL NAVIGATION—REPORT ON THE RECENT DEVELOPMENTS OF INERTIAL TECHNIQUES, SYSTEMS AND EQUIPMENT, FOR SEA AND AIR APPLICATIONS, 1962-1967

H. J. Bos Jan. 1967 35 p refs
 (TDCK-46515)

A review is presented on the development history during the period 1962-1967 of present-day requirements for sea and air applications, the availability, and the future aspects. The consulted literature is referenced chronologically with 137 items. A basic system description and the method of operation are included, as well as a four-language glossary of technical terms. Author

N67-28901# RAND Corp., Santa Monica Calif.
BIBLIOGRAPHY ON AUTOMATION AND TECHNOLOGICAL CHANGE AND STUDIES OF THE FUTURE
 Annette Harrison Mar. 1967 28 p refs
 (P-3365-2; AD-650074) CFSTI: HC \$3.00/MF \$0.65

This Paper comprises a list of works collected for two ongoing RAND projects: Automation and Technological Change, and a related informal study of future national and international problems. This list is by no means exhaustive; it consists solely of materials assembled to date by project members. New entries, which have been added since the last updating of this Paper in October 1966, are indicated by asterisks. Author (TAB)

N67-28984# Avco Corp., Wilmington, Mass. Missiles, Space and Electronics Group.
THEORETICAL STUDY OF THE PROPAGATION OF INFRASONIC WAVES IN THE ATMOSPHERE Final Report, Jan. 1964-Feb. 1967

Allan D. Pierce and Charles A. Moo Feb. 1967 66 p refs
 (Contract AF 19(628)-3891)
 (AVSSD-0059-67-RR; AFCRL-67-0172; AD-650752) CFSTI: HC \$3.00/MF \$0.65

The theory of the propagation of long-period infrasonic waves from nuclear explosions in the atmosphere is reviewed and the extensions of the normal mode method to include non-stratified windy atmospheres is described. The formulation for incorporating wind effects into theoretical models is reviewed. A justification of the multilayer method is given and numerical results based on this approximation are summarized. The report includes a listing of all reports, journal articles, and symposia papers written under the contract and includes an extensive bibliography on atmospheric waves and nuclear explosions. Recommendations for future research are given. Author (TAB)

N67-29114# Army Materials Research Agency, Watertown, Mass.
A REPORT GUIDE TO ULTRASONIC TESTING LITERATURE. VOLUME IV: MONOGRAPH SERIES
 Ernest H. Rodgers and Charles P. Merhib, comp. Apr. 1967 138 p
 (AMRA-MS-67-03; AD-650279) CFSTI: HC \$3.00/MF \$0.65

The guide is Volume IV of a series of planned report guides consisting of the complete coverage of items in the AMRA Nondestructive Testing Information Analysis Center covering the subject of ultrasonic testing exclusive of those items in the Center utilizing methods of ultrasonic attenuation. TAB

N67-29134# Michigan Univ., Ann Arbor. Infrared Physics Lab.
REMOTE SENSING OF ENVIRONMENT Progress Report, 1 Aug. 1965-31 Dec. 1966
 Virginia L. Prentice Apr. 1967 28 p refs
 (Contract Nonr-1224(44))
 (Rept.-4864-12-P; AD-650581) CFSTI: HC \$3.00/MF \$0.65

This document reports investigation of progress in the unclassified areas in the technology of remote sensing of environment. It includes a synopsis of progress in the field as reported at the Fourth Symposium on Remote Sensing of Environment, a discussion of the existence and availability of unclassified imagery, and a summary of related activities. A selected bibliography of material published in the open literature is also included. TAB

N67-29260*# National Aeronautics and Space Administration, Washington, D. C.
A SELECTED LISTING OF NASA SCIENTIFIC AND TECHNICAL REPORTS FOR 1966

Jan. 1967 2078 p refs
 (NASA-SP-7028) Available from GPO CSCL 05B

Abstracts and indexes are presented for selected reports that previously appeared in the 1966 series of Scientific and Technical Aerospace Reports (STAR) published by NASA. Most of the listed documents were issued as part of the NASA special publications; technical reports, notes, memorandums, and translations; and contractors reports. References to journal articles that were published as a result of NASA-sponsored or NASA-supported activities are not included. Arrangement of the publication is the same as that of STAR, with the first section containing bibliographic citations and abstracts arranged according to 34 subject categories. The second section contains five indexes: (1) subject, (2) corporate source, (3) personal author, (4) report/accession number, and (5) accession/report number. M.W.R.

N67-29334# Zentralstelle fuer Atomkernenergie-Dokumentation, Frankfurt am Main (West Germany).
BIBLIOGRAPHIES IN NUCLEAR SCIENCE AND TECHNOLOGY. SECTION 18: ACCELERATORS
 W. Mausberg, comp. Nov. 1966 122 p
 (AED-C-18-07) CFSTI: HC \$3.00/MF \$0.65

A bibliography of 432 references on various aspects of particle accelerators is presented. Included also are author, patent, report number, and subject indexes. NSA

N67-29410# Environmental Science Services Administration, Silver Spring, Md. Environmental Data Service.
AN ANNOTATED BIBLIOGRAPHY OF METEOROLOGICAL TOWER AND MAST STUDIES

J. Allen Wallace, Jr., comp. Jan. 1967 113 p refs Sponsored by Army
 (WB/BS-5; AD-650781) CFSTI: HC \$3.00/MF \$0.65

The bibliography consists of sources containing meteorological data and information obtained from towers and mast. Primary interest is on wind data. All available sources in the U.S. Department of Commerce, Atmospheric Sciences Library, Environmental Sciences Services Administration, were examined and abstracted. Author (TAB)

N67-29430*# National Aeronautics and Space Administration, Washington, D. C.
AEROSPACE MEDICINE AND BIOLOGY—A CONTINUING BIBLIOGRAPHY WITH INDEXES, APRIL 1967
 May 1967 158 p refs
 (NASA-SP-7011(37)) CFSTI: HC \$3.00/MF \$0.65 CSCL 06S

The bibliography contains references announced during April 1967. It concentrates on biological, physiological, psychological, and environmental effects to man during atmospheric or space flights. Related topics are included such as sanitary problems, pharmacology, toxicology, safety and survival, life support systems, exobiology, and personnel factors. N.E.N.

N67-29477# Bell Aerosystems Co., Buffalo, N. Y. Structural Systems Dept.
UNRESOLVED PROBLEMS IN BRITTLE MATERIAL DESIGN—CRITICAL LITERATURE REVIEW
 W. H. Dukes Paris, AGARD, May 1966 28 p refs Sponsored by AGARD /its AGARD Advisory Rept.-2
 CFSTI: HC \$3.00/MF \$0.65

As an initial step in a program to appropriately refine design procedures and techniques for brittle materials, a literature survey was undertaken to review the state-of-the-art and to indicate the more important unresolved problems. Emphasis is placed on design technology specifically to meet the needs of the structural designer. Areas where significant changes are required to accept brittle materials are defined as fracture theory, statistical theory, stress analysis, test methods, and design criteria. Each is discussed in detail. The bibliography is included. M.G.J

N67-29484# Federal Fire Council, Washington, D. C.
AN ANNOTATED BIBLIOGRAPHY ON CARBON-TETRACHLORIDE AS A FIRE EXTINGUISHANT
 Harry Shoub 17 Apr. 1967 9 p refs
 (AD-650735) CFSTI: HC\$3.00/MF\$0.65

The article presents an annotated bibliography on carbon tetrachloride as a fire extinguishant. A total of 72 references are listed. TAB

N67-29706# Zentralstelle fuer Atomkernenergie-Dokumentation, Frankfurt am Main (West Germany).
DOCUMENTATION OF PLASMA PHYSICS. PART I: EXPERIMENTAL PLASMA PHYSICS, THEORETICAL PLASMA PHYSICS. BIBLIOGRAPHY, AUTHOR INDEX, SUBJECT INDEX, VOLUME 2
 D. Hilsenbeck Jan. 1967 152 p
 (AED-C-03-04)

A listing is presented of 406 papers dealing with all aspects of plasma research. In addition, subject and author indexes are also included. NSA

N67-29711# Battelle-Northwest, Richland, Wash. Pacific Northwest Lab.
POWER REACTOR DESIGNS—AN ANNOTATED BIBLIOGRAPHY
 E. R. Appleby comp. Oct. 1966 703 p refs
 (Contract AT(45-1)-1830)
 (BNWL-326) CFSTI: HC\$3.00/MF\$0.65

An annotated bibliography of power and heat reactor design studies, produced by computer printout of information available through December 1966 is presented. Sections of the Bibliography group the designs into broad reactor types, as listed in the Table of Contents. Each design is given an alpha-numeric code. Pagination follows this alpha-numeric order, with the reactor code number appearing at the upper right hand corner of each page. Tabs are provided for locating the sections. Author (NSA)

N67-29779 Defence Research Board, Ottawa (Ontario).
BIBLIOGRAPHY OF SOIL DYNAMICS AND SOIL STRUCTURE INTERACTION DURING DYNAMIC OR SIMILAR LOADINGS
 G. T. Hughes, J. G. Locker, W. D. Stewart, comp. Mar. 1965 110 p refs
 (Grant DRB-1601-20)
 (DR-170) CFSTI: \$3.00

Reported is an annotated bibliography which contains published and unpublished literature on soil dynamics and soil structure interaction during dynamic or similar loadings. Studies cited are grouped into the following three categories: (1) theoretical studies of the various phenomena associated with dynamic loads in soils; (2) field studies in which movements and forces have been recorded in the natural ground or structures; and (3) laboratory studies of the behavior of various soils and other materials under these loads. S.C.W.

N67-29807# United Kingdom Atomic Energy Authority, Risley (England). Reactor Group.
BIBLIOGRAPHY ON LIQUID METALS, 1964-1965
 S. H. Fenney Nov. 1966 79 p refs /ts TRG Inform. Ser. 312(R), Suppl. 1
 CFSTI: HC\$3.00/MF\$0.65

A bibliography comprising of unclassified references to the literature on liquid metals, particularly sodium and sodium/potassium is presented. It is a continuation of TRG Information Series 312(R) and covers a further two years adding 649 references. Author (NSA)

N67-29934 United Kingdom Atomic Energy Authority, Harwell (England). Metallurgy Div.
VIBRATORY COMPACTION OF METAL AND CERAMIC POWDERS. A BIBLIOGRAPHY
 P. J. Jones, comp. Feb. 1967 8 p refs
 (AERE-BIB-153) HMSO: 1s 9d

A bibliography on vibratory compaction of metal and ceramic powders is presented alphabetically by author, and an author index is included. Sources from which the titles were obtained are Nuclear Science Abstracts, British Ceramic Abstracts, C. G. Goetzler's paper on powder metallurgy, and the Planseeberichte fur Pulver Metallurgie. M.W.R.

N67-30258# RAND Corp., Santa Monica, Calif.
COMPUTATIONAL LINGUISTICS: BIBLIOGRAPHY, 1966
 David G. Hays, Bozena Henisz-Dostert, and Majorie L. Rapp Apr. 1967 90 p refs
 (Contract F44620-67-C-0045)
 (RM-5345-PR; AD-651406) CFSTI: HC\$3.00/MF\$0.65

A bibliography is presented of 914 numbered items from 21 countries: books, articles, reports, research memoranda, and symposium contributions relevant to the fields of computational linguistics and documentation that became available in 1966. Particular attention is given to classification theory and practice and to computer hardware and programming for nonnumerical applications (language processing). Entries under Documentation cover abstracting, bibliographic analysis, dissemination, indexing, organization, personnel, user relations, and publications systems. Psycholinguistics receives extensive coverage. There are also items on research methods, semantics, structural theory, style, and on the characteristics of 17 languages and language groups. An author index and an organization index are included, the latter divided by country. Author (TAB)

N67-30531# Army Tropic Test Center, Fort Clayton (Canal Zone).
HUMAN REACTIONS TO HIGH TEMPERATURES ANNOTATED BIBLIOGRAPHY (1927-1962)
 Mar. 1967 115 p refs
 (AD-651940) CFSTI: HC\$3.00/MF\$0.65

A 352 item annotated bibliography extracted from three sources, the Psychological Abstracts, the Defense Documentation Center, and the Tufts University Human Engineering Service. Includes effects of high temperature, high humidity, tropic and desert environments on human performance, comfort, well-being, and internal responses. The bibliography is a collation from secondary sources. Author (TAB)

N67-30535# Stanford Research Inst., Menlo Park, Calif.
SUPERCONDUCTING DEVICES: A LITERATURE SURVEY
 William S. Goree and Edgar A. Edelsack (ONR) Mar. 1967 72 p refs Prepared jointly with ONR
 (AD-651376) CFSTI: HC\$3.00/MF\$0.65

This bibliography of the literature of superconducting devices and related research covers most extensively the period from 1959 to March, 1967, and contains approximately 1,000 entries representing English and foreign language publications. About 300 entries are on specific superconducting devices. Some 150 United States patents are also listed. So many references were available relating solely to superconducting magnets and computer elements that the listing of these was restricted. TAB

N67-30536 Environmental Science Services Administration, Washington, D. C.
AN ANNOTATED BIBLIOGRAPHY ON CLOUDINESS IN THE U.S.S.R.

Nina A. Stepanova Feb. 1967 67 p refs
(WB/BS-6; TT-67-61804; AD-651762) CFSTI: HC \$3.00/MF \$0.65

This bibliography on cloudiness in the USSR has been compiled from available sources in the U. S. Weather Bureau Library and in the Library of Congress, both in the Washington, D. C. area. The search for sources for this bibliography was terminated December 1964. Author (TAB)

N67-30627 Technisch Documentatie en Informatie Centrum voor de Krijgsmacht, The Hague (Netherlands).

LASERS AND MASERS: MILITARY AND INDUSTRIAL APPLICATIONS—A SELECTIVE BIBLIOGRAPHY, NOVEMBER 1962—NOVEMBER 1966

C. J. de Ruig, comp. Mar. 1967 68 p refs
(TDCK-47999)

This bibliography was compiled from literature available at the TDCK. It refers to the period from November 1962–November 1966 and contains the following subjects: optical radar, rangefinding, navigation, laser velocimeter, laser gyroscope, height measurement, underwater mapping and detection, communication, image forming (holography), detection of laser radiation, laser in industry, safety. Author

N67-30678# Atomic Energy Commission, Oak Ridge, Tenn. Div. of Technical Information Extension.

RADIOISOTOPES IN THE BIOLOGICAL SCIENCES. AN ANNOTATED BIBLIOGRAPHY OF SELECTED LITERATURE

Helen L. Ward, comp. Apr. 1967 120 p refs
(TID-3585) CFSTI: HC \$3.00/MF \$0.65

More than 900 selected references on the use of radioisotopes in biological research are included in this bibliography. These references were selected from the scientific literature published during the period 1958–1963. Author, isotope, and report number indexes are included. NSA

N67-30698# Specola Vaticana (Vatican City). Laboratorio Astrofisico.

THIRTY YEAR SPECTRUM ATLAS OF THE ASTROPHYSICAL LABORATORY OF THE VATICAN OBSERVATORY [DREISSIG JAHRE SPEKTRALATLANTEN DES ASTROPHYSIKALISCHEN LABORATORIUMS DER VATIKAÑISCHEN STERNWARTE]

J. Junkes and E. W. Salpeter Repr. from Ric. Spettroscopiche (Vatican City), v. 3, no. 3, 1966 p 65–162 refs In GERMAN; ENGLISH summary
CFSTI: HC \$3.00/MF \$0.65

In 1935 appeared the first spectrum atlas compiled in the Astrophysical Laboratory of the Vatican Observatory, the Spark and Arc Spectrum of Iron. Other atlases followed: the three volumes of the Atlas der Restlinien, the Grating Spectrum of Iron, the Band Spectra of Metallic Oxides, the Spectrum of Thorium, and the last one in 1965, Part One of Atomic Spectra in the Vacuum Ultraviolet. The authors give some details about the circumstances in which the single atlases originated and how they were made, allowing some glimpses behind the scenes. Author

N67-30734 Library of Congress, Washington, D. C. Aerospace Technology Div.

SOVIET BIOTECHNOLOGY AND BIOASTRONAUTICS, JULY 1966—DECEMBER 1966 Surveys of Foreign Scientific and Technical Literature

30 Mar. 1967 180 p refs
(ATD-67-17)

Summary reports are given of Soviet research in the fields of bioastronautics, space biology, and space-oriented biotechnology

published during the latter half of 1966. The materials are grouped into the following categories with author's name, source, and abstract: accelerations, vestibular reactions, and altered gravity; noise and vibration; radiation effects, radiation dosimetry, and radioprotective drugs; biomedical effects of radio frequency, ultraviolet, infrared, and laser irradiation; temperature effects, hypothermia, and hyperthermia; life support and closed ecological systems; sensory deprivation, hypodynamia, human engineering and man-machine systems, and modeling; and biomedical monitoring, biotelemetry, and bioinstrumentation. L.E.W.

N67-30799# Advisory Group for Aerospace Research and Development, Paris (France).

VTOL/STOL AIRCRAFT, BIBLIOGRAPHY 2, SECOND SUPPLEMENT 1963/64/65

R. J. Shanahan, comp. (Vereinigte Flugtechnische Werke G.m.b.H.) 1966 332 p refs

A bibliography on VTOL/STOL aircraft is presented for literature published during 1963 to 1965. The bibliography contains approximately 820 references and contains the following subject categories: types of V/STOL aircraft, aerodynamic problems, handling characteristics, propulsion systems, test techniques, operational problems and loads and structures. In addition a detailed subject index, a personal author index, and source/corporate source index are provided, all of which include use of a notation of content for each entry. The source/corporate source index includes not only corporate sources, but also journal and periodical sources and patentees. The choice of subject headings is based largely on those used in *Scientific and Technical Aerospace Reports* and *International Aerospace Abstracts*. S.P.

N67-30948 Witwatersrand Univ., Johannesburg (South Africa). Dept. of Mechanical Engineering.

SHOCK WAVE PHENOMENA WITH SPECIAL REFERENCE TO INTERACTIONS—A BIBLIOGRAPHY

Marilyne Katz, comp. Mar. 1967 47 p refs
(Rept.-38)

A bibliography consisting of references on shock wave interaction, shock tubes, and associated instrumentation is presented. Entries are included under the following topics: shock waves; real gas effects including dissociation, relaxation, and ionization; shock wave structure; shock tubes; shock wave attenuation; boundary layers; general shock wave interactions; shock wave boundary layer interaction; and instrumentation. A list of journal abbreviations accompanies the list of approximately 700 articles. S.P.

N67-30949# Library of Congress, Washington, D. C. Aerospace Technology Div.

RADIATION DAMAGE IN SOLIDS Surveys of Foreign Scientific and Technical Literature, 1965–Sep. 1966

Joseph Andrushis 14 Mar. 1967 88 p refs
(ATD-67-14)

A bibliography containing abstracted material on the subject of radiation effects in solids is presented. Sources are grouped under the following headings: semiconductors, metals and alloys, polymers, alkali halides, ferroelectric materials, paramagnetic materials, glasses, devices and components, and miscellaneous. S.P.

N67-31342*# Wayne State Univ., Detroit, Mich. Center for Application of Sciences and Technology.

MANAGEMENT TECHNIQUES—A BIBLIOGRAPHY

Victor A. Gajda and Earl E. Borseth, comp. [1967] 194 p refs
(Contract NASr-175)

(NASA-CR-85828) CSCL 05A

The bibliography with abstracts is presented as a part of the program to aid in the transfer of aerospace-related science

N67-31559

and technology compiled by NASA. The abstracts have been compiled from *Scientific and Technical Aerospace Reports and International Aerospace Abstracts* through December 1966. Included is the keyword out-of-context index, also compiled from the *STAR* and *IAA* publications. N.E.N.

N67-31559# International Union of Pure and Applied Chemistry, Basle (Switzerland). Commission on High Temperatures and Refractories.

BIBLIOGRAPHY ON THE HIGH TEMPERATURE CHEMISTRY AND PHYSICS OF GASES AND PLASMAS

L. Brewer (Calif. Univ.), comp. 31 Mar. 1967 13 p refs (Rept.-22) Available from Natl. Bur. of Std., Washington, D. C.

Listed are 59 titles dealing with spectroscopy of interest to high temperature chemistry and 54 titles on the reaction between gases and condensed phases. The works were mainly published during 1966; the exceptions were published during 1964 and 1965. K.W.

N67-31671# Federal Aviation Agency, Atlantic City, N. J. National Aviation Facilities Experimental Center.

COLLISION AVOIDANCE: A BIBLIOGRAPHY, 1955-APRIL 1967

Dorothy E. Bulford, comp. May 1967 71 p refs (AD-652606) CFSTI: HC\$3.00/MF\$0.65

Safety in the air has always been the paramount goal of the FAA, and the subject of collision avoidance one of primary interest. The Bibliography was compiled with the hope that researchers in the FAA, and among its contractors will find it valuable in their continued search for a system that will meet the needs of the aviation industry. TAB

N67-32125# George Washington Univ., Alexandria, Va.

AN ANNOTATED BIBLIOGRAPHY ON THE DESIGN OF INSTRUCTIONAL SYSTEMS

Robert G. Smith, Jr. May 1967 140 p refs (Contract DA-44-188-ARO-2)

(TR-67-5; AD-653128) CFSTI: HC\$3.00/MF\$0.65

The bibliography is divided into seven major areas, each dealing with a different aspect of instructional system design: (1) Systems--General; (2) Training Systems; (3) Presentation of Knowledge; (4) Practice of Knowledge; (5) Practice of Performance; (6) Management of Students; and (7) Additional Material. The major areas are further divided into subtopics where appropriate. There are 449 annotated entries in the bibliography, dating from 1950 to 1965. Key-word-in-context (KWIC) and author indexes are included. Author (TAB)

N67-32126# Army Environmental Hygiene Agency, Edgewood Arsenal, Md.

LASER HAZARDS BIBLIOGRAPHY

David H. Sliney and William Palmisano. Apr. 1967 25 p refs (AD-652707) CFSTI: HC\$3.00/MF\$0.65

The bibliography provides a source of references for those interested in the biological effects and the evaluation of hazards associated with laser equipment. The references are categorized into six principal sections: General Information; Biological Effects - General Research; Skin Effects; Eye Effects; Safety and Protective Equipment and Procedures; and Atmospheric Attenuation of Laser Beams. TAB

N67-32180*# David Sarnoff Research Center, Princeton, N. J. Astro-Electronics Applied Research Lab.

REVIEW AND EVALUATION OF PAST SOLAR CELL DEVELOPMENT EFFORTS

P. A. Crossley, G. T. Noel, and M. Wolf Jun. 1967 85 p refs (Contract NASw-1427)

(NASA-CR-86979) CFSTI: HC\$3.00/MF\$0.65 CSCL 10A

A bibliography of scientific papers related to the photovoltaic effect is presented, and a historical review of scientific investigations of this effect during the years 1839-1940 is given. Topics covered include the Becquerel effect, the barrier photovoltaic effect, and the Dember effect. Because of its historical importance, major emphasis has been placed on the barrier photovoltaic effect as seen in copper-cuprous oxide photocells. All experimental investigations reported in the literature have been covered, and the development of the modern theory of the photovoltaic effect is described. Author

N67-32248*# George Washington Univ., Washington, D. C.

[BIOLOGICAL SCIENCES COMMUNICATION PROJECT]

Quarterly Report, Apr. 1-Jun. 30, 1967

C. W. Shilling 30 Jun. 1967 327 p refs

(Contract NSR-09-010-027)

(NASA-CR-86650) CSCL 06F

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1. BIBLIOGRAPHY ON APPLICATIONS OF ETHYLENE OXIDE D. E. Wright and A. K. Serrell 33 p refs (See N67-32249 18-04)

2. BIBLIOGRAPHY ON SPACE BIOSCIENCE 5 p refs (See N67-32250 18-04)

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5. SCIENTIFIC PUBLICATIONS OF THE BIOSCIENCE PROGRAMS DIVISION. VOLUME IV: PHYSICAL BIOLOGY F. Hong and L. A. Kulp 42 p refs (See N67-32253 18-04)

6. SCIENTIFIC PUBLICATIONS OF THE BIOSCIENCE PROGRAMS DIVISION. VOLUME V: PLANETARY QUARANTINE F. Hong, L. A. Kulp, and D. E. Wright 42 p refs (See N67-32254 18-04)

7. SCIENTIFIC PUBLICATIONS OF THE BIOSCIENCE PROGRAMS DIVISION. VOLUME VI: BIOSCIENCE COMMUNICATIONS F. Hong and L. A. Kulp 17 p refs (See N67-32255 18-04)

N67-32249*# George Washington Univ., Washington, D. C.

BIBLIOGRAPHY ON APPLICATIONS OF ETHYLENE OXIDE

Donald E. Wright and Ann K. Serrell *In its Biol. Sci. Commun. Proj.* 30 Jun. 1967 33 p refs (See N67-32248 18-04)

A bibliography is presented on the application of ethylene oxide gas to the sterilization of spacecraft surfaces. Also included are a subject index, in which key words in the title of each referenced work have been rotated to the beginning of the title and alphabetized, and an author index. R.N.A.

N67-32250*# George Washington Univ., Washington, D. C.

BIBLIOGRAPHY ON SPACE BIOSCIENCE

In its Biol. Sci. Commun. Proj. 30 Jun. 1967 5 p refs (See N67-32248 18-04)

An annotated bibliography on aerospace medicine and biology is presented. Many of the reference works are bibliographies on the same topic. R.N.A.

N67-32251*# George Washington Univ., Washington, D. C.

SCIENTIFIC PUBLICATIONS OF THE BIOSCIENCE PROGRAM DIVISION. VOLUME II: ENVIRONMENTAL BIOLOGY

Frances Hong and L. A. Kulp *In its Biol. Sci. Comm. Proj.* 30 Jun. 1967 78 p refs (See N67-32248 18-04)

An annotated bibliography on environmental biology is presented. The literature citations are listed chronologically and by author. Author and permuted title indices are included along with addresses of the senior authors and laboratories. An analysis of the publication sources is also given which provides an indication of the activity and direction of research within this field. R.N.A.

N67-32252*# George Washington Univ., Washington, D. C.
SCIENTIFIC PUBLICATIONS OF THE BIOSCIENCE PROGRAMS DIVISION. VOLUME III: EXO BIOLOGY

Frances Hong and L. A. Kulp *In its Biol. Sci. Comm. Proj.* 30 Jun. 1967 102 p refs (See N67-32248 18-04)

An annotated bibliography on exobiology is given. The references are listed chronologically and according to author. Author and permuted title indices and addresses of senior authors and laboratories are listed. An analysis of the publication sources is included to provide an indication of the research activity and direction in this field. R.N.A.

N67-32253*# George Washington Univ., Washington, D. C.
SCIENTIFIC PUBLICATIONS OF THE BIOSCIENCE PROGRAMS DIVISION. VOLUME IV: PHYSICAL BIOLOGY

Frances Hong and L. A. Kulp *In its Biol. Sci. Comm. Proj.* 30 Jun. 1967 42 p refs (See N67-32248 18-04)

Literature citations to research in physical biology are listed chronologically and by author in this bibliography. Author and permuted title indices are listed along with addresses of senior authors and laboratories. An analysis of the publication sources provides some statistics on the extent and direction of research within the field. R.N.A.

N67-32254*# George Washington Univ., Washington, D. C.
SCIENTIFIC PUBLICATIONS OF THE BIOSCIENCE PROGRAMS DIVISION. VOLUME V: PLANETARY QUARANTINE

Frances Hong, L. A. Kulp, and D. E. Wright *In its Biol. Sci. Comm. Proj.* 30 Jun. 1967 42 p refs (See N67-32248 18-04)

This bibliography contains citations to publications on research concerned with planetary quarantine. The references are listed chronologically and by author. Both author and permuted title indices are included as well as lists of senior author and laboratory addresses and journals in which some of the articles appeared. R.N.A.

N67-32255*# George Washington Univ., Washington, D. C.
SCIENTIFIC PUBLICATIONS OF THE BIOSCIENCE PROGRAMS DIVISION. VOLUME VI: BIOSCIENCE COMMUNICATIONS

Frances Hong and L. A. Kulp *In its Biol. Sci. Comm. Proj.* 30 Jul. 1967 17 p refs (See N67-32248 18-04)

References to literature on bioscience communications research are listed chronologically and according to author in this short bibliography. Also included are author and permuted title indices and addresses of the senior authors and laboratories. R.N.A.

N67-32311*# Volt Technical Corp., Washington, D. C.
CHRONOLOGICAL ABSTRACT LISTING, RUSSIAN-FRENCH, SCIENTIFIC LITERATURE Second Quarter, 1967

Andre L. Brichant 1967 15 p refs
(Contract NAS5-12487)

(NASA-CR-86652) CFSTI: HC\$3.00 CSCL 20H

Abstracts are presented for 48 articles on space-related subjects that were translated from the open Soviet literature of 1966 and 1967. Titles, authors, and sources are given for each entry; and the listing is presented in chronological order. M.W.R.

N67-32381# Picatinny Arsenal, Dover, N. J.
ENCYCLOPEDIA OF EXPLOSIVES AND RELATED ITEMS. VOLUME 3

Basil T. Fedoroff and Oliver E. Sheffield 1966 558 p refs
(PA-TR-2700, Vol. 3: AD-653029) CFSTI: HC \$3.00/MF \$0.65

This volume contains entries Chlorides through Detonating relays. Each entry is supported by references to the appropriate source literature. A cumulative index of items discussed in Vols. 1, 2, and 3 is included. TAB

N67-32384# Army Environmental Hygiene Agency, Edgewood Arsenal, Md.

MICROWAVE HAZARDS BIBLIOGRAPHY, APRIL 1967

Apr. 1967 40 p refs
(AD-652788) CFSTI: HC \$3.00/MF \$0.65

The bibliography provides a source of references for those interested in the biological effects and the evaluation of hazards associated with microwave generating equipment. The references are categorized into four principal sections: biological effects; ocular effects; occupational health aspects; and instrumentation, measurements, and technical evaluation of microwave equipment. TAB

N67-32546# Boeing Scientific Research Labs., Seattle, Wash
Mathematics Research Lab.

A SURVEY OF RECENT MATHEMATICAL PUBLICATIONS ON THE SUBJECT OF CURVE CROSSINGS BY STOCHASTIC PROCESSES

Gordon B. Crawford Apr. 1967 20 p refs
(DI-82-0613; AD-652418) CFSTI: HC \$3.00/MF \$0.65

The report is prompted by the rash of good mathematical research on the problem of the moments of the number of crossings of a curve by a stochastic process. It is felt that this problem is important to some engineers and designers who may find a brief introduction to these recent publications useful. Author (TAB)

N67-32858# Army Materials Research Agency, Watertown, Mass.

A REPORT GUIDE TO FATIGUE TESTING LITERATURE

Charles P. Merhia May 1967 69 p refs
(AMRA-MS-67-05; AD-652881) CFSTI: HC \$3.00/MF \$0.65

The main objective of the compilation is to provide simple and fast access to information on the subject of fatigue testing and yet provide sufficient information in the form of abstracts and word descriptors to make the listing useful. TAB

N67-32905*# Lovelace Foundation for Medical Education and Research, Albuquerque, N. Mex.

A PROSPECTIVE LOOK AT MEDICAL PROBLEMS FROM HAZARDS OF SPACE OPERATIONS

Douglas E. Busby Washington, NASA, Jul. 1967 446 p refs
(Contract NASr-115)
(NASA-CR-856) CFSTI: HC \$3.00/MF \$0.65 CSCL 06E

The report is oriented to missions during which the diagnosis and interim treatment of medical problems will have to be carried out in space. The clinical manifestations, diagnosis, and treatment of possible medical problems in space are covered. Various hazards of space operations are defined and analyzed in order to determine

their possible medical effects. The pathophysiologic characteristics of medical problems are discussed to provide the rationale for the prevention and treatment of the problems in space. An effort is also made to provide a substantial bibliography for workers in clinical space medicine and to identify areas of research which will contribute to this field. The various effects of decompression and medical problems which could result from thermal stresses are discussed. Possible medical consequences of weightlessness are considered, along with those of particles traveling in space. Various traumatic injuries and medical problems produced by carbon dioxide are reviewed. The general aspects of the diagnosis and treatment of medical problems in space are covered. Author

N67-32950# Dayton Univ., Ohio.
INFORMAL SYMPOSIUM ON REVERSIBLE PHOTOCHEMICAL PROCESSES

3 May 1967 47 p refs Symp. held 1-3 May 1967
 (AD-653030)

The document is comprised of abstracts of the 34 papers presented at the symposia. TAB

N67-33083*# Pennsylvania Univ., Philadelphia. Moore School of Electrical Engineering.

INVESTIGATION IN AND RESEARCH OF AEROSPACE RELATED MICROWAVE TECHNOLOGY Final Report, 1 Jan. 1965-31 Oct. 1966

E. J. Denlinger et al 28 Feb. 1967 533 p refs
 (Grant NGR-39-010-030)

(NASA-CR-87055; Rept.-67-20) CSCL 20N

A state of the art review is presented on the technology related to aerospace applications of millimeter and submillimeter waves. Topics covered include generation, detection, transmission, propagation, modulation, environment, antennas, measurements, radio interference, and radiation hazards. Research recommendations are classified according to technical areas and their potential for useful results. Detailed assessments are presented on the status of materials; electron beam type generators; quantum generators and amplifiers; modulation; transmission lines and components; propagation of the spectrum of air absorption using coherent sources; superheterodyne and homodyne detection, and detector devices; and phased arrays. Charts are provided as an aid to estimating the capability of point-to-point communication systems, radar, and radiometry. An extensive reference bibliography is included. M.G.J.

N67-33154*# National Aeronautics and Space Administration, Washington, D. C.

AEROSPACE MEDICINE AND BIOLOGY—A CONTINUING BIBLIOGRAPHY WITH INDEXES, MAY 1967

Jun. 1967 144 p refs

(NASA-SP-7011(38)) CFSTI: HC \$3.00/MF \$0.65 CSCL 06S

A compilation of abstracts and subject indexes is presented on references pertaining to the biological, physiological, psychological, and environmental effects to which man and organisms of lower order are subjected during actual or simulated flight or space flight. Consideration is also given to such related topics as sanitary problems, pharmacology, toxicology, safety and survival, life support systems, exobiology, and personnel factors. Corporate source and personal author indexes are included. M.G.J.

N67-33200# California Univ., Berkeley. Lawrence Radiation Lab.
INDEX TO NUCLEAR CHEMISTRY DIVISION ANNUAL REPORT, 1966

28 Mar. 1967 42 p

(Contract W-7405-ENG-48)

(UCRL-17299) CFSTI: HC \$3.00/MF \$0.65

A permuted index is presented of the key words and numbers contained in the titles of the report papers. Authors' surnames are also indexed. Author

N67-33492 Library of Congress, Washington, D. C. Aerospace Technology Div.

PROPELLANTS AND COMBUSTION Surveys of Foreign Scientific and Technical Literature

Serge Markov and Boris Ofrossimow 28 Dec. 1966 74 p refs
Its Compilation of Abstracts
 (ATD-66-146; Rept.-1)

Soviet and other communist open source literature dealing with propellants and combustion is presented in a bibliography that includes 45 abstracts, one translation, and one book review. Entries are arranged alphabetically by authors, and an author index and a list of associations contributing to the bibliography are included. All of the entries are available at the Library of Congress. M.W.R.

N67-33582# International Union of Pure and Applied Chemistry, Basle (Switzerland). Commission on High Temperatures and Refractories.

BIBLIOGRAPHY ON THE HIGH TEMPERATURE CHEMISTRY AND PHYSICS OF MATERIALS IN THE CONDENSED STATE

J. J. Diamond ed. (NBS) Mar. 1967 93 p refs *Its* Vol. 1967, No. 1

A bibliography on high temperature chemistry and physics covering the following areas is presented: (1) devices for achieving, measuring, and controlling temperatures above 1500°C; (2) devices for physical measurements at temperatures above 1000°C; (3) properties, at temperatures below 1000°C, of materials which melt above 1500°C; (4) properties, at temperatures above 1000°C, of materials which melt above 1500°C; (5) properties, at temperatures above 1000°C, of materials which melt below 1500°C; (6) phase equilibria; and (7) reactions at temperatures above 1000°C. C.T.C.

N67-33603* Purdue Univ., Lafayette, Ind. School of Electrical Engineering.

COORDINATION AND SUPPORTING ACTIVITIES

In its [Res. Areas in the School of Elec. Eng. of Purdue Univ.]
 Jan. 1967 p 85-86 (See N67-33593 19-10)

In application to electric power systems, the field of computer storage and retrieval of bibliographic data is very briefly surveyed. The PEREC bibliography is being updated and will include a dictionary of keywords. Computer programs and data files are also being developed to automate this storage and retrieval. R.L.I.

N67-33731# National Bureau of Standards, Washington, D. C.
BIBLIOGRAPHY ON THE HIGH-TEMPERATURE CHEMISTRY AND PHYSICS OF MATERIALS IN THE CONDENSED STATE, VOLUME 1966, NO. 4, OCTOBER-DECEMBER 1966

J. J. Diamond, ed. Dec. 1966 75 p refs

(NP-16584) Available from Natl. Bur. of Standards

References are included on devices for achieving, measuring, and controlling temperatures above 1500°C, devices for physical measurements at temperatures above 1000°C; properties, at temperatures above and below 1000°C, of materials which melt above and below 1500°C; phase equilibria; and reactions at temperatures above 1000°C. NSA

N67-34050# Arizona State Univ., Tempe. Dept. of Chemistry.
THE SOLID STATE CHEMISTRY OF HYDROGEN COMPOUNDS Final Technical Progress Report

M. O'Keeffe, Y. Ebisuzaki and W. J. Kass Jun. 1967 48 p refs
(Contract Nonr-2794(04))
(Rept.-6; AD-653891) CFSTI: HC\$3.00/MF\$0.65

Research on the interactions of hydrogen in solids is summarized and a bibliography of publications is given. New results are given for the permeation of hydrogen in platinum. An extensive account of the solubility of hydrogen in transition metals and alloys is presented. It is concluded that the screened-proton model gives the best account of hydrogen in these systems.
Author (TAB)

N67-34056# Pennsylvania State Univ., University Park. Materials Research Lab.

CRYSTAL CHEMISTRY AT ELEVATED PRESSURE AND MODERATE TEMPERATURES Final Report

Rustum Roy and Frank Dachtler 31 May 1967 23 p refs
(Contract Nonr-656(20))

(AD-653887) CFSTI: HC\$3.00/MF\$0.65

The guidelines and major emphases of the research conducted during the nearly nine year period of support by the Office of Naval Research are summarized. The substantive results were presented at intervals as 22 Technical Reports and 25 publications, plus 4 publications from closely related work branching from this project. A bibliography is included.
Author (TAB)

N67-34236# Library of Congress, Washington, D. C. Aerospace Technology Div.

CBE FACTORS: MONTHLY SURVEY NO. 15

[1967] 259 p refs

(ATD-67-18; TT-67-62024; AD-652484) CFSTI: HC \$3.00/MF \$0.65

The report is one of a series of monthly surveys of Soviet, East European, and Chinese literature covering the following areas: Chemical factors (pesticides, herbicides, fertilizers, psychotomimetics, other chemicals); Biological factors (pathogens); Environmental factors (aerosols, ecology, micrometeorology, soil science). Available translations of additional sources pertinent to these subject areas, authors organizations, and an author index are included as appendixes.
TAB

N67-34410 Joint Publications Research Service, Washington, D. C.

SOVIET-BLOC RESEARCH IN GEOPHYSICS, ASTRONOMY, AND SPACE

1 Aug. 1967 73 p refs

(JPRS-42041; TT-61-11147-161) CFSTI: \$3.00

Abstracts and bibliographic information concerning astronomy, meteorology, oceanography, terrestrial geophysics, upper atmospheric, and other miscellaneous topics, gathered from recent publications of Sino-Soviet Bloc countries, are reported. Information covering 1) stellar structure, 2) interstellar space radio emissions, 3) solar spectrum, 4) brightness in comets, 5) meteor showers, 6) weather conditions, 7) waves and tides, 8) seismology, 9) satellite measurements of the upper atmosphere, and other pertinent investigations, is presented.
L.S.

N67-34433*# National Aeronautics and Space Administration, Washington, D. C.

AEROSPACE MEDICINE AND BIOLOGY—A CONTINUING BIBLIOGRAPHY, WITH INDEXES, JUNE 1967

Jul. 1967 169 p refs

(NASA-SP-7011(39)) CFSTI: HC\$3.00/MF\$0.65 CSCL 06S

A continuing bibliography is presented on aerospace medicine and biology. By means of these periodic supplements, it serves as a current abstracting and announcement medium for references in

this field. It concentrates on the biological, physiological, psychological, and environmental effects to which man is subjected during and following simulated or actual flight in the earth's atmosphere or in interplanetary space.
R.L.I.

N67-34593# International Union of Pure and Applied Chemistry, Basle (Switzerland). Commission on High Temperatures and Refractories.

BIBLIOGRAPHY ON THE HIGH TEMPERATURE CHEMISTRY AND PHYSICS OF GASES AND PLASMAS

L. Brewer, comp. (Calif. Univ., Berkeley) 30 Jun. 1967 33 p refs Prepared in Cooperation with Natl. Bur. of Std.

(Rept.-23) Available from Natl. Bur. of Std., Washington, D. C.

This bibliography lists 148 titles chiefly concerned with spectroscopy of interest to high-temperature chemistry, and 129 titles which deal mainly with reactions between gases and condensed phases. The majority of the works was published in 1966. K.W.

N67-34620 Aeronautical Research Labs., Melbourne (Australia).

A LITERATURE SURVEY ON THE FATIGUE PROPERTIES OF WELDED CHROMIUM-MOLYBDENUM STEEL TUBING

R. Simpson Mar. 1966 49 p refs

(ARL/SM-304)

A literature survey has been carried out on the fatigue properties of unwelded and welded chromium-molybdenum steel tubing of the types employed in aircraft structures. Most of the data examined was for tubing of U.T.S. less than 125,000 p.s.i. Oxyacetylene, atomic hydrogen, electric arc and flash welding processes were considered. It is concluded that: (1) under plane or rotating bending conditions, (a) the fatigue ratio of unwelded tubing steadily decreases with increasing U.T.S. and the maximum fatigue strength (40,000 p.s.i.) corresponds to a U.T.S. of 110,000 p.s.i.; (b) for welded tubing the fatigue ratio is almost constant (approximately 0.2) irrespective of U.T.S. and this infers that the fatigue strength of welded tubing increases with increasing welded U.T.S.; (2) From the fatigue viewpoint there is little to choose between various welding processes; (3) There is a lack of comprehensive axial load fatigue data for both unwelded and welded tubing; and (4) There is a complete lack of torsional fatigue data.
Author

N67-34742# International Union of Pure and Applied Chemistry, Basle (Switzerland). Commission on High Temperatures and Refractories.

BIBLIOGRAPHY ON THE HIGH TEMPERATURE CHEMISTRY AND PHYSICS OF MATERIALS IN THE CONDENSED STATE. VOLUME 1967, NO. 2: APR., MAY, JUN. 1967

J. J. Diamond (Natl. Bur. of Std., Washington, D. C.) [1967] 70 p refs Prepared in cooperation with Natl. Bur. of Std.

Available from Natl. Bur. of Std., Washington, D. C.

A bibliography on the high temperature chemistry and physics of materials in the condensed state is presented in which are cited studies of the following: (1) devices for achieving temperatures above 1500°C; (2) devices for measuring and controlling temperatures above 1000°C; (3) devices for physical measurements at temperatures above 100°C; (4) properties, at temperatures below 1000°C, of metallic and nonmetallic materials which melt above 1500°C; (5) properties, at temperatures above 1000°C, of materials (metallic, nonmetallic, and mixed) which melt above 1500°C; (6) properties, at temperatures above 1000°C, of metallic and nonmetallic materials which melt below 1500°C; (7) phase equilibria; and (8) reactions at temperatures above 1000°C. Also cited is a list of books published in this area.
S.C.W.

N67-34976

N67-34976# Argonne National Lab., Ill.
PHYSICS DIVISION SUMMARY REPORT, SEPTEMBER-DECEMBER 1966

Dec. 1966 69 p refs
(Contract W-31-109-ENG-38)
(ANL-7284) CFSTI: HC\$3.00/MF\$0.65

Summary information is presented on research projects pertaining to partial radiative widths in neutron capture, and final state structure; multiple excitation effects in a single particle transfer reaction; structure of early 1d_{2s}-shell nuclei, and three-body correlations in nuclear matter. Conference reports are highlighted, and abstracts of papers accepted for publication are included.
M.G.J.

N67-35014# General Electric Co., Schenectady, N. Y.
THE INTERMEDIATE STATE IN TYPE I SUPERCONDUCTORS

J. D. Livingston and W. De Sorbo Sep. 1966 44 p refs
(Rept.-66-C-328)

This report reviews the extensive literature on the intermediate state of semiconductors. A variety of techniques have been used for the direct observation of intermediate state structures. Results of these observations are reviewed, as are theories of the intermediate state, and magnetic, electrical, and thermal properties of materials in the intermediate state. The relation between the intermediate state and mixed state is discussed.
Author

N67-35173# Brookhaven National Lab., Upton, N. Y.
HIGH-TEMPERATURE LIQUID-METAL TECHNOLOGY REVIEW Bimonthly Technical Progress Review

Feb. 1967 62 p refs /ts Vol. 5, No. 1
(BNL-50048 (PR-25)) CFSTI: HC\$3.00/MF\$0.65

Research projects are reviewed under the headings of physical properties and thermodynamics, fluid dynamics, heat transfer materials development and corrosion and erosion, instrumentation, component development, systems studies, chemistry and chemical analysis, fabrication techniques, and safety related to high temperature liquid metal technology. Reviews for 20 current projects are included, and authors' comments on reviews presented in previous issues of this bimonthly technical progress review are presented as rebuttals. Organizations with reports in this and previous issues are listed, along with all of relevant review numbers.
M.W.R.

N67-35222* Houston Research Inst., Inc., Tex.
EXAMINATION OF THE CHEMISTRY INVOLVED IN ANODIC OXIDATION OF SILVER IN THE SYSTEM—SILVER:OXYGEN:INHIBITED GLYCOL/WATER SOLUTION Final Report

H. S. Nagaraja Setty 28 Jul. 1967 33 p refs
(Contract NAS9-6698)
(NASA-CR-65681) CSDL 07C

Over 50 papers, reports, and books were obtained and studied in order to get an insight into the chemistry involved during electrolysis of RS89a solution using silver covered copper wire. Electrolyses were conducted under several different conditions and types of electrodes and electrolytes using 27 volts d.c. potential. The anode deposit obtained in each case was analyzed for elemental composition. From the results, it was concluded that the major product of electrolysis was oxides of metal (silver/or copper). The metal amines were also formed and their amount was limited by the availability of triethanolamine phosphate in the electrolyte. The generation of sparks and smoke during electrolysis were recorded photographically.
Author

N67-35377# Picatinny Arsenal, Dover, N. J. Plastics and Packaging Lab.

RADIATION GRAFT COPOLYMERIZATION
F. S. Holahan and D. W. Levi Jun. 1967 124 p refs
(PA-TR-3567; AD-654510)

The literature on radiation graft copolymerization is reviewed for the period between the late nineteen fifties and the middle of 1966. Included are descriptions of studies related to the various types of grafting reactions, the evaluation of factors important in grafting reactions, and properties of the grafted polymers.
Author (TAB)

N67-35451# Phillips Petroleum Co., Idaho Falls, Idaho. Atomic Energy Div.

FISSION PRODUCT BEHAVIOR LITERATURE REVIEW

E. G. Good Feb. 1967 24 p refs
(Contract AT(10-1)-205)
(IDO-17237) CFSTI: HC\$3.00/MF\$0.65

A literature survey was made of the data available on fission product release, transport, and deposition. The report presents a bibliography of the literature which appears applicable to the development of analytical methods for calculating the fission product behavior following a loss-of-coolant accident involving a water-cooled, UO₂ fueled reactor. Experimental and theoretical work has been directed toward determining fission product behavior. Much of this information, however, will be of little value in the development of analytical models for LOFT. The release data of fission product noble gases to the void space between the cladding and the fuel pellets during routine reactor operation are sufficient. The mechanism of fission gas release has not been definitely established but enough experimental results exist to provide an adequate basis for preliminary LOFT calculations. Additional data are needed concerning the release of fission products other than noble gases. Applicable data on fission product release from molten fuel and release during heatup to the fuel melting point are limited. Most of the work on transport and deposition in high-temperature gas streams has been directed toward the gas-cooled reactor program. Some of the theoretical work may be adaptable to the LOFT analysis. Once fission products enter the containment building they may undergo agglomeration, settling, diffusion, transport due to convection, absorption, desorption, and change in chemical form. The containment vessel experiments measure the combined results of several phenomena which occur simultaneously, thereby making interpretation of the results and extrapolation to other conditions difficult. Mathematical models will aid in separating the effects of different variables and allow extrapolation. Thus mathematical models must be developed and checked with additional experiments before extrapolation to LOFT conditions can be accomplished with any degree of certainty.
NSA

N67-35839# Brookhaven National Lab., Upton, N. Y.
BUBBLE CHAMBERS BIBLIOGRAPHY, SUPPLEMENT I

Marjorie Comstock 1 May 1967 33 p refs
(BNL-8083, Suppl. I) CFSTI: HC\$3.00/MF\$0.65

One hundred and eighty-eight references are presented on bubble chambers components and applications to supplement a previous bibliography dated May 28, 1964. The references are arranged in chronological order and an author index is included.
NSA

N67-35897# Martin Co., Orlando, Fla.
COMPILATION OF ABSTRACTS—3rd AFOSR COMBINED CONTRACTORS MEETING ON COMBUSTION DYNAMICS RESEARCH

[1967] 66 p ref Meeting held in Cocoa Beach, Fla., 27-30 Jun. 1967
(Contract AF 49(638)-1566)
(AFOSR-67-0391; AD-654669)

Abstracts are presented under one of three major subject headings: advanced air breathing combustion, liquid propellant rocket combustion, or solid propellant rocket combustion.
Author (TAB)

N67-35938# Naval Ordnance Lab., Corona, Calif.
SEMICONDUCTING THIN FILMS: AN ANNOTATED BIBLIOGRAPHY, 1956-1966
W. R. Turnbull 15 Jun. 1967 291 p refs
(NOLC-712; AD-655100)

A comprehensive bibliographic survey of the preparation, properties, applications, and theory of semiconducting thin films is presented. It is comprised of 976 references published in English and foreign language periodical literature between 1956 and December 1966. The abstracts are arranged by author under the following classes: (1) Elemental, (2) Group III-V, (3) Group II-VI, (4) group IV-VI, (5) Group IV-IV, and (6) miscellaneous compounds. All of the materials are indexed with the exception of the miscellaneous compounds (Groups I-V, I-VI, and I-VII).
Author (TAB)

N67-36117 Nationaal Lucht-en Ruimtevaartlaboratorium, Amsterdam (Netherlands).
SELECTIVE BIBLIOGRAPHY ON AIR CUSHION VEHICLES
A. Harting 27 Feb. 1967 115 p refs

The bibliographic listing is classified according to data on annular jets, labyrinth seals, diffusers, plenum chambers, levapad air bearings, ram wings, navigation control, structures and materials, and propulsion. Related reports, which may be of interest are included.
Author

N67-36168# RAND Corp., Santa Monica, Calif.
ENERGY TRANSFER IN PARTICLE-SURFACE INTERACTIONS IN HYPERVELOCITY FLIGHT: COMMENTARY AND BIBLIOGRAPHY
F. C. Hurlbut Jul. 1967 77 p refs
(Contract F44620-67-C-0045; Proj. RAND)
(RM-4885-PR; AD-655066)

The memorandum reviews thermal-energy transfer in particle-surface interactions and presents an extensive, partially annotated bibliography of literature relevant to this field. The subject area is limited to nonreactive energy transfer between neutral gas molecules and surfaces at energy levels of interest to gas dynamicists and hence is extended, in these terms, from the energies associated with gases at low temperatures to those associated with the velocities of satellites. A summary of values of the thermal accommodation coefficients obtained over the years is given, and the experimental methods used and the current interpretation of the results are reviewed. A discussion and evaluation of current and past theoretical work in this area is also included.
Author (TAB)

N67-36450# International Union of Pure and Applied Physics, London (England). Commission on High Temperatures and Refractories.

BIBLIOGRAPHY ON THE HIGH TEMPERATURE CHEMISTRY AND PHYSICS OF GASES AND PLASMAS
L. Brewer, comp.—Univ. Calif., Berkeley 31 Mar. 1967 14 p refs
CFSTI: HC \$3.00/MF \$0.65

Related to studies on refractory materials, a bibliography is presented on the high temperature chemistry and physics of gases and plasmas. The two main areas of investigation are the reactions between gases and condensed phases, and the spectroscopy of interest to high temperature chemistry.
R.L.I.

N67-36515# Zentralstelle fuer Atomkernenergie-Dokumentation, Frankfurt am Main (West Germany)
DOCUMENTATION OF PLASMA PHYSICS. PART I: EXPERIMENTAL PLASMA PHYSICS, THEORETICAL PLASMA PHYSICS. BIBLIOGRAPHY, AUTHOR INDEX, SUBJECT INDEX

D. Hilsenbeck Apr. 1967 140 p refs
(AED-C-03-07, Pt. I, Vol. II)

A bibliography is presented of 302 papers on various aspects of plasma physics. Author and subject indexes are included.
NSA

N67-36562# Comision Nacional de Energia Atomica, Buenos Aires (Argentina).
DATA ON BUENOS AIRES SYNCHROCYCLOTRONS FOR THE YEARS OF 1954-1965 [EL SINCRROCICLOTRON DE BUENOS AIRES INFORME RETROSPECTIVO PERIODO 1954-1965]
1966 34 p refs In SPANISH
(CNEA-188)

Since its opening in 1954 the synchrocyclotron laboratory has offered facilities first for studies in nuclear chemistry, then in nuclear physics, and most recently in nuclear biology. A general description is given of the laboratory. A bibliography is given of the completed nuclear physics, chemistry, and biological problems studied.
(NSA)

N67-36626# Institut für Plasmaphysik G.m.b.H., Garching (West Germany).
DOCUMENTATION OF PLASMA PHYSICS. PART I: EXPERIMENTAL PLASMA PHYSICS, THEORETICAL PLASMA PHYSICS. VOLUME II: BIBLIOGRAPHY, AUTHOR INDEX, SUBJECT INDEX
D. Hilsenbeck Mar. 1967 126 p refs
(AED-C-03-06, Pt. 1, Vol. 2)

A bibliography containing 291 articles on various aspects of plasma physics is presented. Author and subject indexes are included.
NSA

N67-36753# Air Force Cambridge Research Labs., Bedford, Mass. Optical Physics Lab.
A BIBLIOGRAPHY OF LASER APPLICATIONS
C. Martin Stickley and Arthur Gingrande Apr. 1967 46 p refs
/ts Spec. Rept.-62
(AFCL-67-0223; AD-655774)

The bibliography of laser applications contains 644 entries from the open literature for the period 1961 through September 1966. The entries are divided into the following major areas: mechanical measurements and standards; communications applications; radar and tracking applications; military applications; optical signal processing; interferometry and testing of optical components; applications to scientific studies; applications in chemistry; photographic applications; metalworking; and miscellaneous applications. The entries are further subdivided into 78 other categories. Applications in medical and biological research are not included; complete coverage in the other areas is not guaranteed. Under some topics (detection techniques, spectroscopy, interaction with acoustic waves, plasma diagnostics, nonlinear optics, gas breakdown, scattering, holography) so much has been published that only review articles, articles of major importance, and very recent articles could be included.
Author (TAB)

N67-36994 Library of Congress, Washington, D. C. Aerospace Technology Div.
SOVIET DEVELOPMENT OF SCIENTIFIC RESEARCH INSTRUMENTS
Jordan V. Randjelovic 11 Oct. 1967 61 p refs
(ATD-67-39; Rept.-5)

Abstracts selected from open-source literature are presented, emphasizing radiation sensor development. Also covered are optical, gas, vibration, and plasma temperature sensors. A bibliography is appended. N.E.N.

N67-37009*# Jet Propulsion Lab., Calif. Inst. of Tech., Pasadena.
RESEARCH AND ADVANCED DEVELOPMENT PUBLICATIONS, FISCAL YEAR 1966

30 Jun. 1967 81 p refs

(Contract NAS7-100)

(NASA-CR-88619; JPL-R; AD-701-2) CFSTI: HC \$3.00/MF \$0.65 CSCL 22A

A bibliography of publications relating to bioscience, physical space science, electronics, spacecraft and capsule aeromechanical engineering, fluids, space power, and chemical and electric propulsion, is presented. The material covers planetary and interplanetary missions; planetary atmospheres; interplanetary fields and particles; spacecraft guidance, control, tracking, and communications systems; and liquid and solid chemical propulsion systems. Other relevant activities are also listed. L.S.

N67-37089# Kaman Aircraft Corp., Colorado Springs, Colo.
Kaman Nuclear Div.

X-RAY SCATTERING BIBLIOGRAPHY Progress Report, 1 Sep. 1966-31 Aug. 1967

William J. Veigle 30 Jun. 1967 76 p refs

(Contract N00014-67-C-0154)

(KN-738-67-2(R); AD-656759)

The document contains a bibliography of experimental and theoretical papers on incoherent and coherent scattering of x rays. Entries are cross indexed for theoretical and experimental papers, and all entries are verified in Science Abstracts, Mathematical Reviews, or Nuclear Science Abstracts to facilitate obtaining listed papers or interlibrary loan. Author (TAB)

N67-37251# Rock Island Arsenal Lab., Ill. Research and Engineering Div.

MICROBIAL-METAL CORROSION—LITERATURE REPORT

Van Y. S. Hong Feb. 1967 33 p refs

(RIA-67-534; AD-655274)

The importance of microorganisms in the corrosion process was illustrated as related to their broad distribution in nature and their longevity of existence on earth. A limited literature survey was made in the five areas of Microbial Corrosion. These areas are: historical background, mechanisms of microbial corrosion, microorganisms and the metals and alloys they attack, preventive measures to counteract this corrosion, and examples of microbial corrosion in military equipment. A brief discussion of each area was made, and also a future research program was suggested in resolving some of the problems found in these areas. TAB

N67-37383*# Smithsonian Astrophysical Observatory, Cambridge, Mass.

THEORETICAL RESEARCH ON STELLAR ATMOSPHERES

Charles A. Whitney 1 Aug. 1967 42 p refs

(Grant NgR-22-024-001; Contract AF 19(628)-3877; Grants NSF GP-4318; NSF GP-940)

(NASA-CR-88709; SAO Special Rept.-247) CFSTI: HC \$3.00/MF \$0.65 CSCL 03B

A brief sketch of the development of the theory of stellar atmospheres since 1920 is followed by a discussion of problems that may be central to this theory during the next five years. An

annotated bibliography is provided of theoretical work performed at Harvard College Observatory and Smithsonian Astrophysical Observatory during the decade 1957-1967. Author

N67-37390# Chrysler Corp., Huntsville, Ala. Space Div.
ORBITAL TRANSFER AND RENDEZVOUS: A BIBLIOGRAPHY

Gary P. Herring 30 May 1967 31 p refs

(HSM-N42-67)

The bibliography is presented to make available to the scientific community an essentially complete listing of available research publications in the area of impulsive transfer and rendezvous. Several papers which are only indirectly related to the impulsive problem have been included. Author

N67-37557# RAND Corp., Santa Monica, Calif.
A BIBLIOGRAPHY ON NERVE CONDUCTION AND NERVE IMPULSES

Elizabeth McKeldin, Lois Newman, and Judith Wallach Jul. 1967

31 p refs *Its Lit. Search No. 127*

(P-3613; AD-654637)

The bibliography is concerned with the behavior of networks of nerve cells. Emphasis is placed on waves of nerve impulses passing through masses of nerve tissue, excluding brain waves (EEG). The bibliography does not include items dealing with automata or bionic devices; it does include items on the theory and simulations that apply very closely to the behavior of real (i.e., living) nervous tissue and networks. Author (TAB)

N67-37620*# National Aeronautics and Space Administration, Washington, D. C.

AEROSPACE MEDICINE AND BIOLOGY—A CONTINUING BIBLIOGRAPHY WITH INDEXES, JULY 1967

Aug. 1967 167 p refs

(NASA-SP-7011(40)) CFSTI: HC \$3.00/MF \$0.65 CSCL 06S

In its subject coverage, *Aerospace Medicine and Biology* concentrates on the biological, physiological, psychological, and environmental effects to which man is subjected during the following simulated or actual flight in the earth's atmosphere or in interplanetary space. References describing similar effects on biological organisms of lower order are also included. Such related topics as sanitary problems, pharmacology, toxicology, safety and survival, life support systems, exobiology, and personnel factors receive appropriate attention. Each entry consists of a standard citation accompanied by its abstract. Author

N67-37638 Joint Publications Research Service, Washington, D. C.

COMMUNIST CHINESE SCIENTIFIC ABSTRACTS—CHEMISTRY, NUMBER 85

7 Sep. 1967 33 p refs

(JPRS-42500; TT-67-33128) CFSTI: \$3.00

Abstracts are presented on articles which appeared in the Communist Chinese Chemistry Bulletin editions of January, February, and August 1960. The author's name and affiliation—usually a university, high school, or research institute—are given. M.G.J.

N67-37658* Allied Research Associates, Inc., Concord, Mass.
HYPERVELOCITY IMPACT MECHANICS, BIBLIOGRAPHY AND INDEX Final Technical Report

Robert F. Smiley 30 Jun. 1967 74 p refs

(Contract NASw-1378)

(NASA-CR-88890; ARA-327-8) CSCL 20K

An extensive indexed bibliography is presented, covering primarily the subject of experimental and theoretical information

on the mechanics of penetration of structures by hypervelocity projectiles. Also included is a limited coverage of information on the meteoroid environment and on design considerations for the meteoroid hazard.
Author

N67-37693 Library of Congress, Washington, D. C. Aerospace Technology Div.

COMMUNICATIONS NETWORKS Surveys of Foreign Scientific and Technical Literature

W. Podpaly 21 Sep. 1967 37 p refs *Its Work Assignment No. 33*

(ATD-67-41; Rept.-8)

Abstracts are included for 15 references from Soviet open-source literature dealing with communications equipment and communications facilities and their location. Source code numbers are presented for each of the references, all of which can be found at the Aerospace Technology Division of the Library of Congress.
M.W.R.

N67-37698 Library of Congress, Washington, D. C. Aerospace Technology Div.

ELECTROMAGNETIC WAVE PROPAGATION AND THE UPPER ATMOSPHERE Surveys of Foreign Scientific and Technical Literature

21 Sep. 1967 52 p refs *Its Work Assignment No. 3*

(ATD-67-36; Rept.-4)

Twenty-nine abstracts are presented of Soviet open-source literature dealing with electromagnetic wave propagation and the upper atmosphere. These abstracts are arranged alphabetically by author under the categories of (1) ionosphere, exosphere, and magnetosphere; (2) geomagnetic micropulsations and earth currents; (3) ionospheric perturbations by explosions, satellite and missile passage, and solar radiation; (4) satellite and missile experiments; (5) radio and radar astronomy; and (6) aurora and geomagnetic disturbances. All of the articles are available at the Aerospace Technology Division of the Library of Congress, and source code numbers are included for each of the entries. A complete author index is appended.
M.W.R.

N67-37699*# National Aeronautics and Space Administration, Washington, D. C.

LASERS AND MASERS: A CONTINUING BIBLIOGRAPHY WITH INDEXES

Jul. 1967 447 p refs

(NASA-SP-7009(02)) CFSTI: HC \$3.00/MF \$0.65 CSCL 20E

Abstracts and subject and author indexes are presented for research and development documents dealing with lasers and masers; with special emphasis on applications related to ranging and communication systems, astronomy and optics, and metal working. References are also included for fundamental studies dealing with the physical and electronic properties of lasers and masers and their function and performance. All of the references were previously announced in the NASA Scientific and Technical Aerospace Reports (STAR), International Aerospace Abstracts (IAA), or the NASA continuing bibliography on Aerospace Medicine and Biology; and the majority of the articles are arranged according to accession numbers in the first two of these sources. Both 1966 and 1967 entries are included for these as well as for a small group of LC entries from other journals.
M.W.R.

N67-37711 Joint Publications Research Service, Washington, D. C.

INTERACTION OF SOLIDS COLLIDING AT HIGH SPEEDS

V. S. Lenskiy 12 Sep. 1967 51 p refs Transl. into ENGLISH of the book "Materialy Vsesoyuznogo Simposiuma po Rasprostraneniyu Uprugo-Plasticheskikh Voln v Sploshnykh Sredakh" Baku, 1966 p 26-65

(JPRS-42562; TT-67-33190) CFSTI: \$3.00

A survey and general evaluation are presented on material pertaining to the interaction of solids at high velocities, based mainly on data derived from American sources. The characteristics of gas guns used in collision experiments to accelerate massive solids and particles to the required velocities are discussed in detail. Consideration is also given to explosive, fragmentation, and reflection and splitting methods, and to electroexplosive and electrostatic accelerators. Theoretical approaches to constructing equations of state of solids are reviewed, with particular reference to equations for metals and other materials which approximate the pressures and velocities encountered in the interaction of solids at various high speeds. Experimental data are compared with theoretical calculations of the crater formation process, and possible mechanisms of piercing a solid plate are assessed. A source bibliography is included.
M.G.J

N67-37760*# California Univ., Berkeley. Dept. of Electrical Engineering.

COMPUTER EXPERIMENTS WITH CHARGED PARTICLES, CHARGED FLUIDS AND PLASMAS: A CLASSIFICATION AND BIBLIOGRAPHY

Charles K. Bidsall *In* NASA, Washington Symp. on Computer Simulation of Plasma and Many-body Probl. 1967 p 375-406 refs Sponsored by NSF (See N67-37737 22-25)

The computer experiments are listed and classified to aid in solving many-body and nonlinear systems. Computer experiments are classified according to application, and superparticle models are listed. Charged electron and ion fluids are covered, and definitions and jargon are mentioned. An extensive bibliography by year of publication is presented on the motion of charged particles and fluids in self and applied electric and magnetic fields.
N.E.N.

N67-37880 Hughes Aircraft Co., Culver City, Calif. Optical Properties Technical Information Center.

BERYLLIUM MIRRORS AT CRYOGENIC TEMPERATURES

John T. Milek 3 Jan. 1967 50 p refs

(OPSR-3)

A literature survey was made on the use of beryllium as a mirror and on the factors affecting its performance in a cryogenic environment. Factors affecting dimensional stability and adhesion of reflective coatings were of particular concern. A bibliography on 58 references is included.
Author

N67-38071# Army Natick Labs., Mass. Technical Library.

MOISTURE EQUILIBRIUM IN RELATION TO THE CHEMICAL STABILITY OF DEHYDRATED FOODS: A BIBLIOGRAPHY

Eugene G. Beary, comp. Jan. 1967 146 p refs *Its Bibliographic Ser. 67-1*

(AD-656927)

A bibliography is presented with abstracts of 380 references on moisture equilibrium in relation to the chemical stability of dehydrated foods. Author and detailed subject indexes are provided.
Author (TAB)

N67-38184*# National Aeronautics and Space Administration, Washington, D. C.

AEROSPACE MEDICINE AND BIOLOGY. A CONTINUING BIBLIOGRAPHY WITH INDEXES

Sep. 1967 168 p refs

(NASA-SP-7011(41)) CFSTI: HC \$3.00/MF \$0.65 CSCL 06S

Abstracted material dealing with the biological, physiological, psychological, and environmental effects on man during simulated or actual flight is presented in a continuing bibliography with indexes. Related topics such as: sanitary problems, pharmacology, toxicology, safety and survival, life support systems, exobiology, and personnel factors are considered. Assembled are groups of

N67-38992

references formerly announced in separate journals for use by medical and biological scientists. Entries are obtained from NASA, American Institute of Aeronautics and Astronautics, and the Library of Congress. S.P.

N67-38992# Battelle-Northwest, Richland, Wash. Pacific Northwest Lab.

A BIBLIOGRAPHY OF ALUMINUM-NICKEL-URANIUM BONDING

W. E. Gurwell 21 Apr. 1967 23 p refs
(Contract AT(45-1)-1830)
(BNWL-CC-1185) CFSTI: HC\$3.00/MF\$0.65

This bibliography of 135 references resulted from a search of published literature pertinent to the atomic energy field and was based on Abstracts of Classified Reports, 1953 to April 1967 and Nuclear Science Abstracts, 1951 to April 1967. Only major contributions are included. Some entries are followed by a brief summary to indicate the type or scope of work and any significant results. The references are divided into 6 sections: bonding processes, nickel plates on uranium, bond characteristics and evaluation, Al-Ni diffusion, Ni-U diffusion, and Al-Ni-U and general diffusion. NSA

N67-39033#** George Washington Univ., Washington, D., C.
QUARTERLY REPORT, JULY 1-SEPTEMBER 30, 1967
30 Sep. 1967 325 p refs
(Contract NSR-09-010-027)
(NASA-CR-89313) CSDL 06C

This report concerns the Biological Sciences Communication Project and contains the following: (1) a section on planetary quarantine which briefly summarizes current activities and lists a reference bibliography on sterilization techniques; (2) a synopsis of activities in bioscience communications followed by contractual listings of publications supported by the Bioscience Program and covering environmental biology, exobiology, and physical biology; (3) a selected bibliography on radiobiology covering the years 1959-1967; (4) a monograph series outline and author commitments on works dealing with space biology and medicine; (5) a summary of the biosatellite program and news items on COSPAR, both as presented in No. 15 of the publication *Bioscience Capsule*; and (6) mailing lists and correspondence regarding the program. K.W.

N67-39096# National Bureau of Standards, Washington, D. C.
BIBLIOGRAPHY ON FLAME SPECTROSCOPY ANALYTICAL APPLICATIONS, 1800-1966
R. Mavrodineanu, comp.—Philips Labs. Washington, GPO, 23 Feb. 1967 163 p refs *Its Misc. Publ.*-281
GPO: \$2.00

A collection of 5,113 references to works on flame spectroscopy, selected with emphasis on analytical measurements and covering the period from 1800 to 1966, is presented. The references are classified according to three categories: emission, atomic absorption spectroscopy, and electrical discharges having the aspect of combustion flames. References are arranged in alphabetical order by author. In some cases brief introductory comments and subject indexes are provided. S.P.

N67-39147 Joint Publications Research Service, Washington, D. C.
SOVIET-BLOC RESEARCH IN GEOPHYSICS, ASTRONOMY, AND SPACE, NO. 165
4 Oct. 1967 147 p refs
(JPRS-42836; TT-61-11147-165) CFSTI: \$3.00

Abstracts, summaries, and article translations on Soviet-Bloc research in astronomy, meteorology, oceanography, terrestrial

geophysics, upper atmospheric, and space research, are presented. Areas discussed include: 1) solar activity, 2) lunar surface features, 3) light scattering, 4) lasers as meteorological tools, 5) planetary atmospheres, 6) cloud covers and rainfall, 7) snow cover, 8) determination of sea floor and organic composition of marine sediments, 9) ocean currents and velocities, 10) seismic recordings, and 11) earth and atmospheric magnetic fields. Other related topics are also discussed. Bibliographic information accompanies each article. L.S.

N67-39307# United Kingdom Atomic Energy Authority, Harwell (England). Metallurgy Div.
WETTING OF ALUMINIUM OXIDE AND OTHER OXIDES BY LIQUID METALS: BIBLIOGRAPHY
P. J. Jones, comp. May 1967 10 p refs
(AERE-BIB-155) CFSTI: HC\$3.00/MF\$0.65

A bibliography of 66 references is presented. Sources are Chemical Abstracts, Nuclear Science Abstracts, Scientific and Technical Aerospace Reports, and British Ceramics Abstracts. NSA

N67-39449 Rolls-Royce, Ltd., Derby (England). Advanced Research Dept.
UNSTEADY COMBUSTION—A SELECT BIBLIOGRAPHY
Robert C. Graham, comp. 24 Aug. 1967 23 p refs
(RR/OH/294)

A bibliography on unsteady combustion in liquid propellant rocket engines is presented. The references cover the period from 1960 to 1966. Entries are arranged alphabetically by author or title where no author could be ascertained. R.N.A.

N67-39454# Pennsylvania State Univ., University Park. Ionosphere Research Lab.
IONOSPHERIC RESEARCH Final Report, 1 Apr. 1964-31 Mar. 1967
Thomas A. Seliga 30 Jun. 1967 43 p refs
(Contract AF 19(628)-4050)
(AFCL-67-0425; AD-658040)

The Statement of Work for the research to be performed under Contract AF 19(628)-4050 called for research directed toward the investigation of the lower ionosphere. Specific emphasis was placed on the design, conduction and analysis of rocket-borne A. C. conductivity probes and radio wave propagation experiments. These objectives have formed the basis for the studies outlined in this report. As stated in Section I, the present contract has been one of related efforts underway in the Ionosphere Research Laboratory during the period of interest. It is a continuation of Part B of the original contract (AF19(604)-8012), pertaining to D and lower E-region rocket measurements. Following certain introductory material an outline of each investigation performed under the contract is given. These are related to former efforts described in the Final Report for Contract AF 19(604)-8012. The problems outlined fit under the broad categories of electromagnetic theory studies, ionospheric phenomena, ground based and rocket equipment development and the physics of ionospheric formation. A listing of the reports issued and in preparation, paper publications and presentations, and similar matters comprises Section III of the report. A listing of the personnel that were actively employed in this work is given in Section IV. The report is concluded with an Appendix containing the abstracts of Scientific Reports issued by the Laboratory under the support provided by this contract. Author (TAB)

N67-39460# Rochester Univ., N. Y. Dept. of Physics and Astronomy.
STATISTICAL PROPERTIES OF ELECTROMAGNETIC RADIATION Final Report, 1 Aug. 1964-31 Jul. 1967

Emil Wolf Aug. 1967 28 p refs
(Grant DA-ARO(D)-31-124-G-569)
(AROD-4965-28-P; AD-657586)

The research carried out was chiefly concerned with the following topics: Behavior of the electromagnetic field in the focal region of a coherent beam, coherence effects of second and higher orders, correlation techniques in classical and quantum optics, theory of photoelectric detection of light fluctuations, phase space distributions of fluctuating electromagnetic fields, fluctuations in laser beams, Thomson scattering in intense laser beams, and correlation effects in many atom radiation processes. Author (TAB)

N67-39499*# National Aeronautics and Space Administration, John F. Kennedy Space Center, Cocoa Beach, Fla.
CLEAN ROOMS—A SELECTED BIBLIOGRAPHY
Sep. 1967 39 p refs
(NASA-TM-X-60555; GP-385) CFSTI: HC \$3.00/MF \$0.65 CSCL 14B

A revised and expanded annotated bibliography is presented contamination control using clean rooms for space flight applications. N.E.N.

N67-39675 Rolls-Royce, Ltd., Derby (England). Advanced Research Dept.
SHOCK TUBES—A SELECT BIBLIOGRAPHY
Graham Crowther, comp. May 1967 149 p refs
(RR/OH/287)

A compilation of data pertaining to shock tubes is presented in the form of a bibliography. Covering the period 1958 to 1966, the bibliography contains 1178 entries arranged alphabetically by author or title. Brief subject indexes are also included. S.P.

N67-39866# TRW Systems, Redondo Beach, Calif.
MANNED EXPEDITION TO MARS: A SELECTIVE BIBLIOGRAPHY
L. R. Magnolia, comp. 18 Aug. 1967 10 p refs /ts Spec. Lit. Surv. No. 31PR
(TRW-99900-6264-T001; AD-658997)

Books, articles in periodicals, and conference papers are listed alphabetically by author. TAB

N67-39867# Federal Aviation Agency, Oklahoma City, Okla. Office of Aviation Medicine.
DIAGNOSTIC TESTS OF COLOR DEFECTIVE VISION Annotated Bibliography, 1956-1966
Mark F. Lewis and Faye K. Ashby May 1967 15 p refs
(AM-67-8) CFSTI: HC \$3.00/MF \$0.65

An annotated bibliography of 83 recent papers on diagnostic tests for color vision defects is presented. Three of the foreign-language articles have been translated. Procedures for obtaining copies of the translations are included. Author

N67-39868*# National Aeronautics and Space Administration, Marshall Space Flight Center, Huntsville, Ala.
MARS THERMOPHYSICS
W. P. McNutt, Barbara Maye, and Nancy McHugh Redstone Arsenal, Ala., Redstone Sci. Inform. Center, 28 Sep. 1967 224 p refs Prepared jointly with Army Missile Command
(NASA-TMX-60552; RSIC-657) CFSTI: HC \$3.00/MF \$0.65 CSCL 03B

This bibliography contains approximately 500 annotated citations on the planet Mars published from the latter part of the nineteenth century through early 1967. The selected references

are concerned only with the thermophysics of Mars and, specifically with the results of experiments and analyses in those regions of the electromagnetic spectrum which relate to thermophysics. References concerning the possibility of life on Mars and space vehicle design and performance have been excluded. Author

N67-39956# National Bureau of Standards, Washington, D. C.
BIBLIOGRAPHY ON FLAME SPECTROSCOPY: ANALYTICAL APPLICATIONS, 1800-1966

R. Mavrodineanu (N. Am. Philips Co., Inc.), comp. 23 Feb. 1967 162 p refs
(NBS-Misc.-Publ.-281) GPO: \$2.00

A collection of 5113 references is given of works on flame spectroscopy with emphasis on analytical measurement. The period from 1800 to 1966 is covered. The material is arranged as follows: (1) emission, which includes separate categories in early and fundamental papers, books, theses, reviews, excerpts, instrumentation, and analytical procedures; (2) atomic absorption spectroscopy, including hollow cathodes; and (3) electrical discharges having the aspect of combustion flames, which includes rf discharges, plasma arcs, and arc-and-spark-in-flame. Complete bibliographical information and, whenever possible, the corresponding Chemical Abstract number, are included. K.W.

N67-39982*# National Aeronautics and Space Administration, Washington, D. C.
HISTORY OF AERONAUTICS AND ASTRONAUTICS: A PRELIMINARY BIBLIOGRAPHY

Katherine Murphy Dickson, comp.—Library of Congr. May 1967 123 p refs
(NASA-TM-X-60561; HHR-24) CFSTI: HC \$3.00/MF \$0.65 CSCL 01B

An annotated bibliographical guide to bibliographies on the history of space exploration is presented. The annotations include the scope and purpose of the work, the author's affiliation and/or reputation, the language of the document, special features, limitations, comparisons with similar works, arrangement, content, form, and time period covered. Author, title, and subject indexes are included. M.G.J.

N67-39996 Technisch Documentatie en Informatie Centrum Voor de Krijgsmacht, the Hague (Netherlands).
BIBLIOGRAPHY ON AIRCRAFT NOISE, SUPPLEMENT II, SEPTEMBER 1958-SEPTEMBER 1966
C. J. de Ruig May 1967 62 p refs
(TDCK-5350-SII)

Abstracts on the following subjects: Noise from Aircraft; Helicopters and Hovercrafts; Airport Noise; Acoustical Fatigue; Theoretical and Design Aspects; Measurement of Noise; Reduction of Aircraft Noise; and Protection of People. Author

N67-40086*# David Sarnoff Research Center, Princeton, N. J. Astro-Electronics Applied Research Lab.
REVIEW AND EVALUATION OF PAST SOLAR CELL DEVELOPMENT EFFORTS

P. A. Crossley, G. T. Noel, and M. Wolf Jun. 1967 87 p refs
(Contract NASw-1427)
(NASA-CR-89662) CFSTI: HC \$3.00/MF \$0.65 CSCL 10A

A bibliography is presented for scientific papers related to the photovoltaic effect, and a historical review of scientific investigations of this effect during the years 1839-1940 is given. Topics covered include the Becquerel effect, the barrier photovoltaic effect, and the Demmer effect. Because of its historical importance, major emphasis has been placed on the barrier photovoltaic

N67-40166

effect as seen in copper-cuprous oxide photocells. All experimental investigations as reported in the literature have been covered, and the development of the modern theory of the photovoltaic effect is described. Author

N67-40166 Library of Congress, Washington, D. C. Aerospace Technology Div.
PROPELLANTS AND COMBUSTION Surveys of Foreign Scientific and Technical Literature
Serge Markov 22 Nov. 1967 46 p refs
(ATD-67-32; Rept.-3)

A 34-title bibliography is presented with analytical reviews of the selected items. Of the items, 9 pertain to fuels, 14 to oxidizers, 1 to monopropellants, 5 to high-energy propellant ingredients, 1 to metachemical propellants, 9 to additives, 12 to combustion mechanism and techniques, 1 to additive effects on combustion, and 1 to flame studies. The material is discussed in terms of subject, author and author association, and the rationale for selection of the individual items. Author and association indexes and a subject-personality-facility table are included. K.W.

N67-40189*# National Aeronautics and Space Administration. Goddard Space Flight Center, Greenbelt, Md.
STRUCTURE AND KINETICS OF DEFECTS IN SILICON
Martin M. Sokoloski Washington, NASA, Nov. 1967 21 p refs
(NASA-TN-D-4154) CFSTI: HC \$3.00/MF \$0.65 CSCL 20K

This paper reviews defects in the diamond-type lattice with special emphasis on silicon, which is used as the basic material in the fabrication of solar cells in space programs. The defects are classified as first, second, and higher generation defects, according to their complexity. Some of these defects include vacancies and interstitials (as in lithium, for example) which are first generation defects capable of migrating above certain temperatures and trapping charge carriers. These first generation defects, because of their mobility, can form more complicated defects, such as the Si-A and Si-E centers. The properties of such defects have been systematically tabulated. A short discussion is given on some simple models of the kinetics of such defects. A comprehensive bibliography is given at the end of the review which should help the uninitiated commencing research in this field. Author

N67-40236* Allied Research Associates, Inc., Concord, Mass.
BIBLIOGRAPHY ON BIOSENSORS. A SAMPLING OF THE WORLD LITERATURE 1960-1966, VOLUME V
J. Healer Aug. 1967 321 p
(Contract NASw-15115)
(NASA-CR-89616; ARPA-346-F-2, Vol. V, Pt. 2) CFSTI: \$3.00 CSCL 06B

Biosensor phenomenology is stressed in a bibliography based on a sampling of the world literature between 1960 and 1966 that is referenced according to the categories of (1) mechanoreceptors, (2) photoreceptors, (3) chemoreceptors, (4) thermoreceptors, (5) electric and magnetic field sensors, (6) general sensor information, (7) neural aspects of sensor function, and (8) miscellaneous. Journal code translations and a user's guide are included in this bibliography which lists authors, titles, and sources of document. M.W.R.

N67-40249# General Dynamics Corp., San Diego, Calif. John Jay Hopkins Lab. for Pure and Applied Science.
STATUS OF THERMAL NEUTRON SPECTRA
J. R. Beyster and J. M. Neill 9 Jun. 1967 44 p refs Presented at the Symp. on Neutron Thermalization and Reactor Spectra, Ann Arbor, Mich., 17-21 Jul. 1967
(Contract AT(04-3)-167)
(GA-7092; CONF-670707-7) CFSTI: HC \$3.00/MF \$0.65

Some improvements in methods of calculating and measuring thermal neutron spectra are reviewed together with the status of spectral measurements. NSA

N67-40357# Tufts Univ., Boston, Mass. Inst. for Psychological Research.
HUMAN FACTORS ENGINEERING BIBLIOGRAPHIC SERIES. VOLUME 3: 1965 LITERATURE
Paul G. Ronco Aberdeen Proving Ground, Md., Human Eng. Labs., May 1967 543 p refs
(Contracts Nonr-494(13); DA-18-001-AMC-1004(X))
(AD-657590)

This bibliography is the third in a planned series of bibliographies of literature pertinent to the field of human factors engineering. It covers literature of 1965. This bibliography consists primarily of: (1) an index to the human factors literature, and (2) the annotated bibliography. TAB

N67-40408# Atomic Weapons Research Establishment. Aldermaston (England).
A SURVEY OF REPORTS ON EXPERIMENTAL STUDIES OF THE FORCES EXERTED ON MODEL STRUCTURES BY THE WIND AND BY BLAST WAVES
J. E. Uppard May 1967 156 p refs
(AWRE-E-6/67) HMSO: 20s

An extensive bibliography is presented of the work which has been performed in many countries and over a long period of time on the forces exerted by a flow of air or by blast waves, on model scale structures. Abstracts are given of some of the more important experiments performed under steady flow conditions in wind tunnels and of blast-wave studies performed in shock tubes. Author

N67-40542*# National Aeronautics and Space Administration. John F. Kennedy Space Center, Cocoa Beach, Fla.
JOHN F. KENNEDY SPACE CENTER: A SELECTIVE BIBLIOGRAPHY, 1949-JULY, 1967
Jul. 1967 30 p refs
(NASA-TM-X-60557; GP-394) CFSTI: HC \$3.00/MF \$0.65 CSCL 22A

Compiled in this brief organizational bibliography on the John F. Kennedy Space Center are selected reports from newspapers, periodicals, and House or Congressional hearings that deal primarily with the expansion and development of the Air Force missile test center and later on the NASA space center range. Because of the close working relationship between the Kennedy Space Center and the Air Force Eastern Test Range, articles showing evolution of the range are included. G.G.

1966

IAA ABSTRACTS

A66-22876

BIBLIOGRAPHY OF THE OPEN LITERATURE ON LASERS. V.
Edward V. Ashburn (Lockheed Aircraft Corp., Lockheed-California
Co., Burbank, Calif.).

Optical Society of America, Journal, vol. 56, Feb. 1966, p. 263-267.

Addition of 186 entries to the listing (Parts I-IV) of the bibliographies of the open literature on lasers published in the May 1963, Jan. 1964, June 1965, and Aug. 1965, issues of the Journal of the Optical Society of America. M. M.

A66-26402 #

CONCENTRATION OF STRESSES NEAR CURVILINEAR HOLES IN PLATES AND SHELLS [KONTSENTRATSIIA NAPRIAZHENII OKOLC KRIVOLINEINYKH OTVERSTII V PLASTINAKH I OBOLOCHKAKH]. G. N. Savin.

IN: STRESS CONCENTRATION; SYMPOSIUM, 1ST, KIEV, UKRAINIAN SSR, MAY 26-29, 1964 [KONTSENTRATSIIA NAPRIAZHENII; SIMPOZIUM, 1ST, KIEV, UKRAINIAN SSR, MAY 26-29, 1964]. [A66-26401 13-32]

Edited by G. N. Savin.

Kiev, Izdatel'stvo Naukova Dumka, 1965, p. 5-38. In Russian.

Review of published papers on the stress-strain problem of shells with holes of various configurations. The bibliography has 178 entries. V. Z.

A66-26937

HEAT TRANSFER BIBLIOGRAPHY - JAPANESE WORKS.

Takashi Satō (Kyoto University, Dept. of Mechanical Engineering, Kyoto, Japan).

International Journal of Heat and Mass Transfer, vol. 9, Mar. 1966, p. 239, 240.

Heat transfer bibliography of 32 Japanese works. The topics include applications of heat transfer, channel flow, change of phase, flow with separated regions, radiation, and transpiration and mass transfer. M. F.

A66-26938

HEAT TRANSFER BIBLIOGRAPHY - RUSSIAN WORKS.

A. V. Luikov (Belorussian Academy of Sciences, Heat and Mass Transfer Institute, Minsk, Belorussian SSR).

International Journal of Heat and Mass Transfer, vol. 9, Mar. 1966, p. 241-259.

Heat transfer bibliography of Russian works. Russian books and articles on thermodynamics, heat conduction, convective heat transfer, radiant heat transfer, transfer processes involving phase conversions and chemical conversions, and mass transfer are listed. Titles of works on simultaneous heat and mass transfer, aerohydrodynamics, drying processes, thermal measuring devices, heat and mass transfer involving high temperatures and in plasma, and transfer processes in technological installations are also compiled. M. F.

A66-29363

AERODYNAMICS [AERODYNAMIK].

Friedrich W. Riegels (Max-Planck-Gesellschaft zur Förderung der Wissenschaften, Aerodynamische Versuchsanstalt Göttingen, West Germany).

VDI Zeitschrift, vol. 108, no. 12, 1966, p. 529-531. 72 refs. In German.

Bibliographical review of texts in German, French, and English relative to the general field of aeronautical engineering, airfoils, boundary-layer problems and their solution, and wind tunnels.

There are 27 references to general aerodynamics, Prandtl numbers, turbulence, applied mechanics, and heat transfer. Problems relating to pressure distribution and stresses, wing profiles, and the development of VTOL and STOL aircraft are dealt with in 19 technical references. There are 19 reference texts in the bibliography for subjects related to turbulence, boundary-layer problems, and various types of flow around bodies at sonic and supersonic velocities. That part of the bibliography concerned with wind tunnel technology includes seven titles. D. P. F.

A66-29364

PISTON AND JET ENGINE DRIVES [KOLBEN- UND STRAHLTRIEBWERKE].

Otto Lutz (Deutsche Forschungsanstalt für Luft- und Raumfahrt, Institut für Strahltriebwerke, Braunschweig, West Germany).

VDI Zeitschrift, vol. 108, no. 12, 1966, p. 539-544. 66 refs. In German.

Review of the development and present status of dual-flow and single-flow jet engines with a bibliographical list of reference books containing 60 entries. The problems connected with the design of a satisfactory dual-flow jet engine are considered. Various types of turbojet engines are described including the RB 172/T, jointly developed by English and French aircraft companies, the American GE 1, and the STF-200. Jet engines for VTOL aircraft are discussed in terms of their special requirements. Turboprop engines are found generally more economical than straight jet engines; the contribution of each manufacturing country to the development of various types of turboprops is considered. A diffusion-type engine for hypersonic speeds is described with preheated fuel injection at 815°C. D. P. F.

A66-29365

FLIGHT CONTROLS [FLUGREGELUNGEN].

Gerhard Schweizer and Hans Seelmann.

VDI Zeitschrift, vol. 108, no. 12, 1966, p. 547-549. 65 refs. In German.

Review and bibliography of the past developments and present status of flight control systems, automatic landing devices, and inertial navigation with gyros. In order for SST's to become operational on commercial flights, improved flight controls will be required. Adaptive controls of the type installed on the U. S. X-15 experimental aircraft will find increasing application. The mass-produced F-111 fighter craft is equipped with such automated controls. The introduction of VTOL aircraft will require a new type of landing system; the future lies in the development of predictive controls and self-learning systems. The role of man as part of a closed-loop control circuit is considered. The very great increase in the reliability factor of electronic computing devices brought about by module and integrated circuit techniques more than offsets the increase in complexity of such equipment. D. P. F.

A66-30433

BIBLIOGRAPHY ON HOLOGRAMS.

R. P. Chambers and J. S. Courtney-Pratt (Bell Telephone Laboratories, Inc., Murray Hill, N. J.).

SMPTE, Journal, vol. 75, Apr. 1966, p. 373-378, 380, 382, 386,

388, 390, 392, 394, 396, 398, 400, 402, 404, 406, 408-410, 412-414, 416-418, 420-430, 432, 434, 435.

Bibliography of more than 180 papers on holograms or records of the intensity distribution and also of the relative phase of the light from an object. Papers on spatial filtering or other optical signal-processing are not included unless they make specific use or mention of holograms. M. F.

A66-32022

COMMISSION ON THE RADIATION AND THE STRUCTURE OF THE SOLAR ATMOSPHERE [COMMISSION DE LA RADIATION ET DE LA STRUCTURE DE L'ATMOSPHERE SOLAIRE].

IN: TRANSACTIONS OF THE INTERNATIONAL ASTRONOMICAL UNION. VOLUME 12A - REPORTS ON ASTRONOMY.

A66-32024

Edited by J. C. Pecker.

London, Academic Press, Ltd., 1965, p. 103-135. 304 refs. In French and English.

Bibliographic review on the subject of the radiation and the structure of the solar atmosphere. Topics treated include the solar constant, photometry of the continuous solar spectrum, and polarization; atlas and tables of the Fraunhofer spectrum; wavelengths, rotation, and circulation; and the solar spectrum in the EUV. Regions of the solar atmosphere reviewed include the photosphere, the chromosphere, and the corona. The instruments used to observe the solar atmosphere are briefly described. Also treated briefly are eclipse ephemerides and the total solar eclipses in 1962 and 1963. M. F.

A66-32024

COMMISSION ON THE MOTION AND SHAPE OF THE MOON [COMMISSION DU MOUVEMENT ET DE LA FIGURE DE LA LUNE]. IN: TRANSACTIONS OF THE INTERNATIONAL ASTRONOMICAL UNION. VOLUME 12A - REPORTS ON ASTRONOMY.

Edited by J. C. Pecker.

London, Academic Press, Ltd., 1965, p. 219-225. 29 refs. In English and French.

Review of published work on the motion and shape of the moon. Investigations of the rotational elements and shape of the moon are described, as well as work on right ascensions and declinations, predictions of lunar occultations, theoretical work on the internal structure of the moon and its gravitational field, and a new method for the adjustment of heliometric libration observations. A. B. K.

A66-32326

ANNUAL ASTRONOMICAL REPORT. VOLUME 64 - LITERATURE FOR 1964 [ASTRONOMISCHER JAHRESBERICHT. VOLUME 64 - DIE LITERATUR DES JAHRES 1964].

Edited by W. Lohmann, F. Henn, and U. Güntzel-Lingner (Astronomisches Rechen-Institut, Heidelberg, West Germany). Berlin, West Germany, Walter de Gruyter and Co., 1966, 735 p. In German.

\$20.

In this book listings of astronomical literature published in 1964 are compiled under various categories. Reports on literature dealing with astronomy in general, instrumentation, positional and theoretical astronomy, theoretical astrophysics, planets and satellites, interplanetary objects, stars (including double, multiple, and variable stars), diffuse objects and radio sources, cosmic radiation, and stellar systems are cited. A. B. K.

A66-32350

LOW-THRUST TRAJECTORIES - A BIBLIOGRAPHY.

Edward T. Pitkin (Connecticut, University, Storrs, Conn.). *Journal of the Astronautical Sciences*, vol. 13, Jan.-Feb. 1966, p. 21-28.

Research supported by the University of Connecticut Research Foundation.

Bibliography of programmed low-thrust trajectories and optimal low-thrust trajectories. The first category includes a few exact and many approximate solutions of the nonlinear equations of motion when a predetermined schedule of thrust acceleration of small magnitude is added to the gravitational acceleration. The theory of optimal trajectories essentially consists in the determination of the best schedule for the thrust vector to accomplish an orbit transfer and simultaneously to minimize some performance index. D. P. F.

A66-33040

ACOUSTICS, SHOCK AND VIBRATION BIBLIOGRAPHY.

Edward J. Lunney (Avco Corp., Wilmington, Mass.). *Journal of Environmental Sciences*, vol. 9, June 1966, p. 32, 33. 8 refs.

Bibliographic listing of all the vibration, shock, and acoustic papers contained in the 1959-1965 annual meeting proceedings of

the Institute of Environmental Sciences. The 1957 meeting proceedings of the Institute of Environmental Engineers are also included. The papers are listed for each of the three environmental factors and are further organized under appropriate subdivisions. M. M.

A66-33043

HEAT TRANSFER BIBLIOGRAPHY.

E. R. G. Eckert, E. M. Sparrow, W. E. Ibele, and R. J. Goldstein (Minnesota, University, Dept. of Mechanical Engineering, Heat Transfer Laboratory, Minneapolis, Minn.). *International Journal of Heat and Mass Transfer*, vol. 9, May 1966, p. 481-490.

Heat-transfer bibliography in English and certain foreign languages. Articles dealing with boundary-layer flow, change of phase, channel flow, conduction, flow with separated regions, heat and mass transfer, liquid metals, low density, magnetohydrodynamics, measurement techniques, natural convection, packed and fluidized beds, radiation, rotating surfaces, thermodynamic and transport properties, and transfer mechanisms are cited. A. B. K.

A66-33044

HEAT TRANSFER BIBLIOGRAPHY - RUSSIAN WORKS.

A. V. Luikov (Belorussian Academy of Sciences, Heat and Mass Transfer Institute, Minsk, Belorussian SSR).

International Journal of Heat and Mass Transfer, vol. 9, May 1966, p. 491-505.

Bibliography of Russian works on heat-transfer. Articles dealing with thermodynamics, heat conduction, convective and radiant heat transfer, transfer processes involving phase conversions and chemical conversions, mass transfer, simultaneous heat and mass transfer, aerohydrodynamics, drying processes, thermal properties and methods of determining them, heat and mass transfer in plasmas at high temperatures, transfer processes in technological apparatuses, and rheology are cited. A. B. K.

A66-35062

BIBLIOGRAPHY ON HEAT AND MASS TRANSFER [BIBLIOGRAFIJA PO TEPLO- I MASSOOBMENU].

R. A. Dolinskaia.

Inzhenerno-Fizicheski Zhurnal, vol. 10, June 1966, p. 823-838. In Russian.

Compilation of references to books and articles dealing with heat and mass transfer. The bibliography includes: 3 articles of a general nature, 8 articles on thermodynamics, 11 articles on heat transfer, 16 articles on convective heat transfer, 11 articles on radiant heat transfer, 76 articles dealing with transport processes during phase transformations, 17 articles dealing with transport processes during chemical reactions and combustion, 3 articles on mass transfer, 6 articles on combined heat and mass transfer, 65 articles on aerohydrodynamics, 27 articles on drying processes, 28 articles on the thermophysical characteristics of various substances and methods used in their determination, 11 articles on heat and mass transfer in high-temperature plasmas, 51 articles on transport processes in technological apparatuses, and 5 articles on rheology. V. P.

A66-35800

FIVE-YEAR BIBLIOGRAPHY ON FATIGUE, 1955-1959.

Philadelphia, American Society for Testing and Materials (ASTM Special Technical Publication No. 9-BB), 1966. 102 p. Members, \$11.90; nonmembers, \$17.

This bibliography lists references on fatigue of metals and metal aircraft structures for the period from 1955 to 1959. About 1500 references published in the U. S., England, Western and Eastern European countries, and in Asia and Far Eastern countries are included. M. F.

A66-35886**A CLASSIFIED BIBLIOGRAPHY ON OPTIMIZATION.**

A. Leon (Michigan, University, Dept. of Psychiatry, Mental Health Research Institute, Ann Arbor, Mich.).

IN: RECENT ADVANCES IN OPTIMIZATION TECHNIQUES; PROCEEDINGS OF A SYMPOSIUM, CARNEGIE INSTITUTE OF TECHNOLOGY, PITTSBURGH, PA., APRIL 21-23, 1965. [A66-35867 19-08]

Symposium sponsored by the Systems Science and Cybernetics Group of the Institute of Electrical and Electronics Engineers, and the Optical Society of America.

Edited by Abraham Lavi and T. P. Vogl.

New York, John Wiley and Sons, Inc., 1966, p. 599-649.

Classified bibliography on optimization, considered to be an extensive sampling of the field. Attention is focused on techniques, the type of optimization of interest being that of finding the values of a set of variables that yield either a maximum or minimum value for an objective, merit, or utility function. This function is sometimes given in algebraic form, or might be a simulation of some process that yields functional values directly. The classification consists of (1) general comments on optimization, (2) optimization techniques, (3) stochastic optimization, and (4) problem formulation. Altogether, 377 titles are listed.

F. R. L.

A66-37117**HEAT TRANSFER - A REVIEW OF CURRENT LITERATURE.**

E. R. G. Eckert, E. M. Sparrow, W. E. Ibele, and R. J. Goldstein (Minnesota, University, Dept. of Mechanical Engineering, Heat Transfer Laboratory, Minneapolis, Minn.).

International Journal of Heat and Mass Transfer, vol. 9, July 1966, p. 599-636. 715 refs.

Review of current literature on heat transfer and properties with special relevance to heat transfer. The subjects of the books and periodicals listed and discussed include conduction, channel flow, boundary-layer flow, flow with separated regions, transfer mechanism, natural convection, convection with rotating surfaces, and combined heat and mass transfer. Also discussed are books and periodicals concerning change of phase, radiation, liquid metals, low-density heat transfer, measurement techniques, heat exchangers, aircraft and space vehicles, and thermodynamic and transport properties.

M. F.

A66-37732**A SELECTED ANNOTATED BIBLIOGRAPHY ON R & D MANAGEMENT.**

L. N. Goslin (Indiana University, Graduate School of Business, Bloomington, Ind.).

Bloomington, Ind., Indiana University, Graduate School of Business, Bureau of Business Research (Indiana Business Information Bulletin no. 56), 1966. 204 p. \$3.25.

A book containing a bibliography on various aspects of R & D management with book abstracts. Among the subjects covered are allocation of resources, budgeting, communication, control, creativity, decision making, economics, evaluation of results, expenditures, motivation, objective, organization, patents, philosophy, planning, project selection, responsibility, strategy and tactics, system, and theory.

V. Z.

A66-38509**BOILING OF LIQUIDS.**

E. I. Nesis.

(Uspekhi Fizicheskikh Nauk, vol. 87, Dec. 1965, p. 615-653.)
Soviet Physics - Uspekhi, vol. 8, May-June 1966, p. 883-907.
249 refs. Translation.

[For abstract see issue 09, page 1469, Accession no. A66-20100]

A66-39541**LASER BIBLIOGRAPHY. III.**

K. Tomiyasu (General Electric Co., Schenectady, N. Y.).

IEEE Journal of Quantum Electronics, vol. QE-2, June 1966, p. 124-151.

This laser bibliography, compiled during the period from July through December, 1965, contains 644 references which are divided into 25 subject categories and listed chronologically. Brief annotations are added to many references. Twenty-seven references dealing with holograms are listed.

(Author)

1967

IAA ABSTRACTS

A67-10978**HEAT TRANSFER BIBLIOGRAPHY.**

E. R. G. Eckert, W. E. Ibele, and R. J. Goldstein (Minnesota, University, Dept. of Mechanical Engineering, Heat Transfer Laboratory, Minneapolis, Minn.).

International Journal of Heat and Mass Transfer, vol. 9, Sept. 1966, p. 959-973.

Bibliography of books and periodicals concerning heat transfer and related topics. Topics treated include applications, boundary layer, change of phase, channel flow, conduction, flow with separated regions, heat and mass transfer, liquid metals, low density, magnetohydrodynamics, measurement techniques, natural convection, packed and fluidized beds, radiation, rotating surfaces, thermodynamic and transport properties, and transfer mechanisms.

M. F.

A67-10979**HEAT TRANSFER BIBLIOGRAPHY - RUSSIAN WORKS.**

A. V. Luikov (Akademiia Nauk Belorusskoi SSR, Institut Teplo- i Massoobmena, Minsk, Belorussian SSR).

International Journal of Heat and Mass Transfer, vol. 9, Sept. 1966, p. 975-985.

Bibliography of Russian works on heat transfer and related topics. Subjects discussed include heat conduction, thermodynamics, convective and radiant heat transfer, transfer processes involving phase and chemical conversions, mass transfer, simultaneous heat and mass transfer, aerohydrodynamics, drying processes, thermal properties and their determination methods, thermal measuring devices, heat and mass transfer involving high temperatures and in plasma, transfer processes in technological installations, and rheology.

M. F.

A67-17890**LASER BIBLIOGRAPHY. IV.**

K. Tomiyasu (General Electric Co., Schenectady, N. Y.).

IEEE Journal of Quantum Electronics, vol. QE-2, Nov. 1966, p. 726-755.

Laser bibliography covering the period from January through June 1966. Subjects discussed include ruby laser, neodymium laser, He-Ne gas laser, other gas lasers, laser resonators and mode considerations, Raman and Brillouin scattering, transmission, propagation, scattering, reflection, and filtering, and holography and wavefront reconstruction.

M. F.

A67-19622**RESOURCE LETTER CR-1 ON COSMIC RAYS.**

J. R. Winckler and D. J. Hofmann (Minnesota, University, School of Physics and Astronomy, Minneapolis, Minn.).

American Journal of Physics, vol. 35, Jan. 1967, p. 2-12.
NSF-supported research.

Discussion of different topics on cosmic rays for guiding college physicists to some of the literature and other teaching aids that may help them improve course contents in specified field of physics. The topics treated include (1) a selected list of original papers which represent milestones in the field of cosmic rays during the first 50 years of its history, (2) a list of recent review articles covering

A67-20173

various areas of interest, (3) a brief list of recent published cosmic-ray symposia, (4) books on cosmic rays or related subjects normally used by workers in the field, and (5) popular books and articles, together with citations of chapters in physics textbooks and a list of films on cosmic rays and related subjects. M. M.

A67-20173

AN INCLUSIVE CLASSIFIED BIBLIOGRAPHY PERTAINING TO MODELING THE HUMAN OPERATOR AS AN ELEMENT IN AN AUTOMATIC CONTROL SYSTEM.

R. G. Costello (Cornell Aeronautical Laboratory, Inc., Buffalo, N. Y.) and T. J. Higgins (Wisconsin, University, Dept. of Electrical Engineering, Madison, Wis.).

(Institute of Electrical and Electronics Engineers, Symposium on Human Factors in Electronics, 7th, Minneapolis, Minn., May 5, 6, 1966, Paper.)

IEEE Transactions on Human Factors in Electronics, vol. HFE-7, Dec. 1966, p. 174-181.

Bibliography of some 200 entries, selected from a total collection of almost 500 references pertaining to the human operator. These references are concerned specifically with modeling the human operator as an element in an automatic control system. M. F.

A67-20300

AN INDEX TO THE TWO-PHASE GAS-LIQUID FLOW LITERATURE. S. W. Gouse, Jr. (Massachusetts Institute of Technology, Cambridge, Mass.).

Research supported by the Office of Naval Research of the U.S. Navy, Contract No. Nonr-1841(73).

Cambridge, Mass., M.I.T. Press, 1966. 867 p. \$15.

This text is a three-part bibliography and subject index of two-phase gas-liquid flow literature in report form. This bibliography lists and indexes by subject 5253 references. Part I was issued in May 1963; Part II in September 1964; and Part III in January 1966. Nearly all of the listings have been verified - i.e., either the actual reference, microcard, microfiche, microfilm, or an abstract has been inspected, or correspondence with the author or institution involved has verified the reference. B. B.

A67-21713

BIBLIOGRAPHY OF THE OPEN LITERATURE OF LASERS. VI. Edward V. Ashburn (Lockheed Aircraft Corp., Lockheed-California Co., Burbank, Calif.) and Bela A. Lengyel (San Fernando Valley State College, Northridge, Calif.).

Optical Society of America, Journal, vol. 57, Jan. 1967, p. 119-148.

Bibliography of books and articles on lasers and laser applications published in 1966. The bibliography contains 984 references from 111 journals in the American and foreign open literature. The revised classification scheme that was used includes both laser applications and basic laser physics. The bulk of the material was compiled by conducting a machine search for key words in the title of articles in 25 selected journals. M.

A67-22386

A SURVEY OF OPTIMUM CONTROL SYSTEM THEORY.

M. J. Duckenfield (Brunel University, Electrical Engineering and Electronics Dept., London, England).

Control, vol. 11, Mar. 1967, p. 118-121. 27 refs.

Examination of some of the developments in which writers have interpreted, extended, simplified and specialized basic books concerning the formulation of optimum control system design and statistical signal descriptions. Works on adaptive and optimal systems specifically referred to include those of La Salle, Westcott, Bellman, Tou, and Noton. Mathematical phases are outlined in two appendices, and a brief descriptive bibliography is included. M. F.

A67-26093

1964 REFERENCES ON FATIGUE.

Philadelphia, American Society for Testing and Materials (ASTM Special Technical Publication No. 9-O), 1967. 101 p. Members, \$5.25; nonmembers, \$7.50.

This 1964 format of the Annual References on Fatigue contains a list of references, a subject index, an author index, and a list of reference sources. References are arranged by year and alphabetically by principal author. Each entry gives the authors, the title of the paper, complete information on the reference source (when available), a brief abstract of the paper, and a detailed subject index. V. P.

A67-27225

ASTRONOMICAL YEAR-REPORT. VOLUME 65 - THE LITERATURE OF THE YEAR 1965 [ASTRONOMISCHER JAHRESBERICHT. VOLUME 65 - DIE LITERATUR DES JAHRES 1965].

Edited by W. Lohmann, F. Henn, and U. Güntzel-Lingner.

Berlin, Walter de Gruyter and Co., 1967. 760 p. In German. \$20.

The work represents a collection of literature appearing in 1965, and also literature from previous years which has been belatedly received. Biographies and works on instruments, position astronomy, theoretical astronomy, bodies of the solar system, interplanetary objects, and double star systems are included. Works on quasars and cosmic rays are also noted. R. B. S.

A67-29200

VACUUM AS AN INSULATOR.

R. Hawley (C. A. Parsons and Co., Ltd., Newcastle-upon-Tyne,

England) and A. Maitland (St. Andrews University, St. Salvator's College, Dept. of Natural Philosophy, St. Andrews, Scotland).

London, Chapman and Hall, Ltd.; New York, Barnes and Noble, Inc., 1967. 123 p. \$5.50.

Indexed bibliography of all the papers and reports published on electrical discharges in vacuum and on the properties of vacuum as an electrical insulator. The papers which are concerned with the initiation, development, and decay of electrical conduction processes in vacuum are included, together with those that may have a direct bearing on the problem of understanding vacuum insulation. The bibliography indicates by a numbering system the subjects dealt with in each publication and which publications to consult on each of 48 subjects. The indexing of the bibliography is an essential step toward computer storage and retrieval of information. M. M.

A67-32450

HEAT TRANSFER BIBLIOGRAPHY.

E. R. G. Eckert, E. M. Sparrow, W. E. Ibele, and R. J. Goldstein (Minnesota, University, Dept. of Mechanical Engineering, Heat Transfer Laboratory, Minneapolis, Minn.).

International Journal of Heat and Mass Transfer, vol. 10, June 1967, p. 823-839.

Listing of bibliographic reference works in the various fields of heat transfer published mostly in 1965 and 1966, with a few published in 1963 and 1964 and some yet to be published. The listing includes books, articles, and technical reports in English and in

A67-34166

HEAT TRANSFER BIBLIOGRAPHY - RUSSIAN WORKS.

A. V. Luikov (Akademiia Nauk Belorusskoi SSR, Institut Teplo-Massoobmena, Minsk, Belorussian SSR).

International Journal of Heat and Mass Transfer, vol. 10, July 1967, p. 999-1014.

Bibliography of recent work published in the USSR on heat transfer. The papers are classified under the following headings: heat conduction; convective heat transfer; radiative heat transfer; transfer processes involving phase conversions; transfer processes

involving chemical conversions and combustion; mass transfer; simultaneous heat and mass transfer; aerohydrodynamics; drying processes; thermal properties, methods of determining them, and thermal measuring devices; heat and mass transfer involving high temperatures and in plasma; transfer processes in industrial installations; rheology; and structural thermal engineering.

F. R. L.

A67-36899**ATMOSPHERIC OPTICS AND RADIATION TRANSFER.**

John N. Howard and John S. Garing (USAF, Office of Aerospace Research, Cambridge Research Laboratories, Bedford, Mass.). American Geophysical Union, Transactions, vol. 48, June 1967, p. 471-486. 429 refs.

Discussion of the literature on atmospheric optics and radiation transfer published since the previous report on this topic by Kaplan and Sekera (1963). The accumulation of data and publishing of review papers on such topics as pyrheliometry, solar insolation, daylight distribution, earth radiance and albedo, sky brightness, atmospheric refraction, seeing, and scintillation are considered. Studies of cloud and terrain reflectance, transmission and absorption, scattering, and radiative transfer are discussed.

B. B.

A67-36905**AIRGLOW RESEARCH.**

F. E. Roach (Hawaii, University, Honolulu, Hawaii). American Geophysical Union, Transactions, vol. 48, June 1967, p. 536-540. 114 refs.

Review of night airglow research performed during the IQSY (1964-1965). It is said that one characteristic of the period has been that, during the sunspot minimum, the activity of the airglow 6300 Å has been low, both for the midlatitude M arc and for the tropical emissions associated with the ionospheric equatorial anomaly. In addition to these two 6300-Å phenomena, an enhancement of the 6300-Å emission has been observed, which coincides with ionospheric sunrise at a magnetically conjugate point in the opposite hemisphere.

V. P.

A67-38455**LASER BIBLIOGRAPHY V.**

Kiyo Tomiyasu (General Electric Co., Research and Development Center, Schenectady, N. Y.). IEEE Journal of Quantum Electronics, vol. QE-3, July 1967, p. 296-329.

Laser bibliography compiled during the period from July through December 1966 and containing 809 references which are divided into 27 categories and listed chronologically. The main subject categories include: different types of lasers; giant-pulse techniques; coherence, interference, quantum noise, narrow-line-width lasers, and frequency control; Raman and Brillouin scattering; harmonic generation; non-linear, thermal, and interaction effects with matter; transmission, propagation, scattering, reflection, and filtering; and holography and wavefront reconstruction.

M. F.

A67-39445**LASER SYSTEMS AND APPLICATIONS.**

H. A. Eliot (Geophysics Corporation of America, GCA Technology Div., Modern Optics Laboratory, Bedford, Mass.). Oxford and New York, Pergamon Press, 1967. 642 p. \$22.50.

This book is devoted to the fundamental principles of laser operation and describes various types of lasers currently in use, their operating characteristics, and applications. Light amplification by stimulated emission of radiation is examined with a brief review of quantum electronics and the characteristics of coherent radiator

Types of lasers studied include solid-state lasers, semiconductor lasers, gas lasers, liquid lasers, and chemical lasers. Laser modulation, demodulation, and detection are investigated in relation to steady-state and transient behavior, waveguides, Q-switching, amplitude, and frequency. Energy-intensity and measurement applications are considered, including uses in metallurgy, weapons, biology, chemistry, and photochemistry. Spectral applications are discussed in photography, micrography, spectrography, and plasma research. Ranging, surveying, metrology, and navigation provide further laser applications. Also considered are laser techniques in communications, optical data processing and display, and certain future prospects. A subject and author index from the NASA SP-7009 document (a continuing bibliography) is given in the appendix for the period from January 1962 to July 1966. This continuing bibliography contains material compiled from documents announced in Scientific and Technical Aerospace Reports (STAR) and International Aerospace Abstracts (IAA). Complete bibliographic information is not included, and reference must be made to the NASA SP or the individual announcements in STAR or IAA.

T.M.

A67-42294

COLLECTED PAPERS OF P. L. KAPITZA. VOLUME 3. Edited by D. ter Haar (Oxford University, Magdalen College, Oxford, England). Oxford, Pergamon Press, Ltd., 1967. 253 p. \$13.50.

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- PREFACE. D. ter Haar (Oxford University, Oxford, England), p. vii.
- INTRODUCTION, p. ix, x.
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A66-82304

1966

AEROSPACE MEDICINE AND BIOLOGY ABSTRACTS

A66-80842
PERCEPTION BIBLIOGRAPHY: XXIII. PSYCHOLOGICAL INDEX NO. 19, 1912.
C. H. Ammons and R. B. Ammons (Mont. U., Missoula).
Perceptual and Motor Skills, vol. 21, Dec. 1965, p. 787-790. 92 refs.
This is an alphabetical listing of 92 references to work in perception and related areas, selected from *Psychological Index*, No. 19, 1912.

A66-80844
PERCEPTION BIBLIOGRAPHY: XXIV. PSYCHOLOGICAL INDEX NO. 20, 1913.
R. B. Ammons and C. H. Ammons (Mont. U., Missoula).
Perceptual and Motor Skills, vol. 21, Dec. 1965, p. 823-826. 96 refs.
This is a selection of 96 articles and monographs dealing with perception from the *Psychological Index*, No. 20, 1913.

A66-81001
PERCEPTION BIBLIOGRAPHY: XXV. PSYCHOLOGICAL INDEX NO. 21, 1914.
C. H. Ammons and R. B. Ammons (Mont. U., Missoula).
Perceptual and Motor Skills, vol. 22, Feb. 1966, p. 79-82. 114 refs.
This is a list of 114 items dealing with perception selected from the *Psychological Index*, no. 21, 1914.

A66-81002
PERCEPTION BIBLIOGRAPHY: XXVI. PSYCHOLOGICAL INDEX NO. 22, 1915.
R. B. Ammons and C. H. Ammons (Mont. U., Missoula).
Perceptual and Motor Skills, vol. 22, Feb. 1966, p. 107-110. 111 refs.
In this listing are 111 items dealing with perceptual processes and selected from *Psychological Index*, no. 22, 1915.

A66-81637
MOTOR SKILLS BIBLIOGRAPHY: XLVI. PSYCHOLOGICAL ABSTRACTS, 1965, VOLUME 39, FIRST THIRD.
R. B. Ammons and C. H. Ammons.
Perceptual and Motor Skills, vol. 22, Apr. 1966, p. 471-474. 99 refs.
This is an alphabetical listing of 99 references on motor skills selected from *Psychological Abstracts*, 1965, vol. 39, First Third.

A66-81640
MOTOR SKILLS BIBLIOGRAPHY: XLVII. PSYCHOLOGICAL ABSTRACTS, 1965, VOLUME 39, SECOND THIRD.
C. H. Ammons and R. B. Ammons.
Perceptual and Motor Skills, vol. 22, Apr. 1966, p. 511-514. 101 refs.
This is an alphabetic listing of 101 items on motor skills selected from *Psychological Abstracts*, 1965, vol. 39, Second Third.

A66-81657
PERCEPTION BIBLIOGRAPHY: XXVII. PSYCHOLOGICAL INDEX NO. 23, 1916.
C. H. Ammons and R. B. Ammons.
Perceptual and Motor Skills, vol. 22, Apr. 1966, p. 592-594. 82 refs.

This is an alphabetical listing of 82 references on perception selected from *Psychological Index*, no. 23, 1916.

A66-81662
PERCEPTION BIBLIOGRAPHY: XXVIII. PSYCHOLOGICAL INDEX NO. 24, 1917.
R. B. Ammons and C. H. Ammons.
Perceptual and Motor Skills, vol. 22, Apr. 1966, p. 631-634. 86 refs.
This is an alphabetical listing of 86 references to work in perception selected from *Psychological Index*, no. 24, 1917.

A66-81844
MOTOR SKILLS BIBLIOGRAPHY: XLVIII. PSYCHOLOGICAL ABSTRACTS, 1965, VOLUME 39, THIRD THIRD.
R. B. Ammons and C. H. Ammons.
Perceptual and Motor Skills, vol. 22, Jun. 1966, p. 819-822. 104 refs.
This is an alphabetical listing of 104 references to work on simple and complex motor skills of children and adults.

A66-81847
PERCEPTION BIBLIOGRAPHY: XXIX. PSYCHOLOGICAL INDEX NO. 25, 1918.
C. H. Ammons and R. B. Ammons.
Perceptual and Motor Skills, vol. 22, Jun. 1966, p. 896-898. 74 refs.

A bibliography is given containing 74 items relevant to perceptual problems. Papers refer mainly to problems of vision, and visual illusions.

A66-81848
PERCEPTION BIBLIOGRAPHY: XXX. PSYCHOLOGICAL INDEX, NO. 26, 1919.
R. B. Ammons and C. H. Ammons.
Perceptual and Motor Skills, vol. 22, Jun. 1966, p. 907-909. 70 refs.

A bibliography is presented containing 70 items dealing with some aspect of perception listed for the year 1919. Eight of the papers deal directly with problems of aviators and flying.

A66-81958
A BIBLIOGRAPHY ON THE PSYCHOLOGICAL ASPECTS OF SMOKING: JANUARY 1940 THROUGH SEPTEMBER 1965.
Bernard J. Fine, Michael Marchesani, and Donald R. Sweeney (U. S. Army Res. Inst. of Environ. Med., Natick, Mass.)
Psychological Reports, vol. 18, Jun. 1966, p. 783-787. 142 refs.

One hundred forty-two references to articles concerned with psychological and physiological aspects of smoking are listed alphabetically. Years covered are January 1940 to September 1965.

A66-82304
EXTRATERRESTRIAL LIFE: AN ANTHOLOGY AND BIBLIOGRAPHY.

A67-80058

Washington, D. C., Natl. Acad. of Sci., Natl. Res. Council, Publ. 1296A, vii + 478 p. Many refs. \$6.00.

An anthology of 23 selected textbook and journal articles on the subject of origin, composition, and organic syntheses of extraterrestrial life is presented in the first part of the volume. The second part contains 11 papers on Mariner IV and sounding rocket observations of Mars which were made in 1965. The third part, the bibliography, contains over 2000 references to world literature published through 1965.

1967

AEROSPACE MEDICINE AND BIOLOGY ABSTRACTS

A67-80058
PERCEPTION BIBLIOGRAPHY: XXXI. PSYCHOLOGICAL INDEX NO. 27, 1920.

C. H. Ammons and R. B. Ammons.
Perceptual and Motor Skills, vol. 23, Aug. 1966, p. 43-46. 105 refs.

This bibliography consists of 105 articles dealing with visual perception and closely related fields. The entries are listed alphabetically by author.

A67-80062
PERCEPTION BIBLIOGRAPHY: XXXII. PSYCHOLOGICAL INDEX NO. 28, 1921.

R. B. Ammons and C. H. Ammons.
Perceptual and Motor Skills, vol. 23, Aug. 1966, p. 99-102. 103 refs.

An alphabetical listing of 103 references involving perception and closely related fields for the year 1921 is presented.

A67-80066
MOTOR SKILLS BIBLIOGRAPHY: XLIX. PSYCHOLOGICAL ABSTRACTS, 1927, VOLUME 1.

C. H. Ammons and R. B. Ammons.
Perceptual and Motor Skills, vol. 23, Aug. 1966, p. 139-142. 95 refs.

An alphabetical listing of 95 selected items for the year 1927 on motor skills is presented.

A67-80068
MOTOR SKILLS BIBLIOGRAPHY: L. PSYCHOLOGICAL ABSTRACTS, 1928, VOLUME 2.

R. B. Ammons and C. H. Ammons.
Perceptual and Motor Skills, vol. 23, Aug. 1966, p. 191-194. 101 refs.

An alphabetical listing of 101 articles on motor skills covering the year 1928 is presented.

A67-80287
PERCEPTION BIBLIOGRAPHY: XXXIII. PSYCHOLOGICAL INDEX NO. 29, 1922.

C. H. Ammons and R. B. Ammons.
Perceptual and Motor Skills, vol. 23, Oct. 1966, p. 367-370. 113 refs.

In this listing are 113 items in which perceptual processes and materials are discussed.

A67-80291
MOTOR SKILLS BIBLIOGRAPHY: LI. PSYCHOLOGICAL ABSTRACTS, 1929, VOLUME 3.

C. H. Ammons and R. B. Ammons.
Perceptual and Motor Skills, vol. 23, Oct. 1966, p. 447-450. 107 refs.

References (107) of research on motor skills are listed alphabetically.

A67-80293
PERCEPTION BIBLIOGRAPHY: XXXIV. PSYCHOLOGICAL INDEX NO. 30, 1923.

R. B. Ammons and C. H. Ammons.
Perceptual and Motor Skills, vol. 23, Oct. 1966, p. 479-482. 103 refs.

Alphabetical listing of 103 references of work in perception and closely related fields.

A67-80297
MOTOR SKILLS BIBLIOGRAPHY: LII. PSYCHOLOGICAL ABSTRACTS, 1930, VOLUME 4.

R. B. Ammons and C. H. Ammons.
Perceptual and Motor Skills, vol. 23, Oct. 1966, p. 543-546. 104 refs.

Selected items (104) on motor skills are listed alphabetically.

A67-80860
MOTOR SKILLS BIBLIOGRAPHY: LV. PSYCHOLOGICAL ABSTRACTS, 1966, VOLUME 40, SECOND THIRD.

C. H. Ammons and R. B. Ammons.
Perceptual and Motor Skills, vol. 23, Dec. 1966, Part 2, p. 1075-1078. 106 refs.

One-hundred and six selected items on motor skills are listed alphabetically. These include articles dealing with psychomotor performance such as figure drawing, laterality, flight performance, and reaction-time studies.

A67-80882
MOTOR SKILLS BIBLIOGRAPHY: LVI. PSYCHOLOGICAL ABSTRACTS, 1966, VOLUME 40, THIRD THIRD.

R. B. Ammons and C. H. Ammons.
Perceptual and Motor Skills, vol. 23, Dec. 1966, Part 2, p. 1223-1226. 103 refs.

References (103) to research on motor skills are listed alphabetically.

A67-80922
PERCEPTION BIBLIOGRAPHY: XXXVIII. PSYCHOLOGICAL ABSTRACTS, 1927, VOLUME 1.

R. B. Ammons and C. H. Ammons.
Perceptual and Motor Skills, vol. 23, Dec. 1966, Part 2, p. 1263-1266. 103 refs.

An alphabetical listing of 103 articles and books dealing with perception and closely related subjects is presented.

A67-80978
PERCEPTION BIBLIOGRAPHY: XXXVII. PSYCHOLOGICAL INDEX NO. 33, 1926.

C. H. Ammons and R. B. Ammons.
Perceptual and Motor Skills, vol. 23, Dec. 1966, Part 2, p. 1147-1150. 79 refs.

Seventy-nine books and articles dealing with perception and related fields are listed alphabetically.

A67-81021
PERCEPTION BIBLIOGRAPHY: XXXV. PSYCHOLOGICAL INDEX NO. 31, 1924.

C. H. Ammons and R. B. Ammons.
Perceptual and Motor Skills, vol. 23, Dec. 1966, Part 1, p. 731-734. 109 refs.

One-hundred and nine articles and books dealing with perception and closely related fields are listed alphabetically.

A67-81086
PERCEPTION BIBLIOGRAPHY: XXXVI. PSYCHOLOGICAL INDEX NO. 32, 1925.

R. B. Ammons and C. H. Ammons.
Perceptual and Motor Skills, vol. 23, Dec. 1966, Part 1, p. 879-882. 106 refs.

In this listing are 106 items in which perceptual processes and materials are discussed.

A67-81097
MOTOR SKILLS BIBLIOGRAPHY: LIV. PSYCHOLOGICAL ABSTRACTS, 1966, VOLUME 40, FIRST THIRD.

C. H. Ammons and R. B. Ammons.
Perceptual and Motor Skills, vol. 23, Dec. 1966, Part 1, p. 963-966. 107 refs.

This bibliography contains 107 selected items on motor skills listed alphabetically. Included* are papers on reaction time, teaching body movement and manual dexterity.

A67-81255
PERCEPTION BIBLIOGRAPHY: XXXIX. PSYCHOLOGICAL ABSTRACTS 1928, VOLUME 2.

C. H. Ammons and R. B. Ammons.
Perceptual and Motor Skills, vol. 24, Feb. 1967, p. 95-98. 107 refs.

One-hundred-seven items dealing with visual, tactile, and spatial perception and closely related topics are listed alphabetically.

A67-81256
MOTOR SKILLS BIBLIOGRAPHY: LVII. BALDWIN'S DICTIONARY THROUGH 1893.

C. H. Ammons and R. B. Ammons.
Perceptual and Motor Skills, vol. 24, Feb. 1967, p. 63-65. 89 refs.

Eighty-nine items concerning some aspect of motor skills are listed alphabetically. These aspects include psychomotor performance, body movement reaction time, and sensory perception.

A67-81260
MOTOR SKILLS BIBLIOGRAPHY: LVIII. PSYCHOLOGICAL INDEX NO. 1, 1894.

R. B. Ammons and C. H. Ammons.
Perceptual and Motor Skills, vol. 24, Feb. 1967, p. 277-278. 46 refs.

Forty-six items on various aspects of motor skills are listed alphabetically.

A67-81273
PERCEPTION BIBLIOGRAPHY: XL. PSYCHOLOGICAL ABSTRACTS, 1929, VOLUME 3, FIRST HALF.

R. B. Ammons and C. H. Ammons.
Perceptual and Motor Skills, vol. 24, Feb. 1967, p. 235-238. 90 refs.

An alphabetical listing is presented of 90 items dealing with olfactory, visual auditory, cutaneous, and spatial perception and closely related topics.

A67-81428
BIBLIOGRAPHY ON MUSCLE RECEPTORS: THEIR MORPHOLOGY, PATHOLOGY AND PHYSIOLOGY.

Earl Eldred, Herbert Yellin, Linda Gadbois, and Susan Sweeney (Calif. U., School of Med. Dept. of Anat. and Brain Res. Inst., Los Angeles).

Experimental Neurology, Supplement 3, Jun. 1967, p. 1-154. Many refs.

Grants PHS NB-01143 and PHS NB-03019.

A selective bibliography is compiled on various aspects of sensory receptors of muscle. Articles of retrospective nature date to the pre-1860 period. A total of 1,470 references are cited. Areas of interest include morphology of receptors, receptor axons, physiology and pharmacology or receptors and receptor pathology. A subject index is provided.

A67-81517
MOTOR SKILLS BIBLIOGRAPHY: LXIII. PSYCHOLOGICAL INDEX NO. 6, 1899.

C. H. Ammons and R. B. Ammons (Mont. U., Missoula).
Perceptual and Motor Skills, vol. 24, Jun. 1967, part 1, p. 793-794. 55 refs.

An alphabetical listing of 55 references on motor skills is given.

A67-81526
PERCEPTION BIBLIOGRAPHY: XLIV. PSYCHOLOGICAL ABSTRACTS, 1932, VOLUME 6.

R. B. Ammons and C. H. Ammons (Mont. U., Missoula).
Perceptual and Motor Skills, vol. 24, Jun. 1967, part 1, p. 963-966. 111 refs.

Items (111) relevant to visual, tactile, color, auditory, and spatial perception are listed alphabetically for the year 1932.

A67-81530
PERCEPTION BIBLIOGRAPHY: XLII. PSYCHOLOGICAL ABSTRACTS, 1930, VOLUME 4.

R. B. Ammons and C. H. Ammons (Mont. U., Missoula).
Perceptual and Motor Skills, vol. 24, Apr. 1967, p. 563-566. 110 refs.

A bibliography of 110 references concerning various aspects of perception is presented. These references include papers on spatial perception, illusions, auditory perception and color vision.

A67-81535
MOTOR SKILLS BIBLIOGRAPHY: LXVI. PSYCHOLOGICAL INDEX NO. 9, 1902.

R. B. Ammons and C. H. Ammons (Mont. U., Missoula).
Perceptual and Motor Skills, vol. 24, Jun. 1967, part 1, p. 977-978. 41 refs.

Items (41) concerned with some aspect of motor skills learning or performance are listed alphabetically.

A67-81544

A67-81544
MOTOR SKILLS BIBLIOGRAPHY: LXIV. PSYCHOLOGICAL INDEX NO. 7, 1900.

R. B. Ammons and C. H. Ammons (Mont. U., Missoula).
Perceptual and Motor Skills, vol. 24, Jun. 1967, part 1, p. 829-830. 52 refs.

This listing contains 52 references to research on motor skills.

A67-81555
MOTOR SKILLS BIBLIOGRAPHY: LX. PSYCHOLOGICAL INDEX NO. 3, 1896.

R. B. Ammons and C. H. Ammons (Mont. U., Missoula).
Perceptual and Motor Skills, vol. 24, Apr. 1967, p. 493-494. 45 refs.

A bibliography is presented of 45 items published in 1896 on skilled behavior. Exercise, motor activity, speech and reaction time are some topics covered.

A67-81556
MOTOR SKILLS BIBLIOGRAPHY: LXI. PSYCHOLOGICAL INDEX NO. 4, 1897.

C. H. Ammons and R. B. Ammons (Mont. U., Missoula).
Perceptual and Motor Skills, vol. 24, Apr. 1967, p. 505-506. 46 refs.

A bibliography is presented with 46 items on material about motor skills published in 1897. Individual papers include studies on work, manual dexterity, and reaction time.

A67-81558
MOTOR SKILLS BIBLIOGRAPHY: LIX. PSYCHOLOGICAL INDEX NO. 2, 1895.

C. H. Ammons and R. B. Ammons (Mont. U., Missoula).
Perceptual and Motor Skills, vol. 24, Apr. 1967, p. 421-422. 38 refs.

Thirty-eight references of work done in 1895 on motor skills are presented in this bibliography. Reaction time, muscular movements and eye movements are some of the topics covered.

A67-81562
MOTOR SKILLS BIBLIOGRAPHY: LXII. PSYCHOLOGICAL INDEX NO. 5, 1898.

R. B. Ammons and C. H. Ammons (Mont. U., Missoula).
Perceptual and Motor Skills, vol. 24, Apr. 1967, p. 541-542. 56 refs.

A bibliography of 56 items is presented of papers from 1898 on motor skills. Subject material includes papers on body movement, exercise, neuromotor physiology and eye movement.

A67-81580
MOTOR SKILLS BIBLIOGRAPHY: LXV. PSYCHOLOGICAL INDEX NO. 8, 1901.

C. H. Ammons and R. B. Ammons (Mont. U., Missoula).
Perceptual and Motor Skills, vol. 24, Jun. 1967, part 1, p. 869-870. 56 refs.

This alphabetical listing of references of work on motor skills contains 56 items.

A67-81653
PERCEPTION BIBLIOGRAPHY: XLIII. PSYCHOLOGICAL ABSTRACTS, 1931, VOLUME 5.

C. H. Ammons and R. B. Ammons (Mont. U., Missoula).
Perceptual and Motor Skills, vol. 24, Jun. 1967, part 1, p. 911-914. 115 refs.

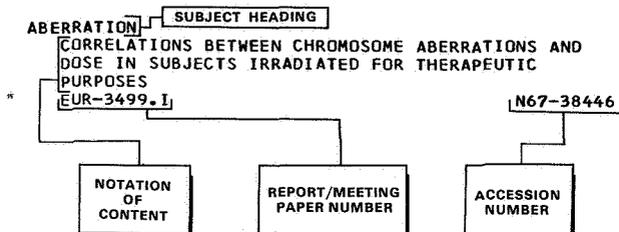
Items (115) relevant to visual, auditory, color, size, cutaneous and motion perception are listed alphabetically for the year 1931.

Subject Index

BIBLIOGRAPHIES ON AEROSPACE SCIENCE / a continuing bibliography
with indexes

JULY 1968

Typical Subject Index Listing



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- CHEMICAL EQUILIBRIUM**
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 AD-656927 N67-38071
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- CORIOLIS EFFECT
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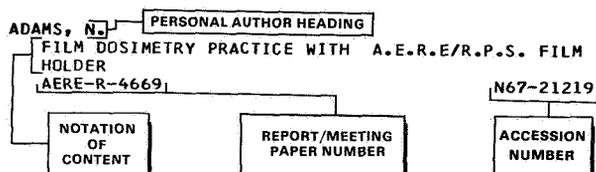
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SENSORY PERCEPTION BIBLIOGRAPHY	A67-80058	ANDERSON, R. T.	
PERCEPTION BIBLIOGRAPHY	A67-80062	WELDING AND INSPECTION TECHNIQUES FOR 2219- T81 ALUMINUM ALLOY - BIBLIOGRAPHY AND INDUSTRY SURVEY	NASA-CR-72097 N67-17619
MOTOR SKILLS BIBLIOGRAPHY	A67-80066	ANDERSON, V. S.	
MOTOR SKILLS BIBLIOGRAPHY	A67-80068	ASTRONAUTICS INFORMATION ABSTRACTS	NASA-CR-75252 N66-27241
PERCEPTION BIBLIOGRAPHY	A67-80287	ANDREW, I. D. C.	
MOTOR SKILLS BIBLIOGRAPHY	A67-80291	COCKPIT DISPLAY SYSTEMS AND FLIGHT INSTRUMENTS, AND HUMAN ENGINEERING - BIBLIOGRAPHY AND ABSTRACTS	COA-M&P-73 N66-34225
PERCEPTION BIBLIOGRAPHY	A67-80293	ANDRUSHIS, J.	
MOTOR SKILLS BIBLIOGRAPHY	A67-80297	ANNOTATED BIBLIOGRAPHY ON RADIATION DAMAGE IN SOLIDS	ATD-67-14 N67-30949
		ANNUS, L. K.	
		ANNOTATED BIBLIOGRAPHY ON ACCESS ROUTES TO AIRPORTS	N66-36375

- DESIGN PROBLEMS, OPERATIONAL EXPERIENCES, AND HUMAN RESPONSES RELATED TO AIRCRAFT NOISE AND SONIC BOOM N67-11116
- APPLEBY, E. R.
BIBLIOGRAPHY ON STRUCTURAL DESIGN OF POWER REACTORS
BNWL-326 N67-29711
- ARMSTRONG, B. H.
ANNOTATED BIBLIOGRAPHY ON LOWERING OF IONIZATION POTENTIAL IN PLASMAS, AND PARTITION FUNCTION CUT-OFFS N66-36882
- ARZHANIKOV, N. S.
HISTORY OF RESEARCH IN AERODYNAMICS IN U. S. S. R. WITH BIBLIOGRAPHY
FTD-MT-65-497 N66-38185
- ASHBURN, E. V.
BIBLIOGRAPHY OF OPEN LITERATURE ON LASERS, PART V A66-22876
BIBLIOGRAPHY ON LASERS AND LASER APPLICATIONS A67-21713
- ASHBY, F. K.
BIBLIOGRAPHY ON DIAGNOSTIC TESTS FOR COLOR VISION DEFECTS
AM-67-8 N67-39867
- ASKILL, J.
BIBLIOGRAPHY ON TRACER DIFFUSION IN METALS - SELF AND IMPURITY DIFFUSION IN ALLOYS
DRNL-3795, PT. III N67-25426
- AYRAPETYANTS, E. SH.
CEREBRAL CORTEX AND FUNCTION OF VESTIBULAR APPARATUS, INCLUDING BIBLIOGRAPHY
FTD-TT-66-30 N67-14703
- B**
- BARATOFF, A.
LIFTING REENTRY SPACECRAFT - PROBLEMS OF LIFTING AND BALLISTIC HYPERVELOCITY FLIGHT, ATMOSPHERIC REENTRY TECHNIQUES, AND ANNOTATED BIBLIOGRAPHY
ATD-66-34 N66-25179
REVIEW AND ANNOTATED BIBLIOGRAPHY ON RESEARCH IN HIGH SPEED LIFTING AND BALLISTIC REENTRY
ATD-66-106 N67-14313
- BARNETT, C. F.
ANNOTATED BIBLIOGRAPHY OF ATOMIC AND MOLECULAR PROCESSES FOR 1964
ORNL-AMPIC-3 N66-27098
- BARRATT, G. M.
CONTAMINATION AND FILTRATION IN OIL HYDRAULIC SYSTEMS - BIBLIOGRAPHY
BIB-19 N67-22461
- BARZILOVICH, YE. YU.
AUTOMATIC CONTROL, SERVICING, AND COMPONENT RELIABILITY OF COMPLEX TECHNICAL SYSTEMS N67-22410
- BASHARA, N. M.
ANNOTATED BIBLIOGRAPHY ON INTERFACES, THIN DIELECTRIC FILMS, AND SURFACES
AD-631187 N66-26831
- BAYEVSKIY, R. M.
INSTRUMENTATION, MEASURING SYSTEMS, AND TECHNIQUES FOR MONITORING PHYSIOLOGICAL INFORMATION ON COSMONAUTS AND ANIMALS DURING SPACE FLIGHTS - BIBLIOGRAPHY INCLUDED
JPRS-37096 N66-33985
- BEARY, E. G.
MOISTURE EQUILIBRIUM IN RELATION TO CHEMICAL STABILITY OF DEHYDRATED FOODS - ANNOTATED BIBLIOGRAPHY
AD-656927 N67-38071
- BERARD, M. F.
ANNOTATED BIBLIOGRAPHY OF LITERATURE ON NUCLEATION AND CRYSTAL GROWTH FROM CERAMIC MELTS
IS-1287 N66-31739
- BERNARDI, S. D.
BIBLIOGRAPHY ON THEORY OF ANALYTIC UNIVALENT / SCHLICHT/ AND MULTIVALENT MAPPINGS OF SIMPLY AND MULTIPLY CONNECTED DOMAINS
*MM-351 N67-16466
- BERNHARD, R. K.
BIBLIOGRAPHY ON SOIL DYNAMICS
CRREL-SR-89 N66-24855
- BEYSTER, J. R.
LITERATURE SURVEY ON METHODS OF CALCULATING AND MEASURING THERMAL NEUTRON SPECTRA AND REVIEW OF SPECTRAL MEASUREMENTS TECHNIQUES
GA-7092 N67-40249
- BHATTACHARYYA, A.
HEAT TRANSFER ANALOG DESCRIPTIONS INCLUDING NETWORK, HYDRAULIC, MEMBRANE AND GEOMETRIC ELECTRICAL - BIBLIOGRAPHY
AE-201 N66-25125
- BIRDSALL, C. K.
COMPUTER EXPERIMENTS WITH CHARGED PARTICLES, CHARGED FLUIDS, AND PLASMAS - CLASSIFICATION AND BIBLIOGRAPHY
IPPJ-54 N67-22943
- BLOOM, P.
ANNOTATED BIBLIOGRAPHY ON JAPANESE RESEARCH STUDIES IN PHYSICS AND CHEMISTRY
UCRL-14288 N67-25509
- BLOOMFIELD, M.
BIBLIOGRAPHY ON POLYTETRAFLUOROETHYLENE / TEFLON/ PLASTICS
LS-BIB-65-3 N66-26606
- BONDY, C.
APPLICATION OF ACTIVABLE TRACERS, INCLUDING BIBLIOGRAPHY
EUR-3128.F N67-17119
- BORESI, A. P.
EQUILIBRIUM, BUCKLING, VIBRATION, AND WAVE MOTION AND IMPACT IN HOMOGENEOUS AND INHOMOGENEOUS ELASTIC PLATES - BIBLIOGRAPHY
T&AM-257 N66-23445
- BOREVA, L. I.
BIBLIOGRAPHY OF SOVIET LITERATURE ON AEROSPACE MEDICINE AND BIOASTRONAUTICS PUBLISHED DURING 1964 AND 1965
FTD-TT-65-1661/1&4 N66-32493
BIBLIOGRAPHY OF SOVIET SCIENTIFIC LITERATURE ON AEROSPACE MEDICINE AND BIOASTRONAUTICS
JPRS-38661 N67-12013
- BOROWITZ, S.
LOW AND HIGH ENERGY ATOMIC SCATTERING - ATOMIC MODEL FROM SCHROEDINGER EQUATION - BIBLIOGRAPHY
AD-630172 N66-29596
- BORSETH, E. E.
BIBLIOGRAPHY ON MANAGEMENT FUNCTIONS AND TECHNIQUES
NASA-CR-85828 N67-31342
- BOS, H. J.
ANNOTATED BIBLIOGRAPHY ON RADIO NAVIGATION
TDCK-44957 N66-39842
LITERATURE REVIEW OF INERTIAL NAVIGATION SYSTEMS, EQUIPMENT, AND TECHNIQUES FOR SEA AND AIR APPLICATIONS
TDCK-46515 N67-28860
- BOUDREAU, C. A.
RADAR SCATTERING AND ATTENUATION BY PRECIPITATION PARTICLES IN ATMOSPHERE - ANNOTATED BIBLIOGRAPHY
ESD-TDR-65-598 N66-23403
- BRECKENRIDGE, R. A.
SURVEY AND BIBLIOGRAPHY CONCERNING USE OF REINFORCED PLASTICS IN STRUCTURAL SYSTEMS
R-491 N67-16121

- BRETSCHNEIDER, C. L.**
BIBLIOGRAPHY ON STORM SURGES AS RELATED TO
OCEANOGRAPHY
SN-134-12 N67-10981
- BREWER, L.**
SPECTROSCOPY OF INTEREST TO HIGH TEMPERATURE
CHEMISTRY AND REACTIONS BETWEEN GASES AND
CONDENSED PHASES - BIBLIOGRAPHY
REPT.-18 N66-25763
- BIBLIOGRAPHY ON HIGH TEMPERATURE CHEMISTRY AND
PHYSICS OF GASES AND GAS CONDENSED PHASE
REACTIONS
REPT.-16 N66-32802
- BIBLIOGRAPHY ON HIGH TEMPERATURE CHEMISTRY AND
PHYSICS OF GASES AND PLASMAS - SPECTROSCOPY
REPT.-19 N66-33163
- BIBLIOGRAPHY ON SPECTROSCOPY OF HIGH TEMPERATURE
CHEMISTRY AND REACTIONS BETWEEN GASES AND
CONDENSED PHASES N67-18184
- BIBLIOGRAPHY ON HIGH TEMPERATURE CHEMISTRY AND
PHYSICS OF GASES AND PLASMAS - SPECTROSCOPY AND
REACTIONS BETWEEN GASES AND CONDENSED PHASES
REPT.-21 N67-23463
- BIBLIOGRAPHY COVERING 1964-1966 WORKS ON HIGH
TEMPERATURE CHEMISTRY AND PHYSICS OF GASES AND
PLASMAS
REPT.-22 N67-31559
- BIBLIOGRAPHY OF WORKS ON HIGH TEMPERATURE PHYSICS
AND CHEMISTRY OF GASES AND PLASMAS PUBLISHED
1964-1966
REPT.-23 N67-34593
- BIBLIOGRAPHY ON HIGH TEMPERATURE
CHEMISTRY AND PHYSICS OF GASES AND
PLASMAS N67-36450
- BRICHANT, A. L.**
ANNOTATED BIBLIOGRAPHY DEALING WITH SOVIET OPEN
LITERATURE ON SPACE ENVIRONMENTS AND RELATED
RESEARCH
NASA-CR-86652 N67-32311
- BRIDSALL, C. K.**
COMPUTER METHODS FOR SOLVING MANY-BODY AND CHARGED
PARTICLE PROBLEMS AND NONLINEAR SYSTEMS,
CLASSIFICATION AND BIBLIOGRAPHY N67-37760
- BROCK, T. E.**
CONTAMINATION AND FILTRATION IN OIL HYDRAULIC
SYSTEMS - BIBLIOGRAPHY
BIB-19 N67-22461
- SIPHONS AND SIPHON SPILLWAYS - BIBLIOGRAPHY, WITH
ABSTRACTS
BIB-21 N67-22462
- BRODTMAN, K.**
HISTORICAL DOCUMENTATION AND BIBLIOGRAPHY ON PAST
RESEARCH IN PHOTOVOLTAIC SOLAR ENERGY CONVERTER
CELLS
NASA-CR-84008 N67-26180
- BROMBACHER, W. G.**
GUIDE TO ABSTRACTING AND INDEXING SERVICES ON
INSTRUMENTATION LITERATURE
NBS-MISC.-PUBL.-271 N66-32573
- BROOKS, E. M.**
TERRESTRIAL INFRARED HORIZON PROFILE DATA FOR
SPACE VEHICLE HORIZON SENSING, WITH BIBLIOGRAPHY
NASA-CR-722 N67-22178
- BROSSMANN, G.**
PLANNING, CONSTRUCTION, ARRANGEMENT, AND EQUIPMENT
FOR LABORATORY WORKING WITH RADIOACTIVE
MATERIALS - BIBLIOGRAPHY
KFK-370 N66-26016
- BRUDERS, P.**
ANNOTATED BIBLIOGRAPHY OF GERMAN AEROSPACE
RESEARCH INSTITUTE PUBLICATIONS DURING 1964 TO
- 1965
REPT.-500 N66-21592
- BRUSH, S.**
ANNOTATED BIBLIOGRAPHY ON JAPANESE RESEARCH
STUDIES IN PHYSICS AND CHEMISTRY
UCRL-14288 N67-25509
- BRUSH, S. G.**
ANNOTATED BIBLIOGRAPHY ON LOWERING OF IONIZATION
POTENTIAL IN PLASMAS, AND PARTITION FUNCTION
CUT-OFFS N66-36882
- BUCHANAN, J. R.**
GUIDE TO RESEARCH AND DEVELOPMENT ACTIVITIES IN
NUCLEAR SAFETY
ORNL-NSIC-10 N66-38597
- BUDININKAS, P.**
FORMALDEHYDE SYNTHESIS PROCEDURES UNDER SPACE
CONDITIONS, WITH BIBLIOGRAPHY
NASA-CR-73070-1 N67-22173
- BUIS, G. R.**
BIBLIOGRAPHICAL SURVEY OF RESEARCH ON STABILITY
THEORY OF SOLUTIONS TO PARTIAL DIFFERENTIAL
EQUATIONS
NASA-CR-82662 N67-19109
- BULFORD, D. E.**
BIBLIOGRAPHY ON AIRCRAFT COLLISION AVOIDANCE
AD-652606 N67-31671
- BURLEY, C. H.**
ELECTRONIC PACKAGING, INTEGRATED CIRCUITS, CIRCUIT
DESIGN, AND MICROCIRCUIT DESIGN - SURVEY WITH
BIBLIOGRAPHY
NASA-TM-X-59418 N67-19037
- BURLINGAME, J. E.**
ANNOTATED BIBLIOGRAPHY OF LITERATURE ON NUCLEATION
AND CRYSTAL GROWTH FROM CERAMIC MELTS
IS-1287 N66-31739
- BUSBY, D. E.**
CLINICAL AEROSPACE MEDICAL PROBLEMS, DIAGNOSIS,
AND TREATMENT IN SPACE, WITH BIBLIOGRAPHY
NASA-CR-856 N67-32905
- C**
- CAPELLAN, J.**
BIBLIOGRAPHY OF MASS SPECTROSCOPY LITERATURE
COMPILED BY COMPUTER METHOD
IS-1335 N67-12862
- CARDON, S. Z.**
ANNOTATED BIBLIOGRAPHY OF REFERENCES IN PHYSICAL
SCIENCE, INTERDISCIPLINARY SCIENCE, AND
NON-DISCIPLINARY SCIENCE
REPT.-2 N66-37863
- CARPENTER, R. OB.**
TERRESTRIAL INFRARED HORIZON PROFILE DATA FOR
SPACE VEHICLE HORIZON SENSING, WITH BIBLIOGRAPHY
NASA-CR-722 N67-22178
- CHADWICK, U. R. M.**
BOOKS, PAMPHLETS, REPORTS, AND JOURNAL ARTICLES
ON CAVITATION IN FLUIDS - BIBLIOGRAPHY
TRG-518/R/ N66-28171
- CHAMBERS, R. P.**
BIBLIOGRAPHY OF HOLOGRAMS A66-30433
- CLAYTON, F. I.**
FLOW SEPARATION IN HIGH SPEED FLIGHT - REPORT
BIBLIOGRAPHY
DAC-59101 N67-13220
- COLLINS, J. T., JR.**
AEROSOL GENERATION, PARTICLE SIZE ANALYSIS
AUTORADIOGRAPHY, AND INSTRUMENTATION FOR
COLLECTING AND SEPARATING RADIOACTIVE AND
NONRADIOACTIVE PARTICLES - BIBLIOGRAPHY
IDD-12051 N66-32450
- COMSTOCK, M.**
BUBBLE CHAMBERS - SUPPLEMENTARY BIBLIOGRAPHY ON

- COMPONENTS AND APPLICATIONS
BNL-8083, SUPPL. I N67-35839
- CONTOPOULOS, G.
MANY-BODY PROBLEM, CONTINUUM, AND STATISTICAL
METHODS APPLIED TO DYNAMICS OF STAR CLUSTERS,
WITH BIBLIOGRAPHY N67-14419
- COSTELLO, R. G.
INCLUSIVE CLASSIFIED BIBLIOGRAPHY PERTAINING TO
* MODELING HUMAN OPERATOR AS ELEMENT IN AUTOMATIC
CONTROL SYSTEM A67-20173
- COURTNEY-PRATT, J. S.
BIBLIOGRAPHY OF HOLOGRAMS A66-30433
- *COUSINS, L. B.
HEAT TRANSFER AND HYDRODYNAMIC STUDIES ON TWO-
PHASE SYSTEMS - BIBLIOGRAPHY AND ABSTRACTS
AERE-BIB-150 N66-33034
- COX, J. P.
BIBLIOGRAPHY ON STELLAR INTERIORS
NASA-CR-81654 N67-17997
- CRANE, R. D.
COMMUNIST VIEWS ON LEGAL PROBLEMS OF SPACE
EXPLORATIONS, AND BIBLIOGRAPHY OF RELATED
REFERENCES N67-25294
- CRAWFORD, G. B.
MATHEMATICAL LITERATURE SURVEY ON CURVE CROSSING
BY STOCHASTIC PROCESSES
D1-82-0613 N67-32546
- CREWS, A.
BIBLIOGRAPHY OF SIGNAL PROCESSING OF PULSED SONAR
IN REVERBERANT MEDIUM
RM-311 N66-24445
- CROSS, N. F.
GUIDE TO RESEARCH AND DEVELOPMENT ACTIVITIES IN
NUCLEAR SAFETY
ORNL-NSIC-10 N66-38597
- CROSSLEY, P. A.
HISTORICAL DOCUMENTATION AND BIBLIOGRAPHY ON PAST
RESEARCH IN PHOTOVOLTAIC SOLAR ENERGY CONVERTER
CELLS
NASA-CR-84008 N67-26180
- BIBLIOGRAPHY ON PHOTOVOLTAIC EFFECT AND SOLAR CELL
DEVELOPMENT
NASA-CR-86979 N67-32180
- BIBLIOGRAPHY OF PAPERS ON PHOTOVOLTAIC EFFECT AND
HISTORICAL REVIEW OF SCIENTIFIC INVESTIGATIONS
DURING YEARS 1839-1940
NASA-CR-89662 N67-40086
- CROWTHER, G.
BIBLIOGRAPHY ON SHOCK TUBES - 1958 TO 1966
RR/OH/287 N67-39675
- CUMMING, P. A.
BIBLIOGRAPHY ON DETERMINATION OF SELF-DIFFUSION
COEFFICIENTS IN SIMPLE METAL OXIDES, AND TABLE
SHOWING FREQUENCY FACTOR AND ACTIVATION ENERGY
AERE-BIB-143 N66-24424
- BIBLIOGRAPHY ON PHYSICAL PROPERTIES OF LIQUID
METAL BINARY SYSTEMS
AERE-BIB-151 N67-21615
- D
- DACHILLE, F.
CRYSTALLOGRAPHIC RESEARCH AT ELEVATED PRESSURES,
WITH BIBLIOGRAPHY
AD-653887 N67-34056
- DAHLBERG, E. P.
ANNOTATED BIBLIOGRAPHY ON AMBIENT TEMPERATURE
AQUEOUS STRESS CORROSION CRACKING OF TITANIUM
AND TITANIUM ALLOYS
NRL-BIBL.-29 N67-14958
- DAUNT, J. G.
PROPERTIES OF SOLIDS AT LOW TEMPERATURES -
BIBLIOGRAPHY
AD-624824 N67-10967
- DE RUIG, C. J.
BIBLIOGRAPHY WITH ABSTRACTS ON MILITARY AND
INDUSTRIAL APPLICATIONS OF LASERS AND MASERS
TDCK-47999 N67-30627
- AIRCRAFT NOISE - SELECTED BIBLIOGRAPHY WITH
ABSTRACTS
TDCK-15350-SII N67-39996
- DE SORBO, W.
LITERATURE SURVEY ON INTERMEDIATE STATE OF
SEMICONDUCTORS
REPT.-66-C-328 N67-35014
- DE VRIES, G.
BIBLIOGRAPHY ON GROUND WATER POLLUTION AND WASTE
WATER PURIFICATION
NASA-TT-F-10215 N66-33720
- DEBERTIN, K.
BIBLIOGRAPHY ON INSTRUMENTATION AND MEASURING
TECHNIQUES IN NUCLEAR PHYSICS
AEO-C-06-14 N67-13969
- DENLINGER, E. J.
STATE OF THE ART REVIEW AND BIBLIOGRAPHY ON
AEROSPACE-RELATED MICROWAVE TECHNOLOGY
NASA-CR-87055 N67-33083
- DIAMOND, J. J.
HIGH TEMPERATURE CHEMISTRY AND PHYSICS OF
METALLIC, NONMETALLIC, AND MIXED MATERIALS IN
CONDENSED STATE - BIBLIOGRAPHY N66-25764
- BIBLIOGRAPHY ON HIGH TEMPERATURE CHEMISTRY AND
PHYSICS OF METALLIC, NONMETALLIC, AND MIXED
MATERIALS IN CONDENSED STATE N66-33165
- BIBLIOGRAPHY ON HIGH TEMPERATURE CHEMISTRY AND
PHYSICS OF MATERIALS IN CONDENSED STATE N67-18182
- HIGH TEMPERATURE CHEMICAL AND PHYSICAL PROPERTIES
OF METALLIC AND NONMETALLIC SOLIDS, AND MEASURING
APPARATUSES - BIBLIOGRAPHY N67-22095
- BIBLIOGRAPHY ON HIGH TEMPERATURE CHEMISTRY AND
PHYSICS OF MATERIALS IN CONDENSED STATE N67-33582
- BIBLIOGRAPHY ON HIGH TEMPERATURE CHEMISTRY AND
PHYSICS OF MATERIALS IN CONDENSED STATE
NP-16584 N67-33731
- BIBLIOGRAPHY ON HIGH TEMPERATURE CHEMISTRY AND
PHYSICS OF MATERIALS IN CONDENSED STATE N67-34742
- DICKSON, K. M.
ANNOTATED BIBLIOGRAPHY ON HISTORY OF AERONAUTICS
AND ASTRONAUTICS
NASA-TM-X-60561 N67-39982
- DICKSON, P. F.
INFRARED SPECTRAL AND TOTAL REFLECTANCES FOR
METALS AT CRYOGENIC TEMPERATURES - LITERATURE
DATA COMPILATION AND BIBLIOGRAPHY
NBS-TN-348 N67-27774
- DILTS, R. V.
ATOMIC ABSORPTION AND EMISSION SPECTROSCOPY, AND
NEUTRON ACTIVATION FOR ULTRATRACE CHEMICAL
ANALYSIS OF MATERIALS FOR SEMICONDUCTOR
NASA-CR-82011 N67-18519
- DOLINSKAIA, R. A.
SOVIET BIBLIOGRAPHY ON HEAT AND MASS TRANSFER
A66-35062
- DONCOV, B.
DIGITAL COMPUTER TECHNOLOGY ANNOTATED BIBLIOGRAPHY
WITH ABSTRACTS, INCLUDING COMPONENTS, DESIGN,
APPLICATIONS, AND ASSOCIATED SYSTEMS
ATD-66-19 N66-28077
- U. S. S. R. ABSTRACTS ON COMPUTER TECHNOLOGY

- ATD-66-37 N66-33234
DESIGN AND APPLICATION OF COMPUTER COMPONENTS AND RELATED SYSTEMS - ANNOTATED BIBLIOGRAPHY ATD-66-145 N67-23427
- DOWDEN, W. A.
BIBLIOGRAPHY ON X-RAY FLUORESCENCE ANALYSIS AERE-BIB-136 N66-35277
BIBLIOGRAPHY ON ANALYTICAL CHEMISTRY MANUALS AWRE/LIB/BIB/15 N67-21612
- DOWNY, M. E.
BIBLIOGRAPHY ON PHYSICAL PROPERTIES OF LIQUID METAL BINARY SYSTEMS AERE-BIB-151 N67-21615
- DUARDO, J. A.
SPECTROSCOPY OF OZONE, MEASUREMENT OF ITS ATMOSPHERIC CONCENTRATION BY OPTICAL MEANS, ROLE IN ATMOSPHERIC DYNAMICS, AND USE AS TRACER FOR ATMOSPHERIC WINDS - BIBLIOGRAPHY INCLUDED NASA-CR-80022 N67-28366
- DUCKENFIELD, M. J.
SURVEY AND BIBLIOGRAPHY OF WORKS ON OPTIMUM CONTROL SYSTEM DESIGN AND STATISTICAL SIGNAL DESCRIPTIONS A67-22386
- DUDDY, J. N.
ANNOTATED BIBLIOGRAPHY OF WEIGHTLESSNESS SIMULATION USING WATER IMMERSION TECHNIQUES LMSC-5-24-65-3/SB-65-2, REV. 1 N67-28573
- DUDLEY, J.
DIFFUSION THEORY AND EFFECTS FOR METALS IN GENERAL AND ALUMINUM IN PARTICULAR - BIBLIOGRAPHY RAE-LIB-BIBL-265 N67-20306
- DUKES, W. H.
CRITICAL LITERATURE SURVEY AND BIBLIOGRAPHY ON STRUCTURAL DESIGN PROBLEMS OF BRITTLE MATERIALS N67-29477
- DUNNE, J. C.
BIBLIOGRAPHY OF AEROSPACE RESEARCH AND DEVELOPMENT LITERATURE N66-37801
BIBLIOGRAPHY, ABSTRACTS, AND INDEX TO AGARD PUBLICATIONS ON AEROSPACE AND RESEARCH TOPICS N67-25856
- E**
- EASTERDAY, J. L.
ANNOTATED BIBLIOGRAPHY OF LITERATURE ON ELECTRONIC PACKAGING FOR USE IN DESIGNING ELECTRONIC EQUIPMENT NASA-CR-76570 N66-33390
ELECTRONIC PACKAGING, INTEGRATED CIRCUITS, CIRCUIT DESIGN, AND MICROCIRCUIT DESIGN - SURVEY WITH BIBLIOGRAPHY NASA-TM-X-59418 N67-19037
- EBISUZAKI, Y.
SOLUBILITY OF HYDROGEN IN TRANSITION METALS AND ELEMENTS, WITH BIBLIOGRAPHY REPT--6 N67-34050
- ECKERT, E. R. G.
HEAT TRANSFER BIBLIOGRAPHY INCLUDING LISTING OF WORKS ON BOUNDARY LAYER FLOW, PHASE CHANGE, CHANNEL FLOW, MHD CONDUCTION, ETC A66-33043
HEAT TRANSFER LITERATURE PUBLISHED IN 1965 ON CONDUCTION, CHANNEL FLOW, BOUNDARY LAYER FLOW, SEPARATED FLOW, TRANSFER MECHANISM, ETC A66-37117
BIBLIOGRAPHY OF BOOKS AND PERIODICALS CONCERNING HEAT TRANSFER AND RELATED TOPICS INCLUDING APPLICATIONS, BOUNDARY LAYER, PHASE CHANGE, SEPARATED FLOW, ETC A67-10978
HEAT TRANSFER BIBLIOGRAPHY COVERING BOUNDARY LAYER, PHASE CHANGE, TWO-PHASE FLOW, CHANNEL FLOW, CONDUCTION, LIQUID METAL, MHD, ETC A67-32450
- ECKSTEIN, H. P.
ANNOTATED BIBLIOGRAPHY ON RANDOM NOISE AND EFFECT ON SIGNALS NASA-TM-X-59657 N67-26080
- EDELSACK, E. A.
BIBLIOGRAPHY OF SUPERCONDUCTING DEVICES AD-651376 N67-30538
- ELDRED, E.
BIBLIOGRAPHY OF MUSCLE RECEPTORS - MORPHOLOGY, PATHOLOGY, PHYSIOLOGY A67-81428
- ELION, H. A.
BOOK ON LASER SYSTEMS COVERING QUANTUM ELECTRONICS, COHERENT RADIATION, MODULATION AND SPECTRAL, DISTANCE, VELOCITY AND COMMUNICATION APPLICATIONS A67-39445
- ELSON, J. A.
SELECTION, TRAINING, AND UTILIZATION OF MILITARY PERSONNEL - BIBLIOGRAPHY AND ABSTRACTS PRL-TR-65-23 N66-38220
- ENGEL, G. L.
COMPUTER ASSISTED INSTRUCTION, INCLUDING PROGRAMMED TEXTS, TEACHING MACHINES, AND LEARNING THEORY - ANNOTATED BIBLIOGRAPHY R-49/66 N67-11179
BIBLIOGRAPHY ON COMPUTER ASSISTED INSTRUCTION NWL-K-3/67 N67-22679
- ENSSLEN, B.
BIBLIOGRAPHY OF PUBLICATIONS ON QUANTUM FIELD THEORY, REGGE POLES, COSMIC RADIATION, ELEMENTARY PARTICLES, AND RADIATION DETECTION AED-C-12-13, PT. III N67-10654
- EVREINOV, E. V.
COMPUTER SYSTEMS DESIGN TECHNIQUES, AND RELATED BIBLIOGRAPHY N67-25719
- F**
- FEDOROFF, B. T.
ENCYCLOPEDIA OF EXPLOSIVES - CHLORIDES TO DETONATING RELAYS PA-TR-2700, VOL. 3 N67-32381
- FENNEY, S. H.
BIBLIOGRAPHY ON LIQUID METALS WITH EMPHASIS ON SODIUM AND SODIUM-POTASSIUM ALLOYS TRG-312/R/ N66-31870
BIBLIOGRAPHY PERTAINING TO LIQUID METALS N67-29807
- FERGUSON, I.
COCKPIT DISPLAY SYSTEMS AND FLIGHT INSTRUMENTS, AND HUMAN ENGINEERING - BIBLIOGRAPHY AND ABSTRACTS COA-M&P-73 N66-34225
- FERRIS, R. W.
FORMALDEHYDE SYNTHESIS PROCEDURES UNDER SPACE CONDITIONS, WITH BIBLIOGRAPHY NASA-CR-73070-1 N67-22173
- FINCH, K. A.
BIBLIOGRAPHY ON INTERNATIONAL LAW DEALING WITH SPACE EXPLORATION N67-25315
- FINE, B. J.
SELECTED BIBLIOGRAPHY ON PHYSIOLOGICAL AND PSYCHOLOGICAL ASPECTS OF SMOKING A66-81958
- FINNIE, I.
MECHANICAL PROPERTIES AND STRUCTURE OF FOAMED MATERIAL - BIBLIOGRAPHY UCRL-13193 N66-30889
- FLYNN, R. J.
LABORATORY ANIMAL MEDICINE AND TECHNOLOGY, BIBLIOGRAPHY WITH ABSTRACTS ANL-7300 N67-25397

- FOLEY, R. T.
BIBLIOGRAPHY ON ELECTROCHEMISTRY OF HIGH ENERGY
COMPOUNDS IN ORGANIC ELECTROLYTES
NASA-CR-78235 N66-37304 A66-33043
- FOLKS, L.
BIBLIOGRAPHY OF SUBJECTIVE PROBABILITY AND
BAYESIAN PROCEDURES - REGRESSION ANALYSES
NASA-CR-84487 N67-27645 A66-37117
- FOSHAG, W. F.
BIBLIOGRAPHY OF WINGS IN GROUND EFFECT AND RELATED
PHENOMENA
DTMB-2179 N66-30689 A67-10978
- FOX, J. G.
COCKPIT DISPLAY SYSTEMS AND FLIGHT INSTRUMENTS,
AND HUMAN ENGINEERING - BIBLIOGRAPHY AND ABSTRACTS
COA-M&P-73 N66-34225 A67-32450
- FRANCIS, L. S.
PLASMA SHEATH THEORY - BIBLIOGRAPHY WITH ABSTRACTS
CLM-BIB-6 N66-28138 A67-35451
- CONFERENCES ON PLASMA PHYSICS AND NUCLEAR FUSION
ACTIVITIES
NP-16154 N67-10814 A67-30535
- FULLMER, I. H.
METEOROLOGY BIBLIOGRAPHY WITH ABSTRACTS COVERING
SOLID BODY MEASUREMENTS AND IN-PROCESS SIZE
CONTROL N66-39945 A66-37732
- G**
- GADBOIS, L.
BIBLIOGRAPHY OF MUSCLE RECEPTORS - MORPHOLOGY,
PATHOLOGY, PHYSIOLOGY A67-81428
- GAJDA, V. A.
BIBLIOGRAPHY ON MANAGEMENT FUNCTIONS AND
TECHNIQUES
NASA-CR-85828 N67-31342
- GALL, L. S.
LITERATURE SURVEY ON MICROORGANISMS OF HUMAN SKIN-
BACTERIA, YEASTS, MOLDS, FUNGI, ACTINOMYCETES,
AND VIRUSES
NASA-CR-65438 N66-32622
- GARING, J. S.
ATMOSPHERIC OPTICS AND RADIATION TRANSFER
COVERING SKY BRIGHTNESS, SOLAR INSULATION, EARTH
RADIANCE AND ALBEDO, ETC A67-36899
- GEBHARDT, R. E.
AIR-CORE COIL SYSTEMS FOR PRODUCTION OF
RELATIVELY WEAK MAGNETIC FIELDS - THEORY
APPLICATIONS, AND ANNOTATED BIBLIOGRAPHY
X-100-65-407/S/ N66-23444
- GEHRKE, G.
BIBLIOGRAPHY COVERING 1940 THROUGH 1966 OF TITLES
ON PHYSICAL AND PHYSICOCHEMICAL PROPERTIES OF
KRYPTON
JUL-BIBL-11 N67-20307
- GINGRANDE, A.
LASER APPLICATIONS BIBLIOGRAPHY
AFCL-67-0223 N67-36753
- GINSBERG, F.
BIBLIOGRAPHY ON HIGH YIELD STRENGTH STEELS AND
WELDMENTS
PR-5 N67-24486
- GLENNON, B. M.
BIBLIOGRAPHY ON ATOMIC TRANSITION PROBABILITIES
NBS-MISC.-PUBL.-278 N67-23450
- GOLDGAMER, G. I.
ORGANIZATION AND METHODS OF SCIENTIFIC LITERATURE
SEARCHES AND INFORMATION GATHERING PRECEDING NEW
DEVELOPMENT N66-39002
- GOLDSTEIN, R. J.
HEAT TRANSFER BIBLIOGRAPHY INCLUDING LISTING OF
WORKS ON BOUNDARY LAYER FLOW, PHASE CHANGE,
CHANNEL FLOW, MHD CONDUCTION, ETC
- HEAT TRANSFER LITERATURE PUBLISHED IN 1965 ON
CONDUCTION, CHANNEL FLOW, BOUNDARY LAYER FLOW,
SEPARATED FLOW, TRANSFER MECHANISM, ETC A66-37117
- BIBLIOGRAPHY OF BOOKS AND PERIODICALS CONCERNING
HEAT TRANSFER AND RELATED TOPICS INCLUDING
APPLICATIONS, BOUNDARY LAYER, PHASE CHANGE,
SEPARATED FLOW, ETC A67-10978
- HEAT TRANSFER BIBLIOGRAPHY COVERING BOUNDARY
LAYER, PHASE CHANGE, TWO-PHASE FLOW, CHANNEL FLOW,
CONDUCTION, LIQUID METAL, MHD, ETC A67-32450
- GOOD, E. G.
FISSION PRODUCT RELEASE, TRANSPORT, AND
DEPOSITION - BIBLIOGRAPHY
ID0-17237 N67-35451
- GOREE, W. S.
BIBLIOGRAPHY OF SUPERCONDUCTING DEVICES
AD-651376 N67-30535
- GOSLIN, L. N.
ANNOTATED BIBLIOGRAPHY ON R AND D MANAGEMENT
WITH BOOK ABSTRACTS A66-37732
- GOUSE, S. W., JR.
BIBLIOGRAPHY AND SUBJECT INDEX TO TWO-PHASE GAS-
LIQUID FLOW LITERATURE A67-20300
- BIBLIOGRAPHY ON TWO-PHASE GAS-LIQUID FLOW
DSR-8734-6 N66-25613
- GRAHAM, R. C.
BIBLIOGRAPHY ON UNSTEADY COMBUSTION IN LIQUID
PROPELLANT ROCKET ENGINES
RR/OH/294 N67-39449
- GRAVES, J.
COMPUTERIZED TECHNIQUES APPLIED TO ECONOMICS TO
PRODUCE BIBLIOGRAPHY OF RELATED MATERIAL
NASA-CR-80097 N67-12157
- GRIFFIN, D. A.
ANNOTATED BIBLIOGRAPHY OF ATOMIC AND MOLECULAR
PROCESSES FOR 1964
ORNL-AMPIC-3 N66-27098
- GRIMWOOD, J. M.
TECHNOLOGICAL AND MANAGERIAL HISTORY OF MERCURY
PROJECT, INCLUDING BIBLIOGRAPHY
NASA-SP-4201 N67-14934
- GURNEY, J.
BIBLIOGRAPHY OF SPACE RADIATION SOURCES, CROSS
SECTION DATA, PARTICLE TRANSPORT, AND SHIELDING
NASA-CR-75316 N66-26815
- BIBLIOGRAPHY OF COMPUTER CODES ON RADIATION AND
NUCLEAR SHIELDING
NASA-CR-81301 N67-16540
- NUCLEAR REACTORS, NUCLEAR WEAPONS, AND RADIOACTIVE
ISOTOPES - BIBLIOGRAPHY
ORNL-RSIC-5, REV. 1 N67-23549
- GURWELL, W. E.
BIBLIOGRAPHY OF ALUMINUM NICKEL URANIUM BONDING -
BONDING PROCESSES, PLATING, AND DIFFUSION
BNWL-CC-1185 N67-38992
- GWYER, J. A.
SUPPORT FACILITIES AND TRANSPORTATION EQUIPMENT
FOR MISSILE AND SPACE SYSTEMS - ANNOTATED
BIBLIOGRAPHY
ATD-66-139 N67-26351
- H**
- HAAS, A. H.
CUMULATIVE KEY WORD AND AUTHOR INDEXES TO
ANALYTICAL CHEMISTRY PROGRESS REPORTS -
BIBLIOGRAPHY
ORNL-3904 N66-26456

- HAAS, A. S.
BIBLIOGRAPHY OF TECHNICAL REPORTS ON BIOLOGY,
CHEMISTRY, HEALTH PHYSICS, MATHEMATICS,
METALLURGY, NUCLEAR PHYSICS, SOLID STATE
DEVICES, AND RADIATION SAFETY
ORNL-3300, VOL. 5 N66-38610
- HAEFELE, W.
BIBLIOGRAPHY ON FAST BREEDER REACTOR TECHNOLOGY
AND NUCLEAR ECONOMY
KFK-480 N67-27450
- HAGN, G. H.
ANNOTATED BIBLIOGRAPHY ON ANTENNAS, VEGETATION,
ELECTROMAGNETIC WAVES, IMPEDANCE MATCHING,
BOTANY, AND RELATED TOPICS
AD-629155 N66-30511
- HALL, J. L.
BIBLIOGRAPHY ON EXPERIMENTAL ASPECTS OF NUCLEON-
NUCLEON SCATTERING
AERE-BIB-149 N67-23199
- HALL, L. C.
ATOMIC ABSORPTION AND EMISSION SPECTROSCOPY, AND
NEUTRON ACTIVATION FOR ULTRATRACE CHEMICAL
ANALYSIS OF MATERIALS FOR SEMICONDUCTOR
NASA-CR-82011 N67-18519
- HARLEE, F. N.
BIBLIOGRAPHY ON CHEMICAL ION-MOLECULE REACTIONS
WITH ATOMIC COMPOSITION CHANGES
NBS-TN-291 N66-37124
- HARRIE, W. J.
AEROSOL GENERATION, PARTICLE SIZE ANALYSIS
AUTORADIOGRAPHY, AND INSTRUMENTATION FOR
COLLECTING AND SEPARATING RADIOACTIVE AND
NONRADIOACTIVE PARTICLES - BIBLIOGRAPHY
IDC-12051 N66-32450
- HARRISON, A.
AUTOMATION AND TECHNOLOGICAL CHANGES AFFECTING
EMPLOYMENT AND ECONOMICS - BIBLIOGRAPHY
P-3365-1 N67-14995
- BIBLIOGRAPHY ON AUTOMATION AND TECHNOLOGICAL
CHANGE
P-3365-2 N67-28901
- HARROP, P. J.
BIBLIOGRAPHY ON DETERMINATION OF SELF-DIFFUSION
COEFFICIENTS IN SIMPLE METAL OXIDES, AND TABLE
SHOWING FREQUENCY FACTOR AND ACTIVATION ENERGY
AERE-BIB-143 N66-24424
- HART, P. E.
BIBLIOGRAPHY ON PREPROCESSING PROBLEM IN PATTERN
RECOGNITION
RADC-TR-66-819 N67-24942
- HARTING, A.
SELECTIVE BIBLIOGRAPHY ON AIR CUSHION VEHICLES
N67-36117
- HASTINGS, G. A.
ANNOTATED BIBLIOGRAPHY ON LOW-G LIQUID PROPELLANT
BEHAVIOR
NASA-CR-65539 N66-38975
- HAWLEY, R.
BIBLIOGRAPHY ON ELECTRICAL DISCHARGES IN VACUUM
AND PROPERTIES OF VACUUM AS ELECTRICAL INSULATOR
A67-29200
- HAYS, D. G.
BIBLIOGRAPHY ON COMPUTATIONAL LINGUISTICS AND
DOCUMENTATION
RM-4523-PR N66-25904
- BIBLIOGRAPHY OF ARTICLES, REPORTS, AND BOOKS ON
COMPUTATIONAL LINGUISTICS AND DOCUMENTATION
RM-4986-PR N66-28310
- BIBLIOGRAPHY OF UNITED STATES AND FOREIGN
ARTICLES, REPORTS, AND BOOKS RELEVANT TO FIELDS
OF COMPUTATIONAL LINGUISTICS AND DOCUMENTATION
RM-5345-PR N67-30258
- HEALER, J.
BIBLIOGRAPHY OF BIOSENSOR PHENOMENOLOGY BASED ON
SAMPLING OF WORLD LITERATURE FROM 1960 THROUGH
1966
NASA-CR-89616 N67-40236
- HENISZ-DOSTERT, B.
BIBLIOGRAPHY OF ARTICLES, REPORTS, AND BOOKS ON
COMPUTATIONAL LINGUISTICS AND DOCUMENTATION
RM-4986-PR N66-28310
- BIBLIOGRAPHY OF UNITED STATES AND FOREIGN
ARTICLES, REPORTS, AND BOOKS RELEVANT TO FIELDS
OF COMPUTATIONAL LINGUISTICS AND DOCUMENTATION
RM-5345-PR N67-30258
- HERRING, G. P.
IMPULSE ORBITAL TRANSFER AND ORBITAL RENDEZVOUS,
BIBLIOGRAPHY
HSM-N42-67 N67-37390
- HERRON, J. T.
BIBLIOGRAPHY ON CHEMICAL ION-MOLECULE REACTIONS
WITH ATOMIC COMPOSITION CHANGES
NBS-TN-291 N66-37124
- HERSH, M. S.
WELDING AND INSPECTION TECHNIQUES FOR 2219- T81
ALUMINUM ALLOY - BIBLIOGRAPHY AND INDUSTRY
SURVEY
NASA-CR-72097 N67-17619
- HERZ, M.
BIBLIOGRAPHY ON STELLAR INTERIORS
NASA-CR-81654 N67-17997
- HESS, W. N.
ROCKET AND SATELLITE RESEARCH BIBLIOGRAPHY ON
MAGNETIC AND ELECTRIC FIELDS, AND COSMIC
ENERGETIC PARTICLES
NASA-SP-7026 N66-30156
- HIGGINS, T. J.
INCLUSIVE CLASSIFIED BIBLIOGRAPHY PERTAINING TO
MODELING HUMAN OPERATOR AS ELEMENT IN AUTOMATIC
CONTROL SYSTEM A67-20173
- HILL, D. W.
ANNOTATED BIBLIOGRAPHY ON LOW-G LIQUID PROPELLANT
BEHAVIOR
NASA-CR-65539 N66-38975
- HILSENBECK, D.
DOCUMENTATION OF PLASMA AND THEORETICAL PHYSICS
WITH BIBLIOGRAPHY AND INDEXES
AED-C-03-04 N67-29706
- BIBLIOGRAPHY ON VARIOUS ASPECTS OF PLASMA PHYSICS
AED-C-03-07, PT. I, VOL. II N67-36515
- BIBLIOGRAPHY ON EXPERIMENTAL AND THEORETICAL
PLASMA PHYSICS
AED-C-03-06, PT. I, VOL. II N67-36626
- HODGSON, B. A. B.
STRIP TRANSMISSION LINE CHARACTERISTICS AND
APPARATUS - BIBLIOGRAPHY
RAE-LIB-BIBL-269 N67-22963
- VARIABLE-MAGNETIZATION FERRITE DEVICES -
BIBLIOGRAPHY
RAE-LIB-BIBL-268 N67-23085
- BIBLIOGRAPHY OF PULSE MAGNETIZED FERRITE DEVICE
REFERENCES
RAE-LIB-BIBL-270 N67-26190
- HOFMANN, D. J.
BIBLIOGRAPHY ON COSMIC RAYS FOR USE AS TEACHING
AID FOR COLLEGE PHYSICISTS
A67-19622
- ANNOTATED BIBLIOGRAPHY ON COSMIC RADIATION AND
RELATED SUBJECTS
CR-89 N67-23468
- HOLAHAN, F. S.
ANNOTATED BIBLIOGRAPHY ON RADIATION GRAFT
COPOLYMERIZATION

- PA-TR-3567 N67-35377
- HOLLEMAN, B. M. B.**
MICROBIOLOGICAL AND BACTERIAL CONTAMINATION OF
JET AND OTHER AIRCRAFT FUELS
TDCK-42045 N66-23690
- HOLT, J. C.**
ANNOTATED BIBLIOGRAPHY OF LITERATURE ON ELECTRONIC
PACKAGING FOR USE IN DESIGNING ELECTRONIC
EQUIPMENT
NASA-CR-76570 N66-33390
- HONG, F.**
BEHAVIORAL BIOLOGY BIBLIOGRAPHY, INCLUDING
CITATIONS ON NEUROPHYSIOLOGY, PSYCHOLOGY,
AND INFORMATION SCIENCE
NASA-CR-62040 N67-25641
- ENVIRONMENTAL BIOLOGY BIBLIOGRAPHY, INCLUDING
CITATIONS ON BIOCHEMISTRY, RADIOBIOLOGY, AND
BIOINSTRUMENTATION
NASA-CR-62041 N67-25642
- BEHAVIORAL BIOLOGY - BIBLIOGRAPHY
NASA-CR-84161 N67-26503
- BIBLIOGRAPHY ON ENVIRONMENTAL BIOLOGY
N67-32251
- BIBLIOGRAPHY ON EXTRATERRESTRIAL LIFE
N67-32252
- BIBLIOGRAPHY ON PHYSICAL BIOLOGY
N67-32253
- BIBLIOGRAPHY ON PLANETARY QUARANTINE
N67-32254
- BIBLIOGRAPHY ON BIOSCIENCE COMMUNICATIONS
N67-32255
- HONG, V. Y. S.**
MECHANISMS OF MICROBIAL CORROSION IN METALS AND
ALLOYS - LITERATURE SURVEY AND BIBLIOGRAPHY
RIA-67-534 N67-37251
- HONIGFELD, A. R.**
BIBLIOGRAPHY ON GROUP BEHAVIOR IN CONFINEMENT
TM-14-65 N67-16361
- HOOP, H. H.**
SELECTED LITERATURE SUMMARY AND ANNOTATED
BIBLIOGRAPHY ON MARS SURFACE FORMATION,
MATERIAL, AND TERRAIN
NASA-TM-X-59177 N67-13023
- BIBLIOGRAPHY AND AUTHOR ON MERCURY SURFACE,
ATMOSPHERE, ROTATION, TEMPERATURE, AND TERRAIN
NASA-CR-84113 N67-26454
- HOOPER, J. W.**
ANNOTATED BIBLIOGRAPHY OF ATOMIC AND MOLECULAR
PROCESSES FOR 1964
ORNL-AMPIC-3 N66-27098
- HOWARD, J. N.**
ATMOSPHERIC OPTICS AND RADIATION TRANSFER
COVERING SKY BRIGHTNESS, SOLAR INSULATION, EARTH
RADIANCE AND ALBEDO, ETC
A67-36899
- HUBER, R.**
BIBLIOGRAPHIC REVIEW OF BIOLOGICAL AND CHEMICAL
RADIOPROTECTIVE AGENTS
SZS-5/1966/ N67-20145
- HUGHES, G. T.**
ANNOTATED BIBLIOGRAPHY OF LITERATURE ON SOIL
DYNAMICS AND SOIL STRUCTURE INTERACTION DURING
DYNAMIC OR SIMILAR LOADINGS
DR-170 N67-29779
- HURLBUT, F. C.**
LITERATURE SURVEY ON ENERGY TRANSFER IN PARTICLE
AND SURFACE INTERACTIONS IN HYPERVELOCITY FLIGHT
RM-4885-PR N67-36168
- I**
- IBELE, W. E.**
HEAT TRANSFER BIBLIOGRAPHY INCLUDING LISTING OF
WORKS ON BOUNDARY LAYER FLOW, PHASE CHANGE,
CHANNEL FLOW, MHD CONDUCTION, ETC
A66-33043
- HEAT TRANSFER LITERATURE PUBLISHED IN 1965 ON
CONDUCTION, CHANNEL FLOW, BOUNDARY LAYER FLOW,
SEPARATED FLOW, TRANSFER MECHANISM, ETC
A66-37117
- BIBLIOGRAPHY OF BOOKS AND PERIODICALS CONCERNING
HEAT TRANSFER AND RELATED TOPICS INCLUDING
APPLICATIONS, BOUNDARY LAYER, PHASE CHANGE,
SEPARATED FLOW, ETC
A67-10978
- HEAT TRANSFER BIBLIOGRAPHY COVERING BOUNDARY
LAYER, PHASE CHANGE, TWO-PHASE FLOW, CHANNEL FLOW,
CONDUCTION, LIQUID METAL, MHD, ETC
A67-32450
- IBERALL, A. S.**
ASSESSMENT AND INTRODUCTION TO INTERDISCIPLINARY
INFORMATION BIBLIOGRAPHIES ON COMMUNICATION
NETWORKS, HUMAN INFORMATION PROCESSES, AND LARGE
CYBERNETIC SYSTEMS
AD-635809 N66-37532
- IVES, N.**
ASTRONAUTICS INFORMATION ABSTRACTS
NASA-CR-75252 N66-27241
- J**
- JAVIS, J.**
ANNOTATED BIBLIOGRAPHY ON LUNAR REVOLUTION,
ROTATION, LIBRATION, AND MAPPING TECHNIQUES
ATD-B-66-96 N66-39434
- JOHNS, D. J.**
SELECTIVE BIBLIOGRAPHY AND SURVEY OF RESEARCH IN
PROGRESS IN NATO COUNTRIES ON PANEL FLUTTER
N67-15160
- JOHNSON, K. O.**
BIBLIOGRAPHY OF TECHNICAL REPORTS ON BIOLOGY,
CHEMISTRY, HEALTH PHYSICS, MATHEMATICS,
METALLURGY, NUCLEAR PHYSICS, SOLID STATE
DEVICES, AND RADIATION SAFETY
ORNL-3300, VOL. 5 N66-38610
- JONES, M. C.**
INFRARED SPECTRAL AND TOTAL REFLECTANCES FOR
METALS AT CRYOGENIC TEMPERATURES - LITERATURE
DATA COMPILATION AND BIBLIOGRAPHY
NBS-TN-348 N67-27774
- JONES, P. J.**
VIBRATORY COMPACTION OF METAL AND CERAMIC
POWDERS - BIBLIOGRAPHY
AERE-BIB-153 N67-29934
- BIBLIOGRAPHY ON LIQUID METAL WETTING METHODS FOR
OXIDES
AERE-BIB-155 N67-39307
- JOSHI, S. W.**
BIBLIOGRAPHY ON STATISTICAL PROBABILITY AND
PROBABILITY DISTRIBUTION FUNCTIONS
ARL-66-0185 N67-28542
- JUNKES, J.**
BIBLIOGRAPHY ON ARC, SPARK, AND GRATING SPECTRA OF
IRON, BAND SPECTRA OF METALLIC OXIDES, THORIUM
SPECTRA, AND ATOMIC SPECTRA IN VACUUM
ULTRAVIOLET
N67-30698
- K**
- KACINSKAS, L.**
ANNOTATED BIBLIOGRAPHY ON THEORETICAL ASPECTS OF
ANTENNAS
ATD-66-33 N66-28112
- KAISER, D. A.**
ELECTRONIC PACKAGING, INTEGRATED CIRCUITS, CIRCUIT

- DESIGN, AND MICROCIRCUIT DESIGN - SURVEY WITH
BIBLIOGRAPHY
NASA-TM-X-59418 N67-19037
- KANTZ, M. R.
BIBLIOGRAPHY ON PENTAERYTHRITOL TETRANITRATE AND
HOMOLOGS
MLM-1252 N66-26029
- KASS, W. J.
SOLUBILITY OF HYDROGEN IN TRANSITION METALS AND
ELEMENTS, WITH BIBLIOGRAPHY
REPT.-6 N67-34050
- KATZ, M.
BIBLIOGRAPHY ON SHOCK WAVE INTERACTION, SHOCK
TUBES, AND ASSOCIATED INSTRUMENTATION
REPT.-38 N67-30948
- KATZENBACH, N. DE. B.
ANALYSIS OF EXISTING LITERATURE AND ANNOTATED
BIBLIOGRAPHY OF REPORTS RELATED TO INTERNATIONAL
SPACE LAW AND TECHNICAL ASPECTS OF ASTRONAUTICS
N67-25292
- KEHRBERGER, H. P.
BIBLIOGRAPHY OF SPACE LAW AND ITS BACKGROUND -
POLITICAL, ECONOMICAL, MILITARY ASPECTS OF
ASTRONAUTICS N67-18376
- KENK, R.
SUBJECT AND AUTHOR CUMULATIVE INDEXES ON AEROSPACE
MEDICINE AND BIOLOGY - ANNOTATED BIBLIOGRAPHY
NASA-CR-75598 N66-27623
- ABSTRACTS ON AEROSPACE MEDICINE AND BIOLOGY -
BIBLIOGRAPHY ON PHYSIOLOGY, PSYCHOLOGY,
PSYCHIATRY, ENVIRONMENTAL FACTORS, AND GENERAL
ASPECTS OF BIOLOGICAL RESEARCH
NASA-CR-75599 N66-27624
- ABSTRACTS ON AEROSPACE MEDICINE AND BIOLOGY -
BIBLIOGRAPHY ON ENVIRONMENTAL FACTORS, SAFETY
AND SURVIVAL, PERSONNEL, PHARMACOLOGY,
TOXICOLOGY, AND LIFE SUPPORT SYSTEMS
NASA-CR-75597 N66-27625
- KERLINS, V.
HANDBOOK OF ELECTRON FRACTOGRAPHY INCLUDING
BIBLIOGRAPHY OF RELATED OPEN LITERATURE
AFML-TR-64-416 N66-31274
- KHALKIN, V. A.
PREPARATION AND PROPERTIES OF INORGANIC AND
ORGANIC FORMS - BIBLIOGRAPHY
JINR-P-2895 N67-18473
- KIEFFER, L. J.
LOW ENERGY ELECTRON COLLISION CROSS SECTION DATA -
BIBLIOGRAPHY
NBS-MISC.-PUBL.-289 N67-27747
- KING, A. L.
SIPHONS AND SIPHON SPILLWAYS - BIBLIOGRAPHY, WITH
ABSTRACTS
BIB-21 N67-22462
- KINGSBURY, R.
ANNOTATED BIBLIOGRAPHY ON JAPANESE RESEARCH
STUDIES IN PHYSICS AND CHEMISTRY
UCRL-14288 N67-25509
- KIRK, R. J.
TERRESTRIAL INFRARED HORIZON PROFILE DATA FOR
SPACE VEHICLE HORIZON SENSING, WITH BIBLIOGRAPHY
NASA-CR-722 N67-22178
- KISLYAKOV, V. A.
CEREBRAL CORTEX AND FUNCTION OF VESTIBULAR
APPARATUS, INCLUDING BIBLIOGRAPHY
FTD-TT-66-30 N67-14703
- KIVIAT, P. J.
BIBLIOGRAPHY AND REVIEW OF DEVELOPMENT IN DISCRETE
DIGITAL COMPUTER SIMULATION LANGUAGES AND
PROGRAMMING
P-3453 N67-16124
- KLAPHEKE, J. W.
ANNOTATED BIBLIOGRAPHY OF LITERATURE ON ELECTRONIC
PACKAGING FOR USE IN DESIGNING ELECTRONIC
EQUIPMENT
NASA-CR-76570 N66-33390
- KLEIN, V.
LIFTING REENTRY SPACECRAFT - PROBLEMS OF LIFTING
AND BALLISTIC HYPERVELOCITY FLIGHT, ATMOSPHERIC
REENTRY TECHNIQUES, AND ANNOTATED BIBLIOGRAPHY
ATD-66-34 N66-25179
- PROTECTIVE STRUCTURES AND COMPONENTS ANNOTATED
BIBLIOGRAPHY WITH ABSTRACTS
ATD-66-3 N66-25913
- REVIEW AND ANNOTATED BIBLIOGRAPHY ON RESEARCH IN
HIGH SPEED LIFTING AND BALLISTIC REENTRY
ATD-66-106 N67-14313
- KLEMENT, A. W., JR.
ANNOTATED BIBLIOGRAPHY ON NATURAL ENVIRONMENTAL
RADIOACTIVITY IN ATMOSPHERE, BIOLOGICAL
MATERIALS, SOILS, AND WATERS
WASH-1061 N66-26228
- KOSAREV, YU. G.
COMPUTER SYSTEMS DESIGN TECHNIQUES, AND RELATED
BIBLIOGRAPHY N67-25719
- KOURILO, J. J.
ULTRAHIGH PRESSURE STUDIES AND CRYSTAL GROWTH
TECHNIQUES - ANNOTATED BIBLIOGRAPHY
ATD-66-56 N67-12491
- KOWALL, D. M.
ANNOTATED BIBLIOGRAPHY OF WEIGHTLESSNESS
SIMULATION USING WATER IMMERSION TECHNIQUES
LMSC-5-24-65-3/SB-65-2, REV. 1 N67-28573
- KRAUSE, M. O.
ANNOTATED BIBLIOGRAPHY OF ATOMIC AND MOLECULAR
PROCESSES FOR 1964
ORNL-AMPIC-3 N66-27098
- KSANDER, Y.
ANNOTATED BIBLIOGRAPHY OF RESEARCH ON NUCLEAR
WEAPONS EFFECTS
ATD-66-45 N66-35485
- KULP, L. A.
BEHAVIORAL BIOLOGY BIBLIOGRAPHY, INCLUDING
CITATIONS ON NEUROPHYSIOLOGY, PSYCHOLOGY,
AND INFORMATION SCIENCE
NASA-CR-62040 N67-25641
- ENVIRONMENTAL BIOLOGY BIBLIOGRAPHY, INCLUDING
CITATIONS ON BIOCHEMISTRY, RADIOBIOLOGY, AND
BIOINSTRUMENTATION
NASA-CR-62041 N67-25642
- BEHAVIORAL BIOLOGY - BIBLIOGRAPHY
NASA-CR-84161 N67-26503
- BIBLIOGRAPHY ON ENVIRONMENTAL BIOLOGY
N67-32251
- BIBLIOGRAPHY ON EXTRATERRESTRIAL LIFE
N67-32252
- BIBLIOGRAPHY ON PHYSICAL BIOLOGY
N67-32253
- BIBLIOGRAPHY ON PLANETARY QUARANTINE
N67-32254
- BIBLIOGRAPHY ON BIOSCIENCE COMMUNICATIONS
N67-32255
- L
- LANGER, E.
BIBLIOGRAPHY ON STELLAR INTERIORS
NASA-CR-81654 N67-17997
- LANGSTON, R.
SPACE VEHICLE, GUIDANCE, AND CONTROL SUMMARY AND
BIBLIOGRAPHY
NASA-TM-X-59660 N67-26297

- LARSON, E. R.
SELECTED MATHEMATICS MATERIALS LIST IN U. S.
NAVAL POSTGRADUATE SCHOOL LIBRARY
TR-58 N66-24707
- LE LEVIER, M.-G.
BIBLIOGRAPHY ON APPLICATIONS OF ELECTRON BEAM
TECHNIQUES IN METALLURGY
CEA-BIB-43 N66-32870
- LENGYEL, B. A.
BIBLIOGRAPHY ON LASERS AND LASER APPLICATIONS
A67-21713
- LENSKIY, V. S.
LITERATURE SURVEY ON INTERACTION OF SOLIDS AT
HIGH VELOCITIES, COLLISION EXPERIMENTS, AND
STATE EQUATIONS OF SOLIDS
JPRS-42562 N67-37711
- LEON, A.
CLASSIFIED BIBLIOGRAPHY ON OPTIMIZATION CONSISTING
OF TECHNIQUES, STOCHASTIC OPTIMIZATION AND
PROBLEM FORMULATION A66-35886
- LEVI, D. W.
BIBLIOGRAPHY ON THERMAL DEGRADATION, THERMAL
OXIDATION AND THERMAL ANALYSIS OF HIGH POLYMERS
PLASTEC-10 N66-27720
- ANNOTATED BIBLIOGRAPHY ON CROSS LINKING, THERMAL,
AND MECHANICAL PROPERTIES OF THERMOPLASTIC AND
PHENOLIC RESIN SYSTEMS
PLASTEC-11 N66-35545
- BIBLIOGRAPHY ON DIELECTRIC PROPERTIES OF POLYMERS
PLASTEC-12 N66-38289
- ANNOTATED AND INDEXED BIBLIOGRAPHY OF FERROCENE
POLYMERS
PLASTEC-15 N67-19730
- ANNOTATED BIBLIOGRAPHY ON RADIATION GRAFT
COPOLYMERIZATION
RA-TR-3567 N67-35377
- LEWIS, M. F.
BIBLIOGRAPHY ON DIAGNOSTIC TESTS FOR COLOR VISION
DEFECTS
AM-67-8 N67-39867
- LIEFFERING, H.
ABSTRACTS OF INFRARED STUDIES - EMISSION,
TRANSMISSION, DETECTION, NOISE, SYSTEMS,
APPLICATIONS, BIBLIOGRAPHY
TDCK-44741 N66-28100
- ANNOTATED BIBLIOGRAPHY ON VARIOUS ASPECTS OF
INFRARED RADIATION
TDCK-44741 N67-28355
- LIPSON, L.
ANALYSIS OF EXISTING LITERATURE AND ANNOTATED
BIBLIOGRAPHY OF REPORTS RELATED TO INTERNATIONAL
SPACE LAW AND TECHNICAL ASPECTS OF ASTRONAUTICS
N67-25292
- LIVINGSTON, J. D.
LITERATURE SURVEY ON INTERMEDIATE STATE OF
SEMICONDUCTORS
REPT.-66-C-328 N67-35014
- LOCKER, J. G.
ANNOTATED BIBLIOGRAPHY OF LITERATURE ON SOIL
DYNAMICS AND SOIL STRUCTURE INTERACTION DURING
DYNAMIC OR SIMILAR LOADINGS
DR-170 N67-29779
- LUDWIG, G. H.
ABSTRACTS AND EXPERIMENT DESCRIPTIONS OF OGO I,
II, III, E, AND F - BIBLIOGRAPHY
NASA-CR-81210 N67-15846
- LUIKOV, A. V.
HEAT TRANSFER BIBLIOGRAPHY OF RUSSIAN WORKS
INCLUDING CONDUCTIVE, CONVECTIVE AND RADIANT HEAT
TRANSFER, PHASE AND CHEMICAL CONVERSIONS, MASS
TRANSFER, ETC A66-26938
- HEAT TRANSFER BIBLIOGRAPHY OF RUSSIAN WORKS,
INCLUDING LISTING OF WORKS ON THERMODYNAMICS,
HEAT CONDUCTION, RADIANT AND CONVECTIVE HEAT
TRANSFER PROCESSES, PHASE CHANGE, MASS TRANSFER,
DRYING PROCESSES, ETC A66-33044
- BIBLIOGRAPHY OF RUSSIAN WORKS ON HEAT TRANSFER
AND RELATED TOPICS INCLUDING HEAT CONDUCTION,
THERMODYNAMICS, TRANSFER PROCESSES INVOLVING PHASE
AND CHEMICAL CONVERSION, ETC A67-10979
- SOVIET HEAT TRANSFER BIBLIOGRAPHY COVERING HEAT
CONDUCTION, CONVECTIVE AND RADIATIVE HEAT
TRANSFER, MASS TRANSFER, DRYING PROCESSES, HIGH
TEMPERATURE, ETC A67-34166
- LUNNEY, E. J.
ACOUSTICS, SHOCK AND VIBRATION BIBLIOGRAPHY OF
1959-1965 MEETINGS OF INSTITUTE OF ENVIRONMENTAL
SCIENCES A66-33040
- LUTZ, O.
DUAL-FLOW AND SINGLE-FLOW JET ENGINES
A66-29364
- LYAU, C. F. C.
BIBLIOGRAPHY ON APPLICATION OF MULTIPROCESSOR
SYSTEMS TO SPACE MISSIONS
NASA-CR-76756 N66-32432
- M
- MA, R.
BIBLIOGRAPHY ON COMPUTATIONAL LINGUISTICS AND
DOCUMENTATION
RM-4523-PR N66-25904
- MAC DONALD, T. P.
ASTRONAUTICS INFORMATION ABSTRACTS
NASA-CR-75252 N66-27241
- MAGNITSKIY, V. A.
INTERNAL STRUCTURE AND PHYSICS OF EARTH,
INCLUDING THERMAL HISTORY, SEISMOLOGICAL DATA,
GRAVITATIONAL FIELD, RHEOLOGY, AND BIBLIOGRAPHY
NASA-TT-F-395 N67-23321
- MAGNOLIA, L. R.
U. S.S.R. SPACE RESEARCH PROGRAM ANNOTATED
BIBLIOGRAPHY OF TITLES - MANNED SPACE FLIGHT,
FAR SIDE OF MOON, ENVIRONMENT AND PHYSIOLOGY,
SATELLITE OBSERVATION, AND COSMIC RADIATION
TRW-9990-7235-T0-000 N66-25282
- BIBLIOGRAPHY ON MANNED EXPLORATION, COLONIZATION,
AND EXPLOITATION OF LUNAR SURFACE
TRW-99900-6045-T000 N67-16587
- MANNED EXPEDITIONS TO MARS - SELECTIVE
BIBLIOGRAPHY
TRW-99900-6264-T001 N67-39866
- MAITLAND, A.
BIBLIOGRAPHY ON ELECTRICAL DISCHARGES IN VACUUM
AND PROPERTIES OF VACUUM AS ELECTRICAL INSULATOR
A67-29200
- MALTSEV, V. N.
HISTORY OF RESEARCH IN AERODYNAMICS IN
U. S. S. R. WITH BIBLIOGRAPHY
FTD-MT-65-497 N66-38185
- MARCHESANI, M.
SELECTED BIBLIOGRAPHY ON PHYSIOLOGICAL AND
PSYCHOLOGICAL ASPECTS OF SMOKING
A66-81958
- MARCINISZYN, J. P., JR.
BIBLIOGRAPHY ON ELECTROCHEMISTRY OF HIGH ENERGY
COMPOUNDS IN ORGANIC ELECTROLYTES
NASA-CR-78235 N66-37304
- MARINGER, R. E.
DAMPING CAPACITY IN MATERIALS - ANNOTATED
BIBLIOGRAPHY
NASA-CR-80143 N67-12059
- DAMPING CAPACITY OF METALS - BIBLIOGRAPHY
NASA-CR-80144 N67-12060

- MARKOV, S.
ELECTRIC PROPERTIES OF ORGANIC SEMICONDUCTORS AND
PHOTOCONDUCTORS
ATD-66-49 N67-10180
- BIBLIOGRAPHY OF FOREIGN OPEN SOURCE LITERATURE
DEALING WITH PROPELLANTS AND COMBUSTION
ATD-66-146 N67-33492
- BIBLIOGRAPHY AND ANALYTICAL REVIEW OF 34 U.S.S.R.
TITLES ON PROPELLANT PROPERTIES AND COMBUSTION
PROCESSES
ATD-67-32 N67-40166
- MARTIN, G.
LITERATURE AND INDUSTRIAL SURVEYS OF
NONDESTRUCTIVE TESTING EQUIPMENT AND TECHNIQUES
FOR APPLICATION TO HONEYCOMB HEAT SHIELDS,
INCLUDING PARTIALLY ANNOTATED BIBLIOGRAPHY
NASA-CR-81525 N67-17138
- MARTIN, M. J.
NUCLEAR THEORY INDEX OF BIBLIOGRAPHIC REFERENCES
FOR 1964
TID-22771 N66-25204
- MASKEWITZ, B. F.
BIBLIOGRAPHY OF COMPUTER CODES ON RADIATION AND
NUCLEAR SHIELDING
NASA-CR-81301 N67-16540
- MASON, G. F.
BIBLIOGRAPHY ON GAMMA RAY SPECTRAL ANALYSES,
EQUIPMENT, AND SAMPLE PREPARATION
AFRR1-SP66-10 N67-16494
- MAUSBERG, W.
PARTICLE ACCELERATOR TECHNOLOGY - BIBLIOGRAPHY
AED-C-18-07 N67-29334
- MAVRODINEANU, R.
BIBLIOGRAPHY FOR FLAME SPECTROSCOPY ANALYTICAL
MEASUREMENTS - 1800 TO 1966 N67-39096
- BIBLIOGRAPHY ON FLAME SPECTROSCOPY COVERING PERIOD
FROM 1800 TO 1966 AND EMPHASIZING ANALYTICAL
APPLICATIONS
NBS-MISC.-PUBL.-281 N67-39956
- MAYE, B.
BIBLIOGRAPHY ON THERMOPHYSICAL EXPERIMENTS AND
ANALYSES FOR MARS
NASA-TM-X-60552 N67-39868
- MAYOROV, S. A.
CHAPTER ABSTRACTS AND BIBLIOGRAPHY PERTAINING TO
COMPUTER TECHNOLOGY
JPRS-39826 N67-23421
- MC GHIE, R. D.
ANNOTATED BIBLIOGRAPHY ON DEFORMATION, VIBRATION,
AND STABILITY OF CYLINDRICAL, SPHERICAL, AND
CONICAL SHELLS
UCRL-13187 N66-23317
- MC GILL, B. L.
BIBLIOGRAPHY OF COMPUTER CODES ON RADIATION AND
NUCLEAR SHIELDING
NASA-CR-81301 N67-16540
- MC GRATH, J. R.
BIBLIOGRAPHY OF RESEARCH IN EXPLODING WIRE
PHENOMENA
NRL-MR-1698 N66-33255
- MC HUGH, N.
BIBLIOGRAPHY ON THERMOPHYSICAL EXPERIMENTS AND
ANALYSES FOR MARS
NASA-TM-X-60552 N67-39868
- MC KELDIN, E.
BIBLIOGRAPHY ON NERVE CONDUCTION AND NERVE
IMPULSES, WITH EMPHASIS ON BEHAVIOR OF NERVE
CELL NETWORKS
P-3613 N67-37557
- MC NUTT, W. P.
ANNOTATED BIBLIOGRAPHY OF FERROCENE AND
DERIVATIVES INCLUDING SYNTHESIS, REACTION,
BONDING, AND APPLICATION
NASA-TM-X-59478 N67-19943
- BIBLIOGRAPHY ON THERMOPHYSICAL EXPERIMENTS AND
ANALYSES FOR MARS
NASA-TM-X-60552 N67-39868
- MEAD, G. D.
ROCKET AND SATELLITE RESEARCH BIBLIOGRAPHY ON
MAGNETIC AND ELECTRIC FIELDS, AND COSMIC
ENERGETIC PARTICLES
NASA-SP-7026 N66-30156
- MELLENTIN, K.
HIGH-ENERGY PHYSICS BIBLIOGRAPHY - COMPUTATION OF
ELECTRON-PHOTON CASCADES BY MONTE CARLO METHOD,
PION-ELECTRON SCATTERING, ORIGIN OF INTERNAL
SYMMETRY, AND SPIN TESTS FOR FERMIONS
AED-C-23-08, PT. 1 N66-31063
- BIBLIOGRAPHY ON HIGH ENERGY PHYSICS
AED-C-23-08, PT. 2 N66-31064
- MERHIB, C. P.
ANNOTATED BIBLIOGRAPHY ON ULTRASONIC TESTING
AMRA-MS-66-05 N67-10983
- ANNOTATED BIBLIOGRAPHY ON ULTRASONIC TESTING
AMRA-MS-66-11, VOL. III N67-26949
- NONDESTRUCTIVE, ULTRASONIC TESTING - BIBLIOGRAPHY
AND ABSTRACTS
AMRA-MS-67-03 N67-29114
- ANNOTATED BIBLIOGRAPHY OF LITERATURE ON FATIGUE
TESTING
AMRA-MS-67-05 N67-32858
- MICHAELS, D. W.
ANNOTATED BIBLIOGRAPHY ON LUNAR REVOLUTION,
ROTATION, LIBRATION, AND MAPPING TECHNIQUES
ATD-B-66-96 N66-39434
- MILEK, J. T.
BIBLIOGRAPHY ON POLYTETRAFLUOROETHYLENE / TEFLON/
PLASTICS
LS-BIB-65-3 N66-26606
- FACTORS AFFECTING USE OF BERYLLIUM AS MIRROR IN
CRYOGENIC ENVIRONMENT - BIBLIOGRAPHY
OPSR-3 N67-37880
- MILLER, H. W.
ANNOTATED BIBLIOGRAPHY OF CHEMICAL AND PHYSICAL
PROPERTIES OF AMERICIUM
RFP-770 N67-22382
- MOFFATT, J. P.
BIBLIOGRAPHY ON OPTICAL INFORMATION AND DATA
PROCESSING
NASA-CR-81662 N67-17966
- MOHLER, S. R.
ANNOTATED BIBLIOGRAPHY OF MEDICAL REPORTS FROM
1961 THROUGH 1965 BY CIVIL AVIATION AGENCY
AM-66-1 N66-36251
- MOLZON, A. E.
BIBLIOGRAPHY, SUBJECT AND AUTHOR INDEXES, AND CODE
DESCRIPTION OF TECHNICAL CONFERENCE PAPERS ON
PLASTICS
PLASTEC-27 N67-16470
- REVIEW AND ANNOTATED BIBLIOGRAPHY ON PLASTICS
ENCAPSULATION OF ELECTRONIC PARTS AND CIRCUITS
PLASTEC-29 N67-27161
- MONROE, R. E.
STATE-OF-ART OF METAL-METAL BONDING IN SPACE
ENVIRONMENT - BIBLIOGRAPHY
NASA-TM-X-59395 N67-18509
- MOO, C. A.
THEORETICAL STUDY OF PROPAGATION OF LONG-PERIOD
INFRASONIC WAVES FROM NUCLEAR EXPLOSIONS IN
ATMOSPHERE, INCLUDING BIBLIOGRAPHY
AVSSD-0059-67-RR N67-28984

- MOORE, J. F.
LITERATURE AND INDUSTRIAL SURVEYS OF
NONDESTRUCTIVE TESTING EQUIPMENT AND TECHNIQUES
FOR APPLICATION TO HONEYCOMB HEAT SHIELDS,
INCLUDING PARTIALLY ANNOTATED BIBLIOGRAPHY
NASA-CR-81525 N67-17138
- MOTT, B. W.
BIBLIOGRAPHY ON PHYSICAL PROPERTIES OF LIQUID
METAL BINARY SYSTEMS
AERE-BIB-151 N67-21615
- MURDOCK, J. C.
COMPUTERIZED TECHNIQUES APPLIED TO ECONOMICS TO
PRODUCE BIBLIOGRAPHY OF RELATED MATERIAL
NASA-CR-80097 N67-12157
- MURRAY, I.
BIBLIOGRAPHY ON HEAT N67-12625
- N**
- NARTSISSOV, B.
ANNOTATED BIBLIOGRAPHY OF SOVIET RESEARCH IN
ENERGY TRANSFER IN PHOTOSYNTHESIS AND VISION
ATD-B-65-102 N66-25762
- NEELAND, F. I.
BIBLIOGRAPHY ON INFORMATION SCIENCE AND TECHNOLOGY
TM-3008/001/00 N66-37431
BIBLIOGRAPHY ON INFORMATION SCIENCE AND TECHNOLOGY
TM-3008/003/00-PT-3 N67-21871
- NEFEDOV, V. D.
PREPARATION AND PROPERTIES OF INORGANIC AND
ORGANIC FORMS - BIBLIOGRAPHY
JINR-P-2895 N67-18473
- NEILL, J. M.
LITERATURE SURVEY ON METHODS OF CALCULATING AND
MEASURING THERMAL NEUTRON SPECTRA AND REVIEW OF
SPECTRAL MEASUREMENTS TECHNIQUES
GA-7092 N67-40249
- NESES, E. I.
SOVIET AND FOREIGN PAPERS ON PHYSICS OF BOILING
COVERING HEAT TRANSFER, HEAT RELEASE, BUBBLING
PROCESSES, KINETICS AND SONIC ASPECTS OF BOILING,
INCLUDING BIBLIOGRAPHY A66-38509
- NEUMANN, T. W.
ANNOTATED BIBLIOGRAPHY ON VARIOUS MEANS OF
DETECTING EXTRATERRESTRIAL LIFE FOR AUTOMATED
BIOLOGICAL LABORATORY PROGRAM
NASA-CR-81311 N67-16579
- NEWMAN, L.
BIBLIOGRAPHY ON NERVE CONDUCTION AND NERVE
IMPULSES, WITH EMPHASIS ON BEHAVIOR OF NERVE
CELL NETWORKS
P-3613 N67-37557
- NICHOLS, B. H.
ASTRONAUTICS INFORMATION ABSTRACTS
NASA-CR-75252 N66-27241
- NIKOLAI, R. J.
EQUILIBRIUM, BUCKLING, VIBRATION, AND WAVE MOTION
AND IMPACT IN HOMOGENEOUS AND INHOMOGENEOUS
ELASTIC PLATES - BIBLIOGRAPHY
T&AM-257 N66-23445
- NOEL, G. T.
HISTORICAL DOCUMENTATION AND BIBLIOGRAPHY ON PAST
RESEARCH IN PHOTOVOLTAIC SOLAR ENERGY CONVERTER
CELLS
NASA-CR-84008 N67-26180
BIBLIOGRAPHY ON PHOTOVOLTAIC EFFECT AND SOLAR CELL
DEVELOPMENT
NASA-CR-86979 N67-32180
BIBLIOGRAPHY OF PAPERS ON PHOTOVOLTAIC EFFECT AND
HISTORICAL REVIEW OF SCIENTIFIC INVESTIGATIONS
DURING YEARS 1839-1940
NASA-CR-89662 N67-40086
- NORSEEV, YU. V.
PREPARATION AND PROPERTIES OF INORGANIC AND
ORGANIC FORMS - BIBLIOGRAPHY
JINR-P-2895 N67-18473
- O**
- OFROSSIMOV, B.
BIBLIOGRAPHY OF FOREIGN OPEN SOURCE LITERATURE
DEALING WITH PROPELLANTS AND COMBUSTION
ATD-66-146 N67-33492
- OGATA, H.
NUCLEAR THEORY INDEX OF BIBLIOGRAPHIC REFERENCES
FOR 1964
TID-22771 N66-25204
- OJEMANN, R. G.
LITERATURE SURVEY ON CORRELATIONS BETWEEN HUMAN
BRAIN LESIONS AND MEMORY CHANGES, CLINICAL CASE
HISTORIES, AND PSYCHOLOGICAL TESTS OF MEMORY
FUNCTIONS N67-22582
- OKEEFFE, M.
SOLUBILITY OF HYDROGEN IN TRANSITION METALS AND
ELEMENTS, WITH BIBLIOGRAPHY
REPT.-6 N67-34050
- OLTE, A.
BIBLIOGRAPHY OF TECHNICAL REPORTS ON PLASMA SHEATH
PHENOMENA AND COMMUNICATIONS BLACKOUT DURING
VEHICLE ATMOSPHERIC REENTRY
NASA-CR-66280 N67-19139
- OSBORN, M. J.
FLUID AMPLIFIERS AND NO MOVING PART CONTROL
DEVICES - ANNOTATED BIBLIOGRAPHY
NASA-CR-734 N67-27618
- OSTER, L.
BIBLIOGRAPHY FROM RESEARCH ON INTERACTION OF
SOLAR FLARE PARTICLES WITH CORONAL PLASMA
NASA-CR-76457 N66-31745
- OTTESEN, E. A.
ARTICLES AND BIBLIOGRAPHY ON ORIGIN AND EVOLUTION
OF EXTRATERRESTRIAL LIFE - MARINER IV AND OTHER
OBSERVATIONS OF MARS
NAS-NRC-1296A N67-12721
- OZAWA, S.
ANNOTATED BIBLIOGRAPHY ON JAPANESE RESEARCH
STUDIES IN PHYSICS AND CHEMISTRY
UCRL-14288 N67-25509
- P**
- PALMISANO, W.
BIBLIOGRAPHY ON BIOLOGICAL EFFECTS AND HAZARDS
ASSOCIATED WITH LASER EQUIPMENT
AD-652707 N67-32126
- PANOYA, E. M.
BIBLIOGRAPHY OF SOVIET SCIENTIFIC LITERATURE ON
AEROSPACE MEDICINE AND BIOASTRONAUTICS
JPRS-38661 N67-12013
- PARANDJUK, S.
ANNOTATED BIBLIOGRAPHY ON THEORETICAL STUDIES OF
COMBUSTION MECHANISM AND EXPLOSIVE PROPERTIES
ATD-R-66-80 N67-26218
- PARO, J. N.
NUCLEAR SHIP PROPULSION - BIBLIOGRAPHY
AED-C-22-06 N67-13322
- PARR, W. E.
MATHEMATICAL FORMULATIONS OF PHYSICAL WATER ENTRY
PROBLEMS FOR COMPRESSIBLE, LINEARIZED
COMPRESSIBLE, LINEARIZED INCOMPRESSIBLE, AND
OTHER CASES - BIBLIOGRAPHY
NOLTR-66-173 N67-16477
- PATEL, M. R.
MECHANICAL PROPERTIES AND STRUCTURE OF FOAMED
MATERIAL - BIBLIOGRAPHY
UCRL-13193 N66-30889

- PATIL, G. P.
BIBLIOGRAPHY ON STATISTICAL PROBABILITY AND
PROBABILITY DISTRIBUTION FUNCTIONS
ARL-66-0185 N67-28542
- PATTEE, H. E.
STATE-OF-ART OF METAL-METAL BONDING IN SPACE
ENVIRONMENT - BIBLIOGRAPHY
NASA-TM-X-59395 N67-18509
- PAUL, C. K.
SURVEY AND BIBLIOGRAPHY CONCERNING USE OF
REINFORCED PLASTICS IN STRUCTURAL SYSTEMS
R-491 N67-16121
- PAUL, E.
BIBLIOGRAPHY COVERING 1940 THROUGH 1966 OF TITLES
ON PHYSICAL AND PHYSIOCHEMICAL PROPERTIES OF
KRYPTON
JUL-BIBL-11 N67-20307
- PENNY, S. K.
NUCLEAR REACTORS, NUCLEAR WEAPONS, AND RADIOACTIVE
ISOTOPES - BIBLIOGRAPHY
ORNL-RSIC-5, REV. 1 N67-23549
- PHILLIPS, A.
HANDBOOK OF ELECTRON FRACTOGRAPHY INCLUDING
BIBLIOGRAPHY OF RELATED OPEN LITERATURE
AFML-TR-64-416 N66-31274
- PICK, G. S.
BIBLIOGRAPHY ON STORM SURGES AS RELATED TO
OCEANOGRAPHY
SN-134-12 N67-10981
- PIERCE, A. D.
THEORETICAL STUDY OF PROPAGATION OF LONG-PERIOD
INFRASONIC WAVES FROM NUCLEAR EXPLOSIONS IN
ATMOSPHERE, INCLUDING BIBLIOGRAPHY
AVSSD-0059-67-RR N67-28984
- PILKEY, W. D.
OPTIMUM MECHANICAL EXPERIMENTAL DESIGN SYNTHESIS -
BIBLIOGRAPHY WITH ABSTRACTS
AROD-4957-6, VOL. II N66-39463
- PITHA, C. A.
SELF FOCUSING, STIMULATED BRILLOUIN SCATTERING,
MULTIPHOTON ABSORPTION, AND MICROPLASMA
GENERATION MECHANISMS CAUSING DAMAGE TO LASER
COMPONENT ELEMENTS UNDER HIGH POWER CONDITIONS
AFCL-67-0137 N67-28556
- PITKIN, E. T.
BIBLIOGRAPHY OF PROGRAMMED LOW-THRUST TRAJECTORIES
AND OPTIMAL LOW-THRUST TRAJECTORIES
A66-32350
- PITTMAN, C. V., JR.
ANNOTATED BIBLIOGRAPHY OF FERROCENE AND
DERIVATIVES INCLUDING SYNTHESIS, REACTION,
BONDING, AND APPLICATION
NASA-TM-X-59478 N67-19943
- PODOSKI, J. J.
BIBLIOGRAPHY ON SOVIET DEVELOPMENTS IN COMPUTER
TECHNOLOGY
ATD-66-12 N66-26171
- PODPALY, V.
BIBLIOGRAPHY ON SOVIET DEVELOPMENTS IN COMPUTER
TECHNOLOGY
ATD-66-12 N66-26171
- ABSTRACTS OF SOVIET ARTICLES ON COMMUNICATIONS
EQUIPMENT AND FACILITIES
ATD-67-41 N67-37693
- POSEY, K. A.
ANNOTATED BIBLIOGRAPHY ON ANTENNAS, VEGETATION,
ELECTROMAGNETIC WAVES, IMPEDANCE MATCHING,
BOTANY, AND RELATED TOPICS
AD-629155 N66-30511
- POWERS, J. L.
AEROSOL GENERATION, PARTICLE SIZE ANALYSIS
AUTORADIOGRAPHY, AND INSTRUMENTATION FOR
COLLECTING AND SEPARATING RADIOACTIVE AND
NONRADIOACTIVE PARTICLES - BIBLIOGRAPHY
IDO-1205I N66-32450
- PRENTICE, V. L.
REMOTE SENSING OF ENVIRONMENT BY RADAR AND
INFRARED IMAGERY AND OPTICAL SENSORS -
BIBLIOGRAPHY
REPT.-4864-12-P N67-29134
- PRICE, J. F.
ANNOTATED BIBLIOGRAPHY ON NUMERICAL ANALYSIS AND
RELATED LITERATURE FOR SCIENTIFIC COMPUTER USERS
DI-82-0517 N66-30548
- ## R
- RAAEN, H. P.
CUMULATIVE KEY WORD AND AUTHOR INDEXES TO
ANALYTICAL CHEMISTRY PROGRESS REPORTS -
BIBLIOGRAPHY
ORNL-3904 N66-26456
- RAFIQUE, M. M.
BIBLIOGRAPHY ON SOLAR ENERGY - CELLS, COLLECTORS,
CONVERTERS AND CONCENTRATORS, ECONOMICS,
MEASUREMENT, SPACE APPLICATIONS, AND STILLS
AECL-PAK/LIB-15 N67-22471
- BIBLIOGRAPHY ON INFRARED DETECTORS, RADIATION,
APPLICATIONS, SYSTEMS, SCANNERS, AND PHOTOGRAPHY
AECL-PAK/LIB-13 N67-25562
- BIBLIOGRAPHY ON LASER TECHNOLOGY, USES, AND
APPLICATIONS
AECL-PAK/LIB-12 N67-25566
- RANDJELOVIC, J. V.
ANNOTATED BIBLIOGRAPHY ON ELECTROSTATIC AND
ELECTROMAGNETIC GENERATORS
ATD-66-10 N66-28118
- SOVIET DEVELOPMENTS IN RADIATION, OPTICAL, GAS,
VIBRATION, AND PLASMA TEMPERATURE SENSORS,
BIBLIOGRAPHY
ATD-67-39 N67-36994
- RAPETTI, V. A.
KENNEDY SPACE CENTER DEVELOPMENT FROM 1949
THROUGH 1965 - SELECTED BIBLIOGRAPHY OF ARTICLES
NASA-TM-X-57967 N66-38723
- RAPP, M. L.
BIBLIOGRAPHY OF ARTICLES, REPORTS, AND BOOKS ON
COMPUTATIONAL LINGUISTICS AND DOCUMENTATION
RM-4986-PR N66-28310
- BIBLIOGRAPHY OF UNITED STATES AND FOREIGN
ARTICLES, REPORTS, AND BOOKS RELEVANT TO FIELDS
OF COMPUTATIONAL LINGUISTICS AND DOCUMENTATION
RM-5345-PR N67-30258
- RASTOGI, B. P.
ANNOTATED BIBLIOGRAPHY OF PAPERS ON VARIOUS
PHYSICS PROBLEMS IN REACTOR DESIGN, OPERATION,
OPTIMIZATION, AND FUEL CYCLE STUDIES
AEET-248 N66-31955
- RAY, J. A.
ANNOTATED BIBLIOGRAPHY OF ATOMIC AND MOLECULAR
PROCESSES FOR 1964
ORNL-AMPIC-3 N66-27098
- REDMAN, J. D.
THERMOCHEMICAL PROPERTIES OF GASES, THERMODYNAMIC
PROPERTIES OF BE AND ALKALI METAL HALIDES, AND
THERMOCHEMICAL MASS SPECTROMETRY - BIBLIOGRAPHY
ORNL-TM-989, SUPPL. I N67-10634
- REMUS, G. A.
FORMALDEHYDE SYNTHESIS PROCEDURES UNDER SPACE
CONDITIONS, WITH BIBLIOGRAPHY
NASA-CR-73070-1 N67-22173
- RIECKER, R. E.
EXPERIMENTAL ROCK DEFORMATION - BIBLIOGRAPHY
AFCL-65-740/II/ N67-14740

- RIEGELS, F. W.
BIBLIOGRAPHICAL REVIEW OF GERMAN, FRENCH AND
ENGLISH TEXTS RELATIVE TO AERONAUTICAL
ENGINEERING, THEORETICAL AND APPLIED
A66-29363
- RIELY, P. E.
LITERATURE SURVEY ON MICROORGANISMS OF HUMAN SKIN-
BACTERIA, YEASTS, MOLDS, FUNGI, ACTINOMYCETES,
AND VIRUSES
NASA-CR-65438 N66-32622
- ROACH, F. E.
NIGHT AIRGLOW RESEARCH DURING IQSY NOTING
CORRELATION OF LOW ACTIVITY WITH SUNSPOT MINIMUM
A67-36905
- ROCKE, J. W.
LITERATURE AND INDUSTRIAL SURVEYS OF
NONDESTRUCTIVE TESTING EQUIPMENT AND TECHNIQUES
FOR APPLICATION TO HONEYCOMB HEAT SHIELDS,
INCLUDING PARTIALLY ANNOTATED BIBLIOGRAPHY
NASA-CR-81525 N67-17138
- RODGERS, E. H.
BIBLIOGRAPHY AND GUIDE ON ULTRASONIC ATTENUATION
LITERATURE
AMRA-MS-65-09 N66-22589
- ANNOTATED BIBLIOGRAPHY ON ULTRASONIC TESTING
AMRA-MS-66-05 N67-10983
- ANNOTATED BIBLIOGRAPHY ON ULTRASONIC TESTING
AMRA-MS-66-11, VOL. III N67-26949
- NONDESTRUCTIVE, ULTRASONIC TESTING - BIBLIOGRAPHY
AND ABSTRACTS
AMRA-MS-67-03 N67-29114
- ROGACHEVA, N. I.
ANNOTATED BIBLIOGRAPHY OF TSIOLKOVSKIIS WORKS ON
ROCKETRY AND SPACE FLIGHT
N66-37136
- ROHLES, F. H., JR.
ANATOMY, EXPERIMENTAL MEDICINE, PATHOLOGY,
PHYSIOLOGY, AND PSYCHOBIOLOGY STUDIES ON
CHIMPANZEE - BIOLOGY
ARL-TR-67-4 N67-24380
- ROLLINS, S.
BEHAVIORAL BIOLOGY - BIBLIOGRAPHY
NASA-CR-84161 N67-26503
- RONCO, P. G.
ANNOTATED BIBLIOGRAPHY ON HUMAN FACTORS
ENGINEERING
AD-639906 N67-16660
- INDEX TO HUMAN FACTORS ENGINEERING LITERATURE
AND ANNOTATED BIBLIOGRAPHY
AD-657590 N67-40357
- ROSENSTOCK, H. M.
BIBLIOGRAPHY ON CHEMICAL ION-MOLECULE REACTIONS
WITH ATOMIC COMPOSITION CHANGES
NBS-TN-291 N66-37124
- RODESCU, T.
BIBLIOGRAPHY OF LITERATURE ON NEUTRON TRANSPORT
THEORY
IFA-FR-48 N66-33881
- ROY, R.
CRYSTALLOGRAPHIC RESEARCH AT ELEVATED PRESSURES,
WITH BIBLIOGRAPHY
AD-653887 N67-34056
- RUSSELL, L. R.
SURVEY AND BIBLIOGRAPHY CONCERNING USE OF
REINFORCED PLASTICS IN STRUCTURAL SYSTEMS
R-491 N67-16121
- SAGE, C. R.
BIBLIOGRAPHY OF MASS SPECTROSCOPY LITERATURE
COMPILED BY COMPUTER METHOD
IS-1335 N67-12862
- SALEEM, M.
BIBLIOGRAPHY ON SOLAR ENERGY - CELLS, COLLECTORS,
CONVERTERS AND CONCENTRATORS, ECONOMICS,
MEASUREMENT, SPACE APPLICATIONS, AND STILL
AECL-PAK/LIB-15 N67-22471
- BIBLIOGRAPHY ON INFRARED DETECTORS, RADIATION,
APPLICATIONS, SYSTEMS, SCANNERS, AND PHOTOGRAPHY
AECL-PAK/LIB-13 N67-25562
- SALISBURY, J. W.
BIBLIOGRAPHY OF LUNAR AND PLANETARY RESEARCH
ARTICLES
AFCL-66-52 N66-22384
- BIBLIOGRAPHY OF LUNAR AND PLANETARY RESEARCH FOR
1965
AFCL-67-0043 N67-26674
- SALPETER, E. W.
BIBLIOGRAPHY ON ARC, SPARK, AND GRATING SPECTRA OF
IRON, BAND SPECTRA OF METALLIC OXIDES, THORIUM
SPECTRA, AND ATOMIC SPECTRA IN VACUUM
ULTRAVIOLET
N67-30698
- SATO, T.
HEAT TRANSFER BIBLIOGRAPHY OF 32 JAPANESE WORKS
INCLUDING HEAT TRANSFER APPLICATION, PHASE CHANGE,
SEPARATED FLOW, RADIATION, TRANSPIRATION AND MASS
TRANSFER
A66-26937
- SATTERLEE, H. M.
ANNOTATED BIBLIOGRAPHY ON LOW-G LIQUID PROPELLANT
BEHAVIOR
NASA-CR-65539 N66-38975
- SAVIN, G. N.
REVIEW OF PUBLISHED PAPERS ON STRESS-STRAIN OF
PERFORATED SHELLS, INCLUDING BIBLIOGRAPHY
A66-26402
- SCHAUER, C. V.
SELECTIVE BIBLIOGRAPHY ON ELASTIC AND INELASTIC
PROTON-PROTON SCATTERING
UCRL-14716 N67-14687
- SCHILLER, L. D.
DEVELOPMENT PLAN FOR ALL WEATHER LANDING SYSTEM
RELIABILITY ANALYSIS AND CRITERIA, AND AWLS
TECHNOLOGY BIBLIOGRAPHY
RD-66-2 N67-20359
- SCHMIDT-BLEEK, F.
SYMPOSIUM ON HOT ATOM CHEMISTRY - ANNOTATED
BIBLIOGRAPHY
AFOSR-67-0338 N67-25630
- SCHULZ, W.
RESEARCH REPORTS ON AERONAUTICS AND ASTRONAUTICS
FROM GERMAN RESEARCH FACILITIES 1953-1964
DLR-MITT.-64-01 N66-25603
- SCHWEIZER, G.
FLIGHT CONTROL SYSTEMS, AUTOMATIC LANDING DEVICES
AND INERTIAL NAVIGATION WITH GYROS
A66-29365
- SEEBOLD, J. G.
ANNOTATED BIBLIOGRAPHY ON LOW-G LIQUID PROPELLANT
BEHAVIOR
NASA-CR-65539 N66-38975
- SEELMANN, H.
FLIGHT CONTROL SYSTEMS, AUTOMATIC LANDING DEVICES
AND INERTIAL NAVIGATION WITH GYROS
A66-29365
- SELIGA, T. A.
LOWER IONOSPHERE RESEARCH, ROCKETBORNE AC
CONDUCTIVITY PROBES, AND RADIO WAVE PROPAGATION
EXPERIMENTS, WITH BIBLIOGRAPHY
AFCL-67-0425 N67-39454
- SEREMAK, J.
ANNOTATED BIBLIOGRAPHY ON NICKEL-CADMIUM BATTERY
DESIGN, TESTING, AND TECHNOLOGICAL DEVELOPMENTS
LS-BIB-66-1 N66-29981

- SERRELL, A. K.
ETHYLENE OXIDE STERILIZATION, AND APPLICATIONS TO
SPACECRAFT - BIBLIOGRAPHY
NASA-CR-84827 N67-28787
- BIBLIOGRAPHY ON APPLICATIONS OF ETHYLENE OXIDE GAS
TO SPACECRAFT STERILIZATION N67-32249
- SETLOW, R. B.
LITERATURE REVIEW OF BIOLOGICAL AND PHYSIOCHEMICAL
DATA ON EXISTENCE OF REPAIR SYSTEMS FOR DNA
ORNL-P-2240 N67-10841
- SETTY, H. S. N.
LITERATURE SURVEY AND ELECTROLYSES TESTING FOR
ANODIC OXIDATION OF SILVER COVERED COPPER WIRE
IN CONTACT WITH GLYCOL/WATER SOLUTION
NASA-CR-65681 N67-35222
- SHANAHAN, R. J.
BIBLIOGRAPHY CONTAINING ABSTRACTS AND INDEXES ON
V/STOL AIRCRAFT N67-30799
- SHANKLE, A. T.
BIBLIOGRAPHY ON OPTICAL INFORMATION AND DATA
PROCESSING
NASA-CR-81662 N67-17966
- SHEFFIELD, O. E.
ENCYCLOPEDIA OF EXPLOSIVES - CHLORIDES TO
DETONATING RELAYS
PA-TR-2700, VOL. 3 N67-32381
- SHILLING, C. W.
BIBLIOGRAPHIES ON ETHYLENE OXIDE STERILANT,
AEROSPACE MEDICINE, ENVIRONMENTAL SCIENCE,
EXOBIOLGY, PHYSICAL BIOLOGY, PLANETARY
QUARANTINE, AND BIOSCIENCE COMMUNICATIONS
NASA-CR-86650 N67-32248
- SHKAROFSKY, I. P.
APPLICATIONS OF TRANSPORT COEFFICIENTS IN PLASMA,
AND RELATED BIBLIOGRAPHY N67-13684
- SHNEOUR, E. A.
ARTICLES AND BIBLIOGRAPHY ON ORIGIN AND EVOLUTION
OF EXTRATERRESTRIAL LIFE - MARINER IV AND OTHER
OBSERVATIONS OF MARS
NAS-NRC-1296A N67-12721
- SHOUB, H.
ANNOTATED BIBLIOGRAPHY OF 72 REFERENCES ON CARBON
TETRACHLORIDE AS FIRE EXTINGUISHANT
AD-650735 N67-29484
- SHVARTS, K.
RESEARCH SUMMARIES AND BIBLIOGRAPHY ON RADIATION
PHENOMENA IN IONIC CRYSTALS
FTD-TT-65-1734 N67-15294
- SIDWELL, E. C.
ASTRONAUTICS INFORMATION ABSTRACTS
NASA-CR-75252 N66-27241
- SILVERMAN, S.
LITERATURE SURVEY AND BIBLIOGRAPHY ON LIGHT
INITIATION OF SILVER ACETYLIDE-SILVER NITRATE
EXPLOSIVE
TR-1 N66-35747
- SIMNAD, M. T.
REVIEW OF DIFFUSION OF FISSION PRODUCTS AND
TRANSMUTATION PRODUCTS IN NONFISSILE MATERIALS
GA-6542 N66-33952
- SIMPSON, R.
LITERATURE SURVEY ON FATIGUE PROPERTIES OF
UNWELDED AND WELDED CHROMIUM-MOLYBDENUM STEEL
TUBINGS USED IN AIRCRAFT STRUCTURES
ARL/SM-304 N67-34620
- SLESARENKO, M.
ANNOTATED BIBLIOGRAPHY ON MATERIALS FOR HIGH
TEMPERATURE ENERGY CONVERTERS
ATD-66-20 N66-25178
- SLINEY, D. H.
BIBLIOGRAPHY ON BIOLOGICAL EFFECTS AND HAZARDS
ASSOCIATED WITH LASER EQUIPMENT
- AD-652707 N67-32126
- SLITER, G. E.
EQUILIBRIUM, BUCKLING, VIBRATION, AND WAVE MOTION
AND IMPACT IN HOMOGENEOUS AND INHOMOGENEOUS
ELASTIC PLATES - BIBLIOGRAPHY
T&AM-257 N66-23445
- SMILEY, R. F.
BIBLIOGRAPHY AND INDEX OF HYPERVELOCITY IMPACT
MECHANICS
NASA-CR-88890 N67-37658
- SMITH, J. F.
GUIDE TO ABSTRACTING AND INDEXING SERVICES ON
INSTRUMENTATION LITERATURE
NBS-MISC.-PUBL.-271 N66-32573
- SMITH, J. L.
EFFECT OF ANGULAR, IMPACT, AND CORIOLIS
ACCELERATIONS ON VESTIBULAR APPARATUS -
BIBLIOGRAPHY
ATD-66-62 N66-33780
- SMITH, R. G., JR.
ANNOTATED BIBLIOGRAPHY ON DESIGN OF INSTRUCTION
SYSTEMS - TRAINING SYSTEMS, KNOWLEDGE
PRESENTATION, PRACTICE OF KNOWLEDGE, PRACTICE OF
PERFORMANCE, AND STUDENT MANAGEMENT
TR-67-5 N67-32125
- SMITH, R. J.
BIBLIOGRAPHY ON SYSTEMS, MATERIALS, AND OPERATIONS
RELATING TO REACTOR SAFETY
TID-3525, REV. 5, SUPPL. 2 N66-25994
- SOKOLOSKI, M. M.
LITERATURE REVIEW ON KINETICS OF DEFECT
PRODUCTION AND MIGRATION, AND DEFECTS IN
DIAMOND-TYPE LATTICE, PARTICULARLY SILICON
NASA-TN-D-4154 N67-40189
- SOKOLOVA, S. A.
ANNOTATED BIBLIOGRAPHY OF TSIOLKOVSKIIS WORKS ON
ROCKETRY AND SPACE FLIGHT N66-37136
- SOUKHANOV, I. M.
LIFTING REENTRY SPACECRAFT - PROBLEMS OF LIFTING
AND BALLISTIC HYPERVELOCITY FLIGHT, ATMOSPHERIC
REENTRY TECHNIQUES, AND ANNOTATED BIBLIOGRAPHY
ATD-66-34 N66-25179
- SPARROW, E. M.
HEAT TRANSFER BIBLIOGRAPHY INCLUDING LISTING OF
WORKS ON BOUNDARY LAYER FLOW, PHASE CHANGE,
CHANNEL FLOW, MHD CONDUCTION, ETC
A66-33043
- HEAT TRANSFER LITERATURE PUBLISHED IN 1965 ON
CONDUCTION, CHANNEL FLOW, BOUNDARY LAYER FLOW,
SEPARATED FLOW, TRANSFER MECHANISM, ETC
A66-37117
- HEAT TRANSFER BIBLIOGRAPHY COVERING BOUNDARY
LAYER, PHASE CHANGE, TWO-PHASE FLOW, CHANNEL FLOW,
CONDUCTION, LIQUID METAL, MHD, ETC
A67-32450
- STAHLHOFEN, W.
BIBLIOGRAPHY ON RADIATION EFFECTS ON LIVING
TISSUES AND ORGANISMS
AED-C-04-21 N66-21959
- BIBLIOGRAPHY ON LIVING TISSUE AND ORGANISM
RADIATION EFFECTS
AED-C-04-20 N66-27560
- STEBLEZ, G.
ANNOTATED BIBLIOGRAPHY ON ELECTROMAGNETIC WAVE
PROPAGATION AND UPPER ATMOSPHERE
ATD-66-144 N67-26319
- STEPANOVA, N. A.
ANNOTATED BIBLIOGRAPHY ON CLOUDINESS IN RUSSIA
WB/BS-6 N67-30536
- STERKIN, C. K.
MOVING SPACECRAFT INTERACTIONS WITH SURROUNDING
PLASMAS - BIBLIOGRAPHY WITH ABSTRACTS

- NASA-CR-84819 N67-28768
- STERN, I. L.**
BIBLIOGRAPHY ON HIGH YIELD STRENGTH STEELS AND WELDMENTS
PR-5 N67-24486
- STEVENS, C. L.**
BIBLIOGRAPHY OF RESEARCH AND DEVELOPMENT REPORTS ON CENTAUR PROGRAM
4 GDC-ACW64-027F N66-24556
- STEWART, W. D.**
ANNOTATED BIBLIOGRAPHY OF LITERATURE ON SOIL DYNAMICS AND SOIL STRUCTURE INTERACTION DURING DYNAMIC OR SIMILAR LOADINGS
5 DR-170 N67-29779
- STICKLEY, C. M.**
LASER APPLICATIONS BIBLIOGRAPHY
AFCRL-67-0223 N67-36753
- STODDART, H. A.**
BIBLIOGRAPHY ON X-RAY FLUORESCENCE ANALYSIS
AERE-BIB-136 N66-35277
- STONE, M. L.**
RADAR SCATTERING AND ATTENUATION BY PRECIPITATION PARTICLES IN ATMOSPHERE - ANNOTATED BIBLIOGRAPHY
ESD-TDR-65-598 N66-23403
- STROMBERG, D. D.**
AEROSOL GENERATION, PARTICLE SIZE ANALYSIS AUTORADIOGRAPHY, AND INSTRUMENTATION FOR COLLECTING AND SEPARATING RADIOACTIVE AND NONRADIOACTIVE PARTICLES - BIBLIOGRAPHY
IDD-12051 N66-32450
- SUNDERMAN, F. W., JR.**
BIBLIOGRAPHY OF TOXICOLOGY OF NICKEL CARBONYL
ORO-3461-8A N67-21815
- BIBLIOGRAPHY OF CARCINOGENIC EFFECTS OF NICKEL, INCLUDING CLINICAL AND EXPERIMENTAL STUDIES AS WELL AS OCCUPATIONAL PARAMETERS OF RESPIRATORY TRACT CARCINOGENESIS
ORO-3461-8B N67-21817
- SVEC, H. J.**
BIBLIOGRAPHY OF MASS SPECTROSCOPY LITERATURE COMPILED BY COMPUTER METHOD
IS-1335 N67-12862
- SWEENEY, D. R.**
SELECTED BIBLIOGRAPHY ON PHYSIOLOGICAL AND PSYCHOLOGICAL ASPECTS OF SMOKING
A66-81958
- SWEENEY, S.**
BIBLIOGRAPHY OF MUSCLE RECEPTORS - MORPHOLOGY, PATHOLOGY, PHYSIOLOGY
A67-81428
- SWENSON, L. S., JR.**
TECHNOLOGICAL AND MANAGERIAL HISTORY OF MERCURY PROJECT, INCLUDING BIBLIOGRAPHY
NASA-SP-4201 N67-14934
- T**
- TAYLOR, J.**
ANNOTATED BIBLIOGRAPHY ON ANTENNAS, VEGETATION, ELECTROMAGNETIC WAVES, IMPEDANCE MATCHING, BOTANY, AND RELATED TOPICS
AD-629155 N66-30511
- TEETSEL, D. A.**
BIBLIOGRAPHY ON THERMAL DEGRADATION, THERMAL OXIDATION AND THERMAL ANALYSIS OF HIGH POLYMERS
PLASTEC-10 N66-27720
- BIBLIOGRAPHY ON DIELECTRIC PROPERTIES OF POLYMERS
PLASTEC-12 N66-38289
- TEMPLE, W. J.**
COMPUTER ASSISTED INSTRUCTION, INCLUDING PROGRAMMED TEXTS, TEACHING MACHINES, AND LEARNING THEORY - ANNOTATED BIBLIOGRAPHY
R-49/66 N67-11179
- THATRO, M. C.**
DEVELOPMENT PLAN FOR ALL WEATHER LANDING SYSTEM RELIABILITY ANALYSIS AND CRITERIA, AND AWLS TECHNOLOGY BIBLIOGRAPHY
RD-66-2 N67-20359
- THURSTON, G. A.**
SHOCK HARDENING, STRAIN EFFECTS, AND DUCTILITY EXAMINED DURING STUDIES OF EXPLOSIVE FORMING OF METALS - BIBLIOGRAPHY
AMRA-CR-66-05/6 N67-16599
- TISCHER, F. J.**
BIBLIOGRAPHY ON OPTICAL INFORMATION AND DATA PROCESSING
NASA-CR-81662 N67-17966
- TITUS, J. B.**
BIBLIOGRAPHY, SUBJECT AND AUTHOR INDEXES, AND CODE DESCRIPTION OF TECHNICAL CONFERENCE PAPERS ON PLASTICS
PLASTEC-27 N67-16470
- TOMIYASU, K.**
LASER BIBLIOGRAPHY JULY- DECEMBER 1965, INCLUDING REFERENCES TO HOLOGRAMS
A66-39541
- BIBLIOGRAPHY ON LASERS COVERING MODES, SCATTERING MECHANISMS, QUANTUM ELECTRODYNAMICS, MATTER-RADIATION INTERACTION, PLASMA, HOLOGRAPHY AND OPTICS
A67-17890
- LASER BIBLIOGRAPHY V / JULY- DECEMBER 1966/ COVERING GIANT-PULSE TECHNIQUES, RAMAN AND BRILLOUIN SCATTERING, INTERACTION EFFECTS, PROPAGATION, HOLOGRAPHY, ETC
A67-38455
- TOROPOVA, M. A.**
PREPARATION AND PROPERTIES OF INORGANIC AND ORGANIC FORMS - BIBLIOGRAPHY
JINR-P-2895 N67-18473
- TREIMAN, M.**
BIBLIOGRAPHY ON KINETICS OF OXIDATION REDUCTION REACTIONS OF URANIUM, NEPTUNIUM, PLUTONIUM, AND AMERICIUM IN AQUEOUS SOLUTIONS
LA-3507 N66-37621
- TRUBEY, D. K.**
NUCLEAR REACTORS, NUCLEAR WEAPONS, AND RADIOACTIVE ISOTOPES - BIBLIOGRAPHY
ORNL-RSIC-5, REV. 1 N67-23549
- TURNBULL, W. R.**
BIBLIOGRAPHY ON HALL EFFECT THEORY, DESIGN, AND APPLICATIONS IN ELECTRONIC EQUIPMENT
NOLC-659 N66-35078
- ANNOTATED BIBLIOGRAPHY ON PREPARATION, PROPERTIES, APPLICATIONS, AND THEORY OF SEMICONDUCTING THIN FILMS
NOLC-712 N67-35938
- U**
- UHLMANN, W.**
BIBLIOGRAPHY OF RADIATION EFFECTS ON SOLID, URANIUM BASED NUCLEAR FUEL MATERIALS
VDDIT-16/5-3/ N66-25124
- UPPARD, J. E.**
SURVEY ON EXPERIMENTAL STUDIES OF FORCES EXERTED ON SCALE MODEL STRUCTURES BY WIND AND BLAST WAVES
ANRE-E-6/67 N67-40408
- V**
- VALLIERE, E. S.**
SUBJECT AND AUTHOR CUMULATIVE INDEXES ON AEROSPACE MEDICINE AND BIOLOGY - ANNOTATED BIBLIOGRAPHY
NASA-CR-75598 N66-27623
- ABSTRACTS ON AEROSPACE MEDICINE AND BIOLOGY - BIBLIOGRAPHY ON PHYSIOLOGY, PSYCHOLOGY,

- PSYCHIATRY, ENVIRONMENTAL FACTORS, AND GENERAL ASPECTS OF BIOLOGICAL RESEARCH
NASA-CR-75599 N66-27624
- ABSTRACTS ON AEROSPACE MEDICINE AND BIOLOGY - BIBLIOGRAPHY ON ENVIRONMENTAL FACTORS, SAFETY AND SURVIVAL, PERSONNEL, PHARMACOLOGY, TOXICOLOGY, AND LIFE SUPPORT SYSTEMS
NASA-CR-75597 N66-27625
- VAN ECK, F. P.
BIBLIOGRAPHY AND ABSTRACTS ON NETWORK ANALYSIS AND APPLICATIONS IN CONSTRUCTION AND MILITARY OPERATIONS
TDCK-46624 N67-22969
- VAN VOSS, W. G.
HAZARDS CREATED BY IGNITION OF EXPLOSIVE DEVICES BY ELECTROMAGNETIC RADIATION - ANNOTATED BIBLIOGRAPHY FOR HERO PROGRAM
TDCK-43958 N66-25478
- VANNUCCI, A. G.
BIBLIOGRAPHY OF AEROSPACE RESEARCH AND DEVELOPMENT LITERATURE N66-37801
- BIBLIOGRAPHY, ABSTRACTS, AND INDEX TO AGARD PUBLICATIONS ON AEROSPACE AND RESEARCH TOPICS
N67-25856
- VEAZIE, W. H.
ANNOTATED BIBLIOGRAPHY OF LITERATURE ON ELECTRONIC PACKAGING FOR USE IN DESIGNING ELECTRONIC EQUIPMENT
NASA-CR-76570 N66-33390
- VEIGELE, W. J.
BIBLIOGRAPHY ON INCOHERENT AND COHERENT SCATTERING OF X-RAYS
KN-738-67-2/R/ N67-37089
- VIK, I.
HIGH-ENERGY PHYSICS BIBLIOGRAPHY - COMPUTATION OF ELECTRON-PHOTON CASCADES BY MONTE CARLO METHOD, PION-ELECTRON SCATTERING, ORIGIN OF INTERNAL SYMMETRY, AND SPIN TESTS FOR FERMIONS
AED-C-23-08, PT. 1 N66-31063
- BIBLIOGRAPHY ON HIGH ENERGY PHYSICS
AED-C-23-08, PT. 2 N66-31064
- VOGT, W. G.
BIBLIOGRAPHICAL SURVEY OF RESEARCH ON STABILITY THEORY OF SOLUTIONS TO PARTIAL DIFFERENTIAL EQUATIONS
NASA-CR-82662 N67-19109
- VOROBEV, B. N.
ANNOTATED BIBLIOGRAPHY OF TSIOLKOVSKIIS WORKS ON ROCKETRY AND SPACE FLIGHT N66-37136
- W**
- WAIDELICH, D. L.
AIR-CORE COIL SYSTEMS FOR PRODUCTION OF RELATIVELY WEAK MAGNETIC FIELDS - THEORY APPLICATIONS, AND ANNOTATED BIBLIOGRAPHY
X-100-65-407/S/ N66-23444
- SPACECRAFT AND COMPONENT SHIELDING AGAINST EARTH MAGNETIC FIELD - ANNOTATED BIBLIOGRAPHY
N67-22758
- ANNOTATED BIBLIOGRAPHY ON PRODUCTION OF UNIFORM MAGNETIC FIELD BY COMPENSATED SOLENOIDS
N67-22759
- ANNOTATED BIBLIOGRAPHY ON TWO PLASMA PROBE TECHNIQUES USING PLASMA RESONANCE PROBE, AND LANGMUIR PROBE
N67-22760
- PRODUCTION OF UNIFORM GRADIENT MAGNETIC FIELDS
N67-22767
- WALLACE, J. A., JR.
ANNOTATED BIBLIOGRAPHY OF METEOROLOGICAL TOWER AND MAST STUDIES PERTAINING PRIMARILY TO WIND
WB/BS-5 N67-29410
- WALLACH, J.
BIBLIOGRAPHY ON NERVE CONDUCTION AND NERVE IMPULSES, WITH EMPHASIS ON BEHAVIOR OF NERVE CELL NETWORKS
P-3613 N67-37557
- WANG, P. K. C.
ANNOTATED BIBLIOGRAPHY ON THEORY OF STABILITY AND CONTROL FOR DISTRIBUTED PARAMETER SYSTEMS, OPTIMUM CONTROL, AUTOMATION, AND REMOTE CONTROL
N66-21674
- WARD, H. L.
BIBLIOGRAPHY ON USE OF RADIOACTIVE ISOTOPES IN PHYSIOLOGICAL STUDIES
TID-3515, SUPPL. 1 N66-27506
- RADIOACTIVE ISOTOPES USED AS TRACERS IN GENETICS, PHYSIOLOGY, ENTOMOLOGY, IMMUNOLOGY, ECOLOGY, CYTOLOGY, AND NUTRITION RESEARCH - ANNOTATED BIBLIOGRAPHY
TID-3585 N67-30678
- WATSON, B. F.
TERRESTRIAL INFRARED HORIZON PROFILE DATA FOR SPACE VEHICLE HORIZON SENSING, WITH BIBLIOGRAPHY
NASA-CR-722 N67-22178
- WEAVER, R. W.
LITERATURE SURVEY OF CARBORANE-CONTAINING POLYMERS WITH BIBLIOGRAPHY
SCL-DR-67-11 N67-28479
- WERBER, M. F.
BEHAVIORAL BIOLOGY BIBLIOGRAPHY, INCLUDING CITATIONS ON NEUROPHYSIOLOGY, PSYCHOLOGY, AND INFORMATION SCIENCE
NASA-CR-62040 N67-25641
- WHITESON, B. V.
HANDBOOK OF ELECTRON FRACTOGRAPHY INCLUDING BIBLIOGRAPHY OF RELATED OPEN LITERATURE
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1964 AND 1965
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TRANSMUTATION PRODUCTS IN NONFISSILE MATERIALS
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