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ORNL/RSIC-5/V5

**BIBLIOGRAPHY, SUBJECT INDEX, AND AUTHOR INDEX
OF THE LITERATURE EXAMINED BY THE
RADIATION SHIELDING INFORMATION CENTER
(Reactor and Weapons Radiation Shielding)**

Vol. 5

January 1978

RADIATION SHIELDING INFORMATION CENTER



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J. Gurney and A. B. Gustin

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ABSTRACT

An indexed bibliography is presented of literature selected by the Radiation Shielding Information Center since the previous volume was published in 1974 in the area of radiation transport and shielding against radiation from nuclear reactors, X-ray machines, radioisotopes, nuclear weapons (including fallout), and low energy accelerators (e.g., neutron generators). The bibliography was typeset from data processed by computer from magnetic tape files. In addition to lists of literature titles by subject categories (accessions 3501-4950), author and keyword indexes are given.

Most of the literature selected for Vol. V was published in the years 1973-1976.

ACKNOWLEDGMENTS

The several compilers of the bibliography are pleased to acknowledge the support of the entire RSIC staff. We are grateful to J. G. Jones and R. O. Green of the Union Carbide Corporation Nuclear Division, Computer Sciences Division (CSD), who did the programming of the RSIC Storage and Retrieval Information System (SARIS) and to Janice Paylor (also of CSD), who continues to update and maintain the program.

Jan created several programs which have been helpful in making the SARIS data available for on-line searching by RECON and for selecting and arranging the bibliographic data for this bibliography. D. K. Trubey wrote the necessary programs to process the data for the ORNL AM748 typesetter. In addition to managing the SARIS system, Jane Gurney processed the data for the various steps which included much troubleshooting of the newly developed processing steps. Ann Gustin manages the literature acquisition and cataloging and prepares the data for updating the SARIS files.

And finally, we wish to express appreciation to the many research scientists who call to our attention their published work by placing RSIC on direct distribution. It is this kind of cooperation that makes of the information center a more viable and useful service to the shielding community.

DESCRIPTION AND USE OF BIBLIOGRAPHY

This bibliography is the eighth edit of the literature concerned with nuclear reactors, nuclear weapons* and radioisotopes which has been selected by the Radiation Shielding Information Center. The review of space and accelerator shielding literature (generally involving charged particles at medium and high energies) ended in the early 1970s, but it has been resumed on a very limited scale recently although the work is not supported financially. The last volume published was ORNL-RSIC-11 (Rev.2) in 1970.

Other RSIC publications of interest are the monthly RSIC Newsletter, Abstracts of Computer Code Packages Assembled by the Radiation Shielding Information Center (radiation transport codes in ORNL-RSIC-13; other codes such as cross-section processing in ORNL-RSIC-31) and Abstracts of the Data Library Packages Assembled by the Radiation Shielding Information Center (ORNL-RSIC-30).

The present bibliography, produced from the files of the IBM 360 RSIC Storage and Retrieval System (SARIS)**, lists literature collected since the previous publication was issued. This literature, mainly published in 1973-1976, has been assigned RSIC accession numbers 3501-4950. Vol. I (Rev. 1) - Vol. IV contain accessions 0-1135, 1136-1700, 1701-2300, 2301-3500, respectively. In contrast to previous editions, the current author index in the new issue covers only the present volume, accessions 3501-4950.

The present volume was produced by a sequence of computer processing steps which selected the data, organized it by category number or author, introduced typesetting commands, set the lines into double columns, and finally produced a file for input to the AM748 typesetter. The fully automated algorithms introduce some peculiarities, especially the procedure for setting upper and lower case. The original data on the master file are all upper case, having originated with punched cards. A set of rules was built into the program to convert much of the data to lower case, and this resulted in some peculiarities. For example, acronyms frequently have only the leading letter capitalized.

As in previous editions, the two major sections in this bibliography are a list of documents by subject category and an author index. The document list covers nine major subjects broken down by categories. A given document is listed under each category with which it has been identified. The Author Index includes cross references to the categories under which the author's publications appear. Preceding the bibliography is a List of the Subject categories, their corresponding category numbers, and the pages on which they appear in the bibliography.

The subject categories have again been revised. A number of new categories have been added, and several have been modified. Both additions and changes are denoted in the category index of this issue. Many of the new categories identify accessions which report the use of specific shielding computer codes distributed by RSIC. The CCC number assigned to a shielding computer code by the Center is the same as the last three digits of the 795XXX series of categories. This provides a means of linking research results with particular computer codes. Two categories, 793000 and 794000, identify accessions which report the use of any data libraries or peripheral shielding

* The work related to weapons radiation transport and shielding is funded by the Defense Nuclear Agency.

** J. G. Jones, D. K. Trubey, J. Gurney, *The 1969 RSIC Computer-Based Information Retrieval System in Brief*, ORNL-TM-2719 (1969).

routines, respectively, which are distributed by the Center. New categories include mixed oxide sources, low-background radioactivity, beta-ray dose, environmental dose, occupational exposure, radioactive waste management, perturbation theory, TLD neutron dose detectors, fuel reprocessing and fabrication, fission-fusion hybrid systems, light-water cooled reactors, gas-cooled reactors, heavy-water cooled reactors, several elements, and actinides. It should be noted that some of these materials can be identified as sources of radiation (e.g., californium) rather than materials for shielding purposes.

Please note that alphameric categories precede a similar fully numeric category, e.g., 112A00 precedes 112110, and 32A000 precedes 321000.

For some categories there are no accessions for the time period covered by this bibliography. For example, no documents were selected which dealt with category number 870096, Shielding Materials, Curium. In these cases, all references to those categories are omitted from the bibliography printout. However, the categories are listed in the index to denote that they are valid for use in machine searches and for future literature review by the Center. The Author Index, which includes only authors in this volume (accessions 3501-4950), aids the reader in quickly finding accessions associated with a particular subject category, citing the category in the first field followed by relevant accessions for that individual author.

The Keyword Index, which serves as an aid in locating bibliographic references to a given subject has also been revised. The pages associated with a word in the index will contain a list of documents that might be relevant to the keyword. To obtain pages relevant to keyword references, one must look up pagination for associated category numbers in the category printout (pp xxxii—xxxii).

Examples of entries in the subject category and author index sections are shown in Figs. 1 and 2, respectively. The ACCESSION NUMBER assigned to this particular document is given on the first line together with the PUBLICATION DATE. It is independent of the subject category and is repeated each time the document is listed. The second line in the example shown in Fig. 1 lists all the SUBJECT CATEGORIES relating to a publication and is included for purposes of cross referencing, and performing hand searching. Next follows the TITLE. In contrast to previous editions, all authors are included with each citation.

The line identified in Fig. 1 as CITATION lists the installation designation of the document and its number. As many as three citations may be listed, the primary citation being listed first. Any other citation or relevant remarks will follow immediately in the COMMENTS section. In nearly all cases such reports have been published under the auspices of a government-sponsored agency, and the installation document designation will be familiar to most librarians. Journal articles will be identified as to volume, issue, and page numbers. Individual articles in books, symposium proceedings, etc., will be identified by author, title, and chapter and/or page number, and the compilation in which the article appears will also be adequately identified.

Availabilities of documents are also given. The abbreviations used are the same as those listed in *Nuclear Science Abstracts*, (NSA) bimonthly publication by the U.S. Energy Research and Development Administration, covering international literature on nuclear science and technology which ceased publication in 1976. For convenience, those pages of NSA which define the abbreviations used in the AVAILABILITY line and which identify the depositories where documents may be obtained are reproduced here as they appeared in the June 30, 1976 issue. Depositories, both USA and foreign, are those listed in the NSA, June 30, 1976 issue.

Diagram illustrating the relationship between Author's Name, Subject Category Numbers, and Accession Numbers:

- AUTHOR'S NAME** points to **Beverly, W. B.**
- Beverly, W. B.** points to **SUBJECT CATEGORY NUMBERS** (122310, 329000, 511110, 795192, 830000, 870007).
- Each **SUBJECT CATEGORY NUMBER** points to **ACCESSION NUMBERS** (3728, 4922, 3869, 4922).

Fig. 2 Example of author index entry.

Most reports of government-funded research are available from the National Technical Information Service (NTIS), Springfield, Virginia 22151. Where the prices are known, they have been listed under AVAILABILITY. NTIS has recently initiated a sliding price schedule which is coded. In this bibliography price codes will not be applicable, but in the future, RSIC will publish these codes when available. Otherwise, the price listed in the document will be published. The most current list of price codes is October 1977, which we have included on page xviii for your future reference with searches which you may request.

An example of an entry in the Author Index is shown in Fig. 2. Here each entry lists an author, subject categories, and each of the author's documents for each subject category.

NUCLEAR SCIENCE ABSTRACTS CUMULATIVE REPORT NUMBER INDEX

Volumes 29-33

Numbers assigned to reports, conference papers and proceedings, translations, and patents are included in this index. Each item is listed by report number; this is followed by the abstract number and a brief notation regarding public availability. The index entries show which reports are on file in the institutions listed on the backs of the covers (Dep.), which reports have been published in open-literature journals (journal citation), and which reports can be purchased (source and price). Whenever a report is identified by more than one number, the availability is given under the primary number, and a cross reference is given under the secondary report number.

The report number codes apply to ERDA reports unless designated otherwise. Non-ERDA reports are identified by parenthetical notes after the report codes; e.g., (non-ERDA), (UK), (Canada), (France). The note (Misc.) identifies the codes used for both ERDA and non-ERDA Reports. Patents are listed under the heading "PATENTS"; the country of origin and availability are included in parentheses.

A comprehensive list of both ERDA and non-ERDA report codes is contained in the latest revision of TID-85, *Report Number Series Used by the ERDA Technical Information Center in Cataloging Reports*. This information is also included in the Cumulative Report Number Index (issued annually).

Availability of ERDA Reports

ERDA Reports abstracted in *Nuclear Science Abstracts* are available through one or more of the following sources:

(1) University and public libraries in the United States. A list of these organizations appears on the inside front cover of each issue of *NSA*.

(2) NCR Microcard Editions in Microcard and micro-negative form. Orders and inquiries should be sent to: Order Processing Department, 365 South Oak Street, West Salem, Wisconsin 54669.

(3) National Technical Information Service, U. S. Department of Commerce, Springfield, Virginia 22161.

(4) Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402.

(5) Microsurance, Inc., P. O. Box 3522, Oak Ridge, Tenn. 37830, in micronegative form. Purchase details available on request.

(6) Overseas at the organizations listed on the inside of the back cover.

Availability of Non-ERDA Reports

U. S. Reports. Reports of U. S. Government agencies are available to the public from the National Technical Information

Service (NTIS). If specific availability is not shown, inquiries may be directed to NTIS.

Non-U. S. Reports. Reports of atomic energy organizations of other countries are available from NTIS for U. S. sale only. Specific availability in the country of origin is shown, when known, at the report number entry. Otherwise, inquiries should be made to the organizations listed below:

AUSTRALIA

Australian Atomic Energy Commission Research Establishment. Available upon request from the Library, Australian Atomic Research Establishment, Private Mail Bag, Sutherland, New South Wales, Australia.

BELGIUM

Centre d'Étude de l'Energie Nucléaire. Available upon request to individuals and organizations from the Centre d'Étude de l'Energie Nucléaire (C.E.N.), Studiecentrum voor Kernenergie (S.C.K.), Technical Information Dept., MOL-DONK (Belgium).

CERN

CERN European Organization for Nuclear Research. Available without charge from CERN European Organization for Nuclear Research, Geneva 23, Switzerland. Copies are deposited in libraries throughout the world.

FRANCE

Commissariat à l'Energie Atomique. Inquiries for reports numbered 1-2199 should be addressed to Service Central de Documentation du C.E.A., Centre d'Etudes Nucléaires de Saclay, Boîte postale n° 2, 91, Gif-sur-Yvette, France. Reports numbered 2200 and above are available from La Documentation Française, 31 quai Voltaire, 75, PARIS (7e), France.

Service Central de Protection contre les Rayonnements Ionisants. Copies are available from Ministère de la Santé Publique, Service Central de Protection contre les Rayonnements Ionisants, B.P. n° 78 Le Vesinet (France) Telex 25667.

GERMANY

Deutsches Elektronen-Synchrotron DESY. Copies are available from Deutsches Elektronen-Synchrotron DESY, Dokumentation, 2000 Hamburg 52, Notkestieg 1, Germany.

Gesellschaft für Kernforschung mbH (KFK). Copies are available from Gesellschaft für Kernforschung mbH, 75 Karlsruhe, Postfach 947, Germany. Copies are also deposited in many national nuclear centers in the world.

Kernforschungsanlage. Copies may be ordered from Zentralbibliothek der Kernforschungsanlage Jülich, Jülich, Bundesrepublik Deutschland.

Hahn-Meitner-Institute für Kernforschung. Available without charge from Hahn-Meitner-Institute für Kernforschung Berlin, Bibliothek, Glienicker Strasse 100, 1 Berlin 39, Germany. Copies are deposited in many national nuclear centers in the world.

Johann-Wolfgang-Goethe Universität, Frankfurt Am Main, Institut für Kernphysik, (IKF). Copies are available from Gmelin Institut, 40-42 Varrentrappstrasse, Frankfurt (Main), West Germany.

ISRAEL

Israel Atomic Energy Commission. Available without charge from Israel Atomic Energy Commission, Soreq Nuclear Research Centre, Yavne, Israel.

ITALY

Centro Informazioni Studi Esperienze (CISE). For sale at CISE Press Office, Casella Postale 3986, Milano, Italy. Copies are deposited in the libraries of various nuclear centers in Italy and abroad.

Comitato Nazionale per l'Energia Nucleare. Copies are available from Comitato Nazionale per l'Energia Nucleare, Divisione Affari Internazionali e Studi Economici, Ufficio Pubblicazioni, Via Belisario, 15, Roma, Italy.

JAPAN

Japan Atomic Energy Research Institute (JAERI). Available from the Staff Supply Cooperative of Japan Atomic Energy Research Institute (JAERI), Tokai-mura, Naka-gun, Ibaraki-ken, Japan. Copies are deposited in depositories in Tokyo, Nagoya, and Osaka.

Nagoya University. Copies are available from Research Information Center, Institute of Plasma Physics, Nagoya University, Nagoya, Japan.

University of Tokyo. Available free of charge from Institute for Nuclear Study, University of Tokyo, Tanashi-Machi, Kitatama-gun, Tokyo, Japan.

NETHERLANDS

Reactor Centrum Nederland. For sale by Reactor Centrum Nederland, 112 Scheveningsweg, 's-Gravenhage, The Netherlands. Copies are deposited in university libraries in Holland and in many national nuclear centers in the world.

NEW ZEALAND

Institute of Nuclear Sciences. Copies are available from Librarian, N. Z. Institute of Nuclear Sciences, D.S.I.R., Private Bag, Lower Hutt, New Zealand. Copies are deposited in other countries.

PAKISTAN

Atomic Energy Center. Copies are available from Atomic Energy Center, P. O. Box 658, Lahore, (West Pakistan).

POLAND

Reports of the Polish nuclear institutes are published by the Nuclear Energy Information Center of the Government Commissioner for Use of Nuclear Energy. Copies are available free of charge from Nuclear Energy Information Center, Palace of Culture and Science, Warsaw, Poland.

SPAIN

Junta de Energia Nuclear. "JEN" reports are available without charge from Servicio de Documentación, Junta de Energia Nuclear, Ciudad Universitaria, Madrid (3), España.

SWITZERLAND

Eidgenössisches Institut für Reaktorforschung. "EIR" reports are available from Eidgenössisches Institut für Reaktorforschung, c/o Bibliothek, 5303 Würenlingen/Switzerland.

TURKEY

Turkish Atomic Energy Commission. Copies are available free of charge from T.A.E.C., Çekmece Nuclear Research Center, P. O. Box 1, Airport, Istanbul, Turkey.

Conferences

Numbers assigned to published conference proceedings as well as individual unpublished papers from conferences are included in this index. A CONF number is assigned to the conference if published proceedings are received and also if only a single paper is received. The base number used is year-month-sequence. Thus, the number CONF-730101 indicates that the conference was held in 1973, in January, and that this was the first January 1973 conference so received. This number would be assigned to complete published proceedings. If individual papers are received, the base number is extended to include a paper number, e.g., CONF-730101-1. As additional papers are received, they are assigned consecutive numbers in the series, CONF-730101-1, CONF-730101-2, etc. This numbering system ensures that all papers received from a conference will be associated with that conference in this index.

Abbreviations Used in Availability Column

AECL	Reports of the Atomic Energy of Canada Limited are for sale by the Scientific Document Distribution Office, Atomic Energy of Canada Limited, Chalk River, Ontario, Canada.
AT	Liquid Metal Fast Breeder Reactor applied technology is available to domestic requesters within the United States from the USERDA Technical Information Center, P. O. Box 62, Oak Ridge, TN 37830. Information regarding subscription purchase will be sent on request. Foreign requesters should address inquiries to the above address.
DENM	Reports of the Atomic Energy Commission Research Establishment, Riso, are available on exchange from the Library, Danish Atomic Energy Commission, Riso, Roskilde, Denmark. Also for sale at the price shown from Jul. Gjellerup, Booksellers, 87 Solvgade, København K., Denmark. Reports of Danatom are available on loan from Research Establishment, Riso, Roskilde, Denmark. Copies are available from Danatom, Aurehøjvej 2, Hellerup, Denmark.
Dep.	ERDA reports so designated are maintained in the organizations listed on the inside front

	cover of <i>NSA</i> . Prior to July 1, 1965, reports were deposited either in printed copy form or in microform. After that time, all reports have been in the form of micronegatives.	NTIS	For sale by the National Technical Information Service (NTIS), U. S. Department of Commerce, Springfield, Virginia 22161. Price given is the domestic price for paper copy; foreign purchasers add \$2.50 per report copy.
	Reports from other countries so designated are available in the United States at the organizations listed on the inside front cover of <i>NSA</i> .	NUREG	Address inquiries to the U. S. Nuclear Regulatory Commission, Technical Information Division, Washington, D. C. 20555.
DRS	See NUREG	OECD	Available from O.E.C.D., Publications 2, rue, André-Pascal, 75 Paris 16 ^e , France, and from its sales agencies in various countries throughout the world. A list of these agencies is found in each OECD publication.
EM	Inquiries regarding the availability of blueprint prints of ERDA engineering drawings which were formerly available for sale by NTIS should be addressed to USERDA, Technical Information Center, P. O. Box 62, Oak Ridge, Tennessee 37830.	RSO	Available only to requesters within the United States from the Reactor Standards Office, Oak Ridge National Laboratory, P. O. Box X, Oak Ridge, TN 37830.
EUR	For sale by Centrale de vente des publications des Communautés européennes 37, rue Glesener-Luxembourg.	SWED	"AE" reports (full size or microcopies) are for sale from Aktiebolaget Atomenergi, Studsvik, Library, Fack, S-611 01 NYKÖPING 1, Sweden.
GJO	Available from USERDA, Grand Junction Office, P. O. Box 2567, Grand Junction, Colorado 81501.		Other series are not generally available to the public. Organizations in the Atomic Energy field may obtain copies from Aktiebolaget Atomenergi.
GPO	For sale by the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.	TIC	Available from the USERDA Technical Information Center, P. O. Box 62, Oak Ridge, Tennessee 37830.
IAEA	Available from the International Atomic Energy Agency, Vienna, Austria, and from its sales agencies in various countries throughout the world. A list of these agencies is found in each STI/DOC and STI/PUB publication.	UK	United Kingdom Atomic Energy Authority reports generally may be purchased from Her Majesty's Stationery Office, P. O. Box 569, London SE1 9NH. Copies of many UKAEA reports (particularly earlier ones) may be purchased in microcopy form from E. P. Microform Ltd., East Ardsley, Wakefield, Yorkshire WF3 2JN, England. Copies of UKAEA reports are deposited with the British Library Lending Division in England; with ERDA and (through ERDA) with NTIS; and in most national nuclear centers throughout the world. In the USA, UKAEA reports are available on a subscription basis, by subject category, from UNIPUB, Inc., P. O. Box 433, New York, NY 10016; and individually from Pendragon House, Inc., 220 University Avenue, Palo Alto, California 94301.
INIS	Available on microfiche at \$0.65 per document from INIS Section, International Atomic Energy Agency, P. O. Box 590 A-1011, Vienna, Austria.	UN	Mail orders should be directed to the Sales Section, Room 1059, United Nations Headquarters, New York, New York 10017.
LMEC	Available only to requesters within the United States from the Liquid Metal Engineering Center, P. O. Box 1449, Canoga Park, CA 91304.	ZAED	Available from ZAED, Kernforschungszentrum, 7501 Leopoldshafen, West Germany.
NORW	Reports from Forsvarets Forskningsinstitutt are available from Norwegian Defense Research Establishment, Library, P. O. Box 25, Kjeller, Norway. "KR" reports are available on an exchange basis from the Library, Institutt for Atomenergi, Box 40, Kjeller, Norway. Reports of the Norwegian Reactor School are available from the Library, Institutt for Atomenergi, P. O. Box 40, Kjeller, Norway.		
NRC	For sale by the National Research Council of Canada, Ottawa, Ontario, Canada.		

REPORT COLLECTIONS IN THE UNITED STATES

The libraries listed below purchase and maintain microfiche collections of ERDA and foreign reports that are abstracted in *NSA*. Their collections also include *NSA* and its indexes, ERDA's Technical Progress Reviews, ERDA-sponsored translations, conference proceedings published by ERDA, and various bibliographic tools. Most of these libraries have microfiche reader-printers or other photocopy facilities with which to reproduce enlarged copies from microfiche. Charges for reproduction services vary.

Report collections of ERDA reports in countries other than the United States are listed on the inside back cover.

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Auburn, Auburn University
Tuskegee Institute, Tuskegee Institute

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Tucson, University of Arizona

CALIFORNIA

Davis, University of California
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Santa Barbara, University of California

COLORADO

Boulder, University of Colorado

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Atlanta, Georgia Institute of
Technology

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IDAHO

Pocatello, Idaho State University

ILLINOIS

Urbana, University of Illinois

INDIANA

Lafayette, Purdue University

IOWA

Ames, Iowa State University

KANSAS

Manhattan, Kansas State University

KENTUCKY

Lexington, University of Kentucky

MARYLAND

Baltimore, Johns Hopkins University
College Park, University of Maryland

MASSACHUSETTS

Cambridge, Massachusetts Institute of
Technology
Worcester, Worcester Polytechnic Institute

MICHIGAN

Ann Arbor, University of Michigan

MISSISSIPPI

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Kansas City, Linda Hall Library

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NEW YORK

Albany, New York State Library
Albany, State University at Albany
Ithaca, Cornell University
New York, Columbia University
Rochester, University of Rochester
Syracuse, Syracuse University

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Houston, Rice University

UTAH

Salt Lake City, University of Utah

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Blacksburg, Virginia Polytechnic Institute
Charlottesville, University of Virginia

WASHINGTON

Pullman, Washington State University
Seattle, University of Washington

WEST VIRGINIA

Morgantown, West Virginia University

WISCONSIN

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Agency (IAEA)
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Mol-Donk, Centre d'Etude de l'Energie
Nucléaire

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São Paulo, Instituto de Energia Atômica

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ANS-SD-8,PP.1-47; AD-712532,PP.1-47

AVAILABILITY-NTIS

Indiana Schools

CATEGORY NUMBER 010000

4277. Date 700300
010000 210000 32A000 329000 521110 521130 531000
710000 861000 870011

Recent Advances in Reactor Shielding in France
Rastoin, J.
ANS-SD-8, PP.60-81; AD-712532, PP.60-81
AVAILABILITY-NTIS
France

4278. Date 700300
010000 32A000 32E000 32F000 326000 329000 511110
620000 710000 722100 795022 795081 795121 820000
861000 870092

Key Problems in Radiation Shielding in the Federal
Republic of Germany
Bunemann, D.
ANS-SD-8, PP.82-108; AD-712532, PP.82-108
AVAILABILITY-NTIS
Germany (West)

4279. Date 700300
010000 795054 795072

Key Problems in Reactor Shielding in Sweden
Leimdorfer, M.
ANS-SD-8, PP.109-112; AD-712532, PP.109-112
AVAILABILITY-NTIS
Sweden

4280. Date 700300
010000 32A000 32F000 511110 521130 632120 721100
795040 795042 795066 795072 795121 820000 853100
861000 870006

Today's Approaches to Reactor Shielding Problems
Nicks, R.; Penkuhn, H.; Ponti, C.
ANS-SD-8, PP.113-138; AD-712532, PP.113-138
AVAILABILITY-NTIS
Italy

4281. Date 700300
010000 511110 512110 521130 522110 710000 713000
721100 722100 820000 841000 861000 870013 870050

Latest Research on Reactor Shielding in Japan
Hyodo, T.; Miyasaka, S.; Nakata, M.
ANS-SD-8, PP.139-155; AD-712532, PP.139-155
AVAILABILITY-NTIS
Japan

4282. Date 740600
010000 111210 32A000 329000 717000 810000
Fusion Reactor Nuclear Analysis Methods and
Applications
Dudziak, D. J.
LA-UR-883
AVAILABILITY-NTIS

CATEGORY NUMBER 00000

Los Alamos Sci

4300. Date 740800
010000 122700 717000 810000

The Status of Neutron-Induced Nuclear Data for
Controlled Thermonuclear Research Applications:
Critical Reviews of Current Evaluations
Steiner, D. (Comp.)
USNDC-CTR-1
AVAILABILITY-NTIS
Oak Ridge National Lab.

4360. Date 740800
010000 111110 112120 424000 713000 870092 870094

The State-of-the Art in Non-Destructive Assay Systems
and Their Applications To An Lmfbr Aqueous Fuel
Reprocessing Plant
Shahrokhi, F.; Robinson, J. C.; Mihalcz, J. T.;
Ackermann, N. J., Jr.
ORNL-TM-4586; ORNL-TM-4586
AVAILABILITY-DEP., NTIS \$5.45
Oak Ridge National Lab.

4412. Date 730000
010000 111600 810000

Photonuclear Reactions in Reactors
Francis, N. C.; Lubert, M.; Mendelson, M. R.;
Block, R. C.
CONF-730301, 1095-1104
AVAILABILITY-TIC
Lawrence Livermore Lab

4480. Date 730600
010000 122100

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September 3, 1971

IAEA,
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AVAILABILITY-IAEA, \$5.00
Iaea

4526. Date 730000
010000 122100

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Pearlstein, S.
BNL-18252; CONF-731015-3
AVAILABILITY-DEP., NTIS \$3.00
Brookhaven Natl. Lab.

CATEGORY NUMBER 010000

4527. Date 730329
010000 220000
Radiation Effects Data and Their Interpretation
Bond, V. P.
BNL-17889; CONF-730444-1
AVAILABILITY-DEP., NTIS \$4.50
Brookhaven Natl. Lab.

4534. Date 730000
010000 111110 870098
Californium-252: Neutron Source for Industry and
Medicine
Reinig, W. C.; Permar, P. H.; Cornman, W. R.
DP-MS-73-50; CONF-731116-1
AVAILABILITY-DEP., NTIS \$6.75
E. I. Dupont Denemours

4535. Date 720901
010000 111110 870098
Californium-252 Neutron Sources
Crandall, J. L.
DP-MS-72-45; CONF-720902-8
AVAILABILITY-DEP., NTIS \$3.00
E. I. Dupont Denemours

4548. Date 741200
010000
A New Discipline: Design Against Radiation
Biro, G. C.
CONSULTING ENG., 43(6), 55-58
Gibbs and Hill, Inc.

4576. Date 730000
010000 210000 810000
Radiation Damage in Reactor Materials
Srinivasan, N. (Comp.)
RRC-1
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$15.50
India

4583. Date 730000
010000 853100 853200 853300 853400 853500 853600
853700 853800 853900
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Neville, A. M.
PITMAN PUB., LONDON
England

CATEGORY NUMBER 010000

4595. Date 730100
010000 220000 423240 512120
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Intercomparisons. Proceedings of A Panel Held in
Vienna, 13-17 December 1971
IAEA,
STI/PUB-338; CONF-711225
AVAILABILITY-IAEA \$6.00
Iaea

4599. Date 740900
010000 795081 795082 795089 795121 795127 795132
795142 795144
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Devillers, C.; Ponti, C.; Rexer, G.; Hehn, G.;
Amin, E.; Sartori, E.; Pfister, G.; Burgart, C. E.;
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Nuclear Energy Agency

4602. Date 731000
010000 111110 111210 717000 810000
Nuclear Data Requirements for Fusion-Fission (Hybrid)
Reactors
Wolkenhauer, W.C.; Leonard, B. R., Jr.
STI/PUB-343, V.1, 39-50; CONF-730302(VOL.1), 39-50;
IAEA-SM-170/56
AVAILABILITY-IAEA, VIENNA
Pacific Northwest Lab

4611. Date 740000
010000 122100 610000 810000
2200 M/s Neutron Activation Cross-Sections
Sher, R.
STI/DOC-10/156, PP.1-13
AVAILABILITY-IAEA
California Schools

4612. Date 740000
010000 122100 610000 810000
Tables and Graphs of Cross-Sections for (N,p), (N,α)
and (N,2n) Reactions in the Neutron Energy Region
1 - 37 Mev
Bormann, M.; Neuert, H.; Scobel, W.
STI/DOC-10/156, PP.87-272
AVAILABILITY-IAEA
Germany (West)

CATEGORY NUMBER 010000

4613. Date 740000
 010000 122100 610000 810000
 Cross-Sections for Fission Neutron Spectrum Induced
 Reactions
 Calamand, A.
 STI/DOC-10/156, PP.273-324
 AVAILABILITY-IAEA
 Iaca

4614. Date 740000
 010000 122200 610000 810000
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 Bulow, B.; Forkman, B.
 STI/DOC-10-156, PP.475-558
 AVAILABILITY-IAEA
 Sweden

4659. Date 730000
 010000 310000
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 Theory
 Zweifel, P. F.
 TRANSP., THEORY AND STAT. PHYS., 3(1), 65-77
 Virginia Schools

4700. Date 731100
 010000 112910
 Present and Future Capabilities for Battlefield Radiation
 Hazard Assessment. Final Report
 Lee, H.; Millican, R. W.; Hardman, W. F.
 UCRL-13591
 AVAILABILITY-DEP., NTIS \$8.50
 Stanford Research Institute

4710. Date 741200
 010000 230000
 United States Atomic Energy Waste Management
 Programs and Objectives
 Pittman, F. K.
 NUCL. TECH., 24(3), 273-285
 Atomic Energy Commission (U.S.)

4711. Date 741200
 010000 230000
 The Hidden Commitment of Nuclear Wastes
 Rowe, W. D.; Holcomb, W. F.
 NUCL. TECH., 24(3), 286-293
 Environmental Protection Agency

CATEGORY NUMBER 010000

4712. Date 741200
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 Waste Management - Licensing and Criteria
 Smiley, S. H.
 NUCL. TECH., 24(3), 294-299
 Atomic Energy Commission (U.S.)

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 010000 230000
 Management of Radioactive Wastes - Programs of the
 International Atomic Energy Agency
 Jacobs, D. G.
 NUCL. TECH., 24(3), 300-304
 Oak Ridge National Lab.

4714. Date 741200
 010000 230000
 Radioactive Waste Management in Selected Foreign
 Countries
 Parker, H. M.
 NUCL. TECH., 24(3), 305-308
 Hmp

4715. Date 741200
 010000 111110 112110 112760 112910 113100 220000
 Nuclear Radiation-Sources and Impact
 Unruh, C. M.
 NUCL. TECH., 24(3), 314-322
 Battelle Memorial Inst.

4717. Date 741200
 010000 230000
 Evaluation Methodology of Waste Management
 Concepts
 Deonigi, D. E.
 NUCL. TECH., 24(3), 331-338
 Battelle-Northwest

4718. Date 741200
 010000 230000 712000
 Transportation of Nuclear Fuel and Waste
 Brobst, W.
 NUCL. TECH., 24(3), 343-355
 Atomic Energy Commission (U.S.)

4719. Date 741200
 010000 230000
 Geohydrologic Considerations in the Management of
 Radioactive Waste
 Debuchanne, G. D.
 NUCL. TECH., 24(3), 356-361
 Geological Survey, U.S.

CATEGORY NUMBER 010000

4720..... Date 741200
010000 230000
Methods for Removal of Actinides From High-Level
Wastes
Bond, W. D.; Claiborne, H. C.; Leuze, R. E.
NUCL. TECH., 24(3), 362-370
Oak Ridge National Lab.

4721..... Date 741200
010000 230000
High-Level Waste Solidification: Applicability of
Fluidized-Bed Calcination To Commercial Wastes
Dickey, B. R.; Wheeler, B. R.; Buckham, J. A.
NUCL. TECH., 24(3), 371-382
Allied Chemical Corp.

4722..... Date 741200
010000 230000
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Low-Level Transuranic Wastes
Macbeth, P. J.; Hickman, W. W.
NUCL. TECH., 24(3), 383-390
Aerojet-General

4723..... Date 741200
010000 230000
Retrievable Surface Storage Facility for Commercial
High-Level Waste
Nelson, D. C.; Wodrich, D. D.
NUCL. TECH., 24(3), 391-397
Atlantic Richfield Hanford Co.

4724..... Date 741200
010000 230000
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Formations
McClain, W. C.; Boch, A. L.
NUCL. TECH., 24(3), 398-408
Oak Ridge National Lab.

4726..... Date 741200
010000 230000
Extraterrestrial Disposal of Nuclear Wastes
Drumheller, K.
NUCL. TECH., 24(3), 418-424
Battelle Memorial Inst.

4727..... Date 741200
010000 230000
Seabed Disposal - Where to Look
Bishop, W. P.; Hollister, C. D.
NUCL. TECH., 24(3), 425-443
Sandia Corporation

CATEGORY NUMBER 010000

4728..... Date 741200
010000 230000
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Radionuclides
Smith, A. E.; Brown, D. J.; Isaacson, R. E.
NUCL. TECH., 24(3), 444-446
Atlantic Richfield Hanford Co.

4763..... Date 740000
010000 111210 210000 717070 810000
Forseeable Thermal, Mechanical, and Materials
Engineering Problems of Fusion Reactor Power
Plants
Fraas, A. P.
NUCL. ENG. DESIGN, 29(3), 295-310
Oak Ridge National Lab.

4769..... Date 740000
010000 795178
Calculations of the Transport of Fast Neutrons (<50
Mev) Through Matter
Alsmiller, R. G., Jr.
CONF-740940-1
AVAILABILITY-DEP., NTIS \$5.75
Oak Ridge National Lab.

4773..... Date 740000
010000 32A000 32C000
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Lathrop, K. D.
LA-UR-74-1262
AVAILABILITY-DEP., NTIS \$4.00
Los Alamos Scientific Lab

4778..... Date 740000
010000 329000
Monte Carlo Code Development in Los Alamos
Carter, L. L.; Cashwell, E. D.; Everett, C. J.;
Forest, C. A.; Schrandt, R. G.; Taylor, W. M.;
Thompson, W. L.; Turner, G. D.
LA-UR-74-897; CONF-740710-2
AVAILABILITY-DEP., NTIS \$4.00
Los Alamos Scientific Lab

4785..... Date 711200
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Bridges, J. E.; Miller, D. A.; Valentino, A. R.
PEM-2
AVAILABILITY-DEP., NTIS \$4.00
Lawrence Livermore Lab

CATEGORY NUMBER 010000

4796. Date 730000
010000 717000
Materials Problems in Magnetically Confined Pulsed
Fusion Reactors
Green, W. V.; Yeske, R. A.
LA-UR-74-652; CONF-740222-1
AVAILABILITY-DEP., NTIS \$4.00
Los Alamos Scientific Lab

4815. Date 750800
010000 020000
Proprietary, Standard, and Government-Supported
Nuclear Data Bases
Poncelet, C. G.; Ozer, O.; Harris, D. R.
LA-6023-MS
AVAILABILITY-NTIS \$4.00
Los Alamos Scientific Lab

4835. Date 751000
010000 111210 717000
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Steiner, D.
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Oak Ridge National Lab.

4846. Date 750000
010000 111500 112B00 329000
Particle-Transport Simulation With the Monte Carlo
Method
Carter, L. L.; Cashwell, E. D.
TID-26607
Los Alamos Scientific Lab

4864. Date 750000
010000 420000
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Ouseph, P. J.
PLENUM PRESS, NY
Kentucky Schools

4889. Date 701200
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The Physics Problems of Reactor Shielding
IAEA
CONF-701228
AVAILABILITY-OECD \$5.00
Iaea

CATEGORY NUMBER 010000

4890. Date 701200
010000 713000 718000
Today's Activities on Reactor Shielding Studies in Japan
Miyasaka, S.; Higashihara, Y.
CONF-701228, PP.55-71
AVAILABILITY-OECD \$5.00
Japan

4891. Date 701200
010000 713000
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Empiricism in the 1970's. A Review of
Contemporary United Kingdom Shielding
Techniques With An Indication Of Future Trends.
Butler, J.
CONF-710228, PP.109-141; CONF-710228, PP.109-141
AVAILABILITY-OECD \$5.00
England

4892. Date 701200
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Reactor Shielding in Switzerland
Herrnberger, V.; Ligou, J.
CONF-701228, PP.143-155
AVAILABILITY-OECD \$5.00
Switzerland

4893. Date 751100
010000 111210 717000
Comparative Study of the More Promising
Combinations of Blanket Materials, Power
Conversion Systems, and Tritium Recovery and
Containment Systems For Fusion Reactors
Fraas, A. P.
ORNL-TM-4999
AVAILABILITY-DEP., NTIS \$5.45
Oak Ridge National Lab.

4901. Date 751000
010000 122100 810000
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Schrack, R. A.(Ed.); Bowman, C. D.(Ed.)
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AVAILABILITY-GPO \$19.45 PER 2 VOL. SET
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National Bureau of Standards

CATEGORY NUMBER 010000

4902..... Date 751000
 010000 122100
 Neutron Cross-Section Needs
 Kouts, H. J.
 NBS SPEC.PUB.-425,PP.3-6; CONF-750303,PP.3-6
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Nuclear Regulatory Commission

4903..... Date 751000
 010000 122100 123000 719A00
 The Light Water Reactor Industry - Nuclear Data Needs
 Uotinen, V. O.; Robertson, J. D.; Tulenko, J. S.
 NBS SPEC.PUB.-425,PP.7-13; CONF-750303,PP.7-13
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Babcock and Wilcox Co.

4904..... Date 751000
 010000 112120 123000
 Radioactive-Nuclide Decay Data in Science and
 Technology
 Reich, C. W.; Helmer, R. G.
 NBS SPEC.PUB.-425,PP.14-20; CONF-750303,PP.14-20
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Aerojet-General

4907..... Date 751000
 010000 112400 112500 112600 122100 123000 810000
 Nuclear Models and Data for Gamma-Ray Production
 Young, P. G.
 NBS SPEC.PUB.-425,PP.149-155;
 CONF-750303,PP.149-155
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Los Alamos Scientific Lab

4911..... Date 751000
 010000 111110 122110 122310 511110 511120 521130
 521230 793000 794000 810000 861000
 Shielding Benchmark Experiments and Sensitivity
 Studies in Progress at Some European Laboratories
 Hehn, G.; Mattes, W.; Nicks, R.; Matthes, W.;
 Rief, H.
 NBS SPEC.PUB.-425,PP.177-183;
 CONF-750303,PP.177-183
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Germany (West)

CATEGORY NUMBER 010000

4931..... Date 751000
 010000 111210 717000
 Nuclear Data Needs for Fusion Reactor Design
 Steiner, D.
 NBS SPEC.PUB.-425,PP.646-650;
 CONF-750303,PP.646-650
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Oak Ridge National Lab.

4933..... Date 751000
 010000 111210 122100 717000
 A Survey of Fast-Neutron Induced Reaction
 Cross-Section Data
 Qaim, S. M.
 NBS SPEC.PUB.-425,PP.664-673;
 CONF-750303,PP.664-673
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Germany (West)

4934..... Date 751000
 010000 122310 717000
 A Quantitative Assessment of Ctr Cross Section Needs
 Gerstl, S. A.; Dudziak, D. J.; Muir, D. W.
 NBS SPEC.PUB.-425,PP.674-679;
 CONF-750303,PP.674-679
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Los Alamos Scientific Lab

4938..... Date 751000
 010000 122310
 Uncertainties and Correlations in Evaluated Data Sets
 Induced By Use Of Standard Cross Sections
 Peele, R. W.
 NBS SPEC.PUB.-425,PP.173-176; CONF-750303-30
 AVAILABILITY-NTIS AS CONF-750303-30
 Oak Ridge National Lab.

4950..... Date 750300
 010000 020000 511120 512220 810000
 Benchmark Experiments for Nuclear Data
 Bohn, E. M.; Maerker, R. E.; McCrosson, F. J.;
 Labauve, R. J.; Magurno, B. A.; Schenter, R. E.
 NBS SPEC.PUB.-425,PP.834-841; CONF-750303-52
 AVAILABILITY-NTIS \$4.00 AS CONF-750303-52
 Argonne National Lab.

**CATEGORY NUMBER 020000
STANDARDS**

3533..... Date 680000
020000 220000
Code of Practice for the Protection of Persons Exposed
to Ionizing Radiation In Research and Teaching
UNITED KINGDOM
HMSO
AVAILABILITY-PENDRAGON HOUSE,
REDWOOD CITY, CALIFORNIA
England

3868..... Date 721000
020000 220000
Si Units in Radiation Measurement
Jennings, W. A.
BRIT. J. RADIOL., 45(538), 784-785
England

4070..... Date 740200
020000 111110 122110 310000
Standard Interface Files and Procedures for Reactor
Physics Codes, Version Iii
Carmichael, B. M.
LA-4070
AVAILABILITY-NTIS \$5.45
Los Alamos Scientific Lab

4117..... Date 730800
020000 220000
Si Units in Radiology and Radiation Measurement
Liden, K.
HEALTH PHYS., 25(2), 199-200
Sweden

4144..... Date 730000
010000 020000 220000
Exposure to Radiation From Man Made Sources
Muth, H.
ATOMKERNENERGIE, 21(4), 230-239
Germany (West)

4150..... Date 740401
020000 112720 220000 760000
Specification of Gamma-Ray Brachytherapy Sources
NCRP,
NCRP-41
AVAILABILITY-NCRP PUBLICATIONS, P.O. BOX
30175, WASHINGTON, D.C. 20014 \$3.00
Ncrp (Natl. Council Rad. Prot.)

CATEGORY NUMBER 020000

4286..... Date 740400
020000 111110 210000 610000
Nuclear Reactor Neutron Energy Spectra
Serpan, C. Z., Jr.; Menke, B. H.
ASTM-DS-52
AVAILABILITY-AMERICAN SOCIETY FOR
TESTING AND MATERIALS, 1916 RACE
STREET, PHILADELPHIA, PA. 19103 \$26.00
American Soc. for Testing Matls

4287..... Date 740900
020000 111110 421110 421130 422140 511110 551110
713000 861000
Sdt 11. the Ornl Benchmark Experiment for Neutron
Transport Through Iron And Stainless Steel, Part I
Maerker, R. E.
ORNL-TM-4222; ENDF-188
AVAILABILITY-NTIS
Oak Ridge National Lab.

4288..... Date 740900
020000 111110 421110 421130 422140 511110 551110
713000 870011
Sdt 12. the Ornl Benchmark Experiment for Neutron
Transport Through Sodium
Maerker, R. E.
ORNL-TM-4223; ENDF-189
AVAILABILITY-NTIS
Oak Ridge National Lab.

4293..... Date 730800
020000
Availability of Nuclear Standards Information
Cottrell, W. B.
NUCL. ENG. DESIGN, 25(3), 441-448
Oak Ridge National Lab.

4411..... Date 740700
020000 111110 32A000 329000 421130 422140 511110
511120 512210 713000 793000 795017 795046 795082
795089 795127 842000 870011
Shielding Benchmark Problems
Simmons, G. L.(Ed.)
ORNL-RSIC-25(SUPPL.2); ANS-SD-9(SUPPL.2)
AVAILABILITY-DEP., NTIS \$5.45
Oak Ridge National Lab.

4455..... Date 730901
020000 220000
Dose Equivalent
ICRU,
ICRU-19 SUPPLEMENT
AVAILABILITY-ICRU PUBLICATIONS,
WASHINGTON, D.C. \$1.00

CATEGORY NUMBER 020000

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4522..... Date 740000
020000
1974 Annual Book of Astm Standards. Part 45. Nuclear Standards
ASTM,
ASTM
AVAILABILITY-ASTM, 1916 RACE ST.,
PHILADELPHIA, PA. 19103 \$24.00
American Soc. for Testing Matls

4536..... Date 720800
020000 310000 510000 511110
An Analytic Time-Dependent Neutron Transport Benchmark Solution
Ganapol, B.
EIR-220
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Switzerland

4590..... Date 741100
020000 122310 122330 122350
Cross Section Evaluation Working Group - Benchmark Specifications
Alter, H.; Kidman, R. B.; Labauve, R.; Protsik, R.; Zolotar, B. A.
BNL-19302; ENDF-202
AVAILABILITY-NATIONAL NEUTRON CROSS SECTION CENTER, BROOKHAVEN
NATIONAL LAB., UPTON, NEW YORK 11973
Brookhaven Natl. Lab.

4592..... Date 730000
020000 123000
The 1973 Least-Squares Adjustment of the Fundamental Constants
Cohen, E. R.; Taylor, B. N.
J. PHYS. CHEM. REF. DATA, 2(4), 663-734
North American Rockwell Corp.

4774..... Date 721100
020000 122100 870002 870003 882000
The $^3\text{He}(\text{N,p})t$, $^6\text{Li}(\text{N,}\alpha)t$, and $^{10}\text{B}(\text{N,}\alpha)t$ Standard Cross Sections
Stewart, L.
LA-DC-72-1412; CONF-721127-2
AVAILABILITY-DEP., NTIS
Los Alamos Scientific Lab

CATEGORY NUMBER 020000

4776..... Date 740000
020000 122310
Application of Shielding Benchmark Experiments to the Testing of Nuclear Data, Calculational Methods, and Procedures
Labauve, R. J.; Harris, D. R.; Muir, D. W.; Hemmig, P. B.
LA-UR-74-600; CONF-740440-1
AVAILABILITY-DEP., NTIS \$4.50
Los Alamos Scientific Lab

4815..... Date 750800
010000 020000
Proprietary, Standard, and Government-Supported Nuclear Data Bases
Poncelet, C. G.; Ozer, O.; Harris, D. R.
LA-6023-MS
AVAILABILITY-NTIS \$4.00
Los Alamos Scientific Lab

4950..... Date 750300
010000 020000 511120 512220 810000
Benchmark Experiments for Nuclear Data
Bohn, E. M.; Maerker, R. E.; McCrosson, F. J.; Labauve, R. J.; Magurno, B. A.; Schenter, R. E.
NBS SPEC.PUB.-425, PP.834-841; CONF-750303-52
AVAILABILITY-NTIS \$4.00 AS CONF-750303-52
Argonne National Lab.

CATEGORY NUMBER 111110
SOURCES - NEUTRON - FISSION OR
REACTOR - PROMPT

3507..... Date 721000
010000 111110
Prompt Fission Neutron Spectra. Proceedings of a Consultants' Meeting Held In Vienna, August 25-27, 1971
IAEA
STI/PUB/329; CONF-710845
AVAILABILITY-IAEA, VIENNA(AUSTRIA), 1972
\$6.00
Austria

3549..... Date 721200
111110 421140 430000
The Use of Threshold Detectors to Evaluate Neutron Leakage Spectra For Dosimetry Calculations.
Boot, S. J.
AERE-R-7294
AVAILABILITY-HMSO
England

CATEGORY NUMBER 111110

3586. Date 720100
 111110 112110 220000 329000 511110 512210 610000
 Calculated Depth Dose Table for 252-Cf Sources in
 Tissue
 Krishnaswamy, V.
 PHYS. MED. BIOL., 17(1), 56-63
 Pennsylvania Schools

3587. Date 720500
 111110 220000 845000 870098
 Radiation Quality of Californium-252
 Dicello, J. F.; Gross, W.; Kraljevic, U.
 PHYS. MED. BIOL., 17(3), 345-355
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3588. Date 720500
 111110 112110 220000 423110 511120 512120 845000
 870098
 Dose Distributions Around a 252-Cf Needle
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3597. Date 720400
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 Fission-Neutron Spectra Measurements of 235-U,
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 Werle, H.; Bluhm, H.
 J. NUCL. ENERGY, 26(4), 165-175
 Germany (West)

3630. Date 730500
 111110 32A000 329000 421130 422120 422140 511120
 521230 795082 795089 795127 861000 870006 870011
 882000
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 AVAILABILITY-DEP., NTIS \$5.00
 General Electric Co. Except Knolls

3672. Date 730900
 111110 111220 870094
 Neutron Yield From a Small High Purity 238-Pu Sub 2
 Source
 Bair, J. K.; Butler, H. M.
 NUCL. TECH., 19(3), 202-203
 Oak Ridge National Lab.

CATEGORY NUMBER 111110

3843. Date 731100
 111110 870082
 The Uranium-233 Fission Neutron Spectrum From 0.8 to
 10 Mev
 Green, L.; Mitchell, J. A.; Steen, N. M.
 NUCL. SCI. ENG., 52(3), 406-412
 Bettis Atomic Power Lab.

4067. Date 731200
 111110 421160 430000 794000 870098
 The 252-Cf Fission Neutron Spectrum From 0.5 to 13
 Mev (Lwbr Development Program)
 Green, L.; Mitchell, J. A.; Steen, N. M.
 WAPD-TM-1072
 AVAILABILITY-NTIS
 Bettis Atomic Power Lab.

4068. Date 731200
 111110 870092
 The 233-U Fission Neutron Spectrum From 0.8 to 10
 Mev (Lwbr Development Program)
 Green, L.; Mitchell, J. A.; Steen, N. M.
 WAPD-TM-1129
 AVAILABILITY-DEP., NTIS \$3.00
 Bettis Atomic Power Lab.

4110. Date 740500
 111110 324000 422110 511120 820000 870098
 Age of Californium-252 Fission Neutrons to Indium
 Resonance Energy in Water
 Spiegel, V.
 NUCL. SCI. ENG., 54(1), 28-34
 National Bureau of Standards

4201. Date 741100
 111110 220000 760000 870094
 Status of Dosimetry for 252-Cf Medical Neutron Sources
 Anderson, L. L.
 PHYS. MED. BIOL., 18(6), 779-799
 Sloan Kettering Inst. for Cancer Rese

4205. Date 720900
 111110 32A000 511110 795042 870092 870094 870098
 Subcritical Multiplication of Californium-252 Neutrons
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 Hansen, L. E.; Wogman, N. A.; Perkins, R. W.;
 Clayton, E. D.
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CATEGORY NUMBER 111110

4286. Date 740400
 020000 111110 210000 610000
 Nuclear Reactor Neutron Energy Spectra
 Serpan, C. Z., Jr.; Menke, B. H.
 ASTM-DS-52
 AVAILABILITY-AMERICAN SOCIETY FOR
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4294. Date 740700
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 Murthy, M. S.; Bhatt, R. C.; Shinde, S. S.
 HEALTH PHYS., 27(1), 9-17
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4318. Date 730000
 111110 870090 870092 870094
 Prompt and Delayed Neutron Yields From Low Energy
 Photofission of Th-232, U-235, U-238, and Pu-239
 Caldwell, J. T.; Dowdy, E. J.; Worth, G. M.
 LA-UR-73-968; CONF-730823-2; SM-174/100
 AVAILABILITY-DEP., NTIS \$3.00
 Los Alamos Scientific Lab

4319. Date 730000
 111110
 Prompt Neutrons From the Spontaneous Fission of
 Fermium-257
 Balagna, J. P.; Farrell, J. A.; Ford, G. P.;
 Hemmendinger, A.; Hoffman, D. C.; Vesser, L. R.;
 Wilhelmy, J. B.
 LA-UR-73-1010; CONF-730823-1; SM-174/77
 AVAILABILITY-DEP., NTIS \$3.00
 Los Alamos Scientific Lab

4320. Date 721000
 111110 112120 123000 221000 532000 870092 870094
 Data for the Calculation of Gamma Radiation Spectra
 and Beta Heating From Fission Products (Revision
 2)
 Tobias, A.
 RD/B/M-2453
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 England

CATEGORY NUMBER 111110

4325. Date 740400
 111110 112710 610000 713000 719A00 795217 870092
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 Calculation and Compilations of Composition,
 Radioactivity, Thermal Power, Gamma and Neutron
 Release Rates of Fission Products and Actinides of
 Spent Power Reactor Fuels and Their Reprocessing
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 Haug, H. O.
 KFK-1945
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Germany (West)

4328. Date 730700
 111110 112110 112120 870092 870094 870098
 Neutron and Gamma Emission in Fission
 Nifenecker, H.; Signarbieux, C.; Babinet, R.;
 Poitou, J.
 LBL-1950; CONF-730823-15; SM-174/207
 AVAILABILITY-DEP., NTIS \$8.75
 Lawrence Berkeley Lab

4353. Date 721200
 111110 32A000 329000 422110 551110 770000 795089
 795127 870013 870098
 The Neutron Environment of a Cf-252 Facility
 Wyatt, R. M.
 LSU THESIS (MASTERS)
 AVAILABILITY-LOUISIANA STATE UNIV.,
 BATON ROUGE, LA. 70803
 Louisiana Schools

4367. Date 730000
 111110 111220 220000 421130 511120 870004 870092
 870094 870095 870098
 Measurement of Spectral Distributions of Neutrons
 From Radioactive Sources And Uranium-235
 Fission, and the Resulting Fluence-Dose Conversion
 Factors
 Kluge, H.; Weise, K.; Zill, H. W.
 STI/PUB/318,V.1,13-22; CONF-721203,V.1,13-22;
 IAEA-SM-167/7
 AVAILABILITY-IAEA
 Germany (West)

4371. Date 730000
 111110 220000 423140 511110 820000 870092
 Prediction of Fast Neutron Spectra in Criticality
 Accidents
 Cross, W. G.; Ing, H.
 STI/PUB/318,VOL.1,73-86; CONF-721203,V.1,73-86;
 IAEA-SM-167/45
 AVAILABILITY-IAEA
 Canada

CATEGORY NUMBER 111110

4429..... Date 740300
 111110 551110 795089 795123 810000
 Calculation of the Hprr Neutron Spectrum for Simulated
 Nuclear Accident Conditions
 Poston, J. W.; Knight, J. R.; Whitesides, G. E.
 HEALTH PHYS., 26(3), 217-221
 Oak Ridge National Lab.

4469..... Date 730100
 111110 220000 760000 845000 870098
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 Radiotherapy
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 Almond, P. R.
 AM. J. ROENTGENOL, 117(1), 182-194
 California Schools

4534..... Date 730000
 010000 111110 870098
 Californium-252: Neutron Source for Industry and
 Medicine
 Reinig, W. C.; Permar, P. H.; Cornman, W. R.
 DP-MS-73-50; CONF-731116-1
 AVAILABILITY-DEP., NTIS \$6.75
 E. I. Dupont Denemours

4535..... Date 720901
 010000 111110 870098
 Californium-252 Neutron Sources
 Crandall, J. L.
 DP-MS-72-45; CONF-720902-8
 AVAILABILITY-DEP., NTIS \$3.00
 E. I. Dupont Denemours

4559..... Date 730100
 111110 870092 870098
 Prompt Neutrons From Fission
 Skarsvag, K.
 KR-148
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$3.00
 Norway

4813..... Date 741200
 111110 870098
 Use of Californium-252 As a Standard for Nu Bar and
 Neutron Spectrum Measurements
 Kuz'minov, B. D.
 STI/PUB-371, PP.321-325; CONF-721127, PP.321-325;
 IAEA-PL-246-2/35
 AVAILABILITY-IAEA
 Russia

CATEGORY NUMBER 111110

4814..... Date 741200
 111110 870092 870098
 Standard Fission Neutron Spectra
 Ferguson, A. T. G.
 STI/PUB-371, PP.333-338; CONF-721127, PP.333-338;
 IAEA-PL-246-2/37
 AVAILABILITY-IAEA
 England

4914..... Date 751000
 111110 870092 870098
 Fission Spectrum Neutrons for Cross Section Validation
 and Neutron Flux Transfer
 Grundl, J. A.; Eisenhauer, C. M.
 NBS SPEC.PUB.425, PP.250-253;
 CONF-750303, PP.250-253
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 National Bureau of Standards

CATEGORY NUMBER 111120
 SOURCES - NEUTRON - FISSION -
 DELAYED

3683..... Date 730900
 111120
 Delayed Neutron Precursors
 Tomlinson, L.
 AT.DATA + NUCL. DATA TABLES, 12(2), 179-194
 England

3824..... Date 730500
 111120 421120 870092 870094
 The Energy Distribution of Delayed Fission Neutrons
 Shalev, S.; Cuttler, J. M.
 NUCL. SCI. ENG., 51(1), 52-66
 Israel

4494..... Date 750100
 111120 870090 870092 870094
 Delayed-Neutron Data for Reactor-Physics Analysis
 Tuttle, R. J.
 NUCL. SCI. ENG., 56(1), 37-71
 Atomics International

4826..... Date 750600
 111120 870092
 Reevaluation of the Emission Probabilities of Delayed
 Neutrons From Fission Products
 Izak-Biran, T.; Amiel, S.
 NUCL. SCI. ENG., 57(2), 117-121
 Israel

CATEGORY NUMBER 111130
SOURCES - NEUTRON - FISSION -
WEAPON

3532. Date 730700
 000000 111130 111400 112110 112120 112800 610000
 721100 722100 731100 731200 731300 810000
 Shielding Against Initial Radiation From Nuclear
 Weapons
 Abbott, L. S.
 ORNL-RSIC-36
 AVAILABILITY-RSIC
 Oak Ridge National Lab.

3609. Date 700000
 010000 111130 111400 112130 112800 112910 731200
 Protection From Penetrating Radiation of a Nuclear
 Explosion
 Kukhtevich, V. I.; Goryachev, I. V.; Trykov, L. A.
 JPRS-53498
 AVAILABILITY-NTIS
 Russia

CATEGORY NUMBER 111210
SOURCES - NEUTRON -REACTION -
14 MEV AND D,T
FUSION

3508. Date 730117
 111210 421160 511120 540000 861000 870006
 Livermore Pulsed Sphere Program: Low-Energy
 Measurements on Carbon, Iron, And Concrete
 Wong, C.; Anderson, J. D.; Brown, P.;
 Hanson, L. F.; Kammerdiener, J. L.; Logan, C.;
 Pohl, B.
 UCRL-51144, ADDENDUM
 AVAILABILITY-DEP., NTIS \$6.00
 Lawrence Livermore Lab

3608. Date 730417
 111210 210000 423140 870041
 Neutron Dosimetry (14 Mev) for Foil Samples Irradiated
 With the Lawrence Livermore Laboratory Rotating
 Target Neutron Source
 Van Konynenburg, R. A.
 UCRL-51393
 AVAILABILITY-DEP., NTIS \$4.00
 Lawrence Livermore Lab

3982. Date 701000
 111210 111220
 Neutron Generators
 Eschard, G.
 ACTA ELECTRON, 13(4), 293-303
 France

CATEGORY NUMBER 111210

3983. date 701000
 111210 111220
 Sealed Tube Pulse Neutron Generators
 Faure, C.
 ACTA ELECTRON, 13(4), 317-364
 France

4015. Date 721000
 111210 329000 421000 521110 750000 795145
 Monte Carlo Characterization of the Near-Field Energy
 and Angular Distribution for the Henre D-T
 Neutron Generator
 O'dell, A. A.
 EGG-1183-2298
 AVAILABILITY-DEP., NTIS \$4.00
 Edgerton, Germeshausen, + Grier

4045. Date 730800
 010000 111210 410000 717000
 A Report on the Development of Intense Neutron
 Source Facilities for the Ctr Technology Program
 Persiani, P. J.
 ANL/CTR-73-1
 AVAILABILITY-DEP., NTIS \$3.75
 Argonne National Lab.

4059. Date 730400
 111210
 Dense Plasma Focus As a Pulsed Deuterium-Tritium
 Neutron Source
 Hogg, G. R.
 AAEC/E-279
 AVAILABILITY-NTIS
 Australia

4071. Date 731000
 111210 122110 717000
 Sensitivity of Fusion Reactor Average Cross Sections to
 Thermal Broadening Of the 14-Mev Neutron Peak
 Muir, D. W.
 LA-5411-MS
 AVAILABILITY-DEP., NTIS \$4.00
 Los Alamos Scientific Lab

4192. Date 740500
 111210
 Production of 14 Mev Neutrons By Heavy Ions
 Brugger, R. M.; Young, R. C.; Miller, L. G.
 ANCR-1154
 AVAILABILITY-NTIS \$4.00
 Aerojet-General

CATEGORY NUMBER 111210

4202. Date 731100
 111210 111220 421000 421130
 Spectrum Measurements in 15 Mev Neutron Therapy
 Beams
 Hannan, W. J.; Porter, D.; Lawson, R. C.;
 Railton, R.
 PHYS. MED. BIOL., 18(6), 808-820
 Scotland

4204. Date 730700
 111210 111220
 Fusion Neutron Energies and Spectra
 Brysk, H.
 PLAZA PHYS., 15(7), 611-617
 K M S Fusion, Inc

4312. Date 710000
 111210
 Lasl Intense 14-Mev Neutron Source
 Henderson, D. B.
 LA-DC-72-651; CONF-720631-1
 AVAILABILITY-DEP., NTIS
 Los Alamos Scientific Lab

4396. Date 740000
 111110 111210 410000 717000 810000
 Study of the Development of Neutron and Plasma
 Radiation Test Facilities For The Ctr Materials
 Program
 Persiani, P. J.
 CONF-740402-P1,313-323
 AVAILABILITY-NTIS
 Argonne National Lab.

4398. Date 740000
 111210 410000
 An Intense Neutron Source Facility Using a Supersonic
 Jet Target
 Cline, M. C.; Emigh, C. R.
 CONF-740402-P1,313-323
 AVAILABILITY-NTIS
 Los Alamos Scientific Lab

4435. Date 740000
 111210 111220 870001
 Neutron Diagnostics for Laser-Induced Fusion
 Southworth, F. H.; Campbell, H. D.
 CONF-740402-P2,45-52
 AVAILABILITY-NTIS
 Florida Schools

CATEGORY NUMBER 111210

4454. Date 740800
 111210 410000 717000
 Possibilities of Neutron Sources at Nrts for Ctr Materials
 Testing
 Brugger, R. M.
 ANCR-1176
 AVAILABILITY-NTIS \$4.00
 Aerojet-General

4467. Date 750100
 111210 123000 870001 870002
 The T(D,n) 4-He and T(T,2n) Cross Sections at Low
 Energies
 Stewart, L.; Hale, G. M.
 LA-5828-MS; USNDC-CTR-2
 AVAILABILITY-NTIS \$4.00
 Los Alamos Scientific Lab

4568. Date 721200
 111110 111210 210000 870014
 Method to Determine Reactor Equivalence of Neutron
 Threat Spectra
 Mckenzie, J. M.
 SC-RR-720871
 AVAILABILITY-DEP., NTIS
 Sandia Corporation

4650. Date 750200
 111210 422110 511120 632400 841000 853100
 Attenuation of 14 Mev Neutrons in Shields of Concrete
 and Paraffin Wax
 Bozyap, O.; Day, L. R.
 HEALTH PHYS., 28(2), 101-109
 England

4690. Date 720714
 111210
 Intense Sources of High-Energy Neutrons
 Barschell, H. H.
 UCRL-74031; 720701-4
 AVAILABILITY-DEP., NTIS
 Lawrence Livermore Lab

4694. Date 720900
 111210 210000
 Fusion Neutron Sources Induced By Neutron
 Interactions
 Greenspan, E.
 MATT-923
 AVAILABILITY-DEP., NTIS
 New Jersey Schools

CATEGORY NUMBER 111210

4788. Date 740227
111210 717000
Calculation of the Neutron Spectra From Nuclear
Reactions in Focus Type Deuterium Plasmas. I.
General Presentation and Mathematical Analysis
Genta, P.; Millet, F.; Vezin, R.
CEA-N-1711
AVAILABILITY-DEP., NTIS \$14.00
France

4835. Date 751000
010000 111210 717000
The Technological Requirements for Power By Fusion
Steiner, D.
NUCL. SCI. ENG., 58(2), 107-165
Oak Ridge National Lab.

4853. Date 741200
111210
Neutron Energy and Velocity Distributions From
Thermal D-T Reactions
Marshall, D. A.
LA-5836-MS
AVAILABILITY-NTIS, DEP. \$4.00
Los Alamos Scientific Lab

4867. Date 750701
111210 322000 421000
A Pinhole for Producing a Close-in Image of An
Extended 14-Mev Neutron Source
Matthews, S. M.
UCRL-51860
AVAILABILITY-NTIS
Lawrence Livermore Lab

CATEGORY NUMBER 111220
SOURCES - NEUTRON - REACTION -
SPECTRAL

3620. Date 730600
111220 122110
Neutron Production Cross Sections and Energies for the
Reactions T(P,n)³He, D(D,n)³He, and T(D,n)⁴He
Liskien, H.; Paulsen, A.
AT.DATA + NUCL. DATA TABLES, 11(7), 569-619
Belgium

3645. Date 730900
111220 421130 870001 870003 870004 870006
Neutron Spectra From Deuteron Bombardment of D, Li,
Be, and C
Weaver, K. A.; Anderson, J. D.; Barschall, H. H.;
Davis, J. C.
NUCL. SCI. ENG., 52(1), 35-45

CATEGORY NUMBER 111220

Wisconsin Schools

3650. Date 720000
111220 422110 422120 511120 820000
Investigations on Absolute Measurement of Neutron
Source Strength and Flux Density
Collen, J.
CTH-RF-22
AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
Sweden

3672. Date 730900
111110 111220 870094
Neutron Yield From a Small High Purity ²³⁸Pu Sub 2
Source
Bair, J. K.; Butler, H. M.
NUCL. TECH., 19(3), 202-203
Oak Ridge National Lab.

3718. Date 730901
111220
The Neutron Spectrum of Am-Be Neutron Sources
Vijaya, A. D.; Kumar, A.
NUCL. INSTR. METHODS, 111(3), 435-440
India

3743. Date 720000
111220 121100 421000 861000
Iron-Filtered Neutron Beams: a New Approach to
Precision Time-of Flight Cross Section
Measurements
Block, R. C.; Kaushal, N. N.; Hockenbury, R. W.
COO-3058-20; CONF-720901-10
AVAILABILITY-DEP., NTIS
New York Schools

3750. Date 711100
111220 421130 430000
Studies of Neutron Spectra Obtained From the
Unfolding of Pulse Height Spectra Produced By
Recoil Protons in An Organic Liquid Scintillator
Lepretre, A.; Garganne, P.
CEA-N-1489(IN FRENCH)
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
France

3826. Date 730500
111220 870006
Absolute Neutron Yields From Alpha-Particle
Interaction With Thick Targets Of Natural Carbon
Bair, J. K.
NUCL. SCI. ENG., 51(1), 83-84
Oak Ridge National Lab.

CATEGORY NUMBER 111220

3879..... Date 730400
 111220 220000 421000 423110 760000 870004
 Dosimetric Properties of Neutron Beams Produced By
 16-60 Mev Deuterons On Beryllium
 Almond, P. R.; Smathers, J. B.; Oliver, G. D., Jr.;
 Hranitzky, E. B.; Routt, K.
 RADIATION RES., 54(1), 24-34
 Texas Schools

3880..... Date 730600
 111220 220000 423110 760000
 Radiobiological Studies With Monoenergetic Neutrons
 Hall, E. J.; Rossi, H. H.; Kellerer, A. M.;
 Goodman, L.; Marino, S.
 RADIATION RES., 54(3), 431-443
 New York Schools

3898..... Date 710900
 111220 220000
 Average and Effective Energies, and Fluence-Dose
 Equivalent Conversion Factors for 239-Pu-Be,
 241-Am-Li and 241-Am-F Neutron Sources
 Ro, S. G.; Yoo, Y. S.
 J. KOREAN NUCL. SOC., 3(3), 155-160
 Korea

3899..... Date 710000
 111220 422110 820000 870004
 Production of An Sb-Be Neutron Source of Plane Type
 and Measurement of The Neutron Age in Water
 Kanda, K.; Hayashi, M.; Okumura, K.
 ANN. REPTS. RES. REACTOR INST. KYOTO
 UNIV., 4, 17-24
 Japan

3982..... Date 701000
 111210 111220
 Neutron Generators
 Eschard, G.
 ACTA ELECTRON, 13(4), 293-303
 France

3983..... Date 701000
 111210 111220
 Sealed Tube Pulse Neutron Generators
 Faure, C.
 ACTA ELECTRON, 13(4), 317-364
 France

CATEGORY NUMBER 111220

4016..... Date 731000
 111220
 The Role of Electrically Produced Neutrons in Nuclear
 Power Generation
 Fraser, J. S.; Hoffmann, C. R. J.; Tunnicliffe, P. R.
 AECL-4658; CONF-730849-3
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 \$3.75 AECL \$1.00
 Canada

4040..... Date 731000
 111220 717000 870004
 Accelerator Be-Target Neutron Sources for the Ctr
 Materials Program
 Persiani, P. J.
 ANL/CTR-73-2
 AVAILABILITY-DEP., NTIS \$3.00
 Argonne National Lab.

4157..... Date 721221
 111220 112500 122310 122350 329000 421160 421200
 511120 512220 853100
 Time-Dependent Fast-Neutron and Secondary
 Gamma-Ray Spectrum Measurements In Concrete -
 Vol. 3
 Harris, L., Jr.; Kendrick, H.
 GULF-RT-A12456; DNA-2401-3; AD-760035
 AVAILABILITY-NTIS
 Gulf General Atomic

4202..... Date 731100
 111210 111220 421000 421130
 Spectrum Measurements in 15 Mev Neutron Therapy
 Beams
 Hannan, W. J.; Porter, D.; Lawson, R. C.;
 Railton, R.
 PHYS. MED. BIOL., 18(6), 808-820
 Scotland

4204..... Date 730700
 111210 111220
 Fusion Neutron Energies and Spectra
 Brysk, H.
 PLAZA PHYS., 15(7), 611-617
 K M S Fusion, Inc

4221..... Date 731000
 111210 111220 121100 717000 810000
 Problems of Measuring Nuclear Constants for
 Thermonuclear Reactors
 Kuz'min, E. A.; Ogloblin, A. A.; Sidorov, N. I.;
 Faiziev, A. R.; Chulkov, L. V.; Yan'kov, G. B.
 ST1/PUB-343,V.2,PP3-19; CONF-730302,V.2,PP3-19;
 LA-TR-73-32

CATEGORY NUMBER 111220

AVAILABILITY-IAEA
Russia

4367..... Date 730000
111110 111220 220000 421130 511120 870004 870092
870094 870095 870098

Measurement of Spectral Distributions of Neutrons
From Radioactive Sources And Uranium-235
Fission, and the Resulting Fluence-Dose Conversion
Factors

Kluge, H.; Weise, K.; Zill, H. W.
STI/PUB/318,V.1,13-22; CONF-721203,V.1,13-22;
IAEA-SM-167/7
AVAILABILITY-IAEA
Germany (West)

4399..... Date 740000
111220 410000 870004

Neutron Spectral Measurements in Spallation Neutron
Sources: Characterization of the Blip Neutron
Facility

Dudey, N. D.; Heinrich, R. R.; Parkin, D. M.;
Fluss, M. J.
CONF-740402-P1,324-332
AVAILABILITY-NTIS
Argonne National Lab.

4400..... Date 740000
111220 410000 870006

Neutrons From a High Energy Proton Beam Stop
Perry, D. G.; Barr, D. W.; Gilmore, J. S.;
Dudziak, D. J.; Simmons, M. L.; Russell, G. J.;
Seeger, P. A.; Fluss, M. J.; Heinrich, R.;
Ryan, V. A.

CONF-740402-P1,333-338
AVAILABILITY-NTIS
Los Alamos Scientific Lab

4435..... Date 740000
111210 111220 870001

Neutron Diagnostics for Laser-Induced Fusion
Southworth, F. H.; Campbell, H. D.
CONF-740402-P2,45-52
AVAILABILITY-NTIS
Florida Schools

4525..... Date 730800
111220 421140

Preliminary Neutron Foil Dosimetry Characterization of
the Blip Neutron Facility
Parkin, D. M.; Dudey, N. D.; Heinrich, R. R.;
Fluss, M. J.
BNL-18248
AVAILABILITY-DEP., NTIS \$4.00

CATEGORY NUMBER 111220

Brookhaven Natl. Lab.

4571..... Date 711100
111220 883000

Preparation and Operation of Metal Hydride
Neutron-Producing Targets

Detaint, J.
SC-T-722545; SC-T-722545
AVAILABILITY-DEP., NTIS
France

4593..... Date 750100
111220 870003

Neutron Production Cross Sections and Energies for the
Reactions 7-Li(P,n)7-Be and 7-Li(P,n)7-Be*

Liskien, H.; Paulsen, A.
AT.DATA + NUCL. DATA TABLES, 15(1), 54-84
Belgium

4625..... Date 741015
111220 870009 870094

The Neutron Spectrum of Plutonium Fluoride
Massand, O. P.; Venkataraman, G.
NUCL. INSTR. METHODS, 121(2), 405-406
India

4679..... Date 730126
111220 870003 870004 870006

Spectra of Neutrons From Deuteron Bombardment of
Light Nuclei

Weaver, K. A.
UCRL-51310(ADD.)
AVAILABILITY-DEP., NTIS
Lawrence Livermore Lab

4699..... Date 721207
111220 870003 870004 870006

Neutrons From Deuteron Bombardment of Light Nuclei
Weaver, K. A.

UCRL-51310; UCRL-51310
AVAILABILITY-DEP., NTIS
Lawrence Livermore Lab

4817..... Date 750515
111220 421130 511120 512220 760000 842000 861000
870082 882000

Intensity Measurements and Shielding of a Fast-Neutron
Beam for Biological And Medical Applications

Meulders, J. P.; Leleux, P.; Macq, P. C.; Pirart, C.;
Valenduc, G.
NUCL. INSTR. METHODS, 126(1), 81-85
Belgium

CATEGORY NUMBER 111220

4913. Date 751000
 111220 112120 610000 870092 870094
 Fission-Product Gamma-Ray and Photoneutron Spectra
 Stamatelatos, M. G.; England, T. R.
 NBS SPEC.PUB.-425, PP.193-198;
 CONF-750303, PP.193-198
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Los Alamos Scientific Lab

CATEGORY NUMBER 111300
SOURCES - NEUTRON -
ACTIVATION

4228. Date 731000
 010000 111110 111300 112710 422110 424000
 Nuclear Data for Activation Analysis: Requirements and
 Present State Of Compilations
 Krivan, V.
 STI/PUB-343, V2, PP.193-225;
 CONF-730302, V2, PP.193-225; IAEA-SM-170/60
 AVAILABILITY-IAEA
 Germany (West)

4229. Date 731000
 010000 111110 111300 112710 422110 424000
 Nuclear Data Bases for Activation Analyses
 Bowers, J. M.; Pearson, G. J.; Merritt, W. F.
 STI/PUB-343, V2, PP.229-240;
 CONF-730302, V2, PP.229-240; IAEA-SM-170/36
 AVAILABILITY-IAEA
 Canada

4230. Date 731000
 111110 111300 112710 422110
 Resonance Integrals Applied to the
 Multiple-Comparator Method in Reactor Neutron
 Activation Analysis
 Van Der Linden, R.; De Corte, F.; Hoste, J.
 STI/PUB, V2, PP.241-263; CONF-730302, V2, PP.241-263;
 IAEA-SM-170/31
 AVAILABILITY-IAEA
 Belgium

4231. Date 731000
 010000 111110 111300 112710 122310 422110
 Nuclear Data of Importance in Epithermal Neutron
 Activation Analysis
 Steinnes, E.
 STI/PUB-343, V2, PP.265-270;
 CONF-730302, V2, PP.265-270; IAEA-SM-170/77
 AVAILABILITY-IAEA
 Norway

CATEGORY NUMBER 111300

4232. Date 731000
 010000 111110 111300 112710 122310 422110
 Nuclear Data for Neutron Metrology
 Zijp, W. L.
 STI/PUB-343, V2, PP.271-293;
 CONF-730302, V2, PP.271-293; IAEA-SM-170/73
 AVAILABILITY-IAEA
 Norway

4238. Date 731000
 111300 112200 870022 870029 870042
 Nuclear Data for Bremsstrahlung Activation Analysis of
 Valuable Trace Elements in the Copper Ore
 Ratynski, W.; Stegner, A.; Sujkowski, Z.
 STI/PUB-343, V2, PP.411-429;
 CONF-730302, V2, PP.411-429; IAEA-SM-170/17
 AVAILABILITY-IAEA
 Poland

CATEGORY NUMBER 111400
SOURCES - NEUTRON - THERMONUCLEAR
WEAPON

3532. Date 730700
 000000 111130 111400 112110 112120 112800 610000
 721100 722100 731100 731200 731300 810000
 Shielding Against Initial Radiation From Nuclear
 Weapons
 Abbott, L. S.
 ORNL-RSIC-36
 AVAILABILITY-RSIC
 Oak Ridge National Lab.

3609. Date 700000
 010000 111130 111400 112130 112800 112910 731200
 Protection From Penetrating Radiation of a Nuclear
 Explosion
 Kukhtevich, V. I.; Goryachev, I. V.; Trykov, L. A.
 JPRS-53498
 AVAILABILITY-NTIS
 Russia

CATEGORY NUMBER 111500
SOURCES - NEUTRON - DISCRETE
ENERGIES
(CALCULATION)

3503. Date 710615
 111210 111500 32A000 511110 512210 793000 795082
 Effect of Material Composition on Neutron Penetration
 of Concrete Slabs
 Chilton, A. B.
 NBS-10425
 AVAILABILITY-OFFICE OF THE DIRECTOR,

CATEGORY NUMBER 111500

NATIONAL BUREAU OF STANDARDS,
WASHINGTON, D. C. 20234
National Bureau of Standards

CATEGORY NUMBER 111600
SOURCES - NEUTRON - REACTION -
PHOTONEUTRON (IN
SHIELD)

4412. Date 730000
010000 111600 810000
Photonuclear Reactions in Reactors
Francis, N. C.; Lubert, M.; Mendelson, M. R.;
Block, R. C.
CONF-730301,1095-1104
AVAILABILITY-TIC
Lawrence Livermore Lab

CATEGORY NUMBER 112B00
SOURCES - GAMMA-RAY - DISCRETE
ENERGIES
(CALCULATION)

4018. Date 670600
112B00 327000 512110 522120 522130 610000 830000
Distribution Functions of Air-Scattered Gamma Rays
Above Isotropic Plane Sources
Michael, J. A.; Lamonds, H. A.
CEX-73.1; EGG-1183-2160
AVAILABILITY-NTIS \$10.60
Edgerton, Germeshausen, + Grier

4459. Date 730800
112B00 121200
Polynomial Solutions of the Schrodinger Equation
Applied to Photon Cross Sections in Atoms
Merts, A. L.; Matuska, W., Jr.
LA-5280
AVAILABILITY-NTIS \$4.00
Los Alamos Scientific Lab

CATEGORY NUMBER 112110
SOURCES - GAMMA-RAY - FISSION
- PROMPT

3532. Date 730700
000000 111130 111400 112110 112120 112800 610000
721100 722100 731100 731200 731300 810000
Shielding Against Initial Radiation From Nuclear
Weapons
Abbott, L. S.
ORNL-RSIC-36
AVAILABILITY-RSIC
Oak Ridge National Lab.

CATEGORY NUMBER 112110

3586. Date 720100
111110 112110 220000 329000 511110 512210 610000
Calculated Depth Dose Table for 252-Cf Sources in
Tissue
Krishnaswamy, V.
PHYS. MED. BIOL., 17(1), 56-63
Pennsylvania Schools

3588. Date 720500
111110 112110 220000 423110 511120 512120 845000
870098
Dose Distributions Around a 252-Cf Needle
Colvett, R. D.; Rossi, H. H.; Krishnaswamy, V.
PHYS. MED. BIOL., 17(3), 356-364
New York Schools

4328. Date 730700
111110 112110 112120 870092 870094 870098
Neutron and Gamma Emission in Fission
Nifenecker, H.; Signarbieux, C.; Babinet, R.;
Poitou, J.
LBL-1950; CONF-730823-15; SM-174/207
AVAILABILITY-DEP., NTIS \$8.75
Lawrence Berkeley Lab

4329. Date 730700
112110 870098
Measurement of Prompt Gamma Ray Lifetimes of
Fission Fragments of Cf-252
Jared, R. C.; Nifenecker, H.; Thompson, S. G.
LBL-1963; CONF-730823-13; SM-174/62
AVAILABILITY-DEP., NTIS \$3.00
Lawrence Berkeley Lab

4657. Date 720300
112110 532000
Measurements of Gamma-Heat in the Jmtr
Hayashi, T.; Andoh, H.; Takahashi, H.; Onodera, K.
J. NUCL. SCI. TECHNOL. (TOKYO), 9(3), 133-142
Japan

CATEGORY NUMBER 112120
SOURCES - GAMMA-RAY -
FISSION-PRODUCT-DECAY
(INCLUDES YIELDS)

3522. Date 730300
112120 870092 870094
Yields in Thermal Neutron Fission - Some Results and
Recommendations Based On a Recent Evaluation
Walker, W. H.
AECL-4453
AVAILABILITY-SCIENTIFIC DOCUMENT
DISTRIBUTION OFFICE, ATOMIC ENERGY

CATEGORY NUMBER 112120

OF CANADA LIMITED, CHALK RIVER,
ONTARIO, CANADA \$0.50
Canada

3532. Date 730700
000000 111130 111400 112110 112120 112800 610000
721100 722100 731100 731200 731300 810000
Shielding Against Initial Radiation From Nuclear
Weapons

Abbott, L. S.
ORNL-RSIC-36
AVAILABILITY-RSIC
Oak Ridge National Lab.

3560. Date 730400
112120
Calculated Radiation Properties of Spent Plutonium
Fuels

Bell, M. J.
NUCL. TECH., 18(1), 5-14
Oak Ridge National Lab.

3666. Date 730400
112120
Fission Product Data for Thermal Reactors. Part II -
Yields

Walker, W. H.
AECL-3037, PART II
AVAILABILITY-SCIENTIFIC DOCUMENT
DISTRIBUTION OFFICE, ATOMIC ENERGY
OF CANADA LIMITED, CHALK RIVER,
ONTARIO, CANADA \$1.50
Canada

3671. Date 731100
112120
Radioactive Atoms - Supplement I
Martin, M. J.
ORNL-4923
AVAILABILITY-NTIS \$4.00
Oak Ridge National Lab.

3675. Date 730900
112120 510000 532000 870092
Fission-Product Afterheat - a Review of Experiments
Pertinent to The Thermal-Neutron Fission of ^{235}U
Perry, A. M.; Maienschein, F. C.; Vondy, D. R.
ORNL-TM-4197
AVAILABILITY-NTIS
Oak Ridge National Lab.

CATEGORY NUMBER 112120

3764. Date 731003
112120 122100
A Compilation of Fission Product Yields in Use at the
Lawrence Livermore Laboratory
Nethaway, D. R.; Barton, G. W.
UCRL-51458
AVAILABILITY-NTIS
Lawrence Livermore Lab

3875. Date 730100
010000 112120
Fission Product Chain Yields From Experiments in
Thermal Reactors
Crouch, E. A. C.
AERE-R-7209
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
England

3876. Date 730900
112120 112710 112920 795163
The Weerie Program for Assessing the Radiological
Consequences of Airborne Effluents From Nuclear
Installations
Clarke, R. H.
HEALTH PHYS., 25(3), 267-280
England

3933. Date 721000
112120
Calculation of the Circuits Activity in a High
Temperature Reactor
Brisbois, J.; Beslu, P.; L'homme, A.
CONF-721018, PP.828-859
AVAILABILITY-OECD
France

3935. Date 721000
112120 713000
Activity and Shielding of the Blanket Gas Circuit of a
Fast Power Reactor
Costa, L.; De Fremont, R.
CONF-721018, PP.881-897
AVAILABILITY-OECD
France

3965. Date 680400
112120 610000
Calculation of Shielding for a Circulating Fuel Loop.
(Abstract)
Rubanov, S. M.; Titov, V. I.; Shkorbatova, L. S.
SOVIET J. AT. ENERGY (ENGLISH transl.),
24(4), 459-460
Russia

CATEGORY NUMBER 112120

3974..... Date 700615
 112120 870094
 Gamma Radiation Characteristics of Plutonium Dioxide
 Fuel
 Gingo, P. J.; Dore, M. A.
 JPL-TR-32-1481; NASA-CR-110136; N70-35897
 AVAILABILITY-NTIS
 Jet Propulsion Lab

4031..... Date 730100
 112120 421200 870090 870092
 Gamma Ray Spectra of Uranium and Thorium Ores By
 High Resolution (Ge(Li)) Spectrometry
 Urquhart, D. F.
 AAEC/TM-634
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$3.75
 Australia

4032..... Date 730000
 112120 423240 532000
 Calorimetric Measurement of Residual Power of
 Rapsodie and Follissimo Fuel Elements
 Devillers, C.; Lhiaubet, G.; Lott, M.; N'guyen Van
 Dat.; Dufreche, F.
 AEC-TR-7477
 AVAILABILITY-DEP., NTIS \$4.50
 France

4033..... Date 720500
 112120 121100 870092 870094
 Absolute Yields in the Fission of 235-U, 238-U, and
 239-Pu Irradiated in Df
 Cuninghame, J. G.; Goodall, J. A. B.; Willis, H. H.
 AERE-R-6862(REV)
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 England

4042..... Date 730900
 112120 121100 713000
 Review of Fission Product Yield Data for Fast Neutron
 Fission
 Cuninghame, J. G.
 AERE-R-7548
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$6.50
 England

CATEGORY NUMBER 112120

4082..... Date 710000
 112120 795092 795094
 Beta and Gamma Activity of One Fission of 235-U and
 239-Pu
 De Tourreil, R.; Costa, L.
 ORNL-TR-4082; J. NUCL. ENERGY, 25, 235-295
 AVAILABILITY-DEP., NTIS \$3.00
 France

4097..... Date 740400
 112120 532000
 A Method of Computing Fission-Product Decay Heat in
 a Reactor With Time-Dependent Flux
 Barclay, F. W.; Dormuth, K. W.
 NUCL. SCI. ENG., 53(4), 436-439
 Canada

4115..... Date 740600
 112120 121100 532000 870090 870092 870094
 Calculation of the Decay Power of Fission Products
 Tasaka, K.; Sasamoto, N.
 NUCL. SCI. ENG., 54(2), 177-189
 Japan

4305..... Date 741200
 112120 122110 122310
 Rcn-1 Pseudo Fission-Product Capture Group Cross
 Sections
 Gruppelaar, H. (Comp.)
 RCN-205
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.75
 Netherlands (Holland)

4307..... Date 730700
 111110 112120 532000 810000
 Current Status of Fission Product Data
 Davies, B. S.; Tobias, A.
 RD/B/M-2747
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$3.00
 England

4314..... Date 730000
 112120
 Fission Product Data Library
 Devillers, C.; Blanchot, J.; Lott, M.; Nimal, B.;
 N'guyen Van Dat.; Noel, J. P.; De Tourreil, R.
 LA-TR-73-11; CONF-730302-13; SM-170/63
 AVAILABILITY-DEP., NTIS \$3.50
 France

CATEGORY NUMBER 112120

4320. Date 721000
 111110 112120 123000 221000 532000 870092 870094
 Data for the Calculation of Gamma Radiation Spectra
 and Beta Heating From Fission Products (Revision
 2)
 Tobias, A.
 RD/B/M-2453
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 England

4328. Date 730700
 111110 112110 112120 870092 870094 870098
 Neutron and Gamma Emission in Fission
 Nifenecker, H.; Signarbieux, C.; Babinet, R.;
 Poitou, J.
 LBL-1950; CONF-730823-15; SM-174/207
 AVAILABILITY-DEP., NTIS \$8.75
 Lawrence Berkeley Lab

4355. Date 741000
 112120 421200 512220
 The Spectrum of Gamma Rays With Energies Greater
 Than 1.8 Mev Produced By Fissions and
 Short-Lived Fission Products in the Health Physics
 Research Reactor
 Thorngate, J. H.; Christian, D. J.; Sumner, G. K.
 ORNL-TM-4636
 AVAILABILITY-DEP., NTIS
 Oak Ridge National Lab.

4458. Date 690114
 112120 112710 123000 421200 424000 810000
 Gamma-Ray Energies and Intensities
 Gunnink, R.; Niday, J. B.; Anderson, R. P.;
 Meyer, R. A.
 UCID-15439
 AVAILABILITY-DEP., NTIS \$7.25
 Lawrence Livermore Lab

4465. Date 740800
 112120 112760 123000
 Radioactive-Nuclide Decay Data for Endf/b
 Reich, C. W.; Helmer, R. G.; Putnam, M. H.
 ANCR-1157
 AVAILABILITY-NTIS \$4.00
 Aerojet-General

4537. date 750200
 112120 112750 112760 713000 870094 887000
 Radionuclide Behavior During Normal Operation of
 Liquid-Metal Cooled Fast Breeder Reactors. Part I:
 Production
 Erdman, C. A.; Reynolds, A. B.
 NUCL. SAFETY, 16(1), 43-59

CATEGORY NUMBER 112120

Virginia Schools

4550. Date 710900
 112120
 Review of Fission Product Yields and Cross Sections
 Mathews, D. R.; Mcgehee, B. G.
 GULF-GA-B-12071
 AVAILABILITY-DEP., NTIS
 Gulf General Atomic

4553. Date 730000
 112120 532000
 Calorimetric Measurements of the Energy Released By
 U-235 Fission Products For Decay Times Between
 70 and 7.16 Million Seconds
 Lott, M.; Lhiaubet, G.; Dufreche, F.; Devillers, C.; De
 Tourreil, R.
 LA-TR-74-1
 AVAILABILITY-DEP., NTIS \$3.00
 France

4580. Date 740700
 112120 222000 230000 510000 532000 870092 870094
 Decay Heating Measurements and Calculations for
 Irradiated 235-U, 233-U, 239-Pu, and 232-Th (Lwbr
 Development Program)
 Gunst, S. B.; Conway, D. E.; Connor, J. C.
 WAPD-TM-1183
 AVAILABILITY-DEP., NTIS \$6.75
 Bettis Atomic Power Lab.

4607. Date 730400
 112120 122100 870090 870092 870094
 Discussion of Fission-Product Yield Evaluation Methods
 and a New Evaluation
 Lammer, M.; Eder, O. J.
 SGAE-2115; STI/PUB-343,V.1,505-551;
 CONF-730302-22
 AVAILABILITY-IAEA, VIENNA
 Austria

4618. Date 740500
 112120 870090 870092 870094
 Assessment of Known Independent Yields and the
 Calculation of Those Unknown In the Fission of
 232-Th, 233-U, 235-U, 238-U, 239-Pu, 240-Pu and
 241-Pu
 Crouch, E. A. C.
 AERE-R-7680
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$5.25
 England

CATEGORY NUMBER 112120

4733. Date 750600
 112120
 Radionuclide Behavior During Normal Operation of
 Liquid-Metal-Cooled Fast Breeder Reactors. Part 2:
 Transport
 Erdman, C. A.; Kelley, J. L.; Reynolds, A. B.
 NUCL. SAFETY, 16(3), 318-336
 Virginia Schools

4737. Date 701026
 112120 870092 870098
 Prompt Gamma Decay of Fission Fragments
 Sarkar, R.; Chatterjee, A.
 PHYS. REV. B, 33B(4), 263-267
 India

4780. Date 740124
 112120
 Compilation of Fission Product Yields, Vallecitos
 Nuclear Center, 1974
 Meek, M. E.; Rider, B. F.
 NEDO-12154-1
 AVAILABILITY-NTIS
 General Electric Co.

4794. Date 740000
 112120
 Computerized Fission Product Inventory System
 Gileadi, A. E.; Musalem, A.
 CONF-740702-2
 AVAILABILITY-DEP., NTIS \$4.00
 Puerto Rico

4842. Date 750600
 112120 532000 610000 870090 870092 870094
 Gamma-Ray Energy Release in the Decay of Fission
 Products
 Sasamoto, N.; Nemoto, T.
 NUCL. ENG. DESIGN, 32(2), 252-276
 Japan

4854. Date 750000
 112120 610000 810000
 Fission Product Data Library
 Hep, J.; Valenta, V.
 ZJE-158
 AVAILABILITY-SKODA WORKS, NUCLEAR
 POWER CONSTRUCTION DEPARTMENT,
 INFORMATION CENTRE, PLZEN,
 CZECHOSLOVAKIA
 Czechoslovakia

CATEGORY NUMBER 112120

4863. Date 750700
 112120 112930 870092 870094
 Gamma and Beta Decay Power Following 235-U and
 239-Pu Fission Bursts
 England, T. R.; Schenter, R. E.; Whittemore, N. L.
 LA-6021-MS
 AVAILABILITY-NTIS \$4.00
 Los Alamos Scientific Lab

4904. Date 751000
 010000 112120 123000
 Radioactive-Nuclide Decay Data in Science and
 Technology
 Reich, C. W.; Helmer, R. G.
 NBS SPEC.PUB.-425, PP.14-20; CONF-750303, PP.14-20
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Aerojet-General

4905. Date 751000
 112120 123000 221000 532000
 Radioactive Decay Heat Analyses
 Schenter, R. E.; Schmittroth, F.
 NBS SPEC.PUB.-425, PP.21-28; CONF-750303, PP.21-28
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Hanford Eng Dev Lab. Use Cr

4906. Date 751000
 112120 122330 532000
 Sensitivity of the Afterheat From 235-U and 239-Pu
 Thermal Fission to Errors In Fission Product
 Nuclear Data
 Devillers, C.; Nimal, B.; Fiche, C.; Noel, J. P.;
 Blachot, J.; De Turreil, R.
 NBS SPEC.PUB.-425, PP.29-38; CONF-750303, PP.29-38
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 France

4913. Date 751000
 111220 112120 610000 870092 870094
 Fission-Product Gamma-Ray and Photoneutron Spectra
 Stamatelatos, M. G.; England, T. R.
 NBS SPEC.PUB.-425, PP.193-198;
 CONF-750303, PP.193-198
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Los Alamos Scientific Lab

CATEGORY NUMBER 112120

4941. Date 750000
 112120 123000
 Evaluated Decay-Scheme Data for the Ilrr Program
 Helmer, R. G.; Greenwood, R. C.
 NBS SPEC.PUB.-425,PP.324-327; CONF-750303-80
 AVAILABILITY-NTIS AS CONF-750303-80 \$4.00
 Aerojet-General

CATEGORY NUMBER 112130
 SOURCES - GAMMA-RAY - FISSION
 - WEAPON (INITIAL)

3609. Date 700000
 010000 111130 111400 112130 112800 112910 731200
 Protection From Penetrating Radiation of a Nuclear
 Explosion
 Kukhtevich, V. I.; Goryachev, I. V.; Trykov, L. A.
 JPRS-53498
 AVAILABILITY-NTIS
 Russia

CATEGORY NUMBER 112200
 SOURCES - GAMMA-RAY -
 BREMSSTRAHLUNG

3594. Date 720800
 112200 113100
 The Effect of Target Absorption on the Attenuation
 Characteristics Of Bremsstrahlung Generated at
 Constant Medium Potentials
 Soole, B. W.
 J. PHYS. B., 5(8), 1583-1595
 England

3602. Date 720600
 112200 121200
 Bremsstrahlung Cross-Section Formula Including a
 High-Order Coulomb Correction
 Roche, G.; Ducos, C.; Proriot, J.
 PHYS. REV. A, 5(6), 2403-2408
 France

3646. Date 730900
 112B00 112200 329000 512110 522130 632110 870013
 870082
 Calculation of Gamma-Ray Buildup Factors Including
 the Contribution Of Bremsstrahlung
 Kuspa, J. P.; Tsoufanidis, N.
 NUCL. SCI. ENG., 52(1), 117-123
 Missouri Schools

CATEGORY NUMBER 112200

3989. Date 691000
 112200 121200 512110 512210 610000 794000 861000
 870082
 The Importance of Bremsstrahlung in the Shielding of
 Gamma Rays Having Energies Less Than 10 Mev
 Dutton, L. M.
 AEEW-R-675
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY),
 UK 9S .6D.
 England

4036. Date 730400
 112200 220000 512220 845000
 Rbe of High-Energy Bremsstrahlung
 Kovalev, V. P.; Kapchigashev, S. P.; Tsuladze, N. G.
 AEC-TR-7421,PP.190-193
 AVAILABILITY-DEP., NTIS
 Russia

4188. Date 730300
 112200 870029 870082
 External Bremsstrahlung Due to 90-Sr - 90-Y Beta
 Particles
 Mudhole, T. S.
 INDIAN J. PURE APPL. PHYS., 11(3), 199-205
 India

4238. Date 731000
 111300 112200 870022 870029 870042
 Nuclear Data for Bremsstrahlung Activation Analysis of
 Valuable Trace Elements in the Copper Ore
 Ratynski, W.; Stegner, A.; Sujkowski, Z.
 STI/PUB-343,V2,PP.411-429;
 CONF-730302,V2,PP.411-429; IAEA-SM-170/17
 AVAILABILITY-IAEA
 Poland

4240. Date 731000
 112200 112710 220000 760000
 Nuclear Data Compilations of Utility in Medical and
 Biological Applications
 Dillman, L. T.; Snyder, W. S.; Ford, M. R.
 STI/PUB-343,V2,PP.529-539;
 CONF-730302,V2,PP.529-539; IAEA-SM-170/43
 AVAILABILITY-IAEA
 Ohio Schools

CATEGORY NUMBER 112300
 SOURCES - GAMMA-RAY -
 ANNIHILATION

3852. Date 681200
 112300 522110 810000
 Energy and Space Distribution of Backscattered

CATEGORY NUMBER 112300

Gamma-Radiation. (Abstract)
 Zol'nikov, P. P.; Sukhanova, K. A.;
 Dvinyaninov, B. L.
 SOVIET J. AT. ENERGY (ENGLISH TRANSL.),
 25(6), 1350
 Russia

CATEGORY NUMBER 112400
 SOURCES - GAMMA-RAY -
 NEUTRON-INELASTIC-SCATTERING

3953..... Date 721000
 112400 112500 32A000 512210 795042
 Anisotropy of Photon Emission in Transport
 Calculations
 Dudziak, D. J.; Bosler, G. E.
 CONF-721000, PP.1232-1248; LA-DC-72-1010
 AVAILABILITY-OECD
 Los Alamos Scientific Lab

4013..... Date 700700
 112400 329000 512210 795127 830000
 Sensitivity of Secondary Gamma-Ray Dose to Angular
 Distribution of Gamma Rays From Neutron
 Inelastic Scattering
 Straker, E. A.
 NUCL. SCI. ENG., 41(1), 147-148
 Oak Ridge National Lab.

4208..... Date 690800
 010000 112400 112500 112600 122200 731200
 Proceedings of the Special Sessions on Gamma-Ray
 Production and Transport And Civil Defense
 Shielding
 Straker, E. A. (Ed.)
 ANS-SD-7; CONF-671140
 AVAILABILITY-NTIS \$3.00
 American Nuclear Society

4821..... Date 750500
 112400 112500 112600 121100 810000
 A Technique for Calculation of Continuum Photon and
 Conversion Electron Production Cross Sections and
 Spectra From Neutron-Induced Reactions
 Perkins, S. T.; Haight, R. C.; Howerton, R. J.
 NUCL. SCI. ENG., 57(1), 1-11
 Lawrence Livermore Lab

CATEGORY NUMBER 112400

4907..... Date 751000
 010000 112400 112500 112600 122100 123000 810000
 Nuclear Models and Data for Gamma-Ray Production
 Young, P. G.
 NBS SPEC.PUB.-425, PP.149-155;
 CONF-750303, PP.149-155
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Los Alamos Scientific Lab

4949..... Date 750000
 111220 112400 112500 112600 121100 421200 810000
 Gamma-Ray Production Measurements Due to
 Interactions of Neutrons With Elements Required
 for Nuclear Power Applications and Design
 Chapman, G. T.; Dickens, J. K.; Love, T. A.;
 Morgan, G. L.; Newman, E.
 NBS SPEC.PUB.-425, PP.758-761; CONF-750303-8
 AVAILABILITY-NTIS AS CONF-750303-8
 Oak Ridge National Lab.

CATEGORY NUMBER 112500
 SOURCES - GAMMA-RAY -
 NEUTRON-CAPTURE

3685..... Date 730500
 112500 122100 810000
 Compilation of Kev-Neutron-Capture Gamma-Ray
 Spectra
 Bird, J. R.; Allen, B. J.; Bergqvist, I.;
 Biggerstaff, J. A.
 NUCL. DATA TABLES - A (OBSOLETE AFTER
 VOL. 11, SEE 167), 11(6), 433-529
 Australia

3799..... Date 730600
 112500 870029 870040
 Gamma-Ray Spectra From the Interaction of 14-Mev
 Neutrons With Copper, Zirconium, and Antimony
 Stamatelatos, M.; Lawergren, B.; Lidofsky, L. J.
 NUCL. SCI. ENG., 51(2), 113-118
 New York Schools

3811..... Date 730800
 112500 861000
 Neutron Capture Gamma-Ray Yields in Iron (Tech.
 Note)
 White, J. E.; Fu, C. Y.; Yost, K. J.
 NUCL. SCI. ENG., 51(4), 496-514
 Oak Ridge National Lab.

CATEGORY NUMBER 112500

3953. Date 721000
 112400 112500 32A000 512210 795042
 Anisotropy of Photon Emission in Transport
 Calculations
 Dudziak, D. J.; Bosler, G. E.
 CONF-721000, PP.1232-1248; LA-DC-72-1010
 AVAILABILITY-OECD
 Los Alamos Scientific Lab

4012. Date 700700
 112500 521130 870092
 Estimation of Spatial Distributions of Neutron Captures
 in Resonance Absorbers
 Bogart, D.
 NUCL. SCI. ENG., 41(1), 37-46
 National Aeronautics Support Agencies

4157. Date 721221
 111220 112500 122310 122350 329000 421160 421200
 511120 512220 853100
 Time-Dependent Fast-Neutron and Secondary
 Gamma-Ray Spectrum Measurements In Concrete -
 Vol. 3
 Harris, L., Jr.; Kendrick, H.
 GULF-RT-A12456; DNA-2401-3; AD-760035
 AVAILABILITY-NTIS
 Gulf General Atomic

4208. Date 690800
 010000 112400 112500 112600 122200 731200
 Proceedings of the Special Sessions on Gamma-Ray
 Production and Transport And Civil Defense
 Shielding
 Straker, E. A. (Ed.)
 ANS-SD-7; CONF-671140
 AVAILABILITY-NTIS \$3.00
 American Nuclear Society

4209. Date 690800
 112500 121100 810000
 State-Of-The-Art in Thermal Neutron Capture Gamma
 Rays
 Bartholomew, G. A.
 ANS-SD-7, PP.1-13; CONF-671140, PP.1-13
 AVAILABILITY-DEP., NTIS \$3.00
 Canada

4210. Date 690800
 112500 121100 420000 421200 810000
 Radiative Capture of Neutrons in and Between
 Resonances
 Chrien, R. E.
 ANS-SD-7, PP.15-38; CONF-671140, PP.15-38
 AVAILABILITY-DEP., NTIS \$3.00

CATEGORY NUMBER 112500

Brookhaven Natl. Lab.

4211. Date 690800
 112500 121100 810000
 The Calculation of Neutron Capture Gamma-Ray
 Spectra
 Yost, K. J.
 ANS-SD-7, PP.39-52; CONF-671140, PP.39-52
 AVAILABILITY-DEP., NTIS \$3.00
 Oak Ridge National Lab.

4234. Date 731000
 112500 810000
 Neutron-Capture Gamma-Ray Compilations
 Bartholomew, G. A.
 STI/PUB-343, V.2, PP.343-352;
 CONF-730302, V.2, PP.343-352; IAEA-SM-170/37
 AVAILABILITY-IAEA
 Canada

4273. Date 730000
 112500 421200 424000 810000
 Evaluation of Thermal Neutron Gamma-Ray Techniques
 for Nondestructive Analysis of Geological Samples
 (I)
 El Kady, A. A.; Hamouda, I.
 AREAEE-187
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.50
 Egypt

4460. Date 740600
 112500 122100 122200 123000
 Extended Table of Angular-Distribution Coefficients for
 (Gamma, Particle) And (Particle, Gamma)
 Reactions.
 Maute, R. E.; D'amato, D. P.; Blatt, S. L.
 AT.DATA + NUCL. DATA TABLES, 13(6), 499-624
 Ohio Schools

4781. Date 730000
 112500 610000
 Tables for Prompt Gamma-Ray Spectroscopy I: A=6 to
 A=20
 De Meijer, R. J.; Plendl, H. S.
 ORO-1797-47
 AVAILABILITY-DEP., NTIS \$4.50
 Florida Schools

CATEGORY NUMBER 112500

4821..... Date 750500
 112400 112500 112600 121100 810000
 A Technique for Calculation of Continuum Photon and
 Conversion Electron Production Cross Sections and
 Spectra From Neutron-Induced Reactions
 Perkins, S. T.; Haight, R. C.; Howerton, R. J.
 NUCL. SCI. ENG., 57(1), 1-11
 Lawrence Livermore Lab

4907..... Date 751000
 010000 112400 112500 112600 122100 123000 810000
 Nuclear Models and Data for Gamma-Ray Production
 Young, P. G.
 NBS SPEC.PUB.-425,PP.149-155;
 CONF-750303,PP.149-155
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Los Alamos Scientific Lab

4909..... Date 751000
 112120 112500 122110 122310
 Evaluation, Uncertainty Estimation and Adjustment of
 Capture Cross Sections For Fission Product Nuclei
 Gruppelaar, H.; Dragt, J. B.; Janssen, A. J.;
 Dekker, J. W.
 NBS SPEC.PUB.-425,PP.165-168;
 CONF-750303,PP.165-168
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Netherlands (Holland)

4949..... Date 750000
 111220 112400 112500 112600 121100 421200 810000
 Gamma-Ray Production Measurements Due to
 Interactions of Neutrons With Elements Required
 for Nuclear Power Applications and Design
 Chapman, G. T.; Dickens, J. K.; Love, T. A.;
 Morgan, G. L.; Newman, E.
 NBS SPEC.PUB.-425,PP.758-761; CONF-750303-8
 AVAILABILITY-NTIS AS CONF-750303-8
 Oak Ridge National Lab.

CATEGORY NUMBER 112600
SOURCES - GAMMA-RAY -
NEUTRON-REACTION-PRODUCT
(N,X GAMMA) CHARGED PARTICLES

4208..... Date 690800
 010000 112400 112500 112600 122200 731200
 Proceedings of the Special Sessions on Gamma-Ray
 Production and Transport And Civil Defense
 Shielding
 Straker, E. A. (Ed.)
 ANS-SD-7; CONF-671140

CATEGORY NUMBER 112600

AVAILABILITY-NTIS \$3.00
 American Nuclear Society

4821..... Date 750500
 112400 112500 112600 121100 810000
 A Technique for Calculation of Continuum Photon and
 Conversion Electron Production Cross Sections and
 Spectra From Neutron-Induced Reactions
 Perkins, S. T.; Haight, R. C.; Howerton, R. J.
 NUCL. SCI. ENG., 57(1), 1-11
 Lawrence Livermore Lab

4907..... Date 751000
 010000 112400 112500 112600 122100 123000 810000
 Nuclear Models and Data for Gamma-Ray Production
 Young, P. G.
 NBS SPEC.PUB.-425,PP.149-155;
 CONF-750303,PP.149-155
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Los Alamos Scientific Lab

4949..... Date 750000
 111220 112400 112500 112600 121100 421200 810000
 Gamma-Ray Production Measurements Due to
 Interactions of Neutrons With Elements Required
 for Nuclear Power Applications and Design
 Chapman, G. T.; Dickens, J. K.; Love, T. A.;
 Morgan, G. L.; Newman, E.
 NBS SPEC.PUB.-425,PP.758-761; CONF-750303-8
 AVAILABILITY-NTIS AS CONF-750303-8
 Oak Ridge National Lab.

CATEGORY NUMBER 112710
SOURCES - GAMMA-RAY -
RADIONUCLIDE-DECAY

GENERAL SURVEYS

3524..... Date 720301
 112710 220000
 Protection Against Radiation From Brachytherapy
 Sources
 NCRP
 NCRP-40
 AVAILABILITY-NCRP PUBLICATIONS, P.O.BOX
 30175, WASHINGTON, D.C. 20014 \$2.00
 Ncrp (Natl. Council Rad. Prot.)

CATEGORY NUMBER 112710

3535. Date 720601
 010000 112710 220000 420000
 Measurement of Low-Level Radioactivity
 ICRU
 ICRU-22
 AVAILABILITY-ICRU PUBLICATIONS, P.O.BOX
 30165, WASHINGTON, D.C. 20014
 Intl. Commission on Radiation Units

3775. Date 730100
 112710 421200
 Catalog of Ge(Li)-Gamma-Spectra
 Zaddach, G.
 JUL-914-DE(IN GERMAN)
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 \$28.50
 Germany (West)

3782. Date 731000
 112710 610000
 Nuclear Level Schemes A=45 Through A=257 From
 Nuclear Data Sheets
 Nuclear Data Group (Eds.)
 ACADEMIC PRESS, INC.
 AVAILABILITY-\$23.50
 Oak Ridge National Lab.

3876. Date 730900
 112120 112710 112920 795163
 The Weerie Program for Assessing the Radiological
 Consequences of Airborne Effluents From Nuclear
 Installations
 Clarke, R. H.
 HEALTH PHYS., 25(3), 267-280
 England

4066. Date 720200
 112710
 Gamma Spectra Catalog (Ge-Li)
 Lefevre, H.; Godement, A.; Repellin, M. J.
 CEA-R-4296 (IN FRENCH)
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 France

4075. Date 720900
 112710 421200 430000 810000
 Compilation of Gamma-Ray Spectra With a Ge(Li)
 Detector (Revised)
 Tojo, T.; Kondo, M.; Hieta, M.; Shiraishi, T.
 JAERI-M-4968 (IN JAPANESE)
 AVAILABILITY-NTIS (U.S. SALES ONLY)
 Japan

CATEGORY NUMBER 112710

4228. Date 731000
 010000 111110 111300 112710 422110 424000
 Nuclear Data for Activation Analysis: Requirements and
 Present State Of Compilations
 Krivan, V.
 STI/PUB-343,V2,PP.193-225;
 CONF-730302,V2,PP.193-225; IAEA-SM-170/60
 AVAILABILITY-IAEA
 Germany (West)

4229. Date 731000
 010000 111110 111300 112710 422110 424000
 Nuclear Data Bases for Activation Analyses
 Bewers, J. M.; Pearson, G. J.; Merritt, W. F.
 STI/PUB-343,V2,PP.229-240;
 CONF-730302,V2,PP.229-240; IAEA-SM-170/36
 AVAILABILITY-IAEA
 Canada

4230. Date 731000
 111110 111300 112710 422110
 Resonance Integrals Applied to the
 Multiple-Comparator Method in Reactor Neutron
 Activation Analysis
 Van Der Linden, R.; De Corte, F.; Hoste, J.
 STI/PUB,V2,PP.241-263; CONF-730302,V2,PP.241-263;
 IAEA-SM-170/31
 AVAILABILITY-IAEA
 Belgium

4231. Date 731000
 010000 111110 111300 112710 122310 422110
 Nuclear Data of Importance in Epithermal Neutron
 Activation Analysis
 Steinnes, E.
 STI/PUB-343,V2,PP.265-270;
 CONF-730302,V2,PP.265-270; IAEA-SM-170/77
 AVAILABILITY-IAEA
 Norway

4232. Date 731000
 010000 111110 111300 112710 122310 422110
 Nuclear Data for Neutron Metrology
 Zijp, W. L.
 STI/PUB-343,V2,PP.271-293;
 CONF-730302,V2,PP.271-293; IAEA-SM-170/73
 AVAILABILITY-IAEA
 Norway

CATEGORY NUMBER 112710

4235..... Date 731000
 112710 421200 430000
 The Gamma-Ray Spectrum Catalogue - a User Data File
 Heath, R. L.
 STI/PUB-343-V2, PP.365-377;
 CONF-730302, V2, PP.365-377; IAEA-SM-170/76
 AVAILABILITY-IAEA
 Aerojet-General

4236..... Date 731000
 112710 421200 430000 793000
 A Compilation of Modern Nuclear-Decay Data for
 High-Resolution Gamma Spectroscopy
 Dyer, F. F.; Bate, L. C.
 STI/PUB-343, V2, PP.379-387;
 CONF-730302, V2, PP.379-387; IAEA-SM-170/44
 AVAILABILITY-IAEA
 Oak Ridge National Lab.

4239..... Date 731000
 112710 421200 430000
 Gamma Ray Energies and Intensities for Calibrating
 Ge(Li) Detectors in The Range 3-10 Mev
 Sokolovskii, L. L.; Ignatovich, A. E.
 STI/PUB-343, V2, PP.431-435;
 CONF-730302, V2, PP.431-435; IAEA-SM-170/23
 AVAILABILITY-IAEA
 Russia

4240..... Date 731000
 112200 112710 220000 760000
 Nuclear Data Compilations of Utility in Medical and
 Biological Applications
 Dillman, L. T.; Snyder, W. S.; Ford, M. R.
 STI/PUB-343, V2, PP.529-539;
 CONF-730302, V2, PP.529-539; IAEA-SM-170/43
 AVAILABILITY-IAEA
 Ohio Schools

4297..... Date 740100
 112710 123000 221000 222000 610000
 Tables for Reaction Gamma-Ray Spectroscopy. Part I.
 A=6 to A=20
 De Meijer, R. J.; Plendl, H. S.
 AT.DATA + NUCL. DATA TABLES, 13(1), 1-33
 Florida Schools

4299..... Date 740100
 112710 122200 123000
 Strengths of Gamma-Ray Transitions Between Bound
 States of A=21-44 Nuclei
 Endt, P. M.; Van Der Leun, C.
 AT.DATA + NUCL. DATA TABLES, 13(1), 67-88
 Netherlands (Holland)

CATEGORY NUMBER 112710

4325..... Date 740400
 111110 112710 610000 713000 719A00 795217 870092
 870094
 Calculation and Compilations of Composition,
 Radioactivity, Thermal Power, Gamma and Neutron
 Release Rates of Fission Products and Actinides of
 Spent Power Reactor Fuels and Their Reprocessing
 Wastes
 Haug, H. O.
 KFK-1945
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Germany (West)

4402..... Date 740000
 111210 112710 121100 220000 710000 717000 810000
 870023 870041
 A Comparative Analysis of D-T Fusion Reactor
 Radioactivity and Afterheat
 Dudziak, D. J.; Krakowski, R. A.
 LA-UR-74-629; CONF-740402-18;
 CONF-740402-P1, 548-564
 AVAILABILITY-NTIS
 Los Alamos Scientific Lab

4405..... Date 740000
 111210 112710 717000 810000 870092
 Some Safety Considerations of Hybrid Reactors in
 Comparison With Fission And Fusion Reactors
 Wolkenhauer, W. C.; Stewart, C. W.; Werner, R. W.;
 Lee, J. D.
 BNWL-SA-4988; CONF-740402-P1, 588-598
 AVAILABILITY-NTIS
 Pacific Northwest Lab

4458..... Date 690114
 112120 112710 123000 421200 424000 810000
 Gamma-Ray Energies and Intensities
 Gunnink, R.; Niday, J. B.; Anderson, R. P.;
 Meyer, R. A.
 UCID-15439
 AVAILABILITY-DEP., NTIS \$7.25
 Lawrence Livermore Lab

4895..... Date 760300
 112710 123000 810000
 Nuclear Decay Data for Selected Radionuclides
 Martin, M. J. (Ed.)
 ORNL-5114
 AVAILABILITY-NTIS \$5.50
 Oak Ridge National Lab.

CATEGORY NUMBER 112710

4929..... Date 751000
 112710 760000
 Medical Uses of Nuclear Data
 Tilbury, R. S.; Bigler, R. E.; Zeitz, L.; Laughlin, J. S.
 NBS SPEC.PUB.-425, PP-520-526;
 CONF-750303, PP.520-526
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Sloan Kettering Inst. for Cancer Rese

CATEGORY NUMBER 112720
 SOURCES - GAMMA-RAY -
 RADIONUCLIDE-DECAY
 - 60-CO

3600..... Date 720600
 112720 112730 112760 329000 512110
 Monte Carlo Calculation of the Self-Absorption of
 Gamma Rays in a Disc Shaped Source
 Peterman, B. F.
 NUCL. INSTR. METHODS, 101(3), 611-612
 Canada

3878..... Date 720000
 112720 112730 421000 421200 423240
 National Standards for Photon Dosimetry
 Guiho, J. P.
 RADIOPROTECTION (IN FRENCH), 7(1), 3-12
 France

3973..... Date 710215
 112720 112920 423240 632500 731200
 A University Design Study of Reduction Factors in
 Typical American Houses With Fallout Shelters
 Reynolds, R. S.; Faw, R. E.; Robinson, M. J.
 KEES-SR-92; AD-722856
 AVAILABILITY-DEP., NTIS
 Kansas Schools

4150..... Date 740401
 020000 112720 220000 760000
 Specification of Gamma-Ray Brachytherapy Sources
 NCRP,
 NCRP-41
 AVAILABILITY-NCRP PUBLICATIONS, P.O. BOX
 30175, WASHINGTON, D.C. 20014 \$3.00
 Ncrp (Natl. Council Rad. Prot.)

CATEGORY NUMBER 112720

4200..... Date 730500
 112720 220000 328000 512110
 First Scatter to Off-Axis Points and the Clarkson
 Method
 Thames, H. D.
 PHYS. MED. BIOL., 18(3), 444-451
 Texas Schools

4428..... Date 740200
 112720 112730 112740 113100 430000
 Photon Sources for Instrument Calibration
 Storm, E.; Lier, D. W.; Israel, H. I.
 HEALTH PHYS., 26(2), 179-189
 Los Alamos Scientific Lab

CATEGORY NUMBER 112730
 SOURCES - GAMMA-RAY -
 RADIONUCLIDE-DECAY
 - 137-CS

3585..... Date 720000
 112730 610000 632110
 Dose Distributions About 137-Cs Sources in Tissue
 Krishnaswamy, V.
 RADIOLOGY, 105, 181-184
 New York Schools

3600..... Date 720600
 112720 112730 112760 329000 512110
 Monte Carlo Calculation of the Self-Absorption of
 Gamma Rays in a Disc Shaped Source
 Peterman, B. F.
 NUCL. INSTR. METHODS, 101(3), 611-612
 Canada

3878..... Date 720000
 112720 112730 421000 421200 423240
 National Standards for Photon Dosimetry
 Guiho, J. P.
 RADIOPROTECTION (IN FRENCH), 7(1), 3-12
 France

4428..... Date 740200
 112720 112730 112740 113100 430000
 Photon Sources for Instrument Calibration
 Storm, E.; Lier, D. W.; Israel, H. I.
 HEALTH PHYS., 26(2), 179-189
 Los Alamos Scientific Lab

CATEGORY NUMBER 112740
SOURCES - GAMMA-RAY -
RADIONUCLIDE-DECAY
- 198-AU

4428. Date 740200
 112720 112730 112740 113100 430000
 Photon Sources for Instrument Calibration
 Storm, E.; Lier, D. W.; Israel, H. I.
 HEALTH PHYS., 26(2), 179-189
 Los Alamos Scientific Lab

CATEGORY NUMBER 112750
SOURCES - GAMMA-RAY -
RADIONUCLIDE-DECAY
- 24-NA

3776. Date 670900
 112750 112760
 Buildup of Radioisotopes External to Reactor Core
 Bunch, W. L.; Zwibel, H. S.
 BNWL-568
 AVAILABILITY-DEP., NTIS
 Battelle-Northwest

4170. Date 740100
 111110 112750 532000 710000 713000 870011
 Fast Test Reactor Sodium Activity
 Kidman, R. B.; Marr, D. R.
 HEDL-TME-74-7
 AVAILABILITY-AT USAEC(TIC) \$4.00
 Westinghouse

CATEGORY NUMBER 112760
SOURCES - GAMMA-RAY -
RADIONUCLIDE-DECAY
- OTHER
(INCLUDES CORROSION PRODUCTS)

3600. Date 720600
 112720 112730 112760 329000 512110
 Monte Carlo Calculation of the Self-Absorption of
 Gamma Rays in a Disc Shaped Source
 Peterman, B. F.
 NUCL. INSTR. METHODS, 101(3), 611-612
 Canada

3776. Date 670900
 112750 112760
 Buildup of Radioisotopes External to Reactor Core
 Bunch, W. L.; Zwibel, H. S.
 BNWL-568
 AVAILABILITY-DEP., NTIS
 Battelle-Northwest

CATEGORY NUMBER 112760

3936. Date 721000
 112760
 Activity of Corrosion Products in Primary Coolant of
 the Chooz Reactor
 Frejaville, G.; Lott, M.; Marchal, A.
 CONF-721018, PP.898-913
 AVAILABILITY-OECD
 France

4465. Date 740800
 112120 112760 123000
 Radioactive-Nuclide Decay Data for Endf/b
 Reich, C. W.; Helmer, R. G.; Putnam, M. H.
 ANCR-1157
 AVAILABILITY-NTIS \$4.00
 Aerojet-General

4563. Date 730800
 112760 222000 713000 830000
 Sandia Pulsed Reactor II (Spr II): Curie Release and
 Dose Potential
 Bonzon, L. L.
 SLA-73-430
 AVAILABILITY-DEP., NTIS \$4.00
 Sandia Corporation

4841. Date 750600
 112760 713000
 A Transport Model for Radioactive Corrosion Product
 Deposition in An Lmfbr
 Cooper, M. H.; Taylor, G. R.
 NUCL. ENG. DESIGN, 32(2), 246-251
 Westinghouse

4887. Date 740520
 112760 222000
 Gamma Radiation From Radon Daughters in the
 Atmosphere
 Beck, H. L.
 J. GEOPHYS. RESEARCH, 79(15), 2215-2221
 Atomic Energy Commission (U.S.)

CATEGORY NUMBER 112800
SOURCES - GAMMA-RAY - THERMONUCLEAR
WEAPONS

3532..... Date 730700
 000000 111130 111400 112110 112120 112800 610000
 721100 722100 731100 731200 731300 810000
 Shielding Against Initial Radiation From Nuclear
 Weapons
 Abbott, L. S.
 ORNL-RS1C-36
 AVAILABILITY-RSIC
 Oak Ridge National Lab.

3609..... Date 700000
 010000 111130 111400 112130 112800 112910 731200
 Protection From Penetrating Radiation of a Nuclear
 Explosion
 Kukhtevich, V. I.; Goryachev, I. V.; Trykov, L. A.
 JPRS-53498
 AVAILABILITY-NTIS
 Russia

CATEGORY NUMBER 112910
SOURCES - GAMMA-RAY - FALLOUT
FROM WEAPONS

3609..... Date 700000
 010000 111130 111400 112130 112800 112910 731200
 Protection From Penetrating Radiation of a Nuclear
 Explosion
 Kukhtevich, V. I.; Goryachev, I. V.; Trykov, L. A.
 JPRS-53498
 AVAILABILITY-NTIS
 Russia

3615..... Date 730705
 112910 421200 430000
 Field Spectrometric Measurements of Radionuclide
 Concentrations and External Gamma Exposure
 Rates at the Nevada Test Site. a Demonstration
 Study
 Anspaugh, L. R.; Phelps, P. L.; Huckabay, G. W.;
 Todachine, T.
 UCRL-51412
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

3770..... Date 700000
 112910
 The Calculation of the Relative Concentration of the
 Radioactive Particles Falling on the Earth Surface
 Kownacka, L.
 CLOR-83/D(IN POLISH)
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 Poland

CATEGORY NUMBER 112910

3786..... Date 730307
 112910
 Prediction of Dry Fallout From Low Yield Surface and
 Underground Atomic Demolition Mines
 Peterson, K. R.; Knox, J. B.; Gibson, T. A., Jr.;
 Lawson, L. A.
 UCRL-51359
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4700..... Date 731100
 010000 112910
 Present and Future Capabilities for Battlefield Radiation
 Hazard Assessment. Final Report
 Lee, H.; Millican, R. W.; Hardman, W. F.
 UCRL-13591
 AVAILABILITY-DEP., NTIS \$8.50
 Stanford Research Institute

4775..... Date 730000
 112910
 A Probabilistic Evaluation of Fallout Effects Associated
 With Nuclear Air Bursts
 Fultyn, R. V.
 LA-UR-73-1004
 AVAILABILITY-DEP., NTIS \$3.00
 Los Alamos Scientific Lab

4876..... Date 720000
 112910
 Residual Radiation From the Atomic Bomb at
 Hiroshima
 Takeshita, K.
 ORNL-TR-4010
 AVAILABILITY-DEP., NTIS \$4.00
 Japan

CATEGORY NUMBER 112920
SOURCES - GAMMA-RAY - SIMULATED
FALLOUT FROM
WEAPONS

3674..... Date 731000
 112760 112920 220000
 Dose Estimations for the Hypothetical Use of Nuclearly
 Stimulated Natural Gas in the Cherokee Steam
 Electric Station, Denver, Colorado
 Moore, R. E.; Barton, C. J.
 ORNL-TM-4026
 AVAILABILITY-NTIS \$4.00
 Oak Ridge National Lab.

CATEGORY NUMBER 112920

3830..... Date 740100
 112920 423230 522220 731100
 Environmental and Fallout Gamma Radiation
 Protection Factors Provided By Civilian Vehicles
 Burson, Z. G.
 HEALTH PHYS., 26(1), 41-44
 Edgerton, Germeshausen, + Grier

3876..... Date 730900
 112120 112710 112920 795163
 The Weerie Program for Assessing the Radiological
 Consequences of Airborne Effluents From Nuclear
 Installations
 Clarke, R. H.
 HEALTH PHYS., 25(3), 267-280
 England

3973..... Date 710215
 112720 112920 423240 632500 731200
 A University Design Study of Reduction Factors in
 Typical American Houses With Fallout Shelters
 Reynolds, R. S.; Faw, R. E.; Robinson, M. J.
 KEES-SR-92; AD-722856
 AVAILABILITY-DEP., NTIS
 Kansas Schools

CATEGORY NUMBER 112930
 SOURCES - GAMMA-RAY - REACTOR
 ACCIDENT (AIRBORNE
 OR PLUME SOURCES)

3616..... Date 730900
 112930 423250 522120 632120
 Comparison of Measured and Calculated Radiation
 Exposure From a Boiling Water Reactor Plume
 Gogolak, C. V.
 HASL-277
 AVAILABILITY-NTIS
 Atomic Energy Commission (U.S.)

3689..... Date 721100
 112930 220000 631000 713000
 Calculation of Doses Due to Accidentally Released
 Plutonium From An Lmfbr
 Fish, B. R.; Keilholtz, G. W.; Snyder, W. S.;
 Swisher, S. D.
 ORNL-NSIC-74
 AVAILABILITY-NTIS \$15.00; MF
 Oak Ridge National Lab.

CATEGORY NUMBER 112930

4479..... Date 740600
 112930 719A00
 A Study of the Fission Product Release From a Badly
 Damaged Water-Cooled Reactor
 Hsia, D. Y.; Chester, R. O.
 ORNL-TM-4702; ORNL-TM-4702
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4503..... Date 740920
 111210 112930 222000 32A000 521130 522130 717000
 795082 810000
 Environmental Assessment for Fusion Reactor Utilizing
 Brookhaven Minimum Activity Blanket
 Anderson, R. V.
 AI-AEC-13136
 AVAILABILITY-DEP., NTIS \$5.45
 Atomics International

4575..... Date 721123
 112930 610000 830000
 Nomograms for the Computation of the Atmospheric
 Diffusion of a Radioactive Pollutant
 Fritelli, L.
 RT/PROT-(72)7
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Italy

4855..... Date 741200
 112930 220000 221000 222000 845000
 Dacrin - a Computer Program for Calculating Organ
 Dose From Acute or Chronic Radionuclide
 Inhalations
 Houston, J. R.; Streng, D. L.; Watson, E. C.
 BNWL-B-389
 AVAILABILITY-NTIS \$7.60
 Battelle-Northwest

4856..... Date 740200
 112930 220000 221000 222000 845000
 Dacrin - a Computer Program for Calculating Organ
 Dose From Acute or Chronic Radionuclide
 Inhalation: Modification for Gastrointestinal Tract
 Dose
 Streng, D. L.
 BNWL-B-389(SUPP.)
 AVAILABILITY-DEP., NTIS \$5.45
 Battelle-Northwest

CATEGORY NUMBER 112930

4863..... Date 750700
 112120 112930 870092 870094
 Gamma and Beta Decay Power Following 235-U and
 239-Pu Fission Bursts
 England, T. R.; Schenter, R. E.; Whittemore, N. L.
 LA-6021-MS
 AVAILABILITY-NTIS \$4.00
 Los Alamos Scientific Lab

4882..... Date 750600
 112760 112930 222000 522120
 Calculation of the Gamma-Dose Rate From a
 Continuously Emitted Plume
 Huebschmann, W.; Papadopoulos, D.
 KFK-2172(IN GERMAN)
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$5.25
 Germany (West)

CATEGORY NUMBER 113100
 SOURCES - X-RAY

3502..... Date 721000
 113100
 Studies in the Physics of X-Ray Generation of
 Laser-Heated Plasmas
 Tamor, S.
 DNA-2950F; SAI-72-548-LJ
 AVAILABILITY-SCIENCE APPLICATIONS, INC.,
 P.O.BOX 2351, 1250 PROSPECT ST., LA JOLLA,
 CALIF. 92037
 Science Applications, Inc.

3530..... Date 730500
 113100 121200 795200
 Mcp Code Fluorescence-Routine Revision
 Everett, C.J.; Cashwell, E. D.
 LA-5240-MS
 AVAILABILITY-NTIS
 Los Alamos Scientific Lab

3594..... Date 720800
 112200 113100
 The Effect of Target Absorption on the Attenuation
 Characteristics Of Bremsstrahlung Generated at
 Constant Medium Potentials
 Soole, B. W.
 J. PHYS. B., 5(8), 1583-1595
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CATEGORY NUMBER 113100

3705..... Date 720215
 113100
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 Absolute Intensity
 Ebert, P. J.; Gaines, J. L.; Leipelt, G. R.
 NUCL. INSTR. METHODS, 99(1), 29-34
 Lawrence Livermore Lab

4145..... Date 730000
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 Methods for Calculation of Dose Distributions
 Schoknecht, G.
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 Germany (West)

4428..... Date 740200
 112720 112730 112740 113100 430000
 Photon Sources for Instrument Calibration
 Storm, E.; Lier, D. W.; Israel, H. I.
 HEALTH PHYS., 26(2), 179-189
 Los Alamos Scientific Lab

4632..... Date 740200
 113100 523100
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 Release
 Pomraning, G. C.
 NUCL. SCI. ENG., 53(2), 220-225
 Science Applications, Inc.

4752..... Date 700000
 113100 513200 760000 870013
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 McCullough, E. C.; Cameron, J. R.
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 Wisconsin Schools

CATEGORY NUMBER 121100
 INTERACTIONS OF RADIATION WITH
 MATTER COLLISION
 PROCESSES - NEUTRON

3525..... Date 730607
 121100 122310
 Interpolation in Excitation Energy for Two-Dimensional
 Tabular Data
 Perkins, S. T.; Doyas, R. J.
 URCL-51401
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

CATEGORY NUMBER 121100

3551..... Date 690400
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 Study of the Compatibility of the Brinkman-Seeger
 Model of Damage With The Results of Irradiation of
 Steel
 Jimenez, J. L.
 CEA-N-1093 (IN FRENCH)
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3559..... Date 711100
 121100 220000 420000
 Measurement of Radiation Quality
 Rossi, H. H.
 NUCL. NEWS, 14(11), 53-56
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 Compilation of Phenomenological Optical-Model
 Parameters 1969-1970
 Perey, C. M.; Perey, F. G.
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 Oak Ridge National Lab.

3568..... Date 721100
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 The 1971 Atomic Mass Evaluation in Five Parts. Part V.
 Nuclear Reaction Q-Values
 Gove, N. B.; Wapstra, A. H.
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3569..... Date 730700
 121100 121200 122110 220000
 Mack: a Computer Program to Calculate Neutron
 Energy Release Parameters (Fluence-To-Kerma
 Factors) and Multigroup Neutron Reaction Cross
 Sections From Nuclear Data in Endf Format
 Abdou, M. A.; Maynard, C. W.; Wright, R. Q.
 ORNL-TM-3994
 AVAILABILITY-RSIC
 Oak Ridge National Lab.

3579..... Date 730400
 121100
 Multi-Level Effects in Reactor Calculations and the
 Probability Table Method
 Bhat, M. R. (Ed.)
 BNL-50387; ENDF-187
 AVAILABILITY-NTIS
 Brookhaven Natl. Lab.

CATEGORY NUMBER 121100

3584..... Date 730600
 121100
 Adler-III: a Program to Calculate Cross Sections From
 Adler-Adler Resonance Parameters
 Wright, R. Q.
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 Neutron Transport Equations With Spin-Orbit Coupling
 Tannenwald, L. M.
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3598..... Date 720500
 111500 121100 329000 421150 430000
 Monte Carlo Calculation of Recoil Spectra in 4-He
 Proportional Counters
 Atwater, H. F.
 NUCL. INSTR. METHODS, 100(3), 453-457
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3648..... Date 720000
 111110 121100 210000 713000 861000
 Fast Neutron Damage in Stainless Steels
 Agarwala, R. P.; Pande, B. M.; Anand, M. S.
 BARC-661
 AVAILABILITY-BHABHA ATOMIC RESEARCH
 CENTRE, BOMBAY, INDIA
 India

3719..... Date 700800
 121100 122100 820000
 Thermal Neutron Diffusion Data and the Wims
 Scattering Models for Light Models for Light Water
 Butland, A. T. D.; Chudley, C. T.
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 England

3743..... Date 720000
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 Iron-Filtered Neutron Beams: a New Approach to
 Precision Time-of Flight Cross Section
 Measurements
 Block, R. C.; Kaushal, N. N.; Hockenbury, R. W.
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 New York Schools

CATEGORY NUMBER 121100

3747..... Date 720800
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 Proposed Standard for Calculating Displacement Dose
 Rates
 Norgett, M. J.; Robinson, M. T.; Torrens, I. M.
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3759..... Date 730400
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 Correction for Higher-Order Scattering Anisotropy in
 Neutron Transport Theory
 Stacey, W. M., Jr.
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 Argonne National Lab.

3769..... Date 731100
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 Schmittroth, F.
 HEDL-TME-73-79; ENDF-195
 AVAILABILITY-NTIS \$5.45
 Westinghouse

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 121100 610000
 Interpolation of Tabular Secondary Neutron and Photon
 Energy Distributions
 Doyas, R. J.; Perkins, S. T.
 NUCL. SCI. ENG., 50(4), 390-392
 Lawrence Livermore Lab

3841..... Date 731100
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 Multilevel Effects in the Unresolved Resonances Region
 of the Cross Sections Of Fissile Nuclides
 De Saussure, G.; Perez, R. B.
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3844..... Date 731100
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 The Transformation of a Set of Multilevel Resonance
 Parameters Into An Equivalent Set of Single-Level
 Pseudoparameters and a "Smooth Background"
 De Saussure, G.; Perez, R. B.
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 Oak Ridge National Lab.

CATEGORY NUMBER 121100

3866..... Date 721100
 121100 121200 220000 845000
 Irradiation Equivalence
 Katz, R.; Sharma, S. C.; Homayoonfar, M.
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3975..... Date 691100
 010000 121100 122110 540000 820000
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 Water and Its Consequences for Neutron Scattering
 Law Models
 Butland, A. T.; Chudley, C. T.
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 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY),
 UK 5S
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 Considerations in Establishing a Standard for Neutron
 Displacement Energy Effects in Semiconductors
 Conrad, E. E.
 IEEE TRANS. NUCL. SCI., 18(6), 200-205
 Harry Diamond Laboratories

4017..... Date 740100
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 Fission Product Nuclear Data Requirements for the
 Determination of Nuclear Fuel Burnup: a Review
 Maeck, W. J.
 ICP-1040
 AVAILABILITY-NTIS \$4.00
 Allied Chemical Corp.

4029..... Date 720900
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 Thermal Capture Cross Sections and Resonance
 Integrals for the Aaec Fission Product Library
 Clayton, E.
 AAEC/TM-619; INDC(AUL)-19G
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Australia

4033..... Date 720500
 112120 121100 870092 870094
 Absolute Yields in the Fission of 235-U, 238-U, and
 239-Pu Irradiated in Dfr
 Cuninghame, J. G.; Goodall, J. A. B.; Willis, H. H.
 AERE-R-6862(REV)
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CATEGORY NUMBER 121100

4042..... Date 730900
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 Review of Fission Product Yield Data for Fast Neutron
 Fission
 Cuninghame, J. G.
 AERE-R-7548
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
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 England

4048..... Date 720800
 111110 121100 210000 861000
 Definition of Damage Functions From Irradiation Test
 Data
 Yoshikawa, H. H.; McElroy, W. N.; Simons, R. L.
 HEDL-SA-479; CONF-721037-4
 AVAILABILITY-DEP., NTIS
 Hanford Eng Dev Lab.

4049..... Date 720800
 111110 121100 210000 861000
 Calculation of Displacement Rates in Stainless Steel
 Under Neutron And Electron Irradiations
 Doran, D. G.
 HEDL-SA-482; CONF-721037-2
 AVAILABILITY-DEP., NTIS
 Hanford Eng Dev Lab.

4084..... Date 730700
 111500 121100 210000 861000 862000 870023 870041
 870042 870073
 Displacement Cross Sections for Fe, Cr, Ni, 18/10 Ss,
 Mo, V, Nb, and Ta
 Doran, D. G.; Graves, N. J.
 HEDL-TME-73-59
 AVAILABILITY-DEP., NTIS \$4.00
 Westinghouse

4087..... Date 730000
 121100
 Legendre Expansion and Coordinate Transformation
 Cornsant, M. N. H.
 AREAEE-179
 AVAILABILITY-SCIENTIFIC INFORMATION
 DIVISION, ATOMIC ENERGY POST OFFICE,
 CAIRO, A.R.E.
 Egypt

CATEGORY NUMBER 121100

4100..... Date 731200
 111500 121100 210000 861000
 Report of the Working Group on Displacement Models
 and Procedures for Damage Calculations
 Doran, D. G.; Beeler, J. R., Jr.; Dudey, N. D.;
 Fluss, M. J.
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 AVAILABILITY-DEP., NTIS \$5.45
 Westinghouse

4115..... Date 740600
 112120 121100 532000 870090 870092 870094
 Calculation of the Decay Power of Fission Products
 Tasaka, K.; Sasamoto, N.
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 Japan

4158..... Date 730100
 111500 121100 122100 810000
 Neutron Resonance Spacings for Spherical Nuclei
 Schmittroth, F.
 HEDL-TME-73-30; ENDF-171
 AVAILABILITY-DEP., NTIS \$5.45
 Westinghouse

4169..... Date 740200
 111110 112120 121100 122100 795092 795094
 Status of Fission Product Yield Data for Thermal
 Reactors
 Walker, W. H.
 AECL-4704
 AVAILABILITY-CHALK RIVER NUCLEAR LABS,
 CHALK RIVER, ONT.
 Canada

4171..... Date 740800
 111210 121100 210000 220000 717000 793000 794000
 810000
 Macklib - 100-Group Neutron Fluence-To-Kerma
 Factors and Reaction Cross Sections Generated By
 the Mack Computer Program From Data in Endf
 Format
 Abdou, M. A.; Roussin, R. W.
 ORNL-TM-3995
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4175..... Date 740800
 111110 112110 121100 121200 422110 422200 430000
 810000
 Neutron and Gamma-Ray Effects on Self-Powered
 In-Core Radiation Detectors
 Warren, H. D.; Shah, N. H.
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CATEGORY NUMBER 121100

Babcock and Wilcox Co.

4178. Date 740800
 111500 121100 122110 794000
 A Rapid Calculational Method for Multigroup Elastic
 Transfer. (Tech. Note)
 Becker, M.
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 New York Schools

4209. Date 690800
 112500 121100 810000
 State-Of-The-Art in Thermal Neutron Capture Gamma
 Rays
 Bartholomew, G. A.
 ANS-SD-7, PP.1-13; CONF-671140, PP.1-13
 AVAILABILITY-DEP., NTIS \$3.00
 Canada

4210. Date 690800
 112500 121100 420000 421200 810000
 Radiative Capture of Neutrons in and Between
 Resonances
 Chrien, R. E.
 ANS-SD-7, PP.15-38; CONF-671140, PP.15-38
 AVAILABILITY-DEP., NTIS \$3.00
 Brookhaven Natl. Lab.

4211. Date 690800
 112500 121100 810000
 The Calculation of Neutron Capture Gamma-Ray
 Spectra
 Yost, K. J.
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 AVAILABILITY-DEP., NTIS \$3.00
 Oak Ridge National Lab.

4221. Date 731000
 111210 111220 121100 717000 810000
 Problems of Measuring Nuclear Constants for
 Thermonuclear Reactors
 Kuz'min, E. A.; Ogloblin, A. A.; Sidorov, N. I.;
 Faiziev, A. R.; Chulkov, L. V.; Yan'kov, G. B.
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 LA-TR-73-32
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 Russia

CATEGORY NUMBER 121100

4237. Date 731000
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 Instruments for Mineral Exploration and Mining
 Clayton, C. G.; Sanders, L. G.
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 CONF-730302,V2,PP.391-410; IAEA-SM-170/75
 AVAILABILITY-IAEA
 England

4323. Date 720222
 121100 122100 123000 810000
 Fast Neutron Radiative Capture Cross Sections of Stable
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 Benzi, V.; D'orazi, R.; Reffo, G.; Vaccari, M.
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4335. Date 730300
 111210 121100 32A000 521130 717000 810000
 Neutronic Studies of D-T Fusion Reactor Blankets
 Brockmann, H.
 JUL-931-RG (IN GERMAN); JUL-931-RG(IN
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 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
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 Germany (West)

4401. Date 740000
 111210 121100 710000 717000 810000 870006 870013
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 Powell, J.; Aronson, A.; Bezler, P.; Miles, F.;
 Winsche, W.
 CONF-740402-P1,533-547
 AVAILABILITY-NTIS
 Brookhaven Natl. Lab.

4402. Date 740000
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 870023 870041
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 Radioactivity and Afterheat
 Dudziak, D. J.; Krakowski, R. A.
 LA-UR-74-629; CONF-740402-18;
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 AVAILABILITY-NTIS
 Los Alamos Scientific Lab

CATEGORY NUMBER 121100

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 Use of Tantalum and Liquid Lead in a Fusion Reactor
 Blanket
 Davey, W. G.; Beck, C. L.; Palmer, R. G.
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 AVAILABILITY-NTIS
 Argonne National Lab.

4487..... Date 741200
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 Sections
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 Hungary

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 Neutron Moderation in Fast Reactors in the Presence of
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 (Tech. Note)
 Palmiotti, G.; Salvatores, M.
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 Segev, M.
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 New York Schools

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 Fleming, R. F.
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CATEGORY NUMBER 121100

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 Lott, M.; Genthon, J. P.; Gervaise, F.; Mas, P.;
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 IAEA-SM-170/58
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 France

4628..... Date 740200
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 Neutron Slowing Down Via Inelastic Scattering in Heavy
 Moderators- I. Steady State
 Lineberry, M. J.; Corngold, N.
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 California Schools

4637..... Date 750400
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 Computational Methods for Nuclear Heating - Part I:
 Theoretical And Computational Algorithms
 Abdou, M. A.; Maynard, C. W.
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 Wisconsin Schools

4676..... Date 731113
 121100
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 the Help of a Simplified Cross-Section Model
 Kruger, H. W.
 UCID-16392
 AVAILABILITY-DEP., NTIS \$3.25
 Lawrence Livermore Lab

4756..... Date 740100
 111110 121100 122310 713000
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 of Methods. the Consistant Approach.
 Gandini, A.; Petilli, M.; Salvatores, M.
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4764..... Date 730000
 121100 122110
 Rapid Computational Method for Multigroup Elastic
 Transfer
 Becker, M.
 COO-3058-46
 AVAILABILITY-DEP., NTIS
 New York Schools

CATEGORY NUMBER 121100

4818..... Date 750415
 111500 121100 329000 421120 421130 430000
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 Experiment With Fast Neutrons By Means of Monte
 Carlo Calculations
 Tornow, W.; Spiegelhauer, H.; Mack, G.
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 Germany (West)

4821..... Date 750500
 112400 112500 112600 121100 810000
 A Technique for Calculation of Continuum Photon and
 Conversion Electron Production Cross Sections and
 Spectra From Neutron-Induced Reactions
 Perkins, S. T.; Haight, R. C.; Howerton, R. J.
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4942..... Date 750000
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 Development of a Two-Step Hauser-Feshbach Code
 With Precompound Decays And Gamma Ray
 Cascades: a Theoretical Tool for Cross-Section
 Evaluations
 Fu, C. Y.
 NBS SPEC.PUB.-425, PP.328-331; CONF-750303-14
 AVAILABILITY-NTIS AS CONF-750303-14
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CATEGORY NUMBER 121200
 INTERACTIONS OF RADIATION WITH
 MATTER COLLISION
 PROCESSES - GAMMA-RAY

3530..... Date 730500
 113100 121200 795200
 Mcp Code Fluorescence-Routine Revision
 Everett, C.J.; Cashwell, E. D.
 LA-5240-MS
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 Los Alamos Scientific Lab

3569..... Date 730700
 121100 121200 122110 220000
 Mack: a Computer Program to Calculate Neutron
 Energy Release Parameters (Fluence-To-Kerma
 Factors) and Multigroup Neutron Reaction Cross
 Sections From Nuclear Data in Endf Format
 Abdou, M. A.; Maynard, C. W.; Wright, R. Q.
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CATEGORY NUMBER 121200

3599..... Date 720600
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 A Technique for Determining Bias Settings for Organic
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 Knox, H. H.; Miller, T. G.
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 Army Installations

3602..... Date 720600
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 Bremsstrahlung Cross-Section Formula Including a
 High-Order Coulomb Correction
 Roche, G.; Ducos, C.; Proriol, J.
 PHYS. REV. A, 5(6), 2403-2408
 France

3687..... Date 730115
 112720 112730 112760 121200 422200 512120 841000
 842000 844000
 Measurements of Gamma-Ray Attenuation Coefficients
 of Organic Scintillators
 Goswami, B.; Chaudhuri, N.
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 India

3735..... Date 731000
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 Relativistic Invariance and Photon-Electron Scattering
 Kernels in Transport Theory
 Wienke, B. R.
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3823..... Date 730500
 112B00 121200 329000 512110 522110 632300 810000
 Low Energy Components of Scattered Gamma
 Radiation
 Minato, S.
 NUCL. SCI. ENG., 51(1), 32-40
 Japan

3866..... Date 721100
 121100 121200 220000 845000
 Irradiation Equivalence
 Katz, R.; Sharma, S. C.; Homayoonfar, M.
 HEALTH PHYS., 23(5), 740-742
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CATEGORY NUMBER 121200

3937..... Date 710400
 112B00 121200 870050 870082
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 Siddappa, K.; Parthasaradhi, K.; Rama Rao, J.
 INDIAN J. PURE APPL. PHYS., 45(4), 184-186
 India

3989..... Date 691000
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 870082
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 Gamma Rays Having Energies Less Than 10 Mev
 Dutton, L. M.
 AEEW-R-635
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY),
 UK 9S .6D.
 England

4111..... Date 740500
 112B00 121200 610000
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 Weise, K. E.; Foderaro, A.
 NUCL. SCI. ENG., 54(1), 85-93
 Pennsylvania Schools

4112..... Date 740600
 113100 121200 122210 32A000 513110 810000
 Relativistic Compton Scattering By the Discrete
 Ordinates Method
 Stephan, B. G.; Bridgman, C. J.
 NUCL. SCI. ENG., 54(2), 101-115
 Air Corps Installations

4175..... Date 740800
 111110 112110 121100 121200 422110 422200 430000
 810000
 Neutron and Gamma-Ray Effects on Self-Powered
 In-Core Radiation Detectors
 Warren, H. D.; Shah, N. H.
 NUCL. SCI. ENG., 54(4), 395-415
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4212..... Date 690800
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 Theory of Gamma-Ray Cross Sections
 Pratt, R. H.
 ANS-SD-7, PP.53-70; CONF-671140, PP.53-70
 AVAILABILITY-DEP., NTIS \$3.00
 Pennsylvania Schools

CATEGORY NUMBER 121200

4213..... Date 690800
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 Hubbell, J. H.
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 National Bureau of Standards

4237..... Date 731000
 121100 121200 424000
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 Clayton, C. G.; Sanders, L. G.
 STI/PUB-343,V2,PP.391-410;
 CONF-730302,V2,PP.391-410; IAEA-SM-170/75
 AVAILABILITY-IAEA
 England

4296..... Date 740700
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 Plants. (Note)
 Tsoulfanidis, N.
 HEALTH PHYS., 27(1), 145-147
 Missouri Schools

4344..... Date 740900
 113100 121200 122200
 Lifetime-Averaged Cross Sections for X-Ray Transport
 Calculations
 Cole, R. K., Jr.
 NUCL. SCI. ENG., 55(1), 85-88
 Sandia Corporation

4451..... Date 740600
 112B00 121200 632110 632120 810000
 Gamma-Ray Dose and Energy Absorption Build-Up
 Factor Data for Use in Reactor Shield Calculations
 Wallace, O. J.
 WAPD-TM-1012
 AVAILABILITY-DEP. NTIS \$6.00
 Bettis Atomic Power Lab.

4459..... Date 730800
 112B00 121200
 Polynomial Solutions of the Schrodinger Equation
 Applied to Photon Cross Sections in Atoms
 Merts, A. L.; Matuska, W., Jr.
 LA-5280
 AVAILABILITY-NTIS \$4.00
 Los Alamos Scientific Lab

CATEGORY NUMBER 121200

4492. Date 750200
112B00 121200 329000

Direct Sampling From the Klein-Nishina Distribution
for Photon Energies Above 1.4 Mev. (Tech. Note)

Koblinger, L.

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Hungary

4496. Date 750100
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Compact Tables of Functions for Use in Shielding
Calculations. (Tech. Note)

Shure, K.; Wallace, O. J.

NUCL. SCI. ENG., 56(1), 84-94

Bettis Atomic Power Lab.

4515. Date 730000
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Rangarajan, C.; Mishra, U. C.; Gopalakrishnan, S. S.;
Sadasivan, S.

BARC-686

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
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4562. Date 721200
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Dellin, T. A.

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AVAILABILITY-DEP., NTIS

Sandia Corporation

4585. Date 701200
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Compton Scattering By K-Shell Electrons at Large
Scattering Angle

Krishna Reddy, D. V.; Govinda Reddy, V.;
Murty, D. S. R.

CONF-701219(V.2),173-176

AVAILABILITY-DEPARTMENT OF ATOMIC
ENERGY, BOMBAY

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4586. Date 701200
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Krishna Reddy, D. V.; Narasimhacharyulu, E.;
Murty, D. S. R.

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4596. Date 730100
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Conversion Factors for 60-Co Radiation in Water

Eisenlohr, H. H.; Abedin-Zadeh, R.

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AVAILABILITY-IAEA

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Monte Carlo Calculations On Parallel Computers

Cavanaugh, G. P.; Chilton, A. B.

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Illinois Schools

4637. Date 750400
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Abdou, M. A.; Maynard, C. W.

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Wisconsin Schools

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Stephan, B. G.; Bridgman, C. J.

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INTERACTIONS OF RADIATION WITH

MATTER-

CROSS-SECTION EVALUATION OR

COMPILATION

- NEUTRON

3512. Date 730321
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Evaluated Neutron Reaction Data for Uranium 235
 Howerton, R. J.; Macgregor, M. H.
 UCRL-51370
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

3517. Date 711000
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Cross Section Evaluations of Twenty-Seven Fission
 Product Isotopes For Endf/b-III, Mat 1201-1231
 Schenter, R. E.; Schmittroth, F. A.
 HEDL-TME-71-143; ENDF-159
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 Hanford Eng Dev Lab.

3526. Date 730500
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An Evaluation of the Radiative-Capture Cross Section
 for Tungsten
 Devaney, J. J.
 LA-5221
 AVAILABILITY-NTIS
 Los Alamos Scientific Lab

3563. Date 720000
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 Parameters 1969-1970
 Perey, C. M.; Perey, F. G.
 AT.DATA + NUCL. DATA TABLES, 10, 539-566
 Oak Ridge National Lab.

3576. Date 730200
 122100 870054
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 Isotopes of Xenon
 Bhat, M. R.; Mughabghab, S. F.
 BNL-50374; ENDF-185
 AVAILABILITY-NTIS
 Brookhaven Natl. Lab.

3577. Date 730300
 122100 122200 851000
 Neutron and Gamma Ray Production Cross Sections for
 Silicon
 Bhat, M. R.; Goldberg, M. D.; Kinsey, R. R.;
 Prince, A.; Takahashi, H.
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 AVAILABILITY-NTIS
 Brookhaven Natl. Lab.

CATEGORY NUMBER 122100

3578. Date 730400
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 and 133-Cs
 Bhat, M. R.; Prince, A.
 BNL-50383; ENDF-163
 AVAILABILITY-NTIS
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3580. Date 730400
 122100 870094
 An Analysis of the 239-Pu Neutron Cross Sections From
 20 Kev to 20 Mev
 Prince, A.; Drake, M. K.; Hlavac, P.
 BNL-50388; ENDF-190
 AVAILABILITY-NTIS
 Brookhaven Natl. Lab.

3581. Date 730511
 122100 122200 870029
 Preliminary Evaluation of the Neutron and Photon
 Production Cross Sections For Copper
 Drake, M. K.; Fricke, M. P.
 DNA-3129F
 AVAILABILITY-INTELCOM RAD TECH, SAN
 DIEGO, CALIF. 92138
 Intelcom Rad Tech

3582. Date 730511
 122100 122200 870012
 Preliminary Evaluation of the Neutron and Photon
 Production Cross Sections For Magnesium
 Drake, M. K.; Fricke, M. P.
 DNA-3130F
 AVAILABILITY-INTELCOM RAD TECH, SAN
 DIEGO, CALIF. 92138
 Intelcom Rad Tech

3612. Date 730700
 122100 810000
 Neutron Activation Cross Sections - Measured and
 Semiempirical
 Alley, W. E.; Lessler, R. M.
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 Lawrence Livermore Lab

3654. Date 730600
 122100 870094
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 and 240-Pu
 Hunter, R. E.; Stewart, L.; Hiron, T. J.
 LA-5172
 AVAILABILITY-NTIS
 Los Alamos Scientific Lab

CATEGORY NUMBER 122100

3655. Date 730713
 122100 870082
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 Howerton, R. J.; Macgregor, M. H.
 URCL-51427
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

3676. Date 720800
 111110 122100 122310 713000 861000 862000 870011
 Status of Neutron Nuclear Data for Important Fast
 Reactor Structural And Coolant Materials
 Schatz, B.
 KFK-1668
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 Germany (West)

3684. Date 730500
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3685. Date 730500
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 Australia

3701. Date 711100
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 Ribon, P.; Le Coq, G.
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 France

3719. Date 700800
 121100 122100 820000
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 Butland, A. T. D.; Chudley, C. T.
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 England

CATEGORY NUMBER 122100

3737. Date 730718
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 Atomics International

3764. Date 731003
 112120 122100
 A Compilation of Fission Product Yields in Use at the
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 Nethaway, D. R.; Barton, G. W.
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 Lawrence Livermore Lab

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 Mughabghab, S. F.; Garber, D. I.
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 Brookhaven Natl. Lab.

3791. Date 731200
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 Gamma-Ray Production From Neutron Interactions
 With Silicon for Incident Neutron Energies Between
 1.0 and 20 Mev: Tabulated Differential Cross
 Sections
 Dickens, J. K.; Love, T. A.; Morgan, G. L.
 ORNL-TM-4389
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

3806. Date 730700
 122100 122200 870092
 Gamma-Ray Production Cross Sections of
 Neutron-Induced Uranium-238 Reactions
 Takahashi, H.
 NUCL. SCI. ENG., 51(3), 296-315
 Brookhaven Natl. Lab.

3822. Date 730500
 111220 122100 421160 511120 861000
 Measurement and Evaluation of Total Neutron
 Cross-Section Minima In Elemental Iron From 24 to
 750 Kev
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 New York Schools

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3844. Date 731100
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Parameters Into An Equivalent Set of Single-Level
Pseudoparameters and a "Smooth Background"
De Saussure, G.; Perez, R. B.
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Dunford, C.; Frohner, F.; Howerton, R. J.; Ozer, O.;
Schmidt, J. J.; Valente, S.
CONF-721018, PP.1249-1296
AVAILABILITY-OECD
Iaea

3955. Date 721000
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France

4054. Date 720500
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Caner, M.; Yiftah, S.
IA-1243
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Israel

4055. Date 720900
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Kohshin, V. A.; Nikolaev, M. N.
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AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Russia

4093. Date 740300
122100
Neutron-Induced Gamma-Ray Production in Calcium in
the Energy Range Between 0.7 and 20 Mev
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CATEGORY NUMBER 122100

4126. Date 740700
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Whalen, J. F.
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Argonne National Lab.

4127. Date 740700
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Germany (West)

4148. Date 730200
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Hungary

4158. Date 730100
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AVAILABILITY-DEP., NTIS \$5.45
Westinghouse

4168. Date 740618
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Gamma-Ray-Production Cross Sections Of 9-Be for
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Howerton, R. J.; Perkins, S. T.
UCRL-51603
AVAILABILITY-NTIS
Lawrence Livermore Lab

4169. Date 740200
111110 112120 121100 122100 795092 795094
Status of Fission Product Yield Data for Thermal
Reactors
Walker, W. H.
AECL-4704
AVAILABILITY-CHALK RIVER NUCLEAR LABS,
CHALK RIVER, ONT.
Canada

CATEGORY NUMBER 122100

4223. Date 731000
 010000 122100 122200
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 Center, the Cross Section Evaluation Working
 Group, and the User Community
 Ozer, O.
 STI/PUB-343,V.2,PP65-73; CONF-730302,V.2,PP65-73;
 IAEA-SM-170/50
 AVAILABILITY-IAEA
 Brookhaven Natl. Lab.

4224. Date 731000
 010000 122100
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 German Nuclear Data Files For
 Fast-Fission-Reactor Calculations
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 AVAILABILITY-IAEA
 Israel

4251. Date 711021
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 32A000 329000 710000 713000 810000
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4257. Date 710000
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 Young, P. G.; Foster, D. G., Jr.
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 ORNL-RSIC-33,PP.7-48
 AVAILABILITY-DEP., NTIS
 Los Alamos Scientific Lab

4258. Date 710000
 122100 122200 870008
 A Preliminary Evaluation of the Neutron and
 Photon-Production Cross Sections Of Oxygen
 Foster, D. G., Jr.; Young, P. G.
 LA-DC-13271; CONF-711125-2;
 ORNL-RSIC-33,PP.49-83
 AVAILABILITY-DEP., NTIS
 Los Alamos Scientific Lab

CATEGORY NUMBER 122100

4292. Date 740711
 122100 870029
 Evaluation of Neutron and Photon-Production Cross
 Sections for Natural Copper
 Drake, M. K.; Fricke, M. P.
 DNA-3356F
 AVAILABILITY-SCIENCE APPLICATIONS, INC.;
 1200 PROSPECT STREET, LA JOLLA,
 CALIFORNIA 92037
 Science Applications, Inc.

4304. Date 731000
 111110 122100 122110 810000
 Compilation of Evaluated Cross Section Data Used in
 Fast Neutron Metrology
 Ziip, W. L.; Voorbraak, W. P.; Nolthenius, H. J.
 RCN-196
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 Netherlands (Holland)

4310. Date 730809
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 Farinelli, U.
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 Italy

4323. Date 720222
 121100 122100 123000 810000
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 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Italy

4333. Date 721100
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 Abramov, A. I.
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 AVAILABILITY-IAEA
 Iaea

CATEGORY NUMBER 122100

4352. Date 720700
 122100 810000
 Endf/b-III Cross Section Measurement Standards
 Drake, M. K.
 BNL-17188; ENDF-179
 AVAILABILITY-BROOKHAVEN NATIONAL
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 Brookhaven Natl. Lab.

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 Oak Ridge National Lab.

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4366. Date 740301
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4460. Date 740600
 112500 122100 122200 123000
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 (Gamma, Particle) And (Particle, Gamma)
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 Maute, R. E.; D'amato, D. P.; Blatt, S. L.
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 Ohio Schools

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 Conlon, T. W.
 AERE-R-7166
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4506. Date 731200
 122100
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4519. Date 741000
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 Bhat, M. R.; Magurno, B. A.; Pearlstein, S.;
 Scheffel, F. M.
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 AVAILABILITY-DEP. NTIS \$6.00
 Brookhaven Natl. Lab.

4520. Date 741100
 111500 122100 122200 870063
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 Cross Sections of 151-Eu And 153-Eu
 Takahashi, H.
 BNL-19455; ENDF-213
 AVAILABILITY-NATIONAL NEUTRON CROSS
 SECTION CENTER, BROOKHAVEN
 NATIONAL LABORATORY, UPTON, NEW
 YORK 11973
 Brookhaven Natl. Lab.

CATEGORY NUMBER 122100

4521. Date 741100
 111500 122100 122200 870063
 Evaluation of the Neutron Cross Section for 152-Eu and
 154-Eu
 Takahashi, H.
 BNL-19456; ENDF-214
 AVAILABILITY-NATIONAL NEUTRON CROSS
 SECTION CENTER, BROOKHAVEN
 NATIONAL LABORATORY, UPTON, NEW
 YORK 11973
 Brookhaven Natl. Lab.

4526. Date 730000
 010000 122100
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 Pearlstein, S.
 BNL-18252; CONF-731015-3
 AVAILABILITY-DEP., NTIS \$3.00
 Brookhaven Natl. Lab.

4554. Date 730000
 122100 830000 851000
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 Young, P. G.
 LA-UR-73-1578; CONF-730935-2
 AVAILABILITY-DEP., NTIS \$3.00
 Los Alamos Scientific Lab

4607. Date 730400
 112120 122100 870090 870092 870094
 Discussion of Fission-Product Yield Evaluation Methods
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 Lammer, M.; Eder, O. J.
 SGAE-2115; STI/PUB-343,V.1,505-551;
 CONF-730302-22
 AVAILABILITY-IAEA, VIENNA
 Austria

4611. Date 740000
 010000 122100 610000 810000
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 Sher, R.
 STI/DOC-10/156,PP.1-13
 AVAILABILITY-IAEA
 California Schools

CATEGORY NUMBER 122100

4612. Date 740000
 010000 122100 610000 810000
 Tables and Graphs of Cross-Sections for (N,p), (N,alpha)
 and (N,2n) Reactions in the Neutron Energy Region
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 Bormann, M.; Neuert, H.; Scobel, W.
 STI/DOC-10/156,PP.87-272
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 Germany (West)

4613. Date 740000
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 Calamand, A.
 STI/DOC-10/156,PP.273-324
 AVAILABILITY-IAEA
 Iaea

4646. Date 750300
 111500 112B00 122100 122200 810000
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 Data Library (Endl) Translated Into the Endf/b
 Format
 Howerton, R. J.
 UCID-16727
 AVAILABILITY-DEP., NTIS \$4.00
 Lawrence Livermore Lab

4647. Date 750227
 111500 112B00 122100 122200 870073
 An Evaluated Data Set for Tantalum
 Howerton, R. J.; Haight, R. C.; Macgregor, M. H.;
 Perkins, S. T.
 UCRL-51306,REV.1
 AVAILABILITY-NTIS \$4.00
 Lawrence Livermore Lab

4652. Date 741074
 111500 112B00 122100 122200 862000
 Neutron and Gamma-Ray Production Cross-Sections for
 Nickel
 Bhat, M. R.
 BNL-50435; ENDF-207
 AVAILABILITY-DEP., NTIS \$5.45
 Brookhaven Natl. Lab.

4653. Date 741000
 111500 112B00 122100 122200 870079
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 Bhat, M. H.; Pearlstein, S.
 BNL-50439; ENDF-215
 AVAILABILITY-DEP., NTIS \$4.00

CATEGORY NUMBER 122100

Brookhaven Natl. Lab.

4678. Date 720808
 122100 810000
 Semiempirical Neutron-Induced Reaction Cross Sections
 Alley, W. E.; Lessler, R. M.
 UCRL-50484(REV.1)
 AVAILABILITY-DEP., NTIS
 Lawrence Livermore Lab

4774. Date 721100
 020000 122100 870002 870003 882000
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 Stewart, L.
 LA-DC-72-1412; CONF-721127-2
 AVAILABILITY-DEP., NTIS
 Los Alamos Scientific Lab

4872. Date 740900
 122100 717000
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 Common and Low Yield 14 Mev Neutron Induced
 Nuclear Reactions on Structural Fr-Material and
 Transmuted Species
 Qaim, S. M.; Stocklin, G.
 EUR-5182E, PP.939-947; CONF-740630, PP.939-947
 AVAILABILITY-EUROPEAN COMMUNITY
 INFORMATION SERVICE, 2100 M ST., N.W.,
 SUITE 707, WASHINGTON, D.C. 20037 (U.S.
 SALES ONLY)
 Germany (West)

4874. Date 750400
 111110 122100 430000 810000
 Endf/b-Iv Dosimetry File
 Magurno, B. A.
 BNL-NCS-50446; ENDF-216
 AVAILABILITY-NTIS \$8.75
 Brookhaven Natl. Lab.

4879. Date 750500
 111110 122100 122310 861000 862000
 Neutron Capture in the Kev Energy Range in Structural
 Materials for Fast Reactors
 Schatz, B. (Ed.); Kusters, H. (Ed.)
 KFK-2046
 AVAILABILITY-GESELLSCHAFT FUR
 KERNFORSCHUNG MBH, KARLSRUHE
 Germany (West)

CATEGORY NUMBER 122100

4880. Date 750500
 122100 861000 862000
 Comparison of the Kev-Capture Cross Section for Cr,
 Fe, Ni on Endf/b, Ukndl And Kedak
 Schatz, B.
 KFK-2046, PP.222-250
 AVAILABILITY-GESELLSCHAFT FUR
 KERNFORSCHUNG MBG., KARLSRUHE
 Germany (West)

4901. Date 751000
 010000 122100 810000
 Nuclear Cross Sections and Technology - Proceedings of
 a Conference, Washington, D.C., March 3-7, 1975
 Schrack, R. A. (Ed.); Bowman, C. D. (Ed.)
 NBS SPEC.PUB.425, VOLS.I-II;
 CONF-750303, VOLS.I-II
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 National Bureau of Standards

4902. Date 751000
 010000 122100
 Neutron Cross-Section Needs
 Kouts, H. J.
 NBS SPEC.PUB.-425, PP.3-6; CONF-750303, PP.3-6
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Nuclear Regulatory Commission

4903. Date 751000
 010000 122100 123000 719A00
 The Light Water Reactor Industry - Nuclear Data Needs
 Uotinen, V. O.; Robertson, J. D.; Tulenko, J. S.
 NBS SPEC.PUB.-425, PP.7-13; CONF-750303, PP.7-13
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Babcock and Wilcox Co.

4907. Date 751000
 010000 112400 112500 112600 122100 123000 810000
 Nuclear Models and Data for Gamma-Ray Production
 Young, P. G.
 NBS SPEC.PUB.-425, PP.149-155;
 CONF-750303, PP.149-155
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Los Alamos Scientific Lab

CATEGORY NUMBER 122100

4912..... Date 751000
 111220 122100 421130 511120 793000 795082 861000
 Assessment of Neutron Group Constants for Iron and
 Stainless Steel Through Measurements and Analyses
 of Energy and Space Distributions of Neutrons in
 Test Assemblies
 Kimura, I.; Kobayashi, K.; Hayashi, S. A.;
 Yamamoto, S.; Nishihara, H.; Ando, M.;
 Kanazawa, S.; Nakagawa, M.
 NBS SPEC.PUB.-425,PP.184-188;
 CONF-750303,PP.184-188
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Japan

4933..... Date 751000
 010000 111210 122100 717000
 A Survey of Fast-Neutron Induced Reaction
 Cross-Section Data
 Qaim, S. M.
 NBS SPEC.PUB.-425,PP.664-673;
 CONF-750303,PP.664-673
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Germany (West)

4935..... Date 751000
 111210 122100 122310 521130 717000 810000
 A Sensitivity Study of Data Deficiencies, Weighting
 Functions, And 14 Mev Neutron Source Spectrum
 Effects in a 238-U Fueled Fusion Fission Hybrid
 Blanket
 Newman, D. F.; Leonard, B. R., Jr.; Jenquin, U. P.;
 Lessor, D. L.; Stewart, K. B.
 NBS SPEC.PUB.-425,PP.680-682;
 CONF-750303,PP.680-682
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Battelle-Northwest

4940..... Date 751000
 122100 870014
 Description of the Endf/b-Iv Silicon Evaluation Energy
 Distributions Of Outgoing Particles
 Larson, D.
 NBS SPEC.PUB.-425,PP.317-319; CONF-750303-25
 AVAILABILITY-NTIS AS CONF-750303-25
 Oak Ridge National Lab.

CATEGORY NUMBER 122100

4942..... Date 750000
 121100 122100 123000
 Development of a Two-Step Hauser-Feshbach Code
 With Precompound Decays And Gamma Ray
 Cascades: a Theoretical Tool for Cross-Section
 Evaluations
 Fu, C. Y.
 NBS SPEC.PUB.-425,PP.328-331; CONF-750303-14
 AVAILABILITY-NTIS AS CONF-750303-14
 Oak Ridge National Lab.

4944..... Date 751000
 122100 123000
 Representation of the Neutron Cross Sections in the
 Unresolved Resonance Region
 De Saussure, G.; Perez, R. B.
 NBS SPEC.PUB.-425,PP.371-374; CONF-750303-39
 AVAILABILITY-NTIS AS CONF-750303-39
 Oak Ridge National Lab.

CATEGORY NUMBER 122110
 INTERACTIONS OF RADIATION WITH
 MATTER ENERGY
 GROUP CROSS-SECTIONS - NEUTRON

3531..... Date 730600
 111210 122110 32A000 717000 795123 870003
 Outline of Direct Methods Used in Computing the Cross
 Section Sensitivity Of Neutronic Parameters in a
 Fusion Reactor
 Tobias, M. L.; Steiner, D.
 ORNL-TM-4184
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

3548..... Date 730531
 111110 122110 810000
 Selected Computer Codes and Libraries. Volume Iv - a
 28-Group Cross Section Library for Snap Reactor
 Analysis
 Otter, J. M.
 AI-AEC-13076, VOL.IV; N73-33605
 AVAILABILITY-ATOMIC INTERNATIONAL DIV.,
 ROCKWELL INTERNATIONAL, P.O. BOX 309,
 CANOGA PARK, CALIF. 91304
 Atomics International

3569..... Date 730700
 121100 121200 122110 220000
 Mack: a Computer Program to Calculate Neutron
 Energy Release Parameters (Fluence-To-Kerma
 Factors) and Multigroup Neutron Reaction Cross
 Sections From Nuclear Data in Endf Format
 Abdou, M. A.; Maynard, C. W.; Wright, R. Q.

CATEGORY NUMBER 122110

ORNL-TM-3994
 AVAILABILITY-RSIC
 Oak Ridge National Lab.

3575..... Date 730800
 111210 122110 122210 717000 810000
 Coupled Neutron and Gamma-Ray Cross Section Sets
 for Fusion Reactor Calculations
 Kriese, J. T.
 ORNL-TM-4277
 AVAILABILITY-DEP., NTIS \$3.00
 Oak Ridge National Lab.

3583..... Date 730500
 122110
 Specification of a Generally Useful Multigroup Structure
 for Neutron Transport
 Weisbin, C. R.; Labauve, R. J.
 LA-5277-MS; ENDF-192
 AVAILABILITY-NTIS
 Los Alamos Scientific Lab

3620..... Date 730600
 111220 122110
 Neutron Production Cross Sections and Energies for the
 Reactions T(P,n)³-He, D(D,n)³-He, and T(D,n)⁴-He
 Liskien, H.; Paulsen, A.
 AT.DATA + NUCL. DATA TABLES, 11(7), 569-619
 Belgium

3628..... Date 730300
 122110 810000
 Multigroup Cross Sections for Reactor Physics
 Calculations, Generated on The Basis of
 Fundamental Nuclear Data.
 Hvidtfeldt Larsen, A. M.
 RISO-286
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 \$5.25
 Denmark

3629..... Date 730400
 111110 122110 32A000 325000 521130 713000 861000
 862000 870011 870092 870094 882000
 One-Dimensional Calculations in Support of the
 Reactivity Surveillance Procedures for the Fast Test
 Reactor
 Flanagan, G. F.; Simpson, D. B.; Buhl, A. R.
 ORNL-TM-4014
 AVAILABILITY-AT (TECHNICAL INFORMATION
 CENTER, OAK RIDGE, TENN. 37830) \$5.45
 Oak Ridge National Lab.

CATEGORY NUMBER 122110

3656..... Date 720926
 122110 810000
 Bringing Up to Date, Using, and Controlling the
 Multigroup Cross Section Library for Fast Reactor
 Calculations
 Cosimi, M.; Salvatores, M.
 RT/FI-72)44 (IN ITALIAN)
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 \$6.00
 Italy

3756..... Date 730000
 111110 122110 794000
 Iterated Sequential Transport Approximation for
 Anisotropic Spectral Moments
 Gibbs, D. C.; Becker, M.; Malaviya, B. K.
 COO-3058-32
 AVAILABILITY-DEP., NTIS
 New York Schools

3785..... Date 730700
 122110
 Calculated Neutron Absorption Cross Sections of 75
 Fission Products
 Lautenbach, G.
 RCN-191
 AVAILABILITY-PETTEN, THE NETHERLANDS,
 REACTOR CENTRUM NEDERLAND, 1973
 Netherlands (Holland)

3819..... Date 730400
 111110 122110 122310 713000 870092 870094
 Adjustment of Multigroup Neutron Cross Sections By a
 Correlation Method
 Salvatores, M.
 NUCL. SCI. ENG., 50(4), 345-354
 Italy

3975..... Date 691100
 010000 121100 122110 540000 820000
 A Review of Thermal Neutron Diffusion Data for Heavy
 Water and Its Consequences for Neutron Scattering
 Law Models
 Butland, A. T.; Chudley, C. T.
 AEEW-R-685
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY),
 UK 5S
 England

CATEGORY NUMBER 122110

4004. Date 711200
 111110 122110 861000 862000
 Shielding Factors of Capture Cross-Sections With
 Temperature Dependence For Cr, Fe and Ni
 Ishiguro, Y.
 JAERI-M-4660
 AVAILABILITY-NTIS (U.S. SALES ONLY)
 Japan

4029. Date 720900
 121100 122110
 Thermal Capture Cross Sections and Resonance
 Integrals for the Aaec Fission Product Library
 Clayton, E.
 AAEC/TM-619; INDC(AUL)-19G
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Australia

4047. Date 720200
 111110 122110
 A Comparison of Two Fast Reactor Cross Section
 Processing Codes
 Kidman, R. B.
 HEDL-TME-72-57
 AVAILABILITY-DEP., NTIS
 Hanford Eng Dev Lab.

4053. Date 730700
 122110 870027
 Cobalt Fast Neutron Cross Section - Measurement and
 Evaluation
 Guenther, P. T.; Moldauer, P. A.; Smith, A. B.;
 Smith, D. L.; Whalen, J. F.
 ANL/NDM-1
 AVAILABILITY-DEP., NTIS \$7.50
 Argonne National Lab.

4058. Date 730900
 111110 122110 32A000 511110 870092
 Calculation of Neutron Angular Flux Emerging From
 Shells of Natural Uranium Surrounding a Central
 Source
 West, P. H.
 AWRE-0-35/73
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.00
 England

CATEGORY NUMBER 122110

4070. Date 740200
 020000 111110 122110 310000
 Standard Interface Files and Procedures for Reactor
 Physics Codes, Version Iii
 Carmichael, B. M.
 LA-4070
 AVAILABILITY-NTIS \$5.45
 Los Alamos Scientific Lab

4071. Date 731000
 111210 122110 717000
 Sensitivity of Fusion Reactor Average Cross Sections to
 Thermal Broadening Of the 14-Mev Neutron Peak
 Muir, D. W.
 LA-5411-MS
 AVAILABILITY-DEP., NTIS \$4.00
 Los Alamos Scientific Lab

4073. Date 720500
 122110 870092 870094
 Evaluation and Production of Fast Reactor Group
 Constants (for 236-U, 238-Pu, 242-Pu and 10-B)
 Ishiguro, Y.; Hasegawa, A.; Takano, H.;
 Nakagawa, M.; Katsuragi, S.
 JAPFNR-70; PNC-J-250; JAERI-MEMO-4850
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Japan

4085. Date 730400
 111110 122110 713000
 The One-Dimensional 70-Group Pl Code (Production of
 Fast Reactor Group Constants (1)-3)
 Katsuragi, S.; Narita, H.; Suzuki, T.; Hasegawa, A.
 JAPFNR-133; JAERI-MEMO-5237(IN JAPANESE)
 AVAILABILITY-USAEC TECHNICAL
 INFORMATION CENTER, OAK RIDGE, TENN.
 Japan

4121. Date 740300
 122110
 An Iterated Sequential Transport Approximation for
 Anisotropic Spectral Moments. (Tech. Note)
 Gibbs, D. C.; Becker, M.; Malaviya, B. K.
 NUCL. SCI. ENG., 53(3), 327-329
 New York Schools

4149. Date 730400
 111110 122110 794000 795092 795094
 A Comparison of the Group Constants Generated By the
 Endf/b Processing Codes Etox and Supertog
 Wright, R. Q.; Schenter, R. E.; Jenkins, J. D.
 ORNL-TM-4041; ENDF-184
 AVAILABILITY-NTIS \$3.00
 Oak Ridge National Lab.

CATEGORY NUMBER 122110

4172..... Date 740200
 111130 111400 122110 122210 810000
 Coupled Neutron-Gamma Multigroup-Multitable Cross
 Sections for 29 Materials Pertinent to Nuclear
 Weapons Effect Calculations Generated By Lasl/td
 Division
 Sandmeier, H. A.; Hansen, G. E.; Seamon, R. E.;
 Hirons, T. J.; Marshall, A. H.
 LA-5137
 AVAILABILITY-DEP., NTIS \$7.60
 Los Alamos Scientific Lab

4178..... Date 740800
 111500 121100 122110 794000
 A Rapid Computational Method for Multigroup Elastic
 Transfer. (Tech. Note)
 Becker, M.
 NUCL. SCI. ENG., 54(4), 465-467
 New York Schools

4225..... Date 731000
 111110 122110 122310 32A000 511110 713000 870092
 870094
 A Systematic Test of the Endf-B/3 Evaluated
 Cross-Section Library on "Clean" Critical
 Assemblies
 Wagschal, J. J.; Yaari, A.
 STI/PUB-343, V2, PP.83-101;
 CONF-730302, V2, PP.83-101; IAEA-SM-170/19
 AVAILABILITY-IAEA
 Israel

4226..... Date 731000
 111110 122110 122310 713000
 The Role of Integral Experiments in the Production of
 Nuclear Data For Reactor Core and Shield Design
 and for Irradiation Experiments
 Farinelli, U.
 STI/PUB-343, V2, PP.103-119;
 CONF-730302, V2, PP.103-119; IAEA-SM-170/38
 AVAILABILITY-IAEA
 Italy

4227..... Date 731000
 111110 122110 32A000 325000 521130 795082 870006
 870092
 Effects of Different Nuclear Computer Codes and Data
 Libraries on The Evaluation of the Critical
 Htr-Experiment Cesar II
 Scherer, W.
 STI/PUB-343, V2, PP.135-145;
 CONF-730302, V2, PP.135-145; IAEA-SM-170/79
 AVAILABILITY-IAEA
 Germany (West)

CATEGORY NUMBER 122110

4261..... Date 711025
 111130 111210 122110 122210 531000 532000 830000
 An Automated Method to Calculate Non-Fission
 Neutron and Neutron Induced Gamma Heating in
 Air and Other Materials From Basic Multigroup
 Cross Section Data
 Sandmeier, H. A.; Hansen, G. E.; Asprey, M. E.
 LA-DC-13295; CONF-711125-10;
 ORNL-RSIC-33, PP.229-237
 AVAILABILITY-DEP., NTIS
 Los Alamos Scientific Lab

4266..... Date 740401
 122110 810000
 An Integrated System for Production of Neutronics and
 Photonics Computational Constants. Volume 7 Part a
 - Graphical, Experimental Data For Major
 Neutron-Induced Interactions (Z Through 55)
 Cullen, D. E.; Haight, R. C.; Howerton, R. J.;
 Macgregor, M. H.; Perkins, S. T.
 UCRL-50400, VOL.7, PART A
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4267..... Date 740401
 122110 810000
 An Integrated System for Production of Neutronics and
 Photonics Computational Constants. Volume 7 Part B
 - Graphical, Experimental Data For Major
 Neutron-Induced Interactions (Z > 55)
 Cullen, D. E.; Haight, R. C.; Howerton, R. J.;
 Macgregor, M. H.; Perkins, S. T.
 UCRL-50400, VOL.7, PART B
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4303..... Date 730900
 111110 122110 122310 810000
 Error Analysis of Neutron Capture Group Cross
 Sections for Fast Reactors, Applied to Fission
 Products
 Dragt, J. B.; Gruppelaar, H.
 RCN-192
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$5.00
 Netherlands (Holland)

4304..... Date 731000
 111110 122100 122110 810000
 Compilation of Evaluated Cross Section Data Used in
 Fast Neutron Metrology
 Ziip, W. L.; Voorbraak, W. P.; Nolthenius, H. J.
 RCN-196
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)

CATEGORY NUMBER 122110

\$10.25
 Netherlands (Holland)

4305. Date 741200
 112120 122110 122310
 Rcn-I Pseudo Fission-Product Capture Group Cross
 Sections
 Gruppelaar, H. (Comp.)
 RCN-205
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.75
 Netherlands (Holland)

4331. Date 740600
 111110 122110 810000
 Evxs: a Code to Generate Multigroup Cross Sections
 From the Los Alamos Master Data File
 Asprey, M. W.; Lazarus, R. B.; Seamon, R. E.
 LA-4855
 AVAILABILITY-NTIS \$5.45
 Los Alamos Scientific Lab

4357. Date 740300
 122110 540000
 Standard Thermal Energy Group Structure for
 Generation of Thermal Group Constants From
 Endf/b Data
 Finch, D. R.
 DP-1346; ENDF-196
 AVAILABILITY-DEP., NTIS \$4.00
 E. I. Dupont Denemours

4421. Date 741100
 111500 122110
 A New Procedure for the Determination of Neutron
 Multigroup Transfer Matrices
 Weisbin, C. R.; Soran, P. D.; Hendricks, J. S.
 NUCL. SCI. ENG., 55(3), 329-341
 Oak Ridge National Lab.

4423. Date 741100
 111110 122110 521130
 Multiregion Equivalence Relation for Resonance
 Heterogeneity Effects (Tech. Note)
 Ishiguro, Y.
 NUCL. SCI. ENG., 55(3), 349-351
 Japan

CATEGORY NUMBER 122110

4489. Date 741200
 111110 122110 122110 324000 511110 713000 810000
 Neutron Moderation in Fast Reactors in the Presence of
 Wide Scattering Resonances: Analysis of Methods.
 (Tech. Note)
 Palmiotti, G.; Salvatores, M.
 NUCL. SCI. ENG., 55(4), 476-480
 Italy

4491. Date 750200
 111110 122110 32A000 511110 713000 810000
 Practical Preprocessed Nuclear Data Files for Fast
 Reactor Calculations. (Tech. Note)
 Gur, Y.; Yiftah, S.
 NUCL. SCI. ENG., 56(2), 202-210
 Israel

4493. Date 750200
 111110 122110 32A000 521130 719A00 820000 861000
 Additional Few-Group and Multigroup Calculations of
 Neutron Penetration. (Tech. Note)
 Shure, K.
 NUCL. SCI. ENG., 56(2), 219-224
 Bettis Atomic Power Lab.

4495. Date 750100
 111110 111210 121100 122110 810000
 A Theory of Resonance-Group Self-Shielding
 Segev, M.
 NUCL. SCI. ENG., 56(1), 72-82
 Israel

4499. Date 741200
 111500 122110 310000 32A000 511110 795082 861000
 Application of a Discrete-Energy, Discrete-Ordinates
 Technique to the Study Of Neutron Transport in
 Iron
 Ching, J.; Goldstein, H.; Oblow, E. M.
 ORNL-TM-4235
 AVAILABILITY-DEP., NTIS \$5.45
 Oak Ridge National Lab.

4504. Date 681200
 122110
 Calculation of Neutron Spectra and Group Averaged
 Cross-Sections Using The Computer Programmes
 'fresco' and 'mural'
 Macdougall, J. D.; Ross, R. W.; Rowlands, J. L.
 AEEW-M-843
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$3.25
 England

CATEGORY NUMBER 122110

4505. Date 680600
122110
Calculation of Resonance Shielding Factors in 'fresco'
and 'mural'
Macedougall, J. D.; Rowlands, J. L.
AEEW-M-848
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
England

4510. Date 740400
111210 122110 32A000 421130 421160 521230 861000
870011
Measurement and Calculation of Neutron Spectra at a
Sodium-Iron Interface
Kappler, F.
KFK-1959(IN GERMAN)
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$7.50
Germany (West)

4518. Date 730400
122110
A 26-Group Library With Self-Shielding Factors for Fast
Reactor Calculations From the Uk Nuclear Data
File
Menapace, E.; Motta, M.; Panini, G. C.
RT/FI-(73)15
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$4.50
Italy

4574. Date 730406
111110 122110 122310 311000 511110 810000
Sensitivity Coefficients Calculation Using Direct and
Generalized Perturbation Methods
Boeriu, S.; Cecchini, G. P.
RT/FI-(73)14
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Italy

4633. Date 740200
111110 122110 323000
A New Form of the Bn Transport Equations. (Tech.
Note)
Ligou, J.; Stepanek, J.
NUCL. SCI. ENG., 53(2), 255-256
Switzerland

CATEGORY NUMBER 122110

4668. Date 730000
122110
Etoe-2 Mc Sq-2 Sdx Multigroup Neutron Cross-Section
Processing
Henryson, H., II; Toppel, B. J.; Stenberg, C. G.
CONF-731207-1
AVAILABILITY-DEP., NTIS \$3.00
Argonne National Lab.

4764. Date 730000
121100 122110
Rapid Calculational Method for Multigroup Elastic
Transfer
Becker, M.
COO-3058-46
AVAILABILITY-DEP., NTIS
New York Schools

4823. Date 750500
111110 122110 810000 861000
Influence of Deep Minima on Multigroup Cross-Section
Generation
Becker, M.
NUCL. SCI. ENG., 57(1), 75-77
New York Schools

4831. Date 750800
111110 122110 311000
Generalized Bilinear Weighting for Multigroup
Cross-Section Collapsing. (Tech. Note)
Salvatores, M.
NUCL. SCI. ENG., 57(4), 340-344
Italy

4877. Date 751200
111110 122110 122310
Consistency Among Differential Nuclear Data and
Integral Observations: The Alvin Code for Data
Adjustment, for Sensitivity Calculations, and For
Identification of Inconsistent Data
Harris, D. R.; Reupke, W. A.; Wilson, W. B.
LA-5987
AVAILABILITY-NTIS \$5.00
Los Alamos Scientific Lab

4909. Date 751000
112120 112500 122110 122310
Evaluation, Uncertainty Estimation and Adjustment of
Capture Cross Sections For Fission Product Nuclei
Gruppelaar, H.; Dragt, J. B.; Janssen, A. J.;
Dekker, J. W.
NBS SPEC.PUB.-425, PP.165-168;
CONF-750303, PP.165-168
AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -

CATEGORY NUMBER 122110

SOLD IN SETS ONLY
Netherlands (Holland)

4911. Date 751000
010000 111110 122110 122310 511110 511120 521130
521230 793000 794000 810000 861000

Shielding Benchmark Experiments and Sensitivity
Studies in Progress at Some European Laboratories
Hehn, G.; Mattes, W.; Nicks, R.; Matthes, W.;
Rief, H.

NBS SPEC.PUB.-425,PR177-183;

CONF-750303,PP.177-183

AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -

SOLD IN SETS ONLY

Germany (West)

4916. Date 751000
122110 870092 870094

Recent Evaluation for the German Nuclear Data Library
Kedak-3

Goel, B.; Kusters, H.; Weller, F.

NBS SPEC.PUB.-425,PP.313-316;

CONF-750303,PP.313-316

AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -

SOLD IN SETS ONLY

Germany (West)

4919. Date 751000
122110

Tabular Cross Section File Generation and Utilization
Techniques

Cullen, D. E.; Ozer, O.; Weisbin, C. R.

NBS SPEC.PUB.-425,PP.419-421;

CONF-750303,PP.419-421

AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -

SOLD IN SETS ONLY

Lawrence Livermore Lab

4937. Date 751000
111210 122110 32A000 521130 717000 870041

Application of Bondarenko Formalism to Fusion
Reactors

Soran, P. D.; Dudziak, D. J.

NBS SPEC.PUB.-425,PP.722-728;

CONF-750303,PP.722-728

AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -

SOLD IN SETS ONLY

Los Alamos Scientific Lab

CATEGORY NUMBER 122110

4946. Date 750312
111110 122110 122210 511110 512210 532000 719B00
794000 795082 853100 861000 870006

Neutron-Coupled Gamma-Ray Cross-Section
Requirements for Gas-Cooled Fast Breeder Reactors
Nagel, M.; Cerbone, R. J.

GA-A-13329; NBS SPEC.PUB.-425,PP.444-446;
CONF-750303-66

AVAILABILITY-DEP., NTIS \$4.00

Gulf General Atomic

4947. Date 750000
122110 329000

Cross Section Preparation for the Continuous-Energy
Monte Carlo Code 'vim'

Prael, R. E.

NBS SPEC.PUB.-425,PP.447-450; CONF-750303-34

AVAILABILITY-NTIS AS CONF-750303-34

Argonne National Lab.

CATEGORY NUMBER 122200

INTERACTIONS OF RADIATION WITH

MATTER-

CROSS-SECTION EVALUATION OR

COMPILATION

- GAMMA-RAY AND X-RAY

3577. Date 730300
122100 122200 851000

Neutron and Gamma Ray Production Cross Sections for
Silicon

Bhat, M. R.; Goldberg, M. D.; Kinsey, R. R.;
Prince, A.; Takahashi, H.

BNL-50379; ENDF-186

AVAILABILITY-NTIS

Brookhaven Natl. Lab.

3581. Date 730511
122100 122200 870029

Preliminary Evaluation of the Neutron and Photon
Production Cross Sections For Copper

Drake, M. K.; Fricke, M. P.

DNA-3129F

AVAILABILITY-INTELCOM RAD TECH, SAN
DIEGO, CALIF. 92138

Intelcom Rad Tech

3582. Date 730511
122100 122200 870012

Preliminary Evaluation of the Neutron and Photon
Production Cross Sections For Magnesium

Drake, M. K.; Fricke, M. P.

DNA-3130F

AVAILABILITY-INTELCOM RAD TECH, SAN

CATEGORY NUMBER 122200

DIEGO, CALIF. 92138
Intelcom Rad Tech

3617. Date 730800
122200 122310 810000
Fast Neutron Capture Cross Sections for Fission
Product Isotopes
Schmittroth, F.; Schenter, R. E.
HEDL-TME-73-63; ENDF-194
AVAILABILITY-NTIS \$5.45 MF \$0.95
Hanford Eng Dev Lab.

3790. Date 731000
122200 329000 510000 511110 810000
Lawrence Livermore Laboratory Evaluated Nuclear
Data Library (Endl) Translated Into the Endf/b
Format
Howerton, R. J.
UCID-16376
AVAILABILITY-DEP., NTIS \$4.50
Lawrence Livermore Lab

3806. Date 730700
122100 122200 870092
Gamma-Ray Production Cross Sections of
Neutron-Induced Uranium-238 Reactions
Takahashi, H.
NUCL. SCI. ENG., 51(3), 296-315
Brookhaven Natl. Lab.

3809. Date 730700
122200
Total Gamma-Ray Cross Sections (Tech. Note)
Ramana Murty, M. V.; Parthasaradhi, K.;
Ramamurty, S.
NUCL. SCI. ENG., 51(3), 337-339
India

3865. Date 721100
112B00 121200 122200 845000
Evaluation of Mass Energy-Absorption Coefficients of
Bone and Muscle
Atwater, H. F.
HEALTH PHYS., 23(5), 739-740
Los Alamos Scientific Lab

4152. Date 730000
010000 111110 122200 810000
The Evaluation of Neutron Nuclear Data - Proceedings
of a Panel on Neutron Nuclear Data Evaluation Held
in Vienna, 30 Aug-3 Sept, 1971
IAEA,
IAEA-153; CONF-710855
AVAILABILITY-IAEA, VIENNA

CATEGORY NUMBER 122200

Iaea

4208. Date 690800
010000 112400 112500 112600 122200 731200
Proceedings of the Special Sessions on Gamma-Ray
Production and Transport And Civil Defense
Shielding
Straker, E. A. (Ed.)
ANS-SD-7; CONF-671140
AVAILABILITY-NTIS \$3.00
American Nuclear Society

4213. Date 690800
112B00 121200 122200 810000
Gamma-Ray Cross-Section Evaluation and Compilation
Hubbell, J. H.
ANS-SD-7, PP.71-100; CONF-671140, PP.71-100
AVAILABILITY-DEP., NTIS \$3.00
National Bureau of Standards

4223. Date 731000
010000 122100 122200
Interaction Between the National Neutron Cross Section
Center, the Cross Section Evaluation Working
Group, and the User Community
Ozer, O.
STI/PUB-343,V.2,PP65-73; CONF-730302,V.2,PP65-73;
IAEA-SM-170/50
AVAILABILITY-IAEA
Brookhaven Natl. Lab.

4257. Date 710000
122100 122200 870003
Evaluation of the Neutron and Gamma-Ray Production
Cross Sections For Nitrogen
Young, P. G.; Foster, D. G., Jr.
LA-DC-13270; CONF-711125-6;
ORNL-RSIC-33,PP.7-48
AVAILABILITY-DEP., NTIS
Los Alamos Scientific Lab

4258. Date 710000
122100 122200 870008
A Preliminary Evaluation of the Neutron and
Photon-Production Cross Sections Of Oxygen
Foster, D. G., Jr.; Young, P. G.
LA-DC-13271; CONF-711125-2;
ORNL-RSIC-33,PP.49-83
AVAILABILITY-DEP., NTIS
Los Alamos Scientific Lab

CATEGORY NUMBER 122200

4296. Date 740700
 112B00 121200 122200 843000
 Gamma-Ray Attenuation Coefficients for Higher Green
 Plants. (Note)
 Tsoulfanidis, N.
 HEALTH PHYS., 27(1), 145-147
 Missouri Schools

4299. Date 740100
 112710 122200 123000
 Strengths of Gamma-Ray Transitions Between Bound
 States of A=21-44 Nuclei
 Endt, P. M.; Van Der Leun, C.
 AT.DATA + NUCL. DATA TABLES, 13(1), 67-88
 Netherlands (Holland)

4300. Date 740800
 010000 122200 717000 810000
 The Status of Neutron-Induced Nuclear Data for
 Controlled Thermonuclear Research Applications:
 Critical Reviews of Current Evaluations
 Steiner, D. (Comp.)
 USNDC-C1R-1
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4334. Date 720500
 112B00 122200 610000 810000
 Mass Absorption Coefficient for X-Rays. a Tabular
 Comparison of the Values According to the Formula
 of Kelly and Heinrich
 Preuss, E.
 JUL-856-TP(IN GERMAN)
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Germany (West)

4344. Date 740900
 113100 121200 122200
 Lifetime-Averaged Cross Sections for X-Ray Transport
 Calculations
 Cole, R. K., Jr.
 NUCL. SCI. ENG., 55(1), 85-88
 Sandia Corporation

4348. Date 740900
 111500 122200 870092 870094
 Comparative Analysis of Neutron Files As a Sensitivity
 Study (Tech. Note)
 Segev, M.; Yiftah, S.; Gur, Y.; Gitter, L.
 NUCL. SCI. ENG., 55(1), 103-104
 Israel

CATEGORY NUMBER 122200

4359. Date 740600
 122100 122200 810000
 Defense Nuclear Agency Working Cross Section Library:
 Description And Contents
 Roussin, R. W.; Wright, J. B.
 ORNL-RSIC-34(VOL.1)(REV.)
 AVAILABILITY-DEP., NTIS \$14.00
 Oak Ridge National Lab.

4448. Date 740000
 111500 122200 862000 870027
 Measured and Evaluated Fast Neutron Cross Sections of
 Nickel and Cobalt
 Smith, A.; Guenther, P.; Smith, D.; Whalen, J.
 CONF-740402-P2,218-226
 AVAILABILITY-NTIS
 Argonne National Lab.

4460. Date 740600
 112500 122100 122200 123000
 Extended Table of Angular-Distribution Coefficients for
 (Gamma, Particle) And (Particle, Gamma)
 Reactions.
 Maute, R. E.; D'amato, D. P.; Blatt, S. L.
 AT.DATA + NUCL. DATA TABLES, 13(6), 499-624
 Ohio Schools

4461. Date 740800
 113100 122200 810000
 Experimental K and L Relative X-Ray Emission Rates
 Salem, S. I.; Panossian, S. L.; Krause, R. A.
 AT.DATA + NUCL. DATA TABLES, 14(2), 91-109
 California Schools

4462. Date 740800
 113100 122200 810000
 X-Ray Emission Rates in the Hartree-Slater
 Approximation
 Manson, S. T.; Kennedy, D. J.
 AT.DATA + NUCL. DATA TABLES, 14(2), 111-120
 Georgia Schools

4463. Date 740800
 113100 122200 810000
 Relativistic Hartree-Slater Values for K and L X-Ray
 Emission Rates
 Scofield, J. H.
 AT.DATA + NUCL. DATA TABLES, 14(2), 121-137
 Lawrence Livermore Lab

CATEGORY NUMBER 122200

4464. Date 740800
 113100 122200 810000
 Total and Partial Atomic-Level Widths
 Keski-Rohkonen, O.; Krause, M. O.
 AT.DATA + NUCL. DATA TABLES, 14(2), 139-146
 Oak Ridge National Lab.

4520. Date 741100
 111500 122100 122200 870063
 Evaluation of the Neutron and Gamma-Ray Production
 Cross Sections of 151-Eu And 153-Eu
 Takahashi, H.
 BNL-19455; ENDF-213
 AVAILABILITY-NATIONAL NEUTRON CROSS
 SECTION CENTER, BROOKHAVEN
 NATIONAL LABORATORY, UPTON, NEW
 YORK 11973
 Brookhaven Natl. Lab.

4521. Date 741100
 111500 122100 122200 870063
 Evaluation of the Neutron Cross Section for 152-Eu and
 154-Eu
 Takahashi, H.
 BNL-19456; ENDF-214
 AVAILABILITY-NATIONAL NEUTRON CROSS
 SECTION CENTER, BROOKHAVEN
 NATIONAL LABORATORY, UPTON, NEW
 YORK 11973
 Brookhaven Natl. Lab.

4564. Date 730700
 113100 122200 613000 810000
 Approximation for X-Ray Cross Sections
 Sullivan, T. D.
 SLA-73-562
 AVAILABILITY-DEP., NTIS \$3.50
 Sandia Corporation

4614. Date 740000
 010000 122200 610000 810000
 Photonuclear Cross-Sections
 Bulow, B.; Forkman, B.
 STI/DOC-10-156, PP.475-558
 AVAILABILITY-IAEA
 Sweden

4646. Date 750300
 111500 112B00 122100 122200 810000
 The Lawrence Livermore Laboratory Evaluated Nuclear
 Data Library (Endl) Translated Into the Endf/b
 Format
 Howerton, R. J.
 UCID-16727

CATEGORY NUMBER 122200

AVAILABILITY-DEP., NTIS \$4.00
 Lawrence Livermore Lab

4647. Date 750227
 111500 112B00 122100 122200 870073
 An Evaluated Data Set for Tantalum
 Howerton, R. J.; Haight, R. C.; Macgregor, M. H.;
 Perkins, S. T.
 UCRL-51306, REV.1
 AVAILABILITY-NTIS \$4.00
 Lawrence Livermore Lab

4652. Date 741074
 111500 112B00 122100 122200 862000
 Neutron and Gamma-Ray Production Cross-Sections for
 Nickel
 Bhat, M. R.
 BNL-50435; ENDF-207
 AVAILABILITY-DEP., NTIS \$5.45
 Brookhaven Natl. Lab.

4653. Date 741000
 111500 112B00 122100 122200 870079
 Evaluated Neutron Cross Sections of 197-Au
 Mughabghab, S. F.; Prince, A.; Goldberg, M. D.;
 Bhat, M. H.; Pearlstein, S.
 BNL-50439; ENDF-215
 AVAILABILITY-DEP., NTIS \$4.00
 Brookhaven Natl. Lab.

4686. Date 740506
 122200
 Atlas of Photoneutron Cross Sections Obtained With
 Monoenergetic Photons. Second Edition
 Berman, B. L.
 UCRL-75694; CONF-740806-1
 AVAILABILITY-DEP., NTIS \$9.75
 Lawrence Livermore Lab

4736. Date 740000
 112B00 122200 220000 845000
 Human Tissues: Chemical Composition and Photon
 Dosimetry Data
 Kim, Y. S.
 RADIATION RES., 57(1), 38-45
 Ohio Schools

4743. Date 730101
 112B00 122200 870047 870079 870082 870092
 Shell-Wise Photoelectric Cross-Sections of Gamma-Rays
 Rao, K. S.; Rao, B. V.; Parthasaradhi, K.
 NUOVO CIMENTO A, 13(1), 267-270
 India

CATEGORY NUMBER 122200

4850. Date 750200
 112B00 122200 810000
 Differential Cross Sections for Coherent Photon
 Scattering By Elements Z=2 Through Z=26
 Brown, R. T.
 AT.DATA + NUCL. DATA TABLES, 15(2), 111-139
 Los Alamos Scientific Lab

CATEGORY NUMBER 122210
 INTERACTIONS OF RADIATION WITH
 MATTER ENERGY
 GROUP CROSS-SECTIONS - GAMMA-RAY

3575. Date 730800
 111210 122110 122210 717000 810000
 Coupled Neutron and Gamma-Ray Cross Section Sets
 for Fusion Reactor Calculations
 Kriesse, J. T.
 ORNL-TM-4277
 AVAILABILITY-DEP., NTIS \$3.00
 Oak Ridge National Lab.

4063. Date 710300
 122210
 Development of a Multigroup Photon Cross Section
 Library: Bip/gl
 Devillers, C.; Dupont, C.
 CEA-N-1424 (IN FRENCH)
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 France

4112. Date 740600
 111300 121200 122210 32A000 513110 810000
 Relativistic Compton Scattering By the Discrete
 Ordinates Method
 Stephan, B. G.; Bridgman, C. J.
 NUCL. SCI. ENG., 54(2), 101-115
 Air Corps Installations

4172. Date 740200
 111130 111400 122110 122210 810000
 Coupled Neutron-Gamma Multigroup-Multitable Cross
 Sections for 29 Materials Pertinent to Nuclear
 Weapons Effect Calculations Generated By Lasp/td
 Division
 Sandmeier, H. A.; Hansen, G. E.; Seamon, R. E.;
 Hirons, T. J.; Marshall, A. H.
 LA-5137
 AVAILABILITY-DEP., NTIS \$7.60
 Los Alamos Scientific Lab

CATEGORY NUMBER 122210

4261. Date 711025
 111130 111210 122110 122210 531000 532000 830000
 An Automated Method to Calculate Non-Fission
 Neutron and Neutron Induced Gamma Heating in
 Air and Other Materials From Basic Multigroup
 Cross Section Data
 Sandmeier, H. A.; Hansen, G. E.; Asprey, M. E.
 LA-DC-13295; CONF-711125-10;
 ORNL-RSIC-33, PP.229-237
 AVAILABILITY-DEP., NTIS
 Los Alamos Scientific Lab

4730. Date 730200
 113100 121200 122210 32A000 512110 513110
 Compton Scattering From a Maxwellian Distribution of
 Electrons in The Discrete Sn Method
 Stephan, B. G.; Bridgman, C. J.
 J. COMP. PHYS., 11(2), 269-295
 Air Corps Installations

4946. Date 750312
 111110 122110 122210 511110 512210 532000 719B00
 794000 795082 853100 861000 870006
 Neutron-Coupled Gamma-Ray Cross-Section
 Requirements for Gas-Cooled Fast Breeder Reactors
 Nagel, M.; Cerbone, R. J.
 GA-A-13329; NBS SPEC.PUB.-425, PP.444-446;
 CONF-750303-66
 AVAILABILITY-DEP., NTIS \$4.00
 Gulf General Atomic

CATEGORY NUMBER 122310
 CROSS-SECTION EVALUATION BY INTEGRAL
 EXPERIMENT
 SENSITIVITY STUDY OR CALCULATIONAL
 TREATMENT ANALYSIS -NEUTRON

3525. Date 730607
 121100 122310
 Interpolation in Excitation Energy for Two-Dimensional
 Tabular Data
 Perkins, S. T.; Doyas, R. J.
 URCL-51401
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

3537. Date 730600
 111210 122310 32A000 521130 717000 795123 870003
 870006 870041
 Cross-Section Sensitivity of Tritium Breeding in a Fusion
 Reactor Blanket: Effects of Uncertainties in Cross
 Sections of 6-Li, 7-Li, and 93-Nb
 Tobias, M.; Steiner, D.
 ORNL-TM-4200

CATEGORY NUMBER 122310

AVAILABILITY-NTIS
Oak Ridge National Lab.

3555..... Date 730212
122310
Nuclear Data and Integral Measurements Correlation for
Fast Reactors. Part 1: Statistical Formulation
Gandini, A.
RT/FI (73)5
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$4.25
Italy

3572..... Date 730300
122310 310000
General Sensitivity Theory for Radiation Transport
Oblov, E. M.
ORNL-TM-4110
AVAILABILITY-DEP., NTIS
Oak Ridge National Lab.

3574..... Date 730500
122310 870007
Is There Still a Nitrogen Cross-Section Discrepancy?
Perey, F. G.; Dickens, J. K.
ORNL-TM-4216
AVAILABILITY-DEP., NTIS \$3.00
Oak Ridge National Lab.

3617..... Date 730800
122200 122310 810000
Fast Neutron Capture Cross Sections for Fission
Product Isotopes
Schmittroth, F.; Schenter, R. E.
HEDL-TME-73-63; ENDF-194
AVAILABILITY-NTIS \$5.45 MF \$0.95
Hanford Eng Dev Lab.

3676..... Date 720800
111110 122100 122310 713000 861000 862000 870011
Status of Neutron Nuclear Data for Important Fast
Reactor Structural And Coolant Materials
Schatz, B.
KFK-1668
AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
Germany (West)

3726..... Date 731200
111400 122310 795082 795204 830000
Radiation Transport Cross-Section Sensitivity Analysis -
a General Approach Illustrated for a Thermonuclear
Source in Air
Bartine, D. E.; Oblov, E. M.; Mynatt, F. R.
ORNL-TM-4335

CATEGORY NUMBER 122310

AVAILABILITY-NTIS
Oak Ridge National Lab.

3727..... Date 731200
122310 321000 326000
Effects of Highly Anisotropic Scattering on
Monocenergetic Neutron Transport At Deep
Penetrations
Oblov, E.; Kin, K.; Goldstein, H.; Wagschal, J. J.
ORNL-TM-4408
AVAILABILITY-NTIS
Oak Ridge National Lab.

3728..... Date 730900
111210 122310 329000 511110 795192 870007
Sensitivity of the Transport of 14-Mev Neutrons to the
Shape of the Nitrogen Elastic Angular Distribution
Beverly, W. B.
BRL-R-1666
AVAILABILITY-NTIS
Ballistic Research Lab.

3730..... Date 720912
122310 122350 421160 870006 870007
Integral Experiment to Test Carbon and Nitrogen Cross
Sections
Harris, L., Jr.; Trimble, G. D.; Young, J. C.
DNA-2986F; GULF-RT-A12292
AVAILABILITY-INTEI COM RAD TECH, P.O. BOX
80817, SAN DIEGO, CALIFORNIA 92138
Intelcom Rad Tech

3787..... Date 731100
122310 421130 863000 870004 870006 870041 870042
870073 870082
Transport Analysis of Measured Neutron Leakage
Spectra From Spheres As Tests Of Evaluated
High-Energy Cross Sections
Bogart, D.; Shook, D. F.; Fieno, D.
NASA-TN-D-7485; N74-10630
AVAILABILITY-NTIS
National Aeronautics Support Agencies

3789..... Date 730516
111110 122310 32A000 421140 422130 511120 795042
861000
Benchmark Experiment of Neutron Propagation in Iron
Martini, M.; Bozzi, L.
RT/FI(73)19
AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
\$3.00
Italy

CATEGORY NUMBER 122310

3804. Date 730600
122310

The Sensitivity of Neutron Transport Calculations to
Nonelastic Neutron Angular Distributions

Plechaty, E. F.

NUCL. SCI. ENG., 51(2), 239-242

Lawrence Livermore Lab

3805. Date 730700
111210 122310 329000 861000

Measurements and Calculations of the Neutron Spectra
From Iron Bombarded With 14-Mev Neutrons

Hansen, L. F.; Anderson, J. D.; Brown, P. S.;

Howerton, R. J.; Kammerdiener, J. L.;

Logan, C. M.; Plechaty, E. F.; Wong, C.

NUCL. SCI. ENG., 51(3), 278-295

Lawrence Livermore Lab

3819. Date 730400
111110 122110 122310 713000 870092 870094

Adjustment of Multigroup Neutron Cross Sections By a
Correlation Method

Salvatores, M.

NUCL. SCI. ENG., 50(4), 345-354

Italy

3827. Date 740100
111110 122310 421120 421130 422120 551120 795082
795089 795127 870011

Final Report on a Benchmark Experiment for Neutron
Transport in Thick Sodium

Maerker, R. E.; Muckenthaler, F. J.; Childs, R. L.;

Gritzner, M. L.

ORNL-4880

AVAILABILITY-DEP., NTIS \$5.45

Oak Ridge National Lab.

3833. Date 740100
111210 122310 511110 717000 870003 870041

Additional Results Concerning Cross-Section Sensitivity
of Tritium Breeding In a Fusion Reactor Blanket:

Effects of Cross Sections of 6-Li, 7-Li, and 93-Nb

Tobias, M.; Steiner, D.

ORNL-TM-4201; NUCL. FUSION, 14(2), 153-163

AVAILABILITY-DEP., NTIS \$3.00

Oak Ridge National Lab.

3842. Date 731100
122310 210000 861000 862000 870073

Displacement Cross Sections for Iron, Chromium,
Nickel, Stainless Steel, And Tantalum

Doran, D. G.

NUCL. SCI. ENG., 52(3), 398-402

Hanford Eng Dev Lab.

CATEGORY NUMBER 122310

3951. Date 721000
122310 861000

Theoretical Studies of the Sensitivity of Neutron
Transport in Iron to Cross Section Properties

Goldstein, H.; Lidofsky, L. J.; Preeg, W.;

Troubetzkoy, E.; Oblow, E.; Ching, J.

CONF-721018, PP. 1202-1219

AVAILABILITY-OECD

New York Schools

3978. Date 700331
111110 122310 422140 511110 820000 841000 853100
861000

Neutron Average Energies: Calculations and Theory of
Measurements

Makra, S.

KFKI-70-6-HP

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)

Hungary

4094. Date 740300
122310 32A000 795042 842000 870041 870042 870073
870082

Transport Analysis of Measured Neutron Leakage
Spectra From Spheres As Tests Of Evaluated
High-Energy Cross Sections

Bogart, D.; Shook, D. F.; Fieno, D.

NUCL. SCI. ENG., 53(3), 285-303

National Aeronautics Support Agencies

4096. Date 740400
122310

Fine Neutron-Spectrum Effects on Spatial Calculations
for Fast Reactor Design

Corcuera, R.; Khairallah, A.

NUCL. SCI. ENG., 53(4), 420-435

France

4099. Date 740400
122310 870092

An Assessment of Proposed (N, Gamma N') Data Based
on Measured And Calculated Neutron Spectra in
Uranium Depleted in Uranium-235

Becker, M.; Kaushal, N. N.

NUCL. SCI. ENG., 53(4), 487-488

New York Schools

4120. Date 740300
111210 122310 32A000 521130 717000 795082 795204
870003 870006 870041

Cross-Section Sensitivity of Breeding Ratio in a
Fusion-Reactor Blanket

Bartine, D. E.; Alsmiller, R. G., Jr.; Oblow, E. M.;

Mynatt, F. R.

CATEGORY NUMBER 122310

NUCL. SCI. ENG., 53(3), 304-318; ORNL-TM-4208
Oak Ridge National Lab.

4157..... Date 721221
111220 112500 122310 122350 329000 421160 421200
511120 512220 853100

Time-Dependent Fast-Neutron and Secondary
Gamma-Ray Spectrum Measurements In Concrete -
Vol. 3

Harris, L. Jr.; Kendrick, H.
GULF-RT-A12456; DNA-2401-3; AD-760035
AVAILABILITY-NTIS
Gulf General Atomic

4161..... Date 730300
111210 122310 329000 510000 511110 795128 820000
861000 870003 870007 870008

Monte Carlo Calculations and Sensitivity Studies of the
Time-Dependent Neutron Spectra Measured in the
LLI Pulsed Sphere Program

Cramer, S. N.; Roussin, R. W.; Oblow, E. M.
ORNL-TM-4072
AVAILABILITY-DEP., NTIS \$14.00
Oak Ridge National Lab.

4225..... Date 731000
111110 122110 122310 32A000 511110 713000 870092
870094

A Systematic Test of the Endf-B/3 Evaluated
Cross-Section Library on "Clean" Critical
Assemblies

Wagschal, J. J.; Yaari, A.
STI/PUB-343,V2,PP.83-101;
CONF-730302,V2,PP.83-101; IAEA-SM-170/19
AVAILABILITY-IAEA
Israel

4226..... Date 731000
111110 122110 122310 713000

The Role of Integral Experiments in the Production of
Nuclear Data For Reactor Core and Shield Design
and for Irradiation Experiments

Farinelli, U.
STI/PUB-343,V2,PP.103-119;
CONF-730302,V2,PP.103-119; IAEA-SM-170/38
AVAILABILITY-IAEA
Italy

CATEGORY NUMBER 122310

4231..... Date 731000
010000 111110 111300 112710 122310 422110
Nuclear Data of Importance in Epithermal Neutron
Activation Analysis

Steinnes, E.
STI/PUB-343,V2,PP.265-270;
CONF-730302,V2,PP.265-270; IAEA-SM-170/77
AVAILABILITY-IAEA
Norway

4232..... Date 731000
010000 111110 111300 112710 122310 422110
Nuclear Data for Neutron Metrology
Zijp, W. L.
STI/PUB-343,V2,PP.271-293;
CONF-730302,V2,PP.271-293; IAEA-SM-170/73
AVAILABILITY-IAEA
Norway

4268..... Date 720500
111110 122310 422110 713000 810000
Evaluation of Microscopic Integral Cross-Sections
Averaged in The Uranium-235 Thermal Fission
Neutron Spectrum (for 29 Nuclear Reactions
Relevant To Neutron Dosimetry and Fast Reactor
Technology)

Fabry, A.
BLG-465
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Belgium

4303..... Date 730900
111110 122110 122310 810000
Error Analysis of Neutron Capture Group Cross
Sections for Fast Reactors, Applied to Fission
Products

Dragt, J. B.; Gruppelaar, H.
RCN-192
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$5.00
Netherlands (Holland)

4305..... Date 741200
112120 122110 122310
Rcn-I Pseudo Fission-Product Capture Group Cross
Sections
Gruppelaar, H. (Comp.)
RCN-205
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$4.75
Netherlands (Holland)

CATEGORY NUMBER 122310

4310. Date 730809
 111110 122100 122310 810000
 The Role of Integral Data
 Farinelli, U.
 RT/FI-(73)28
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.50
 Italy

4315. Date 720500
 111110 122310 795092 795094
 Effect of Uncertainty in Nuclear Constants on Nuclear
 Characteristics Sensitivity Analysis of Nuclear
 Constants for the Core of Monju Reactor
 Yamamoto, H.; Maki, K.; Zukeran, A.
 JAPFNR-78; PNC-SJ-202-72-5
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Japan

4349. Date 740600
 111210 122310 329000 512120 512220 861000 863000
 Measurements of Neutron and Gamma-Ray Spectra
 From Iron and Tungsten Spheres Bombarded With
 Neutrons From the 2-H(T,n) 4-He Reaction
 Arthur, E. D.; Auchampaugh, G. F.; Drake, D. M.
 LA-5563
 AVAILABILITY-DEP., NTIS \$4.00
 Los Alamos Scientific Lab

4417. Date 741000
 111110 122310 861000 870013 870098
 Cross-Sections of Aluminum and Iron Averaged Over
 the Californium 252 Fission Neutron Spectrum.
 (Tech. Note)
 Alberts, W. G.; Matzke, M.
 NUCL. SCI. ENG., 55(2), 243-244
 Germany (West)

4419. Date 741100
 111500 122310 810000
 The Role of Integral Data in Neutron Cross-Section
 Evaluation
 Pazy, A.; Rakavy, G.; Reiss, I.; Wagschal, J. J.; Atara
 Ya'ari, Y.
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 Israel

4422. Date 741100
 111210 122310 329000 510000 511120 853100 870008
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 Emitted From Concrete Spheres Bombarded With
 14-Mev Neutrons. (Tech. Note)
 Hansen, L. F.; Anderson, J. D.; Doyas, R. J.;
 Howerton, R. J.; Komoto, T.; Logan, C. M.;

CATEGORY NUMBER 122310

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4427. Date 741000
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 Comparison of the Cross-Section Sensitivity of the
 Tritium Breeding Ratio In Various Fusion-Reactor
 Blankets
 Alsmiller, R. G., Jr.; Santoro, R. T.; Barish, J.;
 Gabriel, T. A.
 ORNL-TM-4696
 AVAILABILITY-DEP., NTIS \$4.75
 Oak Ridge National Lab.

4436. Date 740000
 111210 122310 521130 717000 795082 810000 870003
 Tritium Breeding in Ceramic Lithium-Compound
 Blanket
 Seki, Y.; Sako, K.; Tanaka, K.; Hiraoka, T.
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 AVAILABILITY-NTIS
 Japan

4440. Date 740000
 111210 122310 311000 32A000 521130 717000 810000
 Blanket Design and Cross-Section Sensitivity
 Calculations Based On Perturbation Methods
 Gerstl, S. A. W.
 CONF-740402-P2,136-144
 AVAILABILITY-NTIS
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 794000 795082 795248 810000
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 Fusion Power Plant
 Greenspan, E.; Price, W. G., Jr.
 CONF-740402-P2,145-154
 AVAILABILITY-NTIS
 New Jersey Schools

4443. Date 740000
 111210 122310 717000
 Sensitivity of Neutron Multigroup Cross Sections to
 Thermal Broadening Of The Fusion Peak
 Muir, D. W.
 LA-UR-74-613; CONF-740402-33;
 CONF-740402-P2,166-171
 AVAILABILITY-DEP., NTIS \$4.00
 Los Alamos Scientific Lab

CATEGORY NUMBER 122310

4444. Date 740000
 122310 717000 870004
 Effect of Be(N, 2n) Multigroup Treatment on
 Theta-Pinch Blankets Nucleonics
 Soran, P. D.; Dudziak, D. J.; Muir, D. W.
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 AVAILABILITY-DEP., NTIS \$4.00
 Los Alamos Scientific Lab

4445. Date 730000
 111210 122310 717000 795123 870003
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 Tobias, M.; Steiner, D.
 CONF-740402-3; CONF-740402-P2,185-192
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 Oak Ridge National Lab.

4523. Date 730100
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4574. Date 730406
 111110 122110 122310 311000 511110 810000
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 Generalized Perturbation Methods
 Boeriu, S.; Cecchini, G. P.
 RT/FI-(73)14
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Italy

4590. Date 741100
 020000 122310 122330 122350
 Cross Section Evaluation Working Group - Benchmark
 Specifications
 Alter, H.; Kidman, R. B.; Labauve, R.; Protsik, R.;
 Zolotar, B. A.
 BNL-19302; ENDF-202
 AVAILABILITY-NATIONAL NEUTRON CROSS
 SECTION CENTER, BROOKHAVEN
 NATIONAL LAB., UPTON, NEW YORK 11973
 Brookhaven Natl. Lab.

CATEGORY NUMBER 122310

4606. Date 731000
 111110 122310 210000 311000 861000 870092 870094
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 High-Energy Neutron Flux to the Power and
 Resulting Estimation of the Irradiation Limit Errors
 in A Fast Power Reactor
 Boioli, A.; Cecchini, G. P.; Cosimi, M.; Salvatores, M.
 STI/PUB-343,V.1,155-162; CONF-730302.V.1,155-162;
 IAEA-SM-170/7
 AVAILABILITY-IAEA, VIENNA
 Italy

4677. Date 731129
 122310
 Comparison of Experimental Data From
 Energy-Dependent Resonance Self-Shielding Factors
 for 235-U and 239-Pu With Calculations From Tart
 Baccin, L. J.
 UCID-16397
 AVAILABILITY-DEP., NTIS \$3.50
 Lawrence Livermore Lab

4685. Date 740411
 122310 717000
 Calculations of a Fast Fission Blanket for D_T Fusion
 Reactors With Two Evaluated Data Libraries
 Haight, R. C.; Lee, J. D.
 UCRL-75627; CONF-740452-1
 AVAILABILITY-DEP., NTIS \$4.00
 Lawrence Livermore Lab

4701. Date 740510
 122310
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 Benchmark Pulsed Spheres
 Howerton, R. J.
 UCRL-75693
 AVAILABILITY-DEP., NTIS \$4.50
 Lawrence Livermore Lab

4756. Date 740100
 111110 121100 122310 713000
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 Gandini, A.; Petilli, M.; Salvatores, M.
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 Italy

CATEGORY NUMBER 122310

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122310 870092
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Perey, F. G.; De Saussure, G.; Perez, R. B.
CONF-740903-10
AVAILABILITY-DEP. NTIS \$4.00
Oak Ridge National Lab.

4767..... Date 740000
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Bartine, D. E.; Mynatt, F. R.; Oblow, E. M.;
Childs, R. L.; Pace, J. V.; Engle, W. W.;
Knight, J. R.; Sims, T. M.
CONF-740903-8
AVAILABILITY-DEP., NTIS \$4.75
Oak Ridge National Lab.

4776..... Date 740000
020000 122310
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Testing of Nuclear Data, Computational Methods, and
Procedures
Labauve, R. J.; Harris, D. R.; Muir, D. W.;
Hemmig, P. B.
LA-UR-74-600; CONF-740440-1
AVAILABILITY-DEP., NTIS \$4.50
Los Alamos Scientific Lab

4789..... Date 740000
122310
Utilization of Interactive Graphics and Continuous
Slowing Down Theory
Danchak, M.; Becker, M.; Moyer, W. R.
COO-3058-54; CONF-741017-4
AVAILABILITY-DEP., NTIS \$4.00
New York Schools

4827..... Date 750600
111210 122310 311000 32A000 717000 810000
Comparison of the Cross-Section Sensitivity of the
Tritium Breeding Ratio In Various Fusion-Reactor
Blankets
Alsmiller, R. G., Jr.; Santoro, R. T.; Barish, J.;
Gabriel, T. A.
NUCL. SCI. ENG., 57(2), 122-128
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CATEGORY NUMBER 122310

4877..... Date 751200
111110 122110 122310
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Integral Observations: The Alvin Code for Data
Adjustment, for Sensitivity Calculations, and For
Identification of Inconsistent Data
Harris, D. R.; Reupke, W. A.; Wilson, W. B.
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AVAILABILITY-NTIS \$5.00
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4879..... Date 750500
111110 122100 122310 861000 862000
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Materials for Fast Reactors
Schatz, B. (Ed.); Kusters, H. (Ed.)
KFK-2046
AVAILABILITY-GESELLSCHAFT FUR
KERNFORSCHUNG MBH, KARLSRUHE
Germany (West)

4881..... Date 750500
111110 122310 32A000 511110 861000
Sensitivity Calculations in An Iron Shield With Capture
Cross Sections Changed in the Kev Range
Penkuhn, H.
KFK-2046, PP.343-348
AVAILABILITY-GESELLSCHAFT FUR
KERNFORSCHUNG MGH., KARLSRUHE
Germany (West)

4896..... Date 760300
111210 122310 210000 32A000 521130 717000 793000
794000 795082 861000 870006
Uncertainties in Calculated Heating and Radiation
Damage in the Toroidal Field Coil of a Tokamak
Experimental Power Reactor Due to Neutron
Cross-Section Errors
Alsmiller, R. G., Jr.; Barish, J.; Weisbin, C. R.
ORNL/TM-5198
AVAILABILITY-NTIS \$6.00
Oak Ridge National Lab.

4908..... Date 751000
111220 122310 122330 421160 421200 511120 512220
810000
Integral Measurements to Test Shielding Cross Sections
Harris, L., Jr.; Young, J. C.; Lurie, N. A.;
Steinman, D. K.; Friesenhahn, S. J.; Bryan, D. E.;
Gober, W. E.; Schanzler, L.
NBS SPEC.PUB.425, PP.161-164;
CONF-750303, PP.161-164
AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
SOLD IN SETS ONLY

CATEGORY NUMBER 122310

Irt Corporation

4909..... Date 751000
 112120 112500 122110 122310
 Evaluation, Uncertainty Estimation and Adjustment of
 Capture Cross Sections For Fission Product Nuclei
 Gruppelaar, H.; Dragt, J. B.; Janssen, A. J.;
 Dekker, J. W.
 NBS SPEC.PUB.-425,PP.165-168;
 CONF-750303,PP.165-168
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Netherlands (Holland)

4911..... Date 751000
 010000 111110 122110 122310 511110 511120 521130
 521230 793000 794000 810000 861000
 Shielding Benchmark Experiments and Sensitivity
 Studies in Progress at Some European Laboratories
 Hehn, G.; Mattes, W.; Nicks, R.; Matthes, W.;
 Rief, H.
 NBS SPEC.PUB.-425,PP.177-183;
 CONF-750303,PP.177-183
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Germany (West)

4917..... Date 751000
 122310
 Neutron Cross Sections and Their Uncertainties
 Obtained From Nuclear Systematics
 Pearlstein, S.
 NBS SPEC.PUB.-425,PP.332-334;
 CONF-750303,PP.332-334
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Brookhaven Natl. Lab.

4922..... Date 751000
 111210 122310 511110 795192 830000 870007
 The Sensitivity of Neutron Air Transport to Nitrogen
 Cross Section Uncertainties
 Nüller, A.; Beverly, W. B.; Banks, N. E.
 NBS SPEC.PUB.-425,PP.436-439;
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 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
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CATEGORY NUMBER 122310

4925..... Date 751000
 122310 311000 32A000 551110 853100 861000
 A Two Dimensional Cross Section Sensitivity Analysis
 of Iron in a Concrete Shield
 Albert, T. E.; Simmons, G. L.
 NBS SPEC.PUB.-425,PP.459-463;
 CONF-750303,PP.459-463
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Science Applications, Inc.

4932..... Date 751000
 111210 122310 717000
 Model Calculations As One Means of Satisfying the
 Neutron Cross Section Requirements of the Ctr
 Program
 Gardner, D. G.
 NBS SPEC.PUB.-425,PP.651-658;
 CONF-750303,PP.651-658
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Lawrence Livermore Lab

4934..... Date 751000
 010000 122310 717000
 A Quantitative Assessment of Ctr Cross Section Needs
 Gerstl, S. A.; Dudziak, D. J.; Muir, D. W.
 NBS SPEC.PUB.-425,PP.674-679;
 CONF-750303,PP.674-679
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Los Alamos Scientific Lab

4935..... Date 751000
 111210 122100 122310 521130 717000 810000
 A Sensitivity Study of Data Deficiencies, Weighting
 Functions, And/4 Mev Neutron Source Spectrum
 Effects in a 238-U Fueled Fusion Fission Hybrid
 Blanket
 Newman, D. F.; Leonard, B. R., Jr.; Jenquin, U. P.;
 Lessor, D. L.; Stewart, K. B.
 NBS SPEC.PUB.-425,PP.680-682;
 CONF-750303,PP.680-682
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Battelle-Northwest

4938..... Date 751000
 010000 122310
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 Induced By Use Of Standard Cross Sections
 Peelle, R. W.
 NBS SPEC.PUB.-425,PP.173-176; CONF-750303-30
 AVAILABILITY-NFIS AS CONF-750303-30

CATEGORY NUMBER 122310

Oak Ridge National Lab.

CATEGORY NUMBER 122330
CROSS-SECTION EVALUATION BY INTEGRAL
EXPERIMENT -
GAMMA-RAY - PRIMARY

4590..... Date 741100
 020000 122310 122330 122350
 Cross Section Evaluation Working Group - Benchmark
 Specifications
 Alter, H.; Kidman, R. B.; Labauve, R.; Protsik, R.;
 Zolotar, B. A.
 BNL-19302; ENDF-202
 AVAILABILITY-NATIONAL NEUTRON CROSS
 SECTION CENTER, BROOKHAVEN
 NATIONAL LAB., UPTON, NEW YORK 11973
 Brookhaven Natl. Lab.

4664..... Date 730000
 122330 870096
 Theoretical and Experimental Values of Mass
 Attenuation Coefficients Of Gamma-Rays for Coal
 Jardel, L.
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 Poland

4906..... Date 751000
 112120 122330 532000
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 Thermal Fission to Errors In Fission Product
 Nuclear Data
 Devillers, C.; Nimal, B.; Fiche, C.; Noel, J. P.;
 Blachot, J.; De Tourreil, R.
 NBS SPEC.PUB.-425,PP.29-38; CONF-750303,PP.29-38
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 France

4908..... Date 751000
 111220 122310 122330 421160 421200 511120 512220
 810000
 Integral Measurements to Test Shielding Cross Sections
 Harris, L., Jr.; Young, J. C.; Lurie, N. A.;
 Steinman, D. K.; Friesenhahn, S. J.; Bryan, D. E.;
 Gober, W. E.; Schanzler, L.
 NBS SPEC.PUB.-425,PP.161-164;
 CONF-750303,PP.161-164
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
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CATEGORY NUMBER 122350
CROSS-SECTION EVALUATION BY INTEGRAL
EXPERIMENT -
GAMMA-RAY - SECONDARY

3730..... Date 720912
 122310 122350 421160 870006 870007
 Integral Experiment to Test Carbon and Nitrogen Cross
 Sections
 Harris, L., Jr.; Trimble, G. D.; Young, J. C.
 DNA-2986F; GULF-RT-A12292
 AVAILABILITY-INTELCOM RAD TECH, P.O. BOX
 80817, SAN DIEGO, CALIFORNIA 92138
 Intelcom Rad Tech

3957..... Date 721000
 122350 421160 861000
 Evaluation of Nuclear Data and Computational Methods
 for Iron As a Shield Material
 Malaviya, B. K.; Kaushal, N. N.; Becker, M.;
 Ginsberg, A.; Burns, E.; Gaerttner, E. R.
 CONF-721018,PP.1375-1387
 AVAILABILITY-OECD
 New York Schools

4157..... Date 721221
 111220 112500 122310 122350 329000 421160 421200
 511120 512220 853100
 Time-Dependent Fast-Neutron and Secondary
 Gamma-Ray Spectrum Measurements In Concrete -
 Vol. 3
 Harris, L., Jr.; Kendrick, H.
 GULF-RT-A12456; DNA-2401-3; AD-760035
 AVAILABILITY-NTIS
 Gulf General Atomic

4590..... Date 741100
 020000 122310 122330 122350
 Cross Section Evaluation Working Group - Benchmark
 Specifications
 Alter, H.; Kidman, R. B.; Labauve, R.; Protsik, R.;
 Zolotar, B. A.
 BNL-19302; ENDF-202
 AVAILABILITY-NATIONAL NEUTRON CROSS
 SECTION CENTER, BROOKHAVEN
 NATIONAL LAB., UPTON, NEW YORK 11973
 Brookhaven Natl. Lab.

CATEGORY NUMBER 123000
NUCLEAR STRUCTURE AND
PARAMETERS

4297..... Date 740100
 112710 123000 221000 222000 610000
 Tables for Reaction Gamma-Ray Spectroscopy. Part I.
 A=6 to A=20

CATEGORY NUMBER 123000

De Meijer, R. J.; Plendl, H. S.

AT.DATA + NUCL. DATA TABLES, 13(1), 1-33

Florida Schools

4298. Date 740100
123000A Mass Table for Z Between 50 and 118, for a Between
130 and 311 Derived From Nuclear Energy
Systematics

Viola, V. E., Jr.; Swant, J. A.; Graber, J.

AT.DATA + NUCL. DATA TABLES, 13(1), 35-65

Maryland Schools

4299. Date 740100
112710 122200 123000Strengths of Gamma-Ray Transitions Between Bound
States of A=21-44 Nuclei

Endt, P. M.; Van Der Leun, C.

AT.DATA + NUCL. DATA TABLES, 13(1), 67-88

Netherlands (Holland)

4320. Date 721000
111110 112120 123000 221000 532000 870092 870094Data for the Calculation of Gamma Radiation Spectra
and Beta Heating From Fission Products (Revision
2)

Tobias, A.

RD/8/M-2453

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)

England

4323. Date 720222
121100 122100 123000 810000Fast Neutron Radiative Capture Cross Sections of Stable
Nuclei With Z Range Between 29 and 79

Benzi, V.; D'orazi, R.; Reffo, G.; Vaccari, M.

RT/FI-(72)6

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)

Italy

4326. Date 730200
123000Development of a Computer-Based Nuclear Data
Compilation: Table of Isotopes

Lederer, C. M.; Hollander, J. M.

LBL-1261; CONF-730302-7;

STI/PUB-343,V2,PP.541-550

AVAILABILITY-DEP., NTIS \$3.00

Lawrence Berkeley Lab

CATEGORY NUMBER 123000

4327. Date 730200
123000

Survey of Nuclear Data Use in Applied Fields

Lederer, C. M.; Hollander, J. M.

LBL-1262; CONF-730302-8;

STI/PUB-343,V2,PP.449-456

AVAILABILITY-DEP., NTIS \$3.00

Lawrence Berkeley Lab

4350. Date 740400
123000Compilation of Phenomenological Optical-Model
Parameters, 1967-1972

Perey, C. M.; Perey, F. G.

AT.DATA + NUCL. DATA TABLES, 13(4), 293-337

Oak Ridge National Lab.

4458. Date 690114
112120 112710 123000 421200 424000 810000

Gamma-Ray Energies and Intensities

Gunnink, R.; Niday, J. B.; Anderson, R. P.;

Meyer, R. A.

UCID-15439

AVAILABILITY-DEP., NTIS \$7.25

Lawrence Livermore Lab

4460. Date 740600
112500 122100 122200 123000Extended Table of Angular-Distribution Coefficients for
(Gamma, Particle) And (Particle, Gamma)
Reactions.

Maute, R. E.; D'amato, D. P.; Matt, S. L.

AT.DATA + NUCL. DATA TABLES, 13(6), 499-624

Ohio Schools

4465. Date 740800
112120 112760 123000

Radioactive-Nuclide Decay Data for Endf/b

Reich, C. W.; Helmer, R. G.; Putnam, M. H.

ANCR-1157

AVAILABILITY-NTIS \$4.00

Aerojet-General

4467. Date 750100
111210 123000 870001 870002The T(D,n) 4-He and T(T,2n) Cross Sections at Low
Energies

Stewart, L.; Hale, G. M.

LA-5828-MS; USNDC-CTR-2

AVAILABILITY-NTIS \$4.00

Los Alamos Scientific Lab

CATEGORY NUMBER 123000

4486. Date 741200
 111110 123000 32A000
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 Multigroup Calculations Of Neutron Transport
 Cullen, D. E.
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4497. Date 750100
 111110 121100 123000
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 Ginsberg, A.; Becker, M.
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 New York Schools

4566. Date 730700
 111110 111210 123000 421140 422110 430000 810000
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 Sections, Q-Values, Decay Characteristics, and
 Sensitivities
 Kenna, B. T.; Harrison, P. E.
 SLA-73-637
 AVAILABILITY-DEP., NTIS \$6.50
 Sandia Corporation

4592. Date 730000
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 Cohen, E. R.; Taylor, B. N.
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4895. Date 760300
 112710 123000 810000
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 Martin, M. J. (Ed.)
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 AVAILABILITY-NTIS \$5.50
 Oak Ridge National Lab.

4903. Date 751000
 010000 122100 123000 719A00
 The Light Water Reactor Industry - Nuclear Data Needs
 Uotinen, V. O.; Robertson, J. D.; Tulenko, J. S.
 NBS SPEC.PUB.-425, PP.7-13; CONF-750303, PP.7-13
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Babcock and Wilcox Co.

CATEGORY NUMBER 123000

4904. Date 751000
 010000 112120 123000
 Radioactive-Nuclide Decay Data in Science and
 Technology
 Reich, C. W.; Helmer, R. G.
 NBS SPEC.PUB.-425, PP.14-20; CONF-750303, PP.14-20
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
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 Aerojet-General

4905. Date 751000
 112120 123000 221000 532000
 Radioactive Decay Heat Analyses
 Schenter, R. E.; Schmittroth, F.
 NBS SPEC.PUB.-425, PP.21-28; CONF-750303, PP.21-28
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
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 Hanford Eng Dev Lab.

4907. Date 751000
 010000 112400 112500 112600 122100 123000 810000
 Nuclear Models and Data for Gamma-Ray Production
 Young, P. G.
 NBS SPEC.PUB.-425, PP.149-155;
 CONF-750303, PP.149-155
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
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 Los Alamos Scientific Lab

4915. Date 751000
 123000
 Computer-Readable "Nuclear Data Sheets"
 Eubank, W. B.
 NBS SPEC.PUB.-425, PP.309-312;
 CONF-750303, PP.309-312
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
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 Oak Ridge National Lab.

4941. Date 750000
 112120 123000
 Evaluated Decay-Scheme Data for the Ilrr Program
 Helmer, R. G.; Greenwood, R. C.
 NBS SPEC.PUB.-425, PP.324-327; CONF-750303-80
 AVAILABILITY-NTIS AS CONF-750303-80 \$4.00
 Aerojet-General

4942. Date 750000
 121100 122100 123000
 Development of a Two-Step Hauser-Feshbach Code
 With Precompound Decays And Gamma Ray
 Cascades: a Theoretical Tool for Cross-Section
 Evaluations
 Fu, C. Y.

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4944. Date 751000
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 Unresolved Resonance Region
 De Saussure, G.; Perez, R. B.
 NBS SPEC.PUB.-425,PP.371-374; CONF-750303-39
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RADIATION DAMAGE

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 121100 210000 861000
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 Model of Damage With The Results of Irradiation of
 Steel
 Jimenez, J. L.
 CEA-N-1093 (IN FRENCH)
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 France

3557. Date 720800
 111110 210000 861000
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 Design and Performance
 Huebotter, P. R.
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 Argonne National Lab.

3564. Date 730100
 111110 210000 861000 870022
 Postirradiation Mechanical Properties of Types 304 and
 304 Plus 0.15% Titanium Stainless Steel
 Bloom, E. E.; Stiegler, J. O.
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 Oak Ridge National Lab.

CATEGORY NUMBER 210000

3565. Date 730100
 112110 210000 861000 870012 885000
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 Temperature on Coaxial Signal Cables
 Stringer, J. L.; Bourassa, R. R.; Dau, G. J.
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 Battelle Memorial Inst.

3608. Date 730417
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 With the Lawrence Livermore Laboratory Rotating
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 Van Konynenburg, R. A.
 UCRL-51393
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 Serpan, C. Z., Jr.
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 AVAILABILITY-NAVAL RESEARCH
 LABORATORY, WASHINGTON, D.C. 20375
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 Perkins, H. K.; Axtmann, R. C.
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 Norgett, M. I.
 AERE-R-7374
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 McCracken, G. M.; Blow, S.
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 England

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 Norgett, M. J.; Robinson, M. T.; Torrens, I. M.
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3839. Date 731100
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 Mechanical Property Change Data In Type 304
 Stainless Steel
 Simons, R. L.; McElroy, W. N.; Blackburn, L. D.
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3842. Date 731100
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 Doran, D. G.
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 Dubrovskii, V. B.; Ibragimov, Sh. Sh.;
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 Bloom, E. E.; Weir, J. R., Jr.
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 Doran, D. G.; Graves, N. J.
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 Serpan, C. Z., Jr.; Menke, B. H.
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 Dudziak, D. J.
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 Los Alamos Scientific Lab

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 Srinivasan, N. (Comp.)
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 Michel, D. J.; Smith, H.H.; Atwell, J. T.
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 Lott, M.; Genthon, J. P.; Gervaise, F.; Mas, P.; Mougnot, J. C.; N'guyen VAN DOAN,
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4606..... Date 731000
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 Parkin, D. M.; Goland, A. N.
 BNL-50,434
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 Borg, R. J.
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 Conn, R. W.; Kulcinski, G. L.; Avci, H.; El-Maghrabi, M.
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AVAILABILITY-DEP., NTIS \$20.00
Aerojet-General

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Galliani, M.; Serpan, C. Z.
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794000 795082 861000 870006
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 Mehta, S. S.; Johri, S. S.
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 Abdou, M. A.; Maynard, C. W.; Wright, R. Q.
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 Colvett, R. D.; Rossi, H. H.; Krishnaswamy, V.
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 Eisenlohr, H. H.; Abedin-Zadeh, R.
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 Fehrentz, D.; Kuzma, I.
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 Austria

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 Koblinger, L.
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Sources of Monoenergetic Photons
Jones, T. D.; Auxier, J. A.; Snyder, W. S.;
Warner, G. G.
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Oak Ridge National Lab.

3673. Date 730700
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Barber, L. R.; Cloutier, R. J.; Watson, E. E.
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AVAILABILITY-NTIS \$4.00
Oak Ridge Associated Univ.

3674. Date 731000
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Electric Station, Denver, Colorado
Moore, R. E.; Barton, C. J.
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Bone Marrow and Abdomen In a Human Phantom
From 2.95-Mev Neutrons
Facey, R. A.; Clifford, C. E. (Can.)
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 Delafield, H. J.; Dennis, J. A.; Gibson, J. A.
 AERE-R-7486
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.50
 England

4509..... Date 731200
 220000
 Nuclear Accident Dosimetry. Part III. Interpretation and
 Data
 Delafield, H. J.; Dennis, J. A.; Gibson, J. A.
 AERE-R-7487
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.25
 England

4514..... Date 740900
 112760 220000 222000 632110 795048 845000 870094
 Dose-To-The-Population Estimates for Use of
 Radioisotope Powered Cardiac Pacemakers
 McKee, R. W.; Clark, L. L.; Cole, B. M.;
 Libby, R. A.
 BNWL-1858
 AVAILABILITY-DEP., NTIS \$5.45
 Battelle-Northwest

4527..... Date 730329
 010000 220000
 Radiation Effects Data and Their Interpretation
 Bond, V. P.
 BNL-17889; CONF-730444-1
 AVAILABILITY-DEP., NTIS \$4.50
 Brookhaven Natl. Lab.

4546..... Date 710600
 220000
 Radiation Hazards and Radiation Protection
 Hug, O.
 NP-TR-1941
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Germany (West)

4567..... Date 720000
 112120 220000 221000 423250 845000
 Evaluation of Personnel Exposures in a High-Energy,
 High-Intensity Beta-Gamma Field
 O'neal, B.
 SLA-73-5371; CONF-730603-4; CONF-730907-1
 AVAILABILITY-DEP., NTIS \$3.00
 Sandia Corporation

CATEGORY NUMBER 220000

4579..... Date 741100
 112710 220000 329000 610000 632200 845000
 A Tabulation of Dose Equivalent Per Microcurie-Day
 for Source and Target Organs of An Adult for
 Various Radionuclides
 Snyder, W. S.; Ford, M. R.; Warner, G. G.;
 Watson, S. B.
 ORNL-5000
 AVAILABILITY-NTIS \$10.60
 Oak Ridge National Lab.

4584..... Date 750100
 111210 112930 220000 222000 230000 717000 810000
 Information Requirements for Controlled
 Thermonuclear Reactor Environmental Impact
 Statements
 Young, J. R.; Gore, B. F.; Mahlum, D. D.;
 Strand, J. A.; Thompson, R. C.; Soldat, J. K.
 BNWL-1883
 AVAILABILITY-NTIS \$7.60
 Battelle-Northwest

4591..... Date 750300
 111110 112110 220000 420000 511120 512120
 Tenth Dosimetry Intercomparison Study August 27 -
 September 7, 1973
 Dickson, H. W.; Haywood, F. F.; Becker, K.
 ORNL-TM-4566
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4595..... Date 730100
 010000 220000 423240 512120
 National and International Radiation Dose
 Intercomparisons. Proceedings of A Panel Held in
 Vienna, 13-17 December 1971
 IAEA,
 STI/PUB-338; CONF-711225
 AVAILABILITY-IAEA \$6.00
 Iaea

4596..... Date 730100
 112720 121200 220000 328000 512110 820000
 Calculations of Absolute Depth-Doses and Dose
 Conversion Factors for 60-Co Radiation in Water
 Eisenlohr, H. H.; Abedin-Zadeh, R.
 STI/PUB-338, PP.59-65; CONF-711225, PP.59-65
 AVAILABILITY-IAEA
 Iaea

CATEGORY NUMBER 220000

4601..... Date 740200
 220000
 Proceedings of the Third International Congress of the
 International Radiation Protection Association,
 Washington, D.C., September 9-14, 1973
 Snyder, W. S. (Ed.)
 CONF-730907-P2
 AVAILABILITY-DEP., NTIS \$13.60
 Oak Ridge National Lab.

4621..... Date 750400
 111130 112120 112130 220000 329000 845000
 In Vivo Dose Estimates for A-Bomb Survivors Shielded
 By Typical Japanese Houses
 Jones, T. D.; Auxier, J. A.; Cheka, J. A.;
 Kerr, G. D.
 HEALTH PHYS., 28(4), 367-381
 Oak Ridge National Lab.

4637..... Date 750400
 111210 111500 121100 121200 220000 793000 794000
 Calculational Methods for Nuclear Heating - Part I:
 Theoretical And Computational Algorithms
 Abdou, M. A.; Maynard, C. W.
 NUCL. SCI. ENG., 56(4), 360-380
 Wisconsin Schools

4643..... Date 730000
 112B00 220000 329000 845000
 A Tabulation of Specific Effective Energies for Dose
 Calculations
 Ford, M. R.; Snyder, W. S.
 CONF-730907-2; CONF-730907-P1, PP.619-624
 AVAILABILITY-DEP., NTIS
 Oak Ridge National Lab.

4644..... Date 730000
 112760 220000 329000 845000
 Dose From Photon Emitters Distributed Uniformly in
 the Total Body As A Function of Age
 Hilyer, M. J.; Hill, G. S.; Warner, G. G.
 CONF-730907-3; CONF-730907-P1, PP.694-699
 AVAILABILITY-DEP., NTIS
 Oak Ridge National Lab.

4649..... Date 741100
 112B00 220000 32A000 511110 512210 845000
 Neutron and Capture Gamma Spectra in a
 Tissue-Equivalent Slab for Isotropic Irradiation
 Abagyan, A. A.; Dubinin, A. A.; Obaturov, G. M.;
 Shalin, V. A.; Zhuravlev, V. I.; Vrazhnov, Yu. N.;
 Kostin, E. I.
 HEALTH PHYS., 27(5), 481-489
 Russia

CATEGORY NUMBER 220000

4651. Date 750200
 220000
 Some Observations on Mpdf of Neutrons
 Nagarajan, P. S.; Sethulakshmi, R.;
 Nandakumar, A. R.
 HEALTH PHYS., 28(2), 165-169
 India

4654. Date 720100
 112720 220000 610000 760000 820000 845000
 Scatter-Air Ratios
 Cunningham, J. R.
 PHYS. MED. BIOL., 17(1), 42-51
 Canada

4655. Date 720300
 111110 112110 220000 329000 760000 845000 870098
 Absorbed Dose and Linear Energy Transfer Distribution
 From Therapeutic Sources 252-Cf
 Jones, T. D.; Auxier, J. A.
 PHYS. MED. BIOL., 17(2), 206-217
 Oak Ridge National Lab.

4660. Date 730400
 113100 220000 513110 613000 760000 870029 870082
 Parameterization of 4 Mv Depth-Dose Data for the
 Clinac-4 Accelerator
 Dixon, R. L.
 RADIOLOGY, 10(001), 207-211
 North Carolina Schools

4662. Date 730500
 112B00 220000 329000 552110 760000 845000
 Photon Fluence Calculations for Estimating Dose
 Distribution in the Thorax
 Sidwell, J. M.; Burlin, T. E.
 BRIT. J. RADIOL., 46(545), 360-364
 England

4715. Date 741200
 010000 111110 112110 112760 112910 113100 220000
 Nuclear Radiation-Sources and Impact
 Unruh, C. M.
 NUCL. TECH., 24(3), 314-322
 Battelle Memorial Inst.

4736. Date 740000
 112B00 122200 220000 845000
 Human Tissues: Chemical Composition and Photon
 Dosimetry Data
 Kim, Y. S.
 RADIATION RES., 57(1), 38-45
 Ohio Schools

CATEGORY NUMBER 220000

4745. Date 721100
 112B00 220000 632200 845000
 Average Geometrical Factor in Absorbed Dose
 Calculation
 Lane, R. G.; Greenfield, M. A.
 J. NUCL. MED., MIRD, 13(11), 858-859
 Wisconsin Schools

4747. Date 730900
 113100 220000
 Dose Conversion Factors at the Calibration Beam
 Energy
 Valley, J. F.; Lerch, P.
 PHYS. MED. BIOL., 18(5), 744-746
 Switzerland

4748. Date 730900
 113100 220000 329000 513110 820000
 Calculation of X-Ray Spectra in the Diagnostic Energy
 Range, Due Regard Being Paid to Scattered
 Radiation. (Letter to the Editor)
 Reiss, K. H.; Steinle, B.
 PHYS. MED. BIOL., 18(5), 746-747
 Germany (West)

4754. Date 700200
 111210 220000 423120
 Determination of Quality Factor for 15 Mev Neutrons
 Krueger, H.; Graul, E. H.
 STRAHLENTHERAPIE, 139, 179-180
 Germany (West)

4758. Date 720600
 112720 220000 631000 760000
 Calculation of Isodose Curves in Remote Gamma
 Therapy
 Galina, L. S.
 MED. RADIOL., 17(6), 84-85
 Russia

4759. Date 720600
 112710 220000 631000 760000
 Effect of the Irradiation Field Size on the Depth Dose
 With Shaping Devices In Gamma Therapy
 Stavitskii, R. V.; Pasynokova, I. E.
 MED. RADIOL., 17(6), 86-90
 Russia

CATEGORY NUMBER 220000

4762. Date 741200
111210 111220 112720 220000 329000 511110 512110
795178 845000

Calculations Related to the Possible Use of Photons,
Neutrons, Negatively Charged Pions, Protons, and
Alpha Particles in Radiotherapy

Alsmiller, R. G., Jr.; Santoro, R. T.;
Armstrong, T. W.; Barish, J.; Chandler, K. C.;
Chapman, G. T.

RADIATION RES., 60(3), 369-387; ORNL-TM-4369
Oak Ridge National Lab.

4768. Date 730000
112930 220000

Absorbed Dose in Phantoms Which Represent Various
Aged Male Humans From External Sources of
Photons As a Function of Age

Warner, G. G.; Poston, J. W.; Snyder, W. S.
CONF-740703-3

AVAILABILITY-DEP., NTIS \$4.00
Oak Ridge National Lab.

4770. Date 740000
112930 220000 522120

Age Factors for Dose Rates From An Infinite Cloud of a
Photon Emitter

Poston, J. W.; Snyder, J. W.; Warner, G. G.
CONF-741018-5

AVAILABILITY-DEP., NTIS
Oak Ridge National Lab.

4771. Date 740000
220000

Dosimetry of Internal Emitters for Population Exposure
Snyder, W. S.

CONF-741018-6
AVAILABILITY-DEP., NTIS \$4.25
Oak Ridge National Lab.

4798. Date 740500
112B00 220000

Energy Fluence Per Rontgen - An Apparent Paradox
and Its Resolution

McDavid, W. D.; Waggener, R. G.
PHYS. MED. BIOL., 19(3), 389-391
Texas Schools

4799. Date 740900
111110 111210 220000 329000 423120 423220 511120
512220 845000

Measured and Calculated Dose Distributions From
Neutrons Incident on A Tissue-Equivalent Phantom
Hubbell, H. H., Jr.; Chen, W. L.; Shinpaugh, W. H.;
Jones, T. D.

CATEGORY NUMBER 220000

HEALTH PHYS., 27(3), 289-297
Oak Ridge National Lab.

4800. Date 740900
220000

An Analytical Expression for the Neutron Flux-To-Dose
Conversion Factors. (Letter to the Editor)

Rindi, A.
HEALTH PHYS., 27(3), 322-323
Lawrence Berkeley Lab

4801. Date 741100
112B00 220000 830000

There Is No Paradox in the Exposure to Energy
Conversion

Koblinger, L.
PHYS. MED. BIOL., 19(6), 885-886
Hungary

4803. Date 740300
112B00 112720 112730 220000 512110 632200 842000

A Theoretical Evaluation of Plastic Dosimetry Phantoms
Peschel, R. E.; Schultz, R. J.
PHYS. MED. BIOL., 19(2), 171-185
Connecticut Schools

4807. Date 750500
112B00 112720 112730 220000 329000 845000

Measurements of Absorbed Fractions for Photon
Sources Distributed Uniformly In Various Organs of
a Heterogeneous Phantom

Garry, S. M.; Stansbury, P. S.; Poston, J. W.
HEALTH PHYS., 28(5), 591-597
Oak Ridge National Lab.

4808. Date 750500
112B00 220000 329000 845000

Absorbed Dose in Phantoms Which Represent Various
Aged Male Humans From External Sources of
Photons As a Function of Age

Warner, G. G.; Poston, J. W.; Snyder, W. S.
HEALTH PHYS., 28(5), 599-603
Oak Ridge National Lab.

4847. Date 750600
113100 220000 329000 523100 795170

Monte Carlo Calculations of Scattered X-Rays From
Snyder Phantoms

Koblinger, L.
HEALTH PHYS., 28(6), 751-754
Hungary

CATEGORY NUMBER 220000

4851..... Date 750600
112930 220000 221000 222000 632110 632120 795270
845000

Subdosa - a Computer Program for Calculating External
Doses From Accidental Atmospheric Releases of
Radionuclides

Streng, D. L.; Watson, E. C.; Houston, J. R.
BNWL-B-351

AVAILABILITY-NTIS \$7.60 MF \$2.25

Battelle-Northwest

4855..... Date 741200
112930 220000 221000 222000 845000

Dacrin - a Computer Program for Calculating Organ
Dose From Acute or Chronic Radionuclide
Inhalations

Houston, J. R.; Streng, D. L.; Watson, E. C.
BNWL-B-389

AVAILABILITY-NTIS \$7.60

Battelle-Northwest

4856..... Date 740200
112930 220000 221000 222000 845000

Dacrin - a Computer Program for Calculating Organ
Dose From Acute or Chronic Radionuclide
Inhalation: Modification for Gastrointestinal Tract
Dose

Streng, D. L.
BNWL-B-389(SUPP.)

AVAILABILITY-DEP., NTIS \$5.45

Battelle-Northwest

4857..... Date 751000
220000 329000 760000 845000

Effects of Tissue Inhomogeneities on Dose Patterns in
Cylinders Irradiated By Negative Pion Beams

Hamm, R. N.; Wright, H. A.; Turner, J. E.
ORNL-TM-5088

AVAILABILITY-NTIS \$4.00

Oak Ridge National Lab.

4862..... Date 751100
112710 220000 329000 610000 632200 845000

A Tabulation of Dose Equivalent Per Microcurie-Day
for Source and Target Organs of An Adult for
Various Radionuclides

Snyder, W. S.; Ford, M. R.; Warner, G. G.;
Watson, S. B.

ORNL-5000, PART 2

AVAILABILITY-NTIS \$10.60

Oak Ridge National Lab.

CATEGORY NUMBER 220000

4866..... Date 720100
111110 111220 220000 423135 423250 521210 845000

Personnel Albedo Neutron Dosimeter With
Thermoluminescent 6-LiF and 7-LiF

Hoy, J. E.

DP-1277

AVAILABILITY-NTIS

E. I. Dupont Denemours

4884..... Date 740200
111110 111220 112110 220000 423120 423220

Results of Ornl Measurements Made During the
International Neutron Dosimetry Intercomparison,
March 19-30, 1973

Dickson, H. W.; Christian, D. J.

ORNL-TM-4441

AVAILABILITY-DEP., NTIS \$3.25

Oak Ridge National Lab.

4930..... Date 751000
111220 220000 760000

Medical Use of Fast Neutrons in Radiotherapy and
Radiography

Bewley, D. K.

NBS SPEC.PUB.425, PP.527-532;

CONF-750303, PP.527-532

AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
SOLD IN SETS ONLY

England

CATEGORY NUMBER 221000

BETA-RAY DOSE

4433..... Date 740400
221000 632110 632120

A Method for the Calculation of Beta-Ray Dose

Valley, J. F.; Kushelevsky, A. P.; Lerch, P.

HEALTH PHYS., 26(4), 295-300

Switzerland

4567..... Date 720000
112120 220000 221000 423250 845000

Evaluation of Personnel Exposures in a High-Energy,
High-Intensity Beta-Gamma Field

O'neal, B.

SLA-73-5371; CONF-730603-4; CONF-730907-1

AVAILABILITY-DEP., NTIS \$3.00

Sandia Corporation

CATEGORY NUMBER 221000

4665. Date 730000
 112120 221000 222000
 Isopleths of Dose of External Gamma-Radiation
 Following Hypothetical Reactor Hazards With
 Emission of Noble Gases
 Schultz, H.; Voelz, E.
 ORNL-TR-2856
 AVAILABILITY-DEP., NTIS
 Germany (West)

4666. Date 730600
 112120 221000 532000 795163 810000
 Calculations of Fission Product Energy Release
 Tobias, A.
 RD/B/N-2710
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$3.50
 England

4851. Date 750600
 112930 220000 221000 222000 632110 632120 795270
 845000
 Subdosa - a Computer Program for Calculating External
 Doses From Accidental Atmospheric Releases of
 Radionuclides
 Strenge, D. L.; Watson, E. C.; Houston, J. R.
 BNWL-B-351
 AVAILABILITY-NTIS \$7.60 MF \$2.25
 Battelle-Northwest

4855. Date 741200
 112930 220000 221000 222000 845000
 Dacrin - a Computer Program for Calculating Organ
 Dose From Acute or Chronic Radionuclide
 Inhalations
 Houston, J. R.; Strenge, D. L.; Watson, E. C.
 BNWL-B-389
 AVAILABILITY-NTIS \$7.60
 Battelle-Northwest

4856. Date 740200
 112930 220000 221000 222000 845000
 Dacrin - a Computer Program for Calculating Organ
 Dose From Acute or Chronic Radionuclide
 Inhalation: Modification for Gastrointestinal Tract
 Dose
 Strenge, D. L.
 BNWL-B-389(SUPP.)
 AVAILABILITY-DEP., NTIS \$5.45
 Battelle-Northwest

CATEGORY NUMBER 221000

4905. Date 751000
 112120 123000 221000 532000
 Radioactive Decay Heat Analyses
 Schenter, R. E.; Schmittroth, F.
 NBS SPEC.PUB.-425, PP.21-28; CONF-750303, PP.21-28
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Hanford Eng Dev Lab.

CATEGORY NUMBER 222000
 ENVIRONMENTAL DOSE

4403. Date 740000
 111210 112930 222000 717000
 An Environmental Impact Study of a Reference
 Theta-Pinch Reactor (Rtpr)
 Draley, J. E.; Marconi, V. A.; Coultas, T. A.;
 Krakowski, R. A.
 CONF-740402-P1,564-577
 AVAILABILITY-NTIS
 Argonne National Lab.

4503. Date 740920
 111210 112930 222000 32A000 521130 522130 717000
 795082 810000
 Environmental Assessment for Fusion Reactor Utilizing
 Brookhaven Minimum Activity Blanket
 Anderson, R. V.
 AI-AEC-13136
 AVAILABILITY-DEP., NTIS \$5.45
 Atomics International

4514. Date 740900
 112760 220000 222000 632110 795048 845000 870094
 Dose-To-The-Population Estimates for Use of
 Radioisotope Powered Cardiac Pacemakers
 McKee, R. W.; Clark, L. L.; Cole, B. M.;
 Libby, R. A.
 BNWL-1858
 AVAILABILITY-DEP., NTIS \$5.45
 Battelle-Northwest

4532. Date 730000
 222000
 Calculations of the Absorbed Dose to a Man Immersed
 in An Infinite Cloud Of ⁸⁵Kr
 Snyder, W. S.; Dillman, L. T.; Ford, M. R.;
 Poston, J. W.
 CONF-730915-3
 AVAILABILITY-DEP., NTIS \$3.25
 Oak Ridge National Lab.

CATEGORY NUMBER 222000

4556. Date 750100
 112710 222000 230000 795217
 Effect of Actinide Removal on the Long-Term Hazard of
 High-Level Waste
 Claiborne, H. C.
 ORNL-TM-4724
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4563. Date 730800
 112760 222000 713000 830000
 Sandia Pulsed Reactor II (Spr II): Curie Release and
 Dose Potential
 Bonzon, L. L.
 SLA-73-430
 AVAILABILITY-DEP., NTIS \$4.00
 Sandia Corporation

4580. Date 740700
 112120 222000 230000 510000 532000 870092 870094
 Decay Heating Measurements and Calculations for
 Irradiated 235-U, 233-U, 239-Pu, and 232-Th (Lwbr
 Development Program)
 Gunst, S. B.; Conway, D. E.; Connor, J. C.
 WAPD-TM-1183
 AVAILABILITY-DEP., NTIS \$6.75
 Bettis Atomic Power Lab.

4584. Date 750100
 111210 112930 220000 222000 230000 717000 810000
 Information Requirements for Controlled
 Thermonuclear Reactor Environmental Impact
 Statements
 Young, J. R.; Gore, B. F.; Mahlum, D. D.;
 Strand, J. A.; Thompson, R. C.; Soldat, J. K.
 BNWL-1883
 AVAILABILITY-NTIS \$7.60
 Battelle-Northwest

4665. Date 730000
 112120 221000 222000
 Isopleths of Dose of External Gamma-Radiation
 Following Hypothetical Reactor Hazards With
 Emission of Noble Gases
 Schultz, H.; Voelz, E.
 ORNL-TR-2856
 AVAILABILITY-DEP., NTIS
 Germany (West)

CATEGORY NUMBER 222000

4704. Date 730900
 222000
 Environmental Measurements and Monitoring Programs
 Around Reactors: Pre-Operational, Operational, and
 for Accidents
 Budnitz, R. J.
 LBL-2195
 AVAILABILITY-DEP., NTIS \$3.25
 Lawrence Berkeley Lab

4851. Date 750600
 112930 220000 221000 222000 632110 632120 795270
 845000
 Subdosa - a Computer Program for Calculating External
 Doses From Accidental Atmospheric Releases of
 Radionuclides
 Strenge, D. L.; Watson, E. C.; Houston, J. R.
 BNWL-B-351
 AVAILABILITY-NTIS \$7.60 MF \$2.25
 Battelle-Northwest

4855. Date 741200
 112930 220000 221000 222000 845000
 Dacrin - a Computer Program for Calculating Organ
 Dose From Acute or Chronic Radionuclide
 Inhalations
 Houston, J. R.; Strenge, D. L.; Watson, E. C.
 BNWL-B-389
 AVAILABILITY-NTIS \$7.60
 Battelle-Northwest

4856. Date 740200
 112930 220000 221000 222000 845000
 Dacrin - a Computer Program for Calculating Organ
 Dose From Acute or Chronic Radionuclide
 Inhalation: Modification for Gastrointestinal Tract
 Dose
 Strenge, D. L.
 BNWL-B-389(SUPP.)
 AVAILABILITY-DEP., NTIS \$5.45
 Battelle-Northwest

4875. Date 750000
 111110 112750 222000 710000 713000
 Experience in Operation of Phenix With Regard to
 Shielding
 Goddet, J.; Peyresblanques, H.; Galissian, F.;
 Meffre, P.
 ORNL-TR-4003; CONF-750411-10
 AVAILABILITY-NTIS \$4.00
 France

CATEGORY NUMBER 222000

4882. Date 750600
 112760 112930 222000 522120
 Calculation of the Gamma-Dose Rate From a
 Continuously Emitted Plume
 Huebschmann, W.; Papadopoulos, D.
 KFK-2172(IN GERMAN)
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$5.25
 Germany (West)

4887. Date 740520
 112760 222000
 Gamma Radiation From Radon Daughters in the
 Atmosphere
 Beck, H. L.
 J. GEOPHYS. RESEARCH, 79(15), 2215-2221
 Atomic Energy Commission (U.S.)

CATEGORY NUMBER 230000
 RADIOACTIVE WASTE MANAGEMENT

4524. Date 730900
 230000 717000
 Transmutation of High-Level Radioactive Waste With a
 Controlled Thermonuclear Reactor
 Wolkenhauer, W. C.; Leonard, B. R., Jr.; Gore, B. F.
 BNWL-1772
 AVAILABILITY-DEP., NTIS \$7.60
 Battelle-Northwest

4556. Date 750100
 112710 222000 230000 795217
 Effect of Actinide Removal on the Long-Term Hazard of
 High-Level Waste
 Claiborne, H. C.
 ORNL-TM-4724
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4580. Date 740700
 112120 222000 230000 510000 532000 870092 870094
 Decay Heating Measurements and Calculations for
 Irradiated 235-U, 233-U, 239-Pu, and 232-Th (Lwbr
 Development Program)
 Gunst, S. B.; Conway, D. E.; Connor, J. C.
 WAPD-TM-1183
 AVAILABILITY-DEP., NTIS \$6.75
 Bettis Atomic Power Lab.

CATEGORY NUMBER 230000

4584. Date 750100
 111210 112930 220000 222000 230000 717000 810000
 Information Requirements for Controlled
 Thermonuclear Reactor Environmental Impact
 Statements
 Young, J. R.; Gore, B. F.; Mahlum, D. D.;
 Strand, J. A.; Thompson, R. C.; Soldat, J. K.
 BNWL-1883
 AVAILABILITY-NTIS \$7.60
 Battelle-Northwest

4604. Date 731000
 112120 230000 532000 713000 719A00
 A Study of Long-Term Heat Generation in Nuclear
 By-Products From Lwr And Lmfbr Systems
 Angelo, J. A., Jr.; Post, R. G.; Haskin, F. E.;
 Lewis, C.
 STI/PUB-343,V.1,71-88; CONF-730302,V.1,71-88;
 IAEA-SM-170/58
 AVAILABILITY-IAEA, VIENNA
 Arizona Schools

4710. Date 741200
 010000 230000
 United States Atomic Energy Waste Management
 Programs and Objectives
 Pittman, F. K.
 NUCL. TECH., 24(3), 273-285
 Atomic Energy Commission (U.S.)

4711. Date 741200
 010000 230000
 The Hidden Commitment of Nuclear Wastes
 Rowe, W. D.; Holcomb, W. F.
 NUCL. TECH., 24(3), 286-293
 Environmental Protection Agency

4712. Date 741200
 010000 230000
 Waste Management - Licensing and Criteria
 Smiley, S. H.
 NUCL. TECH., 24(3), 294-299
 Atomic Energy Commission (U.S.)

4713. Date 741200
 010000 230000
 Management of Radioactive Wastes - Programs of the
 International Atomic Energy Agency
 Jacobs, D. G.
 NUCL. TECH., 24(3), 300-304
 Oak Ridge National Lab.

CATEGORY NUMBER 230000

4714. Date 741200
010000 230000
Radioactive Waste Management in Selected Foreign
Countries
Parker, H. M.
NUCL. TECH., 24(3), 305-308
Hmp

4716. Date 741200
112120 112760 230000 532000 719A00 719B00
Nuclear Fuel Cycle and the Isotopic Compositions
Angelo, J. A., Jr.; Post, R. G.
NUCL. TECH., 24(3), 323-330
Florida Schools

4717. Date 741200
010000 230000
Evaluation Methodology of Waste Management
Concepts
Deonigi, D. E.
NUCL. TECH., 24(3), 331-338
Battelle-Norilwest

4718. Date 741200
010000 230000 712000
Transportation of Nuclear Fuel and Waste
Brobst, W.
NUCL. TECH., 24(3), 343-355
Atomic Energy Commission (U.S.)

4719. Date 741200
010000 230000
Geohydrologic Considerations in the Management of
Radioactive Waste
Debuchananne, G. D.
NUCL. TECH., 24(3), 356-361
Geological Survey, U.S.

4720. Date 741200
010000 230000
Methods for Removal of Actinides From High-Level
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Dickey, B. R.; Wheeler, B. R.; Buckham, J. A.
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Macbeth, P. J.; Hickman, W. W.
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3527..... Date 720800
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 Orthogonality, Normalization Integrals, Applications
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 Lathrop, K. D.
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Nishigori, T.

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A Class of Second-Order Approximate Formulations of Deep Penetration Radiation Transport Problems

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Greenspan, E.

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El-Wakil, S. A.

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Biro, G. G.

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Premuda, F.
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 Stacey, W. M., Jr.
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 Technique to the Study Of Neutron Transport in
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 Ganapol, B.
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 Central Difference Approximations for the Neutron
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3505. Date 710400
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 Three Dimensional Deep Penetration Problems
 Slater, C. O.; Robinson, J. C.
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 The Development and Application of a Discrete
 Ordinates Adjoint Difference Method for
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 Tavel, M.
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 Chilton, A. B.
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 Adjoint Sn Calculations of Coupled Neutron and
 Gamma-Ray Transport Through Concrete Slabs
 Roussin, R. W.; Schmidt, F. A. R.
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 Solutions of the Neutron Transport Equation
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 Valenta, V.
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Arkuszewski, J. J.
EIR-232
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FUER REAKTORFORSCHUNG,
WUERENLINGEN, SWITZERLAND
Switzerland

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of the Transport Equation
Lathrop, K. D.
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Flux Synthesis Methods in Reactor Physics
Stacey, W. M., Jr.
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The Development and Application of a Discrete
Ordinates Adjoint Difference Method for
One-Dimensional Shield Weight Optimization
Childs, R. L.; Engle, W. W., Jr.; Robinson, J. C.;
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 Sahin, S.
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 in Reactor Shielding
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 Ganapol, B.; Herrnberger, V.; Paratte, J. M.
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 AVAILABILITY-OECD
 Switzerland

3969..... Date 660000
 32A000 511110 521130 820000 861000 870001
 Transmission of Neutrons Through Plane Parallel,
 Multi-Layer
 Germogenova, T. A.; Suvorov, A. P.; Utkin, V. A.
 ORNL-TR-2021(REV.)
 AVAILABILITY-DEP., NTIS
 Russia

4011..... Date 700700
 32A000
 A Numerical Method for the Solution of
 Three-Dimensional Neutron-Transport Problems
 Wagner, M. R.; Sargis, D. A.; Cohen, S. C.
 NUCL. SCI. ENG., 41(1), 14-21
 Switzerland

4037..... Date 720000
 111110 32A000 325000
 Numerical Formulation of Multigroup and Discrete Sn
 Methods for Reactor Analysis
 Nassar, S. F.
 AREAEE-153
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.00
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CATEGORY NUMBER 32A000

4058..... Date 730900
 111110 122110 32A000 511110 870092
 Calculation of Neutron Angular Flux Emerging From
 Shells of Natural Uranium Surrounding a Central
 Source
 West, P. H.
 AWRE-0-35/73
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.00
 England

4074..... Date 720800
 112110 112130 112400 112500 32A000 325000 423250
 532000 551110 552110 552220 713000 810000
 Analysis of Joyo Mock-Up Experimental Data By
 Two-Dimensional Gamma-Ray Heating Distribution
 Calculation Code 2d-Gamm
 Iwaki, T.; Seki, Y.; Osada, H.
 JAPFNR-105; PNC-J-72-18
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.00
 Japan

4089..... Date 720900
 32A000
 Effect of Singularities on Approximation in Sn Methods
 Arkuszewski, J.; Kulikowska, T.; Mika, J.
 NUCL. SCI. ENG., 49(1), 20-26; INR-P-1405
 Poland

4095..... Date 740400
 32A000
 Solution of Standard Diamond Difference Equations for
 Discrete Ordinate Neutron Transport Equations
 Equivalent to the PI Approximation in X-Y Geometry
 Jung, J.; Ohtani, N.; Kobayashi, K.; Nishihara, H.
 NUCL. SCI. ENG., 53(4), 355-369
 Japan

4112..... Date 740600
 113100 121200 122210 32A000 513110 810000
 Relativistic Compton Scattering By the Discrete
 Ordinates Method
 Stephan, B. G.; Bridgman, C. J.
 NUCL. SCI. ENG., 54(2), 101-115
 Air Corps Installations

4120..... Date 740300
 111210 122310 32A000 521130 717000 795082 795204
 870003 870006 870041
 Cross-Section Sensitivity of Breeding Ratio in a
 Fusion-Reactor Blanket
 Bartine, D. E.; Alsmiller, R. G., Jr.; Oblow, E. M.;
 Mynatt, F. R.

CATEGORY NUMBER 32A000

NUCL. SCI. ENG., 53(3), 304-318; ORNL-TM-4208
 Oak Ridge National Lab.

4155..... Date 730300
 111130 311000 32A000 511110 521120 551110 731200
 830000 861000
 Application of Adjoint Difference and Surface Integral
 Methods to Selected Deep-Penetration Radiation
 Transport Problems
 Robinson, J. C.; Stevens, P. N.; Hoffman, T. J.
 BRL-CR-98; NEUT-0150-3; AD-765487
 AVAILABILITY-NTIS
 Tennessee Schools

4164..... Date 710600
 010000 111110 32A000 511110 511120 512110 512120
 632110 712000 793000 795082
 Recent Developments in the Shielding of Neutron
 Sources
 Claiborne, H. C.
 ORNL-RSIC-32; CONF-710402-VOL.1, I-65-68
 AVAILABILITY-DEP., NTIS
 Oak Ridge National Lab.

4173..... Date 740800
 111500 32A000 551110
 Weighted Central Difference Equations for the Neutron
 Transport Equation
 Madsen, N. K.
 NUCL. SCI. ENG., 54(4), 376-386
 Lawrence Livermore Lab

4215..... Date 690800
 111110 112400 112500 112600 32A000 511110 512110
 512210 522130 552110 552220 716000 795089 810000
 Some Characteristics of Secondary Gamma Ray
 Transport in Asymmetric Snap Shields
 Mynatt, F. R.; Williams, L. R.
 ANS-SD-7, PP.113-135; CONF-671140, PP.113-135
 AVAILABILITY-DEP., NTIS \$3.00
 Oak Ridge National Lab.

4251..... Date 711021
 111110 112110 112120 112400 112500 112600 122100
 32A000 329000 710000 713000 810000
 Projected Lmfbr Shielding Needs and Acc/rdt Programs
 Lewellen, J. W.; Hannum, W. H.; Hemmig, P. B.
 ANS-SD-13, ARTICLE I
 AVAILABILITY-ANS
 Atomic Energy Commission (U.S.)

CATEGORY NUMBER 32A000

4256. Date 711021
 111500 311000 32A000 511110 512110 512210 610000
 853100
 Effect of Material Composition, Especially Water
 Content, on Neutron Penetration of Concrete Slabs
 Chilton, A. B.
 ANS-SD-13, ARTICLE 6
 AVAILABILITY-ANS
 Illinois Schools

4274. Date 740700
 111110 310000 32A000 510000 521130 795180 795184
 Approximate Numerical Solutions to the
 Time-Dependent Neutron Transport Equation Using
 the Task Algorithm
 Tomlinson, E. T.
 ORNL-TM-4595
 AVAILABILITY-NTIS \$5.45
 Oak Ridge National Lab.

4277. Date 700300
 010000 210000 32A000 329000 521110 521130 531000
 710000 861000 870011
 Recent Advances in Reactor Shielding in France
 Rastoin, J.
 ANS-SD-8, PP.60-81; AD-712532, PP.60-81
 AVAILABILITY-NTIS
 France

4278. Date 700300
 010000 32A000 32E000 32F000 326000 329000 511110
 620000 710000 722100 795022 795081 795121 820000
 861000 870092
 Key Problems in Radiation Shielding in the Federal
 Republic of Germany
 Bunemann, D.
 ANS-SD-8, PP.82-108; AD-712532, PP.82-108
 AVAILABILITY-NTIS
 Germany (West)

4280. Date 700300
 010000 32A000 32F000 511110 521130 632120 721100
 795040 795042 795066 795072 795121 820000 853100
 861000 870006
 Today's Approaches to Reactor Shielding Problems
 Nicks, R.; Penkuhn, H.; Ponti, C.
 ANS-SD-8, PP.113-138; AD-712532, PP.113-138
 AVAILABILITY-NTIS
 Italy

CATEGORY NUMBER 32A000

4301. Date 740700
 32A000
 Convergence of the Discrete Ordinates Method for the
 Transport Equation
 Anselone, P. M.; Gibbs, A. G.
 ORNL-4984
 AVAILABILITY-DEP., NTIS \$4.00
 Oak Ridge National Lab.

4317. Date 730000
 32A000 32C000
 Comparative Efficiency of Certain Finite-Element and
 Finite Difference Methods for a Hyperbolic Problem
 Swartz, B.; Wendroff, B.
 LA-UR-73-226; CONF-730713-1
 AVAILABILITY-DEP., NTIS \$3.00
 Los Alamos Scientific Lab

4378. Date 730000
 111500 32A000 422140 430000 842000
 Influence of Detector Type and Equipment on the
 Sensitivity of Bonner Spheres
 Rohloff, F.; Heinzelmann, M.
 STI/PUB/318, V.1, 269-277; CONF-721203, V.1, 269-277;
 IAEA-S/A-167/3
 AVAILABILITY-IAEA
 Germany (West)

4379. Date 730000
 111500 311000 32A000 422140 430000
 Response of Detectors in Spherical Moderators to
 Monoenergetic Neutrons
 Bricka, M.; Dolias, M.; Lamberieux, J.; Caizergues, J.
 STI/PUB/318, V.1, 279-295; CONF-721203, V.1, 279-295;
 IAEA-SM-167/19
 AVAILABILITY-IAEA
 France

4486. Date 741200
 111110 123000 32A000
 Application of the Probability Table Method to
 Multigroup Calculations Of Neutron Transport
 Cullen, D. E.
 NUCL. SCI. ENG., 55(4), 387-400
 Lawrence Livermore Lab

4488. Date 741200
 111110 32A000 32B000
 Higher Order Variational Principles and Pade
 Approximants for Linear Functionals. (Tech. Note)
 Conn, R. W.
 NUCL. SCI. ENG., 55(4), 468-470
 Wisconsin Schools

CATEGORY NUMBER 32A000

4499. Date 741200
 111500 122110 310000 32A000 511110 795082 861000
 Application of a Discrete-Energy, Discrete-Ordinates
 Technique to the Study Of Neutron Transport in
 Iron
 Ching, J.; Goldstein, H.; Oblow, E. M.
 ORNL-TM-4235
 AVAILABILITY-DEP., NTIS \$5.45
 Oak Ridge National Lab.

4517. Date 740000
 32A000
 Convergence of the Discrete Ordinates Method for the
 Transport Equation
 Anselone, P. M.; Gibbs, A. G.
 BNWL-SA-5016; CONF-740229-1
 AVAILABILITY-DEP., NTIS \$4.50
 Battelle-Northwest

4649. Date 741100
 112B00 220000 32A000 511110 512210 845000
 Neutron and Capture Gamma Spectra in a
 Tissue-Equivalent Slab for Isotropic Irradiation
 Abagyan, A. A.; Dubinin, A. A.; Obaturov, G. M.;
 Shalin, V. A.; Zhuravlev, V. I.; Vrazhnov, Yu. N.;
 Kostin, E. I.
 HEALTH PHYS., 27(5), 481-489
 Russia

4773. Date 740000
 010000 32A000 32C000
 New Transport Methods and Codes
 Lathrop, K. D.
 LA-UR-74-1262
 AVAILABILITY-DEP., NTIS \$4.00
 Los Alamos Scientific Lab

4805. Date 750600
 111500 32A000
 Onetran: a Discrete Ordinates Finite Element Code for
 the Solution of The One-Dimensional Multigroup
 Transport Equation
 Hill, T. R.
 LA-5990-MS
 AVAILABILITY-NTIS \$5.45
 Los Alamos Scientific Lab

4852. Date 741200
 111210 310000 32A000 717000 795082
 Calculation of the Transport of Neutral Atoms in Highly
 Ionized Plasmas Using Neutron Transport Methods
 Greenspan, E.
 NUCL. FUSION, 14(6), 771-778
 New Jersey Schools

CATEGORY NUMBER 32A000

4897. Date 701200
 32A000 795153
 Work on Radiation Transport in India
 Gopinath, D. V.
 CONF-701228, PP.157-165
 AVAILABILITY-OECD \$5.00
 India

4937. Date 751000
 111210 122110 32A000 521130 717000 870041
 Application of Bondarenko Formalism to Fusion
 Reactors
 Soran, P. D.; Dudziak, D. J.
 NBS SPEC.PUB.-425, PP.722-728;
 CONF-750303, PP.722-728
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
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CATEGORY NUMBER 32B000
METHOD OF SOLUTION -
VARIATIONAL

3527. Date 720800
 010000 111110 112110 310000 32A000 32B000 32D000
 32E000 32F000 325000 326000 329000 330000 710000
 713000
 Numerical Reactor Calculations. Proceedings of a
 Seminar, Vienna, 17-21 January 1972
 IAEA
 STI/PUB/307
 AVAILABILITY-IAEA, VIENNA(AUSTRIA) \$26.00
 Austria

3567. Date 720000
 111110 310000 32A000 32B000
 Flux Synthesis Methods in Reactor Physics
 Stacey, W. M., Jr.
 REACTOR TECH., 15(3), 210-238
 Argonne National Lab.

3643. Date 730900
 310000 32B000 551110
 The Application of Phase-Space Finite Elements to the
 Two-Dimensional Neutron Transport Equation in
 X-Y Geometry
 Miller, W. F.; Lewis, E. E.; Rossow, E. C.
 NUCL. SCI. ENG., 52(1), 12-22
 Illinois Schools

CATEGORY NUMBER 32B000

3709..... Date 720000
 111110 32B000 521130 540000
 Thermal Neutron Transport Near a Moderator
 Discontinuity Using the Method Of Weighted
 Residuals. I. Theory
 Beynon, T. D.; Moon, J. R.
 J. PHYS. D, 5(5), 931-949
 England

3759..... Date 730400
 111110 121100 32A000 32B000
 Correction for Higher-Order Scattering Anisotropy in
 Neutron Transport Theory
 Stacey, W. M., Jr.
 J. NUCL. ENERGY, 27(4), 263-272
 Argonne National Lab.

4364..... Date 740400
 32B000 717000
 Variational Methods for Ctr Blanket Studies
 Conn, R.; Stacey, W. M., Jr.
 CONF-721111, PP.964-969
 AVAILABILITY-NTIS
 Wisconsin Schools

4382..... Date 740000
 000000 32B000
 Variational Methods in Nuclear Reactor Physics.
 (Nuclear Science And Technology - 10)
 Stacey, W. M., Jr.
 ACADEMIC PRESS
 Argonne National Lab.

4488..... Date 741200
 111110 32A000 32B000
 Higher Order Variational Principles and Pade
 Approximants for Linear Functionals. (Tech. Note)
 Conn, R. W.
 NUCL. SCI. ENG., 55(4), 468-470
 Wisconsin Schools

4498..... Date 750100
 111500 311000 32B000
 A Generalized Perturbation Theory and Variational
 Principle for Multiple Ratios of Linear and Bilinear
 Functionals. (Tech. Note)
 Greenspan, E.
 NUCL. SCI. ENG., 56(1), 107-112
 Israel

CATEGORY NUMBER 32B000

4636..... Date 750400
 111110 32B000 511110
 Variational Functionals Which Admit Discontinuous
 Trial Functions
 Nelson, P., Jr.
 NUCL. SCI. ENG., 56(4), 340-353
 Texas Schools

CATEGORY NUMBER 32C000
 METHOD OF SOLUTION - FINITE
 ELEMENTS

3679..... Date 730400
 32A000 32C000
 Triangular Mesh Methods for the Neutron Transport
 Equation
 Reed, W. H.; Hill, T. R.
 CONF-730414-P1, PP.110-131; 1; LA-UR-73-479
 AVAILABILITY-NTIS \$27.50 (2 VOL. SET), MF \$0.95
 Los Alamos Scientific Lab

3698..... Date 720700
 32C000
 Variational Derivation of Modal-Nodal Finite Difference
 Equations in Spatial Reactor Physics
 Bailey, P. G.; Henry, A. F.
 COO-3052-5; MITNE-138
 AVAILABILITY-DEP., NTIS \$10.60
 Massachusetts Schools

3740..... Date 720200
 111110 32C000 551110 713000
 Applications of Finite Element Methods in Reactor
 Mathematics. Numerical Solution of the Neutron
 Diffusion Equation
 Kaper, H. G.; Leaf, G. K.; Lindeman, A. J.
 ANL-7925
 AVAILABILITY-NTIS \$3.00
 Argonne National Lab.

3755..... Date 730200
 111110 32C000 551110 810000
 Finite Element Method Applied to Neutron Diffusion
 Problems
 Deppe, L. O.; Hansen, K. F.
 COO-2262-1; MITNE-145
 AVAILABILITY-DEP., NTIS \$8.25
 Massachusetts Schools

CATEGORY NUMBER 32C000

3772..... Date 730500
 32C000
 Finite Elements in Neutron Transport Theory
 Bareiss, E. H.; Abu-Shumays, I. K.
 COO-2280-1
 AVAILABILITY-DEP., NTIS \$5.00
 Illinois Schools

3800..... Date 730600
 32C000
 The Application of Phase-Space Finite Elements to the
 One Dimensional Neutron Transport Equation
 Miller, W. F., Jr.; Lewis, E. E.; Rossow, E. C.
 NUCL. SCI. ENG., 51(2), 148-156
 Illinois Schools

4090..... Date 720900
 32C000 325000
 A Timing Comparison Study for Some High Order
 Finite Element Approx. Procedures and a Low
 Order Finite Difference Approx. Procedure for The
 Numerical Sol. of the Multigroup Neut. Diffusion
 Equation
 Kaper, H. G.; Leaf, G. K.; Lindeman, A. J.
 NUCL. SCI. ENG., 49(1), 27-48
 Argonne National Lab.

4166..... Date 740700
 010000 32C000
 A Status Report on Computational Techniques for
 Finite Element Analyses
 Melosh, R. J.
 NUCL. ENG. DESIGN, 27(2), 274-285
 Virginia Schools

4177..... Date 740800
 111500 32C000 325000 551110
 Application of the Finite Element Method to
 Two-Dimensional Diffusion Problems
 Deppe, L. O.; Hansen, K. F.
 NUCL. SCI. ENG., 54(4), 456-465
 Massachusetts Schools

4317..... Date 730000
 32A000 32C000
 Comparative Efficiency of Certain Finite-Element and
 Finite Difference Methods for a Hyperbolic Problem
 Swartz, B.; Wendroff, B.
 LA-UR-73-226; CONF-730713-1
 AVAILABILITY-DEP., NTIS \$3.00
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CATEGORY NUMBER 32C000

4413..... Date 730800
 111110 32C000 325000 551110
 Finite Element Methods for Reactor Analysis
 Kang, C. M.; Hansen, K. F.
 NUCL. SCI. ENG., 51(4), 456-495
 Massachusetts Schools

4641..... Date 750400
 111110 32C000 551110 810000
 Power Reactor Calculations With the Finite Element
 Program 'fem 2d'. (Tech. Note)
 Schmidt, F. A.; Franke, H. P.
 NUCL. SCI. ENG., 56(4), 431-433
 Germany (West)

4739..... Date 720600
 111110 32C000
 Solution of Multi-Dimensional Neutron Transport
 Equation By Finite Element Method
 Ukai, S.
 J. NUCL. SCI. TECHNOL. (TOKYO), 9(6), 366-373
 Japan

4773..... Date 740000
 010000 32A000 32C000
 New Transport Methods and Codes
 Lathrop, K. D.
 LA-UR-74-1262
 AVAILABILITY-DEP., NTIS \$4.00
 Los Alamos Scientific Lab

4839..... Date 751000
 111110 32C000 330000 551110
 A Two-Dimensional Finite Element Method for Integral
 Neutron Transport Calculations
 Lewis, E. E.; Miller, W. F., Jr.; Henry, T. P.
 NUCL. SCI. ENG., 58(2), 203-212
 Illinois Schools

CATEGORY NUMBER 32D000
 METHOD OF SOLUTION -
 TRANSMISSION-MATRIX

3527..... Date 720800
 010000 111110 112110 310000 32A000 32B000 32D000
 32E000 32F000 325000 326000 329000 330000 710000
 713000
 Numerical Reactor Calculations. Proceedings of a
 Seminar, Vienna, 17-21 January 1972
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CATEGORY NUMBER 32D000

3644. Date 730900
 32D000 32E000 551110
 Two-Dimensional Neutron Transport Calculations Using
 the Response Matrix Method
 Filippone, W. L.
 NUCL. SCI. ENG., 52(1), 23-24
 Mexico

3882. Date 710100
 111500 32D000 511110 521110
 Energy-Dependent Transmission and Reflection in Thin
 Slabs
 Larson, H. A.; McCormick, N. J.
 TRANSP., THEORY AND STAT. PHYS., 1(1), 5-23
 Washington Schools

3912. Date 721000
 32D000
 Applications of the Transmission Matrix Method in
 Gamma Ray Shielding Analysis
 Rohach, A. F.
 CONF-721018-17; CONF-721018, PP.253-267
 AVAILABILITY-NTIS AS CONF-721018-17
 Iowa Schools

4103. Date 720200
 32D000
 Applications of the Transmission Matrix to Radiation
 Shielding
 Rohach, A. F.
 COO-2060-16
 AVAILABILITY-DEP., NTIS
 Kansas Schools

4735. Date 710000
 32D000
 Relation Between the Transfer Matrix Method and
 Case's Method
 Aronson, R.
 TRANSP., THEORY AND STAT. PHYS., 1(3),
 209-224
 New York Schools

4746. Date 730200
 32D000
 Solution of the Stationary Radiation Transport Problem
 for Energy Scattering Using Matrix Functions
 Melcher, H.; Gerth, E.
 KERNENERGIE, 16(2), 47-52
 Germany (West)

CATEGORY NUMBER 32D000

4836. Date 751000
 111110 310000 32D000 32E000 551110
 High-Order Response Matrix Equations in
 Two-Dimensional Geometry
 Weiss, Z.; Lindahl, S. O.
 NUCL. SCI. ENG., 58(2), 166-181
 Sweden

 CATEGORY NUMBER 32E000
 METHOD OF SOLUTION -
 INVARIANT-IMBEDDING

3527. Date 720800
 010000 111110 112110 310000 32A000 32B000 32D000
 32E000 32F000 325000 326000 329000 330000 710000
 713000
 Numerical Reactor Calculations. Proceedings of a
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 IAEA
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 32D000 32E000 551110
 Two-Dimensional Neutron Transport Calculations Using
 the Response Matrix Method
 Filippone, W. L.
 NUCL. SCI. ENG., 52(1), 23-24
 Mexico

3669. Date 730800
 32E000 327000 511110 521110
 A Method of Moments Applied to An Invariant
 Imbedding Solution of a Certain Class of Fredholm
 Integral Equations.
 Boicourt, G. P.
 LA-5356-T; LA-5356-T
 AVAILABILITY-NTIS \$5.45
 Los Alamos Scientific Lab

3836. Date 730000
 000000 32E000
 The Invariant Imbedding Theory of Nuclear Transport
 Mingle, J. O.
 AMERICAN ELSEVIER PUB. CO
 Kansas Schools

CATEGORY NUMBER 32E000

3872. Date 720600
010000 32E000
Application of Invariant Embedding to Reactor Physics.
Nuclear Science And Technology, Volume 9
Shimizu, A.; Aoki, K.
ACADEMIC PRESS, INC
Japan

3921. Date 721000
32E000 795221
Application of the Invariant Imbedding Method to the
Penetration Problems Of Neutrons
Nakai, M.; Komatsu, I.; Sato, Y.; Noguchi, F.;
Shimizu, A.; Hada, M.
CONF-721018, PP.579-595
AVAILABILITY-OECD
Japan

4001. Date 700500
32E000 512110 522110
Solutions of the Equations of Radiative Transfer By An
Invariant Imbedding Approach
Adams, C. N.; Kattawar, G. W.
J. QUANT. SPECTROSC. RADIATIVE TRANSFER,
10(5), 341-356
Texas Schools

4186. Date 740000
112B00 32E000 512110 522110
Radiation Transport With Anisotropic Scattering
Razani, A.
J. QUANT. SPECTROSC. RADIATIVE TRANSFER,
14(5), 339-349
Iran

4193. Date 731000
32E000 511110
Invariant Imbedding and Radiation Dosimetry V: Finite
Order Intensity Of Radiation in a Target Slab
Ueno, S.; Vasudevan, R.; Bellman, R.
MATH.BIOSCI., 18(1-2), 55-66
California Schools

4278. Date 700300
010000 32A000 32E000 32F000 326000 329000 511110
620000 710000 722100 795022 795081 795121 820000
861000 870092
Key Problems in Radiation Shielding in the Federal
Republic of Germany
Bunemann, D.
ANS-SD-8, PP.82-108; AD-712532, PP.82-108
AVAILABILITY-NTIS
Germany (West)

CATEGORY NUMBER 32E000

4381. Date 730000
000000 32E000
Initial Value Methods for Boundary Value Problems -
Theory and Application Of Invariant Imbedding
Meyer, G. H.
ACADEMIC PRESS
Georgia Schools

4696. Date 730900
32E000
Reflection Function From a Double Layer: a New
Approach. Tech. Report No. Rb73-42
Bellman, R.; Vasudevan, R.
USC-113P-69
AVAILABILITY-DEP., NTIS \$4.50
California Schools

4697. Date 730900
310000 32E000
Computational and Analytic Approaches to Radiative
Transfer and Neutron Transport Theory. Technical
Report No. Rb73-46
Poon, P. T.
USC-113P-56; USC-113P-56
AVAILABILITY-DEP., NTIS \$5.00
California Schools

4708. Date 730500
32E000
Invariant Imbedding and Radiation Dosimetry. Ix.
Inverse Problem Of Determining a Plane Source in a
Finite Isotropically Scattering Target Slab
Bellman, R.; Fymat, A. L.; Ueno, S.; Vasudevan, R.
USC-113P-51; PB-234489
AVAILABILITY-DEP., NTIS \$4.00
California Schools

4740. Date 720800
112B00 113100 32E000
Invariant Imbedding and Radiation Dosimetry: Finite
Order Scattering And Transmission Function
Bellman, R.; Ueno, S.; Vasudevan, R.
MATH.BIOSCI., 14(3-4), 235-254
California Schools

4741. Date 721000
112B00 113100 32E000
Invariant Imbedding and Radiation Dosimetry: II.
Integral Recurrence Relations for the Finite Order
Scattering and Transmission Functions
Bellman, R.; Ueno, S.; Vasudevan, R.
MATH.BIOSCI., 15(1-2), 153-162
California Schools

CATEGORY NUMBER 32E000

4742. Date 721200
 112B00 113100 32E000
 Invariant Imbedding and Radiation Dosimetry - III.
 Integral Recurrence Relations for Finite Order X
 and Y Functions
 Bellman, R.; Ueno, S.; Vasudevan, R.
 MATH.BIOSCI., 15(3-4), 195-203
 California Schools

4744. Date 730000
 111500 112B00 32E000
 Invariant Imbedding and Radiation Dosimetry. Iv. Finite
 Order Scattering Of Gamma Radiation By a Target
 Slab
 Bellman, R.; Ueno, S.; Vasudevan, R.
 MATH.BIOSCI., 17(1-2), 89-104
 California Schools

4755. Date 690100
 32E000
 Methods for Albedo Matrix Calculation
 Vertes, P.
 NUKLEONIK, 12, 67-75
 Hungary

4836. Date 751000
 111110 310000 32D000 32E000 551110
 High-Order Response Matrix Equations in
 Two-Dimensional Geometry
 Weiss, Z.; Lindahl, S. O.
 NUCL. SCI. ENG., 58(2), 166-181
 Sweden

CATEGORY NUMBER 32F000
 METHOD OF SOLUTION - SPINNEY
 (REMOVAL-DIFFUSION)

3510. Date 720000
 111500 112B00 32A000 32F000 511110 512110 522130
 795022 795054 795066 820000 861000 870006
 The Removal PI Method for Calculation of Radiation
 Distribution in Shielding
 Valenta, V.
 ZJE-131
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Czechoslovakia

3527. Date 720800
 010000 111110 112110 310000 32A000 32B000 32D000
 32E000 32F000 325000 326000 329000 330000 710000
 713000
 Numerical Reactor Calculations. Proceedings of a
 Seminar, Vienna, 17-21 January 1972
 IAEA

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 AVAILABILITY-IAEA, VIENNA(AUSTRIA) \$26.00
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3942. Date 721000
 111110 32F000 511110 853100
 Comparison of Dine Neutron Attenuation Calculations
 With Experimental Results for a Wide Variety of
 Simulated Concrete Configurations for a Fast And
 Thermal Reactor Spectrum
 Verschuur, K. A.
 CONF-721018, PP.996-1008
 AVAILABILITY-OECD
 Netherlands (Holland)

4072. Date 720300
 111110 32A000 32F000 551110 552210 713000 795125
 810000
 Evaluation of the Two-Dimensional Shielding Code for a
 Fast Reactor Shield Design and Its Application
 Tanaka, Y.; Suzuki, I.; Otani, M.
 JAPFNR-68; PNC-J-213-72-3-1
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Japan

4278. Date 700300
 010000 32A000 32E000 32F000 326000 329000 511110
 620000 710000 722100 795022 795081 795121 820000
 861000 870092
 Key Problems in Radiation Shielding in the Federal
 Republic of Germany
 Bunemann, D.
 ANS-SD-8, PP.82-108; AD-712532, PP.82-108
 AVAILABILITY-NTIS
 Germany (West)

4280. Date 700300
 010000 32A000 32F000 511110 521130 632120 721100
 795040 795042 795066 795072 795121 820000 853100
 861000 870006
 Today's Approaches to Reactor Shielding Problems
 Nicks, R.; Penkuhn, H.; Ponti, C.
 ANS-SD-8, PP.113-138; AD-712532, PP.113-138
 AVAILABILITY-NTIS
 Italy

CATEGORY NUMBER 321000
 METHOD OF SOLUTION -
 ONE-VELOCITY

3704. Date 720000
 321000
 A Transport Theory Calculation of Neutron Flux,
 Disadvantage Factors And Effective Diffusion

CATEGORY NUMBER 321000

Coefficients in Square Cells and Slabs
Williams, M. M. R.; Wood, J.
J. NUCL. ENERGY, 26(3), 141-162
England

3713. Date 710000
321000

Solution to the Monoenergetic Neutron Boltzmann
Equation for a Finite Parallelepiped
Boffi, V. C.; Molinari, V. G.
TRANSP., THEORY AND STAT. PHYS., 1(4),
313-328
Italy

3714. Date 710000
321000

On the Solution of the Monoenergetic Neutron
Boltzmann Equation In Cylindrical Geometry
Premuda, F.
TRANSP., THEORY AND STAT. PHYS., 1(4),
329-349
Italy

3727. Date 731200
122310 321000 326000

Effects of Highly Anisotropic Scattering on
Monoenergetic Neutron Transport At Deep
Penetrations
Oblov, E.; Kin, K.; Goldstein, H.; Wagschal, J. J.
ORNL-TM-4408
AVAILABILITY-NTIS
Oak Ridge National Lab.

3773. Date 730500
321000

Adjoining Appropriate Singular Elements to Transport
Theory Computations
Abu-Shumays, I. K.; Bareiss, E. H.
COO-2280-2
AVAILABILITY-DEP., NTIS (U. S. SALES ONLY)
\$4.50
Illinois Schools

3801. Date 730600
321000

One-Speed Neutron Transport Problems - Part I. Exact
Transfer Matrix Formulation
Aronson, R.
NUCL. SCI. ENG., 51(2), 157-165
New York Schools

CATEGORY NUMBER 321000

3802. Date 730600
321000 326000

One-Speed Neutron Transport Problems - Part II: Slab
Transmission And Reflection and Finite Reflector
Critical Problems
Caroll, G.; Aronson, R.
NUCL. SCI. ENG., 51(2), 166-179
New York Schools

3812. Date 731200
321000

The Collided Flux Expansion Method for
Time-Dependent Neutron Transport
Ganapol, B. D.; Grossman, L. M.
NUCL. SCI. ENG., 52(4), 454-460
California Schools

3825. Date 730500
111500 321000

On a Multidirectional Modal Representation for
Neutron Transport Analysis
Harms, A. A.; Kushneriuk, S. A.
NUCL. SCI. ENG., 51(1), 76-78
Canada

4129. Date 740700
111500 321000

A Solution of the Milne Problem Using Full-Range
Completeness of Case's Eigenfunctions
Loyalka, S. K.
NUCL. SCI. ENG., 54(3), 353-356
Missouri Schools

4134. Date 740500
111500 321000 330000 521130

Extension of Case's Method to the Two-Region Critical
Cylinder and Its Application As An Analytic
Standard
Westfall, R. M.
NASA-TM-X-71522; N74-17424
AVAILABILITY-NTIS \$9.50
Virginia Schools

4165. Date 740300
111500 321000 510000

A Direct Calculation of the Time-Dependent Spatial
Moments of the One-Speed Neutron Transport
Model
Ganapol, B. D.
NUCL. SCI. ENG., 53(3), 350-351
France

CCATEGORY NUMBER 321000

4176..... Date 740800
111500 321000

Partial-Range Analysis of the One-Speed Neutron
Transport Equation With Anisotropic Scattering.
(Tech. Note)

Attia, E. A.; Harms, A. A.
NUCL. SCI. ENG., 54(4), 450-455
Canada

4190..... Date 740000
111500 321000

Solutions of the Steady, One-Speed Neutron Transport
Equation for Small Mean Free Paths

Larsen, E. W.
J. MATH. PHYS., 15(3), 299-305
New York Schools

4270..... Date 740500
321000 721100

The Dipole Response Coefficient for Cylindrical
Channels in Neutron Diffusion Theory

Love, M. D.; Kushneriuk, S. A.
AECL-4826
AVAILABILITY-CHALK RIVER NUCLEAR
LABORATORIES, CHALK RIVER, ONTARIO
Canada

4309..... Date 730300
111110 310000 321000 330000

Boundedness, Continuity, Positivity, Convergence and
Summability for The Solution of the Neutron
Boltzmann Equation in a Multi Region

Premuda, F.
RT/FI-(73)11
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$5.25
Italy

4414..... Date 741000
321000 330000

Transport Calculations of the Neutron Escape
Probability. (Tech. Note)

Melandri, A. M.; Premuda, F.; Prelati, G. P.
NUCL. SCI. ENG., 55(2), 225-233
Italy

4472..... Date 720000
111500 321000 326000 511110

Partial-Range Legendre Polynomial Solution of the
Neutron-Transport Equation

Garland, W. J.; Harms, A. A.
TRANSP., THEORY AND STAT. PHYS., 2(4),
347-364
Canada

CATEGORY NUMBER 321000

4473..... Date 730100
111500 321000 521110

A New Method for the Calculation of the Emergent
Distributions for The Anisotropic Slab Albedo
Problem

Shultis, J. K.
J. COMP. PHYS., 11(109), 126
Kansas Schools

4626..... Date 740200
321000 510000 511110 795180

The Continued Fraction Approximation: a
Time-Dependent Transport Method

Yingling, W. A.; Bridgman, C. J.
NUCL. SCI. ENG., 53(2), 123-136
Air Corps Installations

4627..... Date 740200
321000 510000 511110

Exact Time-Dependent Spatial and Legendre Moments
for the Monoenergetic Transport Equation

Canfield, E. H.
NUCL. SCI. ENG., 53(2), 137-140
Lawrence Livermore Lab

4661..... Date 730600
111110 321000 330000 551110 810000

An Integral Transport Theory Calculation of Neutron
Flux Distributions In Rectangular Lattice Cells

Wood, J.; Williams, M. M.
J. NUCL. ENERGY, 27(6), 377-394
England

4731..... Date 730000
111500 321000 326000 511110

Parallel Shooting Solution of the Neutron Transport
Equation in Spherical Geometry

Canosa, J.; Penafiel, H. R.
J. COMP. PHYS., 13(3), 380-397
Ibm Corp

4738..... Date 730300
111500 321000 330000

Convergence in the Mean of Solutions to the Neutron
Integral Boltzmann Equation in Three-Dimensional
Systems

Boffi, V. C.; Premuda, F.; Spiga, G.
J. MATH. PHYS., 14(3), 346-352
Italy

CATEGORY NUMBER 321000

4829..... Date 750800
 111500 321000 326000 551110
 The Extended P1 Approximation of the
 Multidimensional Neutron Transport Equation
 Sigg, B.
 NUCL. SCI. ENG., 57(4), 277-291
 Switzerland

CATEGORY NUMBER 322000
 METHOD OF SOLUTION -
 STRAIGHT-AHEAD-APPROXIMATION

4255..... Date 711021
 111110 310000 322000 325000 551110 552110 552210
 710000 713000
 Two-Dimensional Shielding Calculation Using a
 Combination of Diffusion Theory and Line-Of-Sight
 Method
 Vossebrecker, H.
 ANS-SD-13, ARTICLE 5
 AVAILABILITY-ANS
 Germany (West)

4291..... Date 740900
 111500 112B00 322000 329000 632200
 Ray Tracing Through Reactor Shields
 Wallace, O. J.; Cook, N. D.
 NUCL. TECH., 23(3), 306-317
 Bettis Atomic Power Lab.

4867..... Date 750701
 111210 322000 421000
 A Pinhole for Producing a Close-in Image of An
 Extended 14-Mev Neutron Source
 Matthews, S. M.
 UCRL-51860
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

CATEGORY NUMBER 323000
 METHOD OF SOLUTION -
 ASYMPTOTIC

4124..... Date 740700
 112B00 323000 328000 512110 820000 870006 870082
 Prediction of Gamma-Ray Spectra at Deep Penetration
 Utilizing The Equilibrium Angular Distribution
 Johnson, D. M.
 NUCL. SCI. ENG., 54(3), 235-253
 England

CATEGORY NUMBER 323000

4128..... Date 740700
 111110 111220 323000
 A Theory for Pulsed-Neutron Experiments in Reactor
 Lattices
 Van Binnebeek, J. J.
 NUCL. SCI. ENG., 54(3), 341-352
 Belgium

4633..... Date 740200
 111110 122110 323000
 A New Form of the Bn Transport Equations. (Tech.
 Note)
 Ligou, J.; Stepanek, J.
 NUCL. SCI. ENG., 53(2), 255-256
 Switzerland

CATEGORY NUMBER 324000
 METHOD OF SOLUTION -
 FERMI-AGE

3985..... Date 720100
 324000
 An Application of Modal Analysis to the Approximate
 Solution of The Fermi-Age Equation
 Al-Ammar, M. A.; Obradovic, D.; Tudhope, R. G.
 J. BRIT. NUCL. ENERGY SOC., 11(1), 43-48
 Iraq

4415..... Date 741000
 111500 324000
 On the Randomness of a Neutron's Kinetic Energy As It
 Slows Down By Elastic Collisions in An Infinite
 Medium. (Tech. Note)
 Barnett, C. S.
 NUCL. SCI. ENG., 55(2), 234-242
 Lawrence Livermore Lab

4456..... Date 730000
 111110 324000 521110 632110 795238 853100
 Rapid Method of Calculating the Flux and Neutron
 Spectra in the Case of A Criticality Accident (Carnac
 Program)
 Bessis, J.
 ORNL-TR-2825; CEA-N-1612 (IN FRENCH)
 AVAILABILITY-DEP., NTIS
 France

4475..... Date 720200
 111110 324000 540000 870001
 Generalized Exact Solution of the Slowing Down
 Equation
 Dawn, T. Y.
 J. NUCL. SCI. TECHNOL. (TOKYO), 9(2), 93-96

CATEGORY NUMBER 324000

4489..... Date 741200
 111110 121100 122110 324000 511110 713000 810000
 Neutron Moderation in Fast Reactors in the Presence of
 Wide Scattering Resonances: Analysis of Methods.
 (Tech. Note)
 Palmiotti, G.; Salvatores, M.
 NUCL. SCI. ENG., 55(4), 476-480
 Italy

4628..... Date 740200
 111500 121100 324000 540000
 Neutron Slowing Down Via Inelastic Scattering in Heavy
 Moderators- I. Steady State
 Lineberry, M. J.; Corngold, N.
 NUCL. SCI. ENG., 53(2), 153-161
 California Schools

4824..... Date 750500
 111110 111500 324000 511110 861000
 On the Treatment of First- and Last-Collision Effects in
 Neutron Age Theory
 Epstein, G.; Becker, M.
 NUCL. SCI. ENG., 57(1), 81-84
 New York Schools

4834..... Date 750900
 111110 111500 324000
 Moderating Parameters for a Monoenergetic Source and
 a Fission Source. (Tech. Note)
 Yamamura, Y.; Kimura, H.
 NUCL. SCI. ENG., 58(1), 98-103
 Japan

CATEGORY NUMBER 325000
 METHOD OF SOLUTION -
 MULTIGROUP-DIFFUSION

3527..... Date 720800
 010000 111110 112110 310000 32A000 32B000 32D000
 32E000 32F000 325000 326000 329000 330000 710000
 713000
 Numerical Reactor Calculations. Proceedings of a
 Seminar, Vienna, 17-21 January 1972
 IAEA
 STI/PUB/307
 AVAILABILITY-IAEA, VIENNA(AUSTRIA) \$26.00
 Austria

CATEGORY NUMBER 325000

3627..... Date 730600
 111110 325000 511110
 Three-Dimensional Power Distribution Analysis
 Hassan, H. A.; Wittkopf, W. A.
 BAW-10061
 AVAILABILITY-BABCOCK AND WILCOX, POWER
 GENERATION GROUP, NUCLEAR POWER
 GENERATION DIV., P.O. BOX 1260,
 LYNCHBURG, VA. 24505
 Babcock and Wilcox Co.

3631..... Date 720000
 325000 631000
 Two-Dimensional Shielding Calculations Using a
 Combination of Diffusion Theory and Line-Of-Sight
 Method
 Vossebrecker, H.
 ATOMKERNENERGIE, 19(1), 14-16
 Germany (West)

3633..... Date 730600
 111110 325000 511110 551110
 An Energy Dependent Spatial Mesh Approximation for
 Neutron Group Diffusion Problems. (Lwbr
 Development Program)
 Yasinsky, J. B.; Natelson, M.
 WAPD-TM-1062
 AVAILABILITY-NTIS
 Westinghouse (Except Bettis)

3681..... Date 730300
 111110 112110 325000 422110 551110 710000 713000
 810000
 Analysis of the Ftr/emc Neutron Shielding Experiment
 Boulette, E.; Marr, D.; Bunch, W.
 HEDL-TME-73-27
 AVAILABILITY-AT (TIC) AEC
 Westinghouse

3682..... Date 730200
 325000
 Calculation of the Coefficient of Anisotropic Diffusion in
 Cylindrical Cavities and of the Generalized Form Xy
 Anton, V.
 RT/FI(73)6
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 \$4.00
 Italy

CATEGORY NUMBER 325000

3758..... Date 730400
 111210 111220 325000 511120 820000
 Calculation of Neutron Slowing Down Spectrum in
 Water Using Green's Function
 Bhatti, R. A.
 J. NUCL. ENERGY, 27(4), 247-262
 Pakistan

3761..... Date 730500
 111110 325000 713000
 On the Concept of Energy-Dependent Buckling in
 Multigroup Diffusion Theory-III
 Beynon, T. D.
 J. NUCL. ENERGY, 27(5), 327-334
 England

3808..... Date 730700
 325000
 Multigroup Diffusion Coefficients From Transport
 Theory. (Tech. Note)
 Sheaks, O. J.; Sullivan, L. H.; Murray, R. L.
 NUCL. SCI. ENG., 51(3), 331-335
 Maryland Schools

3838..... Date 731000
 325000
 Alternative Numerical Methods for One-Dimensional
 Multigroup Diffusion Problems
 Stewart, H. B.
 KFK-1856
 AVAILABILITY-GESELLSCHAFT FUR
 KERNFORSCHUNG M.B.H., KARLSRUHE
 Germany (West)

3883..... Date 730000
 111110 32A000 325000 511110 795082 861000 870011
 Comparison of Transport and Diffusion Theory for Fast
 Reactor Shielding Calculations
 Sahin, S.
 ATOMKERNENERGIE, 22(1), 24-25
 Oak Ridge National Lab.

3887..... Date 711200
 111110 112110 112120 325000 521130 522130
 An Analysis of Shielding Design of Triga Mark-II
 Reactor - After Power Upgrading By 2.5 Folds
 Lee, C. K.
 J. KOREAN NUCL. SOC., 3(4), 185-197
 Korea

CATEGORY NUMBER 325000

3919..... Date 721000
 325000
 A Modified Form of Diffusion Theory for Use in
 Calculating Neutron Penetration in Practical Shields
 Bendall, D. E.; Cripps, S. J.
 CONF-721018, PP.501-537
 AVAILABILITY-OECD
 England

3972..... Date 710000
 325000
 Difference Method of Solution of Two-Dimensional
 Multigroup Time-Independent Diffusion Equations
 Krysl, V.
 ZJE-101
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Czechoslovakia

4027..... Date 690200
 325000
 Numerical Method of Solving Two-Dimensional and
 Three-Dimensional Diffusion Equations
 Buleev, N. I.
 NP-TR-1770; CT0/584
 AVAILABILITY-HC TIC
 Russia

4037..... Date 720000
 111110 32A000 325000
 Numerical Formulation of Multigroup and Discrete Sn
 Methods for Reactor Analysis
 Nassar, S. F.
 AREAE-153
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.00
 Egypt

4074..... Date 720800
 112110 112130 112400 112500 32A000 325000 423250
 532000 551110 552110 552220 713000 810000
 Analysis of Joyo Mock-Up Experimental Data By
 Two-Dimensional Gamma-Ray Heating Distribution
 Calculation Code 2d-Gamm
 Iwaki, T.; Seki, Y.; Osada, H.
 JAPFNR-105; PNC-J-72-18
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.00
 Japan

CATEGORY NUMBER 325000

4083. Date 720000
 111110 325000 329000
 Gamma-Matrix Concept, a Method for Treating
 Heterogeneities in Diffusion Calculations
 Petersen, T.; Kirkegaard, P.
 RISO-M-1607
 AVAILABILITY-NTIS (U.S. SALES ONLY) \$3.25
 Denmark

4090. Date 720900
 32C000 325000
 A Timing Comparison Study for Some High Order
 Finite Element Approx. Procedures and a Low
 Order Finite Difference Approx. Procedure for The
 Numerical Sol. of the Multigroup Neut. Diffusion
 Equation
 Kaper, H. G.; Leaf, G. K.; Lindeman, A. J.
 NUCL. SCI. ENG., 49(1), 27-48
 Argonne National Lab.

4098. Date 740400
 325000
 Reciprocity Relations in Response Matrix Theory
 Lindahl, S. O.
 NUCL. SCI. ENG., 53(4), 475-478
 Sweden

4130. Date 740700
 111110 325000 719B00 719B00 721100
 Axial Neutron Streaming in Gas-Cooled Fast Reactors.
 (Tech. Note)
 Kohler, P.; Ligou, J.
 NUCL. SCI. ENG., 54(3), 357-360

4132. Date 740700
 111110 325000 551110 713000 870011 870092 885000
 Anisotropic Neutron Diffusion in Lattices of the
 Zero-Power Plutonium Reactor Experiments
 Gelbard, E. M.
 NUCL. SCI. ENG., 54(3), 327-340
 Argonne National Lab.

4177. Date 740800
 111500 32C000 325000 551110
 Application of the Finite Element Method to
 Two-Dimensional Diffusion Problems
 Deppe, L. O.; Hansen, K. F.
 NUCL. SCI. ENG., 54(4), 456-465
 Massachusetts Schools

CATEGORY NUMBER 325000

4255. Date 711021
 111110 310000 322000 325000 551110 552110 552210
 710000 713000
 Two-Dimensional Shielding Calculation Using a
 Combination of Diffusion Theory and Line-Of-Sight
 Method
 Vossebrecker, H.
 ANS-SD-13, ARTICLE 5
 AVAILABILITY-ANS
 Germany (West)

4269. Date 730500
 111110 325000
 Ctd: a Computer Program to Solve the Three
 Dimensional Multi-Group Diffusion Equation in X,
 Y, Z, and Triangular Z Geometries
 Fletcher, J. K.
 TRG-REPORT-2344(R)
 AVAILABILITY-UNITED KINGDOM ATOMIC
 ENERGY AUTHORITY
 England

4413. Date 730800
 111110 32C000 325000 551110
 Finite Element Methods for Reactor Analysis
 Kang, C. M.; Hansen, K. F.
 NUCL. SCI. ENG., 51(4), 456-495
 Massachusetts Schools

4485. Date 741200
 111210 310000 325000 717000
 Transport and Diffusion Equations in Toroidal
 Geometry
 Pomraning, G. C.; Stevens, C. A.
 NUCL. SCI. ENG., 55(4), 359-367
 Science Applications, Inc.

4635. Date 750400
 111110 325000 551110 810000
 A Generalized Diffusion Theory for Calculating the
 Neutron Transport Scalar Flux
 Alcouffe, R. E.
 NUCL. SCI. ENG., 56(1), 321-339
 Los Alamos Scientific Lab

4667. Date 730000
 111220 325000 424000 540000 551110 851000
 Calibration of Neutron Gauges for Measuring of the Soil
 Moisture Content In The 4 Pi Geometry. I. Two
 Group Diffusion Theory, Case of An Empty Hole
 Wozniak, J.
 ITJ-27
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.50

CATEGORY NUMBER 325000

Poland

4782. Date 730300
325000
Mathematical and Computational Problems in Reactor
Calculations
Babuska, I.; Kellogg, R. B.
ORO-3443-43
AVAILABILITY-NTIS \$3.50
Maryland Schools

4797. Date 740500
325000
Approximate Solution of the Multigroup Neutron
Diffusion Equations By Synthesis Methods
Howarth, N.
RD/B/N-3032
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$5.25
England

4822. Date 750500
111110 325000 551110
A New Method for the Numerical Solution of the
Two-Dimensional Neutron Diffusion Equation
Aoki, K.; Tsuiki, M.
NUCL. SCI. ENG., 57(1), 53-62
Japan

4837. Date 751000
111110 325000
A Leakage Iterative Method for Solving the
Three-Dimensional Neutron Diffusion Equation
Naito, Y.; Maekawa, M.; Shibuya, K.
NUCL. SCI. ENG., 58(2), 182-192
Japan

CATEGORY NUMBER 326000
METHOD OF SOLUTION
SPHERICAL-HARMONICS
AND
POLYNOMIAL EXPANSIONS

3527. Date 720800
010000 111110 112110 310000 32A000 32B000 32D000
32E000 32F000 325000 326000 329000 330000 710000
713000
Numerical Reactor Calculations. Proceedings of a
Seminar, Vienna, 17-21 January 1972
IAEA
STI/PUB/307
AVAILABILITY-IAEA, VIENNA(AUSTRIA) \$26.00
Austria

CATEGORY NUMBER 326000

3591. Date 720500
326000
Asymptotic Pn and Double Pn Approximations
Huang, S. T.; Lewis, E. E.
J. NUCL. ENERGY, 26(5), 231-236
Illinois Schools

3657. Date 720000
111110 326000 511110
Theory and Calculation Programs for Solution of the
Neutron Transport Equation According to Pn and
the Double Pn Method for Slab Geometry
Schumann, U.; Bartsch, G.
TUBIK-16 (IN GERMAN)
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$10.25
Germany (West)

3727. Date 731200
122310 321000 326000
Effects of Highly Anisotropic Scattering on
Monoenergetic Neutron Transport At Deep
Penetrations
Oblow, E.; Kin, K.; Goldstein, H.; Wagschal, J. J.
ORNL-TM-4408
AVAILABILITY-NTIS
Oak Ridge National Lab.

3802. Date 730600
321000 326000
One-Speed Neutron Transport Problems - Part II: Slab
Transmission And Reflection and Finite Reflector
Critical Problems
Carroll, G.; Aronson, R.
NUCL. SCI. ENG., 51(2), 166-179
New York Schools

3850. Date 681200
326000 721200
Investigation of the Accuracy of the P2-Approximation
in Describing Neutron Diffusion in a Medium With
a Duct
Rumyantsev, G. Ya.; Dmitrieva, V. A.
SOVIET J. AT. ENERGY (ENGLISH TRANSL.),
25(6), 1346-1347
Russia

4122. Date 740300
326000
Transport Equation in An Accelerated Material.
Legendre Moments, and A Diffusion
Approximation. (Tech. Note)
Wienke, B. R.
NUCL. SCI. ENG., 53(3), 329-332

CATEGORY NUMBER 326000

Los Alamos Scientific Lab

4136. Date 730800
111500 326000Second-Order Discrete Ordinate Pl Equations in
Multi-Dimensional Geometry

Jung, J.; Ohtani, N.; Kobayashi, K.; Nishihara, H.

J. NUCL. ENERGY, 27(8), 577-590

Japan

4152. Date 720000
111500 112B00 326000Using the Method of Spherical Harmonics for the
Calculation of Shielding. Part 1 the Pn
Approximation

Valenta, V.

ZJE-132

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)

\$8.00

Czechoslovakia

4153. Date 720000
111500 112B00 326000Using the Method of Spherical Harmonics for the
Calculation of Shielding. Part 2 the 2pn
Approximation

Hep, J.; Valenta, V.

ZJE-133

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)

\$8.75

Czechoslovakia

4154. Date 720000
111500 112B00 326000Using the Method of Spherical Harmonics for the
Calculation of Shielding. Part 3 Generalized Pn
Approximation

Valenta, V.; Veverka, O.

ZJE-134

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)

\$6.00

Czechoslovakia

4206. Date 740200
111110 326000An Approximation Procedure for the Neutron Transport
Equation Based on The Use of Surface Harmonic
Tensors

Kaper, H. G.; Leaf, G. K.; Lindeman, A. G.

ANL-8081

Argonne National Lab.

CATEGORY NUMBER 326000

4278. Date 700300
010000 32A000 32E000 32F000 326000 329000 511110
620000 710000 722100 795022 795081 795121 820000
861000 870092Key Problems in Radiation Shielding in the Federal
Republic of Germany

Bunemann, D.

ANS-SD-8, PP.82-108; AD-712532, PP.82-108

AVAILABILITY-NTIS

Germany (West)

4453. Date 740800
111500 326000 511110The Solution of the Multigroup Neutron Transport
Equation Using Spherical Harmonics

Fletcher, J. K.

TRG-REPORT-2547

AVAILABILITY-PUBLIC RELATIONS BRANCH,

U.K. ATOMIC ENERGY AUTHORITY,

REACTOR GROUP, RISLEY, WARRINGTON,

LANCASHIRE, WA3 6AT

England

4472. Date 720000
111500 321000 326000 511110Partial-Range Legendre Polynomial Solution of the
Neutron-Transport Equation

Garland, W. J.; Harms, A. A.

TRANSP., THEORY AND STAT. PHYS., 2(4),

347-364

Canada

4617. Date 740900
112760 326000 522130 820000 851000Computer Modeling of Terrestrial Gamma-Radiation
Fields

Kirkegaard, P.; Lovborg, L.

RISO-303

AVAILABILITY-LIBRARY, DANISH ATOMIC

ENERGY COMMISSION, RISO, DK-4000

ROSKILDE, DENMARK

Denmark

4731. Date 730000
111500 321000 326000 511110Parallel Shooting Solution of the Neutron Transport
Equation in Spherical Geometry

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3590..... Date 720600
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 Kansas Schools

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 Czechoslovakia

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Everett, C. J.; Cashwell, E. D.; Turner, G. D.
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YORK 10523
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Howerton, R. J.
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Ritchie, R. H.
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4142. Date 730000
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Germany (West)

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4254. Date 711021
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795199 795200 830000 861000

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the Simulation of The Adjoint Neutron Transport
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ORNL-RSIC-33, PP.197-207
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Los Alamos Scientific Lab

4277. Date 700300
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Rastoin, J.
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AVAILABILITY-NTIS
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4278. Date 700300
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 Cramer, S. N.; Oblow, E. M.
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 Golstein, N. P.
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 Everett, C. J.; Orr, S. R.
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 Deimel, E.; Deimel, P.
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 Koblinger, L.
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 Wilson, D. G.
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4516. Date 680000
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 Mueller, J. W.
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 Bowman, K. O.; Shenton, L. R.
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4544. Date 720000
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 Monte Carlo Method
 Patau, J. P.
 FRNC-TH-229; FRNC-TH-229
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4579. Date 741100
 112710 220000 329000 610000 632200 845000
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 for Source and Target Organs of An Adult for
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 Snyder, W. S.; Ford, M. R.; Warner, G. G.;
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 Noack, K.; Heinzelmann, B.; Wand, H.; Giessing, R.;
 Linemann, H.
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 Germany (West)

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 Emmett, M. B.
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 Jones, T. D.
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CATEGORY NUMBER 329000

4634. Date 74
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 Monte Carlo Calculations On Parallel Compute
 Cavanaugh, G. P.; Chilton, A. B.
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 Illinois Schools

4655. Date 720
 111110 112110 220000 329000 760000 845000 870098
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 Jones, T. D.; Auxier, J. A.
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 Loewe, W. E.
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 Lawrence Livermore Lab

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 Demonsant, J.
 LCA-NT-217-E-T (IN FRENCH)
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 France

4777. Date 740000
 329000
 The Bell Transform
 Everett, C. J.; Cashwell, E. D.
 LA-UR-74-831; CONF-740710-1
 AVAILABILITY-DEP., NTIS \$4.00
 Los Alamos Scientific Lab

4778. Date 740000
 010000 329000
 Monte Carlo Code Development in Los Alamos
 Carter, L. L.; Cashwell, E. D.; Everett, C. J.;
 Forest, C. A.; Schrandt, R. G.; Taylor, W. M.;
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Virginia Schools

4101..... Date 710730
421130
Development of An Ne-213 Fast-Neutron Tac
Spectrometer System Utilizing Off-Line Gamma-Ray
Discrimination
Seck, R. E.; Meyer, W.; Krick, M. S.
COO-2049-6
AVAILABILITY-DEP., NTIS
Kansas Schools

4102..... Date 710730
421130
Fast Neutron Spectroscopy in Aqueous Media Using An
Ne-213 Proton Recoil Neutron Spectrometer System
Coolbaugh, M. J.; Faw, R. E.; Meyer, W.
COO-2049-7
AVAILABILITY-DEP., NTIS
Kansas Schools

4194..... Date 730800
111500 421130 430000 794000
Organic Scintillator Neutron Detector Efficiency - a
Comparison Of Experimental Results With
Predictions
Plasek, R.; Miljanic, D.; Valkovic, V.; Liebert, R. B.;
Phillips, G. C.
NUCL. INSTR. METHODS, 111(2), 251-252
Texas Schools

4202..... Date 731100
111210 111220 421000 421130
Spectrum Measurements in 15 Mev Neutron Therapy
Beams
Hannan, W. J.; Porter, D.; Lawson, R. C.;
Raiton, R.
PHYS. MED. BIOL., 18(6), 808-820
Scotland

CATEGORY NUMBER 421130

4248..... Date 710830
111220 421130 421160 430000 794000
Experimental Studies of Unfolding
Kendrick, H.; Harris, L., Jr.
GULF-RT-A10821; ANS-SD-12,ARTICLE 7
AVAILABILITY-GULF RADIATION TECH., P.O.
BOX 608, SAN DIEGO, CALIF. 92112
Gulf General Atomic

4287..... Date 740900
020000 111110 421110 421130 422140 511110 551110
713000 861000
Sdt 11. the Ornl Benchmark Experiment for Neutron
Transport Through Iron And Stainless Steel, Part 1
Maerker, R. E.
ORNL-TM-4222; ENDF-188
AVAILABILITY-NTIS
Oak Ridge National Lab.

4288..... Date 740900
020000 111110 421110 421130 422140 511110 551110
713000 870011
Sdt 12. the Ornl Benchmark Experiment for Neutron
Transport Through Sodium
Maerker, R. E.
ORNL-TM-4223; ENDF-189
AVAILABILITY-NTIS
Oak Ridge National Lab.

4342..... Date 691117
111210 421130 421200 430000 510000 511120 853100
Time-Dependent Fast Neutron and Secondary Gamma
Ray Spectrum Measurements In Concrete, Vol.1
Harris, L., Jr.; Kendrick, H.; Naliboff, Y. D.;
Sperling, S. M.
GA-9751, VOL.1; DASA-2401-1; AD-711839
AVAILABILITY-NTIS
Gulf General Atomic

4372..... Date 730000
111210 111500 421130 430000 841000
Experimental Determination of Response Functions of
An Organic Liquid Scintillator in the Energy Range
From 0.6 to 12.4 Mev
Schanzler, L.; Stuker, S.
STI/PUB/318,V.1,87-95; CONF-721203,V.1,87-95;
IAEA-SM-167/54
AVAILABILITY-IAEA
Germany (West)

CATEGORY NUMBER 421130

4383. Date 731009
111110 321000 421130 551120 861000 870003 870013
870082 882000

Fast-Neutron Transport in Shields Having Limited
Transverse Dimensions

Bass, L. P.; Bozin, G. M.; Germogenova, T. A.;
Degtyarev, S. G.; Suverov, A. P.;
Tikhonov, V. K.; Tsypin, S. G.; Shul'gin, A. I.
FTD-HT-23-854-73; AD-768493

AVAILABILITY-NTIS
Russia

4541. Date 710500
421130
Investigation of the Neutron Spectrum in the Lower Ev
Region By a Scatter Peel-Off Method

Bayer, A.
NP-19091
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Germany (West)

4552. Date 721016
421130 430000 794000
Proton-Recoil Proportional Counter for Neutron
Spectrometry in Fast Reactors
Verbinski, V. V.
GULF-RT-B-12155
AVAILABILITY-DEP., NTIS
Gulf General Atomic

4642. Date 740600
111110 112B00 421130 870095 870098
A Proton Recoil Spectrometer for In-Pile Measurements
in the Energy Range Between 500 Kev and 3 Mev
Korthaus, E.
EURFNR-1197; KFK-1994(IN GERMAN)
AVAILABILITY-DEP., NTIS
Germany (West)

4810. Date 741200
111220 420000 421130
Absolute Neutron Flux Determination in the Energy
Region Between 0.4 Mev And 2 Mev
Kaeppler, F.
STI/PUB-371, PP.75-83; CONF-721127, PP.75-83;
IAEA-PL-246-2/14
AVAILABILITY-IAEA
Germany (West)

CATEGORY NUMBER 421130

4811. Date 741200
111220 410000 421110 421130
Neutron Flux Measurements at the LII Linac
Czirr, J. B.; Sidhu, G. S.
STI/PUB-371, PP.85-88; CONF-721127, PP.85-88;
IAEA-PL-246-2/15
AVAILABILITY-IAEA
Lawrence Livermore Lab

4816. Date 731015
420000 421130 423230 430000
Radiative Energy Transfer of Liquid Scintillation
Ishikawa, H.; Takiue, M.
NUCL. INSTR. METHODS, 112(3), 431-435
Japan

4910. Date 751000
111110 111210 32A000 421130 511120 795082 842000
861000 870004 870041
Integral Test of Cross Sections Using Neutron Leakage
Spectra From Spheres Of Iron, Niobium, Beryllium,
and Polyethylene
Johnson, R. H.; Dorning, J. J.; Wehring, B. W.
NBS SPEC.PUB.-425, PP.169-172;
CONF-750303, PP.169-172
AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
SOLD IN SETS ONLY
Illinois Schools

CATEGORY NUMBER 421140
INSTRUMENTS - ENERGY SPECTRA -
NEUTRON -
THRESHOLD AND RESONANCE REACTIONS

3549. Date 721200
111110 421140 430000
The Use of Threshold Detectors to Evaluate Neutron
Leakage Spectra For Dosimetry Calculations.
Boot, S. J.
AERE-R-7294
AVAILABILITY-HMSO
England

3706. Date 710100
421140
Determination of Intermediate Neutron Energy
Spectrum for a Pool Type Reactor
Weng, P. S.; Lee, M. H.
ATOMKERNENERGIE, 18(1), 25-29
Taiwan

CATEGORY NUMBER 421140

3732..... Date 730700
 111110 421140 795112
 Ebr-II Dosimetry Test (Reactor Runs 50g and 50h)
 Jackson, J. L.; Mcelroy, W. N.; Ulseth, J. A.;
 Kellogg, L. S.
 HEDL-TME-73-62
 AVAILABILITY-NTIS \$5.45
 Westinghouse

3789..... Date 730516
 111110 122310 32A000 421140 422130 511120 795042
 861000
 Benchmark Experiment of Neutron Propagation in Iron
 Martini, M.; Bozzi, L.
 RT/FI(73)19
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 \$3.00
 Italy

3794..... Date 730900
 111110 111400 421140 430000 794000 795108 795112
 Evaluation of Operational Characteristics of Selected
 Unfolding Codes
 Kilminster, D. T.
 BRL-R-1675
 AVAILABILITY-NTIS
 Army Installations

3894..... Date 711100
 421140
 "Shelled Activation Detectors" for the Measurement of
 Neutron Spectra Especially at Kilovolt Energies
 Henninger, R. J.; Amster, H.; Binney, S. E.; Mark, H.
 NUCL. INSTR. METHODS, 96(4), 515-524
 California Schools

4038..... Date 721100
 111500 421140 511110 713000 870079
 Self-Shielding in Stacked Foils
 Nisle, R. G.; Harker, Y. D.
 ANCR-1066
 AVAILABILITY-DEP., NTIS
 Aerojet-General

4051..... Date 720000
 111110 421140 430000 521230 713000 795112
 Ebr-II Dosimetry Tests
 Jackson, J. L.; Kellogg, L. S.; Mcelroy, W. N.;
 Ulseth, J. A.
 HEDL-SA-548; CONF-730910-2
 AVAILABILITY-DEP., NTIS \$3.00
 Hanford Eng Dev Lab.

CATEGORY NUMBER 421140

4052..... Date 730000
 111110 410000 421140 430000 713000 795112
 Fast Reactor Flux-Spectral Characterization
 Mcelroy, W. N.
 HEDL-SA-556; CONF-730910-3
 AVAILABILITY-DEP., NTIS \$3.25
 Hanford Eng Dev Lab.

4549..... Date 730000
 421140
 Fast Neutron Flux Measurement
 Kirouac, G. J.; Eiland, H. M.; Slavik, C. J.
 KAPL-P-4005; CONF-730910-5
 AVAILABILITY-DEP., NTIS \$3.00
 Knolls Atomic Power Lab

4566..... Date 730700
 111110 111210 123000 421140 422110 430000 810000
 Neutron Activation Analysis: Tabulation of Cross
 Sections, Q-Values, Decay Characteristics, and
 Sensitivities
 Kenna, B. T.; Harrison, P. E.
 SLA-73-637
 AVAILABILITY-DEP., NTIS \$6.50
 Sandia Corporation

4578..... Date 720000
 111110 421140 430000 511120 713000 795042 795108
 810000
 Measured and Calculated Neutron Spectra in the
 Experimental Cavity of The Acpr
 Croucher, D. W.; Lucoff, D. M.; Schmidt, T. R.;
 Reil, K. O.; White, J. R.
 SC-DC-721414; CONF-721109-3
 AVAILABILITY-DEP., NTIS
 Sandia Corporation

4812..... Date 741200
 111500 420000 421140
 Neutron Flux Measurement in the Kev Energy Region:
 Suitability of Indium As An Activation Standard for
 Kev Neutrons
 Ryves, T. B.
 STI/PUB-371, PP.255-257; CONF-721127, PP.255-257;
 IAEA-PL-246-2/30
 AVAILABILITY-IAEA
 England

CATEGORY NUMBER 421140

4939. Date 750200
 111110 421140 430000 795112
 Endf/b Dosimetry Cross Section File Benchmark
 Neutron Flux-Spectral Uncertainties
 Meelroy, W. N.
 HEDL-SA-774; NBS SPEC.PUB.-425, PP.189-192;
 CONF-750303-65
 AVAILABILITY-NTIS \$4.00
 Hanford Eng Dev Lab.

CATEGORY NUMBER 421150
INSTRUMENTS - ENERGY SPECTRA -
NEUTRON - OTHER
MEANS

3598. Date 720500
 111500 121100 329000 421150 430000
 Monte Carlo Calculation of Recoil Spectra in 4-He
 Proportional Counters
 Atwater, H. F.
 NUCL. INSTR. METHODS, 100(3), 453-457
 California Schools

4056. Date 711000
 111110 421150 430000 795108 795112
 Neutron Energy Spectrum Unfolding Method
 Krcevinac, S. B.
 IBK-1050; IBK-1050
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 England

4658. Date 720500
 111110 421150 421160 430000 713000
 Differential and Integral Measurements of An
 Intermediate Neutron Spectrum
 Nanjyo, T.
 J. NUCL. SCI. TECHNOL. (TOKYO), 9(5), 290-300
 Japan

4885. Date 730710
 111500 421150
 Flux Measurement of 0.01 to 18-Mev Monoenergetic
 Fast Neutrons
 Kung, L. H.; Liu, C.
 JPRS-59478, PP.17-43
 AVAILABILITY-NTIS
 China

CATEGORY NUMBER 421160
INSTRUMENTS - ENERGY SPECTRA -
NEUTRON - TIME OF
FLIGHT

3686. Date 730115
 111220 329000 421160 510000 511110 540000 820000
 Monte Carlo of D2o and H2o Neutron Moderators for
 Time of Flight Experiments
 Camarda, H. S.
 NUCL. INSTR. METHODS, 106(2), 205-212
 National Bureau of Standards

3840. Date 731100
 111110 421160 430000 521230 810000
 Comparison of Proton-Recoil and Time-Of-Flight
 Neutron Spectral Measurements With Transport
 Calculations in Two Uranium-235-Fueled Fast
 Subcritical Reactors
 Verbinski, V. V.; Young, J. C.; Neill, J. M.
 NUCL. SCI. ENG., 52(3), 330-342
 Gulf General Atomic

3964. Date 710000
 111220 421160 511110 870011
 Measurement of Neutron Spectrum in An Anhydrous
 Sodium Carbonate Pile
 Kanda, K.; Nakagome, Y.; Kimura, I.
 ANN. REPTS. RES. REACTOR INST. KYOTO
 UNIV., 4, 25-33
 Japan

4057. Date 730000
 111110 421160 511120 540000 820000
 Experimental Investigation of Space-Energy
 Distributions of Slow Neutrons In Water Near Plane
 Absorber
 Hussein, A.; El-Konsol, S.; Novikov, A.; Zakharkin, I.;
 Hamouda, I.
 AREAEE-166
 AVAILABILITY-NTIS
 Egypt

4067. Date 731200
 111110 421160 430000 794000 870098
 The 252-Cf Fission Neutron Spectrum From 0.5 to 13
 Mev (Lwbr Development Program)
 Green, L.; Mitchell, J. A.; Steen, N. M.
 WAPD-TM-1072
 AVAILABILITY-NTIS
 Bettis Atomic Power Lab.

CATEGORY NUMBER 421160

4114. Date 740600
 111110 421160 430000
 Correcting for Emission-Time Effects in Neutron
 Time-Of-Flight Data Using Multiple Time Spectra
 Robitaille, H. A.; Hewitt, J. S.
 NUCL. SCI. ENG., 54(2), 143-156
 Canada

4248. Date 710830
 111220 421130 421160 430000 794000
 Experimental Studies of Unfolding
 Kendrick, H.; Harris, L., Jr.
 GULF-RT-A10821; ANS-SD-12, ARTICLE 7
 AVAILABILITY-GULF RADIATION TECH., P.O.
 BOX 608, SAN DIEGO, CALIF. 92112
 Gulf General Atomic

4658. Date 720500
 111110 421150 421160 430000 713000
 Differential and Integral Measurements of An
 Intermediate Neutron Spectrum
 Nanjyo, T.
 J. NUCL. SCI. TECHNOL. (TOKYO), 9(5), 290-300
 Japan

CATEGORY NUMBER 421200
 INSTRUMENTS - ENERGY SPECTRA -
 GAMMA-RAY

3615. Date 730705
 112910 421200 430000
 Field Spectrometric Measurements of Radionuclide
 Concentrations and External Gamma Exposure
 Rates at the Nevada Test Site, a Demonstration
 Study
 Anspaugh, L. R.; Phelps, P. L.; Huckabay, G. W.;
 Todachine, T.
 UCRL-51412
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

3640. Date 730300
 112800 329000 421200 430000 795210
 Monte Carlo Calculation of Clad NaI(Tl) Scintillation
 Crystal Response To Gamma Photons
 Steyn, J. J.; Huang, R.; Harris, D. W.
 NUCL. INSTR. METHODS, 107(3), 465-475
 Nucl. Utilities Service

CATEGORY NUMBER 421200

3641. Date 721200
 112800 421200 430000
 Detection Cross-Section of Lead Doped Plastic
 Scintillatory for Scattered Gamma-Radiation
 Regarding Detector Threshold
 Schaarschmidt, A.; Durner, H.
 NUCL. INSTR. METHODS, 105(497), 504
 Germany (West)

3762. Date 730500
 112730 421200 430000 522210 853100 861000 870013
 Backscattering of 137-Cs Gamma Rays By Finite
 Barriers
 Elias, E.; Segal, Y.; Notea, A.
 J. NUCL. ENERGY, 27(5), 351-362
 Israel

3775. Date 730100
 112710 421200
 Catalog of Ge(Li)-Gamma-Spectra
 Zaddach, G.
 JUL-914-DE(IN GERMAN)
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 \$28.50
 Germany (West)

3779. Date 690000
 421200
 Measurement of Nuclear Radiation With Semiconductor
 Detectors
 Poenaru, D. N.; Vilcov, N.
 CHEMICAL PUBL. CO., N.Y.
 Romania

3832. Date 730100
 112800 420000 421200
 Comparison of Radiation Detector Materials for
 Imaging Applications In Nuclear Medicine
 Lavoie, L.
 PHYS. MED. BIOL., 18(1), 120-132
 Hospitals

3878. Date 720000
 112720 112730 421000 421200 423240
 National Standards for Photon Dosimetry
 Guiho, J. P.
 RADIOPROTECTION (IN FRENCH), 7(1), 3-12
 France

CATEGORY NUMBER 421200

3932. Date 721000
 421200 430000
 In Situ Analysis of Shielded, Gamma-Active Material
 Using a Ge(Li) Spectrometer
 Spiers, E. W.; Lakey, J. R. A.
 CONF-721018, PP.812-827
 AVAILABILITY-OECD
 England

3968. Date 721100
 112B00 329000 421200 430000
 Monte Carlo Calculation of the Response Function for a
 4-By 4-Inch Nai Crystal Scintillation Detector
 O'dell, A. A.
 EGG-1183-2299
 AVAILABILITY-DEP., NTIS \$4.00
 Edgerton, Germeshausen, + Grier

4031. Date 730100
 112120 421200 870090 870092
 Gamma Ray Spectra of Uranium and Thorium Ores By
 High Resolution (Ge(Li)) Spectrometry
 Urquhart, D. F.
 AAEC/TM-634
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$3.75
 Australia

4065. Date 711100
 421200 713000
 Use of Gamma Spectroscopy for Neutronic Analysis of
 Lmfbr Blankets
 Kang, C. S.; Rasmussen, N. C.; Driscoll, M. J.
 COO-3060-2; MITNE-130
 AVAILABILITY-DEP., NTIS
 Massachusetts Schools

4075. Date 720900
 112710 421200 430000 810000
 Compilation of Gamma-Ray Spectra With a Ge(Li)
 Detector (Revised)
 Tojo, T.; Kondo, M.; Hieta, M.; Shiraishi, T.
 JAERI-M-4968 (IN JAPANESE)
 AVAILABILITY-NTIS (U.S. SALES ONLY)
 Japan

4125. Date 740700
 112720 421200 512120 522230 853100 861000
 Experimental Evidence of An Equilibrium Property in
 Gamma-Ray Angular Spectra Penetrating Bulk
 Shields
 Johnson, D. M.; Woollam, P. B.
 NUCL. SCI. ENG., 54(3), 254-262
 England

CATEGORY NUMBER 421200

4210. Date 690800
 112500 121100 420000 421200 810000
 Radiative Capture of Neutrons in and Between
 Resonances
 Chrien, R. E.
 ANS-SD-7, PP.15-38; CONF-671140, PP.15-38
 AVAILABILITY-DEP., NTIS \$3.00
 Brookhaven Natl. Lab.

4235. Date 731000
 112710 421200 430000
 The Gamma-Ray Spectrum Catalogue - a User Data File
 Heath, R. L.
 STI/PUB-343-V2, PP.365-377;
 CONF-730302, V2, PP.365-377; IAEA-SM-170/76
 AVAILABILITY-IAEA
 Aerojet-General

4236. Date 731000
 112710 421200 430000 793000
 A Compilation of Modern Nuclear-Decay Data for
 High-Resolution Gamma Spectroscopy
 Dyer, F. F.; Bate, L. C.
 STI/PUB-343, V2, PP.379-387;
 CONF-730302, V2, PP.379-387; IAEA-SM-170/44
 AVAILABILITY-IAEA
 Oak Ridge National Lab.

4239. Date 731000
 112710 421200 430000
 Gamma Ray Energies and Intensities for Calibrating
 Ge(Li) Detectors in The Range 3-10 Mev
 Sokolovskii, L. L.; Ignatichkin, A. E.
 STI/PUB-343, V2, PP.431-435;
 CONF-730302, V2, PP.431-435; IAEA-SM-170/23
 AVAILABILITY-IAEA
 Russia

4244. Date 711100
 111210 112400 112500 112600 32A000 421200 512220
 870007
 Study of Secondary Gamma Rays in Liquid Nitrogen By
 Unfolding Ge(Li) Spectra
 Reynolds, G. M.; Sperling, S. M.
 ANS-SD-12, ARTICLE 3
 AVAILABILITY-ANS
 Science Applications, Inc.

CATEGORY NUMBER 421200

4249..... Date 710729
 111110 112120 112710 421200 430000 870092 870094
 Measurement of Fission Fragment Isomers With Ge(Li)
 Detectors: Unfolding Spectra With Discrete and
 Continuum Components
 Verbinski, V. V.; Weber, H.; Sund, R. E.
 GULF-RT-A10782; ANS-SD-12, ARTICLE 8
 AVAILABILITY-GULF RADIATION TECH., P.O.
 BOX 608, SAN DIEGO, CALIF. 92112
 Gulf General Atomic

4273..... Date 730000
 112500 421200 424000 810000
 Evaluation of Thermal Neutron Gamma-Ray Techniques
 for Nondestructive Analysis of Geological Samples
 (I)
 El Kady, A. A.; Hamouda, I.
 AREAEE-187
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.50
 Egypt

4321..... Date 720700
 112760 421200
 Use of Ge(Li) Detectors in High Dose Rate Gamma
 Spectrometry
 Woollam, P. B.; Jones, L. T.
 RD/B/N-2369
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 England

4342..... Date 691117
 111210 421130 421200 430000 510000 511120 853100
 Time-Dependent Fast Neutron and Secondary Gamma
 Ray Spectrum Measurements In Concrete. Vol. I
 Harris, L., Jr.; Kendrick, H.; Naliboff, Y. D.;
 Sperling, S. M.
 GA-9751, VOL. I; DASA-2401-I; AD-711839
 AVAILABILITY-NTIS
 Gulf General Atomic

4355..... Date 741000
 112120 421200 512220
 The Spectrum of Gamma Rays With Energies Greater
 Than 1.8 Mev Produced By Fissions and
 Short-Lived Fission Products in the Health Physics
 Research Reactor
 Thorngate, J. H.; Christian, D. J.; Sumner, G. K.
 ORNL-TM-4636
 AVAILABILITY-DEP., NTIS
 Oak Ridge National Lab.

CATEGORY NUMBER 421200

4458..... Date 690114
 112120 112710 123000 421200 424000 810000
 Gamma-Ray Energies and Intensities
 Gunnink, R.; Niday, J. B.; Anderson, R. P.;
 Meyer, R. A.
 UCID-15439
 AVAILABILITY-DEP., NTIS \$7.25
 Lawrence Livermore Lab

4589..... Date 740000
 112710 421200 430000
 Gamma-Ray Standards
 Kern, J.
 STI/PUB-365,345-366; CONF-7210117, 345-366
 AVAILABILITY-IAEA
 Switzerland

4598..... Date 740000
 112500 421200 430000
 Response Characteristics of Ge(Li) Detector for Thermal
 Neutron Capture Gamma-Ray Spectroscopy
 Eissa, E. A.; Rofail, N. B.; El-Kady, A.;
 Hassan, A. M.; Abu-Zeid, H. M.
 AREAEE-192
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Egypt

4949..... Date 750000
 111220 112400 112500 112600 121100 421200 810000
 Gamma-Ray Production Measurements Due to
 Interactions of Neutrons With Elements Required
 for Nuclear Power Applications and Design
 Chapman, G. T.; Dickens, J. K.; Love, T. A.;
 Morgan, G. L.; Newman, E.
 NBS SPEC.PUB.-425, PP. 758-761; CONF-750303-8
 AVAILABILITY-NTIS AS CONF-750303-8
 Oak Ridge National Lab.

CATEGORY NUMBER 421300
 INSTRUMENTS - ENERGY SPECTRA -
 X-RAY

4849..... Date 750600
 113100 421300 513120 523100 760000 810000
 Spectra of Primary X-Ray and Secondary Photons From
 Shielding Materials For 4- 30 Mv X-Rays
 Maruyama, T.; Sakata, S.; Kumamoto, Y.;
 Hashizume, T.; Hattori, H.; Kanamori, H.;
 Yamamoto, M.
 HEALTH PHYS., 28(6), 771-791
 Japan

CATEGORY NUMBER 422110
INSTRUMENTS - FLUX - NEUTRON -
ACTIVATION
TECHNIQUES

3681..... Date 730300
 111110 112110 325000 422110 551110 710000 713000
 810000

Analysis of the Ftr/emc Neutron Shielding Experiment
 Boulette, E.; Marr, D.; Bunch, W.
 HEDL-TME-73-27
 AVAILABILITY-AT (TIC) AEC
 Westinghouse

3739..... Date 720700
 111110 422110 430000 521230 710000 794000
 Radiation Dosimetry in Wr-I Reactor. III.
 Determination of Flux Density
 Mehta, K. K.; Stadnyk, A. M.
 AECL-3797
 AVAILABILITY-ATOMIC ENERGY CANADA
 LTD., CHALK RIVER, ONTARIO
 Canada

3899..... Date 710000
 111220 422110 820000 870004
 Production of An Sb-Be Neutron Source of Plane Type
 and Measurement of The Neutron Age in Water
 Kanda, K.; Hayashi, M.; Okumura, K.
 ANN. REPTS. RES. REACTOR INST. KYOTO
 UNIV., 4, 17-24
 Japan

4175..... Date 740800
 111110 112110 121100 121200 422110 422200 430000
 810000
 Neutron and Gamma-Ray Effects on Self-Powered
 In-Core Radiation Detectors
 Warren, H. D.; Shah, N. H.
 NUCL. SCI. ENG., 54(4), 395-415
 Babcock and Wilcox Co.

4228..... Date 731000
 010000 111110 111300 112710 422110 424000
 Nuclear Data for Activation Analysis: Requirements and
 Present State Of Compilations
 Krivan, V.
 STI/PUB-343,V2,PP.193-225;
 CONF-730302,V2,PP.193-225; IAEA-SM-170/60
 AVAILABILITY-IAEA
 Germany (West)

CATEGORY NUMBER 422110

4229..... Date 731000
 010000 111110 111300 112710 422110 424000
 Nuclear Data Bases for Activation Analyses
 Bewers, J. M.; Pearson, G. J.; Merritt, W. F.
 STI/PUB-343,V2,PP.229-240;
 CONF-730302,V2,PP.229-240; IAEA-SM-170/36
 AVAILABILITY-IAEA
 Canada

4230..... Date 731000
 111110 111300 112710 422110
 Resonance Integrals Applied to the
 Multiple-Comparator Method in Reactor Neutron
 Activation Analysis
 Van Der Linden, R.; De Corte, F.; Hoste, J.
 STI/PUB,V2,PP.241-263; CONF-730302,V2,PP.241-263;
 IAEA-SM-170/31
 AVAILABILITY-IAEA
 Belgium

4231..... Date 731000
 010000 111110 111300 112710 122310 422110
 Nuclear Data of Importance in Epithermal Neutron
 Activation Analysis
 Steinnes, E.
 STI/PUB-343,V2,PP.265-270;
 CONF-730302,V2,PP.265-270; IAEA-SM-170/77
 AVAILABILITY-IAEA
 Norway

4232..... Date 731000
 010000 111110 111300 112710 122310 422110
 Nuclear Data for Neutron Metrology
 Zijp, W. L.
 STI/PUB-343,V2,PP.271-293;
 CONF-730302,V2,PP.271-293; IAEA-SM-170/73
 AVAILABILITY-IAEA
 Norway

4430..... Date 740300
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4447..... Date 740000
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CATEGORY NUMBER 422110

AVAILABILITY-NTIS

Texas Schools

4566. Date 730700
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 AVAILABILITY-DEP., NTIS \$6.50
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4640. Date 750400
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CATEGORY NUMBER 422130
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3789. Date 730516
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4597. Date 741200
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CATEGORY NUMBER 422140
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3733. Date 730400
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3753. Date 721200
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3978. Date 700331
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 Maerker, R. E.
 ORNL-TM-4222; ENDF-188
 AVAILABILITY-NTIS
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CATEGORY NUMBER 422140

4288..... Date 740900
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 Maerker, R. E.
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 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4424..... Date 740800
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 HEALTH PHYS., 27(2), 173-179
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4543..... Date 720300
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CATEGORY NUMBER 422200
 INSTRUMENTS - FLUX -
 GAMMA-RAY

3691..... Date 720000
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4175..... Date 740800
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4191..... Date 740501
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CATEGORY NUMBER 423110
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 - ION-CHAMBER

3879..... Date 730400
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4000..... Date 701000
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 STRAHLENTHERAPIE, 139, 179-180
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CATEGORY NUMBER 423135
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 -
 THERMOLUMINESCENCE (TLD)

4866. Date 720100
 111110 111220 220000 423135 423250 521210 845000
 Personnel Albedo Neutron Dosimeter With
 Thermoluminescent 6-Lif and 7-Lif
 Hoy, J. E.
 DP-1277
 AVAILABILITY-NTIS
 E. I. Dupont Denemours

CATEGORY NUMBER 423140
 INSTRUMENTS - DOSE RATE - NEUTRON
 - OTHER

3608. Date 730417
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 With the Lawrence Livermore Laboratory Rotating
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 Van Konynenburg, R. A.
 UCRL-51393
 AVAILABILITY-DEP., NTIS \$4.00
 Lawrence Livermore Lab

3766. Date 720700
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 Systems at the Oak Ridge National Laboratory
 Poston, J. W.; Haywood, F. F.
 ORNL-TM-4387
 AVAILABILITY-DEP., NTIS \$6.50

CATEGORY NUMBER 423140

Oak Ridge National Lab.

3834. Date 740100
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 845000
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 ORNL-TM-4418
 AVAILABILITY-NTIS
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4313. Date 720000
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 Hankins, D. E.
 LA-DC-72-1144; CONF-721203-1; SM-167/62
 AVAILABILITY-DEP., NTIS
 Los Alamos Scientific Lab

4373. Date 730000
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 Piltingsrud, H. V.; Engelke, M. J.
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 IAEA-SM-167/51
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CATEGORY NUMBER 423210
 INSTRUMENTS - DOSE RATE - GAMMA-RAY
 - ION-CHAMBER

4003. Date 730000
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INSTRUMENTS - DOSE RATE - GAMMA-RAY
SCINTILLATION-COUNTER

4025. Date 661100
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 Virginia Schools

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4816. Date 731015
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- OTHER

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 AVAILABILITY-NTIS

CATEGORY NUMBER 423240

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3766. Date 720700
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3834. Date 740100
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3878. Date 720000
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 Kansas Schools

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CATEGORY NUMBER 423240

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 Army Installations

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CATEGORY NUMBER 423250
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 RAY -
 THERMOLUMINESCENCE (TLD)

3589. Date 720500
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3766. Date 720700
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 AVAILABILITY-DEP., NTIS \$6.50
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 Lofthouse, J. H.; Kunze, J. F.; Young, T. E.;
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 ANCR-1077; NASA-CR-120903; N72-33651
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 Aerojet-General

CATEGORY NUMBER 423250

4185. Date 740500
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 High Energy (2.25 - 9 Mev) Photons
 Mcneilly, J. H.; Rodgers, M. P.
 BRL-R-1734
 AVAILABILITY-NTIS
 Army Installations

4468. Date 740500
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 Energy Dependence of Thermoluminescent Dosimeters
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 Measurements in a Mouse Phantom
 Puite, K. J.; Crebolder, D. L.
 PHYS. MED. BIOL., 19(3), 341-347
 Netherlands (Holland)

4629. Date 740200
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 Argonne National Lab.

4866. Date 720100
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 Personnel Albedo Neutron Dosimeter With
 Thermoluminescent 6-Lif and 7-Lif
 Hoy, J. E.
 DP-1277
 AVAILABILITY-NTIS
 E. I. Dupont Denemours

CATEGORY NUMBER 423300
INSTRUMENTS - DOSE RATE -
X-RAY

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 Bojtor, I.

CATEGORY NUMBER 423300

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 Hungary

CATEGORY NUMBER 424000
DENSITY, WATER CONTENT,
NON-DESTRUCTIVE
TESTING -
RADIATION METHODS

3720. Date 730300
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 Hopkins, W. C.; Gardner, R. P.
 NUCL. SCI. ENG., 24(3), 332-343
 North Carolina Schools

3721. Date 730300
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3940. Date 721000
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 Recent Methods for the Testing of Gamma Shields
 Fourcade-Cancelle, N.; Papot, L.
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 France

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4180. Date 740500
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 Piper, T. C.
 ANCR-1160
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 Aerojet-General

CATEGORY NUMBER 424000

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 010000 111110 111300 112710 422110 424000
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 Present State Of Compilations
 Krivan, V.
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 CONF-730302,V2,PP.193-225; IAEA-SM-170/60
 AVAILABILITY-IAEA
 Germany (West)

4229. Date 731000
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 Ewers, J. M.; Pearson, G. J.; Merritt, W. F.
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 CONF-730302,V2,PP.229-240; IAEA-SM-170/36
 AVAILABILITY-IAEA
 Canada

4233. Date 731000
 111210 424000 870013 870014
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 Constants: Application To Activation Analysis
 Vorsatz, B.; Zemplen-Papp, E.; Kelen, E.
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 CONF-730302,V2,PP.295-300; IAEA-SM-170/31
 AVAILABILITY-IAEA
 Hungary

4237. Date 731000
 121100 121200 424000
 The Use of Nuclear Data in the Design of Radiation
 Instruments for Mineral Exploration and Mining
 Clayton, C. G.; Sanders, L. G.
 STI/PUB-343,V2,PP.391-410;
 CONF-730302,V2,PP.391-410; IAEA-SM-170/75
 AVAILABILITY-IAEA
 England

4273. Date 730000
 112500 421200 424000 810000
 Evaluation of Thermal Neutron Gamma-Ray Techniques
 for Nondestructive Analysis of Geological Samples
 (I)
 El Kady, A. A.; Hamouda, I.
 AREAEE-187
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 Egypt

CATEGORY NUMBER 424000

4276. Date 700300
 424000 853100
 Ultrasonic and Radiometric Measurement of
 Homogeneity and Density Of Concrete in Biological
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 Honig, A.; Pospisilova, L.; Zapletal, V.
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 AVAILABILITY-NTIS
 Czechoslovakia

4284. Date 740610
 112710 424000 870094
 A Simulation Study of Plutonium Gamma Ray
 Groupings for Isotopic Ratio Determinations
 Gunnink, R.
 UCRL-51605
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4316. Date 720000
 112710 424000 810000
 Role of Nuclear Data in the Practical Application of
 Nondestructive Nuclear Assay Methods
 Thorpe, M. M.
 LA-UR-73-226; CONF-730302-9; SM-170/54
 AVAILABILITY-DEP., NTIS \$3.25
 Los Alamos Scientific Lab

4332. Date 740418
 112710 424000 870094
 A System for Plutonium Analysis By Gamma Ray
 Spectrometry. Part 1: Techniques for Analysis of
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 Gunnink, R.; Niday, J. B.; Siemens, P. D.
 UCRL-51577,PART 1
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4360. Date 740800
 010000 111110 112120 424000 713000 870092 870094
 The State-Of-the Art in Non-Destructive Assay Systems
 and Their Applications To An Lmfbr Aqueous Fuel
 Reprocessing Plant
 Shahrokhi, F.; Robinson, J. C.; Mihalcz, J. T;
 Ackermann, N. J., Jr.
 ORNL-TM-4586; ORNL-TM-4586
 AVAILABILITY-DEP., NTIS \$5.45
 Oak Ridge National Lab.

CATEGORY NUMBER 424000

4458..... Date 690114
 112120 112710 123000 421200 424000 810000
 Gamma-Ray Energies and Intensities
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 Meyer, R. A.
 UCID-15439
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 Lawrence Livermore Lab

4511..... Date 741100
 111110 111120 424000 870090 870092
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 Milani, S.; Emert, C. J.
 WAPD-TM-1088
 AVAILABILITY-DEP., NTIS \$4.00
 Bettis Atomic Power Lab.

4573..... Date 730000
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 Data on The Interpretation of
 Gamma-Spectrometric Measurements on Burnt Fuel
 Elements
 Eder, O. J.; Lammer, M.
 SGAE-2097; SM-170/12
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.25
 Germany (West)

4667..... Date 730000
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 Group Diffusion Theory. Case of An Empty Hole
 Wozniak, J.
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 Poland

4749..... Date 750300
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 A Guide to Gamma-Ray Assay for Nuclear Material
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 Reilly, T. D.; Parker, J. L.
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CATEGORY NUMBER 424000

4787..... Date 720331
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 Gamma Radiation Attenuation Technique
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 Tarnag, H. J.; Jilani, A. A.; Menon, G. V.;
 Siddiqi, F. M.; Reddy, T. R.; Lal, A. B.;
 Khader, M. S.; Ramanrayana, D.
 ORO-3604-8
 AVAILABILITY-DEP., NTIS
 Alabama Schools

4900..... Date 690400
 424000
 Soil Moisture Estimation By the Neutron Method in
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 Bell, J. P.; McCulloch, J. S. G.
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4926..... Date 751000
 111110 111220 421200 424000 853100 870098
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 NBS SPEC.PUB.-425, PP.496-499;
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 SOLD IN SETS ONLY
 Columbia Scientific Ind

4927..... Date 751000
 424000
 Cross Section Requirements for Industrial Gauging
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 Cho, B. Y.; Sheahan, T. P.
 NBS SPEC.PUB.-425, PP.500-503;
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4928..... Date 751000
 111220 424000 851000
 The Measurement of Thermal Neutron Constants of the
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 Soil
 Couchat, P.; Carre, C.; Marcesse, J.; Ho, J. L.
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CATEGORY NUMBER 430000
ANALYSIS - ENERGY SPECTRA UNFOLDING
AND DETECTOR
RESPONSE

3549..... Date 721200
 111110 421140 430000
 The Use of Threshold Detectors to Evaluate Neutron
 Leakage Spectra For Dosimetry Calculations.
 Boot, S. J.
 AERE-R-7294
 AVAILABILITY-HMSO
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3561..... Date 730400
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 Detectors to a Polyenergetic Neutron Beam
 Taherzadeh, M.
 NUCL. TECH., 18(1), 15-24
 Jet Propulsion Lab

3598..... Date 720500
 111500 121100 329000 421150 430000
 Monte Carlo Calculation of Recoil Spectra in 4-He
 Proportional Counters
 Atwater, H. F.
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3615..... Date 730705
 112910 421200 430000
 Field Spectrometric Measurements of Radionuclide
 Concentrations and External Gamma Exposure
 Rates at the Nevada Test Site. a Demonstration
 Study
 Anspaugh, L. R.; Phelps, P. L.; Huckabay, G. W.;
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 AVAILABILITY-NTIS
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3640..... Date 730300
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 Crystal Response To Gamma Photons
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 Schaarschmidt, A.; Durner, H.
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3642..... Date 721200
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 Accurate Measurement of the Counting Efficiency of a
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 Drog, M.
 NUCL. INSTR. METHODS, 105(3), 573-584
 Los Alamos Scientific Lab

3652..... Date 710825
 111110 328000 421130 430000 511110 511120 521110
 521210 820000 861090
 Orders-Of-Scattering Method for Fast-Neutron
 Transport
 Thiesing, J. W.; Meyer, W.
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 AVAILABILITY-DEP., NTIS
 Kansas Schools

3670..... Date 721000
 430000 794000
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 Implementation and Application With Maze2. Final
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 Sperling, M.
 DNA-2990F; SAI-72-574-LJ; AD-755190
 AVAILABILITY-SCIENCE APPLICATIONS,
 P.O.BOX 2351, 1250 PROSPECT STREET, LA
 JOLLA, CALIF. 92037
 Science Applications, Inc.

3691..... Date 720000
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3739..... Date 720700
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 Mehta, K. K.; Stadnyk, A. M.
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CATEGORY NUMBER 430000

LTD., CHALK RIVER, ONTARIO
Canada

3750. Date 711100
111220 421130 430000
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Recoil Protons in An Organic Liquid Scintillator
Lepretre, A.; Garganne, P.
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3752. Date 730400
111110 220000 421110 430000 845000
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Reaction and Surface Barrier Detectors (Kerma
Computations in Neutron Irradiated Tissues)
Laguerre, R.
CEA-R-4393 (IN FRENCH); CEA-R-4393 (IN
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AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$8.00
France

3762. Date 730500
112730 421200 430000 522210 853100 861000 870013
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Elias, E.; Segal, Y.; Notea, A.
J. NUCL. ENERGY, 27(5), 351-362
Israel

3794. Date 730900
111110 111400 421140 430000 794000 795108 795112
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Kilminster, D. T.
BRL-R-1675
AVAILABILITY-NTIS
Army Installations

3816. Date 740100
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Jaschik, W.; Seifritz, W.
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Germany (West)

CATEGORY NUMBER 430000

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3932. Date 721000
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CONF-721018, PP.812-827
AVAILABILITY-OECD
England

3968. Date 721100
112800 329000 421200 430000
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4-By 4-Inch Nai Crystal Scintillation Detector
O'dell, A. A.
EGG-1183-2299
AVAILABILITY-DEP., NTIS \$4.00
Edgerton, Germeshausen, + Grier

4051. Date 720000
111110 421140 430000 521230 713000 795112
Ebr-II Dosimetry Tests
Jackson, J. L.; Kellogg, L. S.; McElroy, W. N;
Ulseth, J. A.
HEDL-SA-548; CONF-730910-2
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Hanford Eng Dev Lab.

4052. Date 730000
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McElroy, W. N.
HEDL-SA-556; CONF-730910-3
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Hanford Eng Dev Lab.

CATEGORY NUMBER 430000

4056. Date 711000
 111110 421150 430000 795108 795112
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 Kreevinac, S. B.
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4067. Date 731200
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 Green, L.; Mitchell, J. A.; Steen, N. M.
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 AVAILABILITY-NTIS
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4075. Date 720900
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 Detector (Revised)
 Tojo, T.; Kondo, M.; Hieta, M.; Shiraishi, T.
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 Japan

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 Robitaille, H. A.; Hewitt, J. S.
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 Heinzelmann, M.; Rohloff, F.; Schuren, H.
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 Germany (West)

4163. Date 730700
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 Nishino, S.; Nakamura, T.; Hyodo, T.
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4194. Date 730800
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 Rieppo, R.
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 Finland

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 Henry, W. H.
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 The Gamma-Ray Spectrum Catalogue - a User Data File
 Heath, R. L.
 STI/PUB-343-V2, PP.365-377;
 CONF-730302, V2, PP.365-377; IAEA-SM-170/76
 AVAILABILITY-IAEA
 Aerojet-General

4236. Date 731000
 112710 421200 430000 793000
 A Compilation of Modern Nuclear-Decay Data for
 High-Resolution Gamma Spectroscopy
 Dyer, F. F.; Bate, L. C.
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 AVAILABILITY-IAEA
 Oak Ridge National Lab.

CATEGORY NUMBER 430000

4239..... Date 731000
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 Sokolovskii, L. L.; Ignatichkin, A. E.
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 CONF-730302,V2,PP.431-435; IAEA-SM-170/23
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 Russia

4242..... Date 711100
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 Schmoke, M. A.
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 AVAILABILITY-ANS
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4243..... Date 711100
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 Sperling, S. M.
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 AVAILABILITY-ANS
 Science Applications, Inc.

4245..... Date 711100
 112710 421200 430000
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 Young, C. S.
 LA-DC-12360; ANS-SD-12, ARTICLE 3;
 CONF-710606-9
 AVAILABILITY-DEP., NTIS
 Los Alamos Scientific Lab

4246..... Date 711100
 111210 112730 113100 421130 421200 421300 430000
 Experiences With Iterative Unfolding Techniques
 Scofield, N. E.
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 AVAILABILITY-ANS
 Naval Installations

4247..... Date 711100
 113100 430000
 An Interactive System for the Analysis of Digital Spectra
 Trombka, J. I.; Schmadebeck, R. L.; Bielefeld, M. J.;
 Silbergeld, M.
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 AVAILABILITY-ANS
 National Aeronautics Support Agencies

CATEGORY NUMBER 430000

4248..... Date 710830
 111220 421130 421160 430000 794000
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 Kendrick, H.; Harris, L., Jr.
 GULF-RT-A10821; ANS-SD-12,ARTICLE 7
 AVAILABILITY-GULF RADIATION TECH., P.O.
 BOX 608, SAN DIEGO, CALIF. 92112
 Gulf General Atomic

4249..... Date 710729
 111110 112120 112710 421200 430000 870092 870094
 Measurement of Fission Fragment Isomers With Ge(Li)
 Detectors: Unfolding Spectra With Discrete and
 Continuum Components
 Verbinski, V. V.; Weber, H.; Sund, R. E.
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 AVAILABILITY-GULF RADIATION TECH., P.O.
 BOX 608, SAN DIEGO, CALIF. 92112
 Gulf General Atomic

4289..... Date 740800
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 The Response of Selected Gamma-Ray Dosimeters to
 High Energy (2.25 - 9 Mev) Photons
 Meneilly, J. H.; Rodgers, M. P.
 BRL-R-1734
 AVAILABILITY-NTIS
 Army Installations

4342..... Date 691117
 111210 421130 421200 430000 510000 511120 853100
 Time-Dependent Fast Neutron and Secondary Gamma
 Ray Spectrum Measurements In Concrete, Vol.1
 Harris, L., Jr.; Kendrick, H.; Naliboff, Y. D.;
 Sperling, S. M.
 GA-9751, VOL.1; DASA-2401-1; AD-711839
 AVAILABILITY-NTIS
 Gulf General Atomic

4370..... Date 730000
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 Data Analysis for Low-Resolution Neutron
 Spectrometry
 Grunauer, F.; Schmatz, W.
 STI/PUB/318,V.1,59-71; CONF-721203,V.1,59-71;
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 AVAILABILITY-IAEA
 Germany (West)

CATEGORY NUMBER 430000

4372..... Date 730000
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 An Organic Liquid Scintillator in the Energy Range
 From 0.6 to 12.4 Mev
 Schanzler, L.; Stuker, S.
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 IAEA-SM-167/54
 AVAILABILITY-IAEA
 Germany (West)

4373..... Date 730000
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 Spectrometer-Posimeter
 Piltingsrud, H. V.; Engelke, M. J.
 STI/PUB/318,V.1,123-138; CONF-721203,V.1,123-138;
 IAEA-SM-167/51
 AVAILABILITY-IAEA
 Air Corps Installations

4378..... Date 730000
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 Sensitivity of Bonner Spheres
 Rohloff, F.; Heinzelmann, M.
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 IAEA-SM-167/3
 AVAILABILITY-IAEA
 Germany (West)

4379..... Date 730000
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 AVAILABILITY-IAEA
 France

4426..... Date 740700
 430000
 The Numerical Solution of Ill-Conditioned Systems of
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 Heath, M. T.
 ORNL-4957
 AVAILABILITY-NTIS, DEP. \$5.45
 Oak Ridge National Lab.

CATEGORY NUMBER 430000

4428..... Date 740200
 112720 112730 112740 113100 430000
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 Storm, E.; Lier, D. W.; Israel, H. I.
 HEALTH PHYS., 26(2), 179-189
 Los Alamos Scientific Lab

4430..... Date 740300
 111110 422110 430000
 A New Interpretation of the Data of Hurst Threshold
 Detector System For Intermediate Neutrons
 Koshaeva, K. K.; Kraitov, S. N.
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 Russia

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 Golstein, N. P.
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 Westinghouse

4543..... Date 720300
 422140 430000
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 Dolias, M.
 EUR-4791
 AVAILABILITY-NTIS (U.S. SALES ONLY)
 France

4552..... Date 721016
 421130 430000 794000
 Proton-Recoil Proportional Counter for Neutron
 Spectrometry in Fast Reactors
 Verbinski, V. V.
 GULF-RT-B-12155
 AVAILABILITY-DEP., NTIS
 Gulf General Atomic

4566..... Date 730700
 111110 111210 123000 421140 422110 430000 810000
 Neutron Activation Analysis: Tabulation of Cross
 Sections, Q-Values, Decay Characteristics, and
 Sensitivities
 Kenna, B. T.; Harrison, P. E.
 SLA-73-637
 AVAILABILITY-DEP., NTIS \$6.50
 Sandia Corporation

CATEGORY NUMBER 430000

4578. Date 720000
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 Croucher, D. W.; Lucoff, D. M.; Schmidt, T. R.;
 Reil, K. O.; White, J. R.
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 AVAILABILITY-DEP., NTIS
 Sandia Corporation

4589. Date 740000
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 Kern, J.
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 AVAILABILITY-IAEA
 Switzerland

4598. Date 740000
 112500 421200 430000
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 Neutron Capture Gamma-Ray Spectroscopy
 Eissa, E. A.; Rofail, N. B.; El-Kady, A.;
 Hassan, A. M.; Abu-Zeid, H. M.
 AREAEE-192
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 Egypt

4610. Date 730800
 111110 430000 511110 810000
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 Application in Nuclear Accident Dosimetry
 Makra, S.
 SZS-153, PP.166-179
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Germany (West)

4624. Date 751015
 112760 326000 422200 430000
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 Gamma Radiation
 Lovborg, L.; Kirkegaard, P.
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 Denmark

4658. Date 720500
 111110 421150 421160 430000 713000
 Differential and Integral Measurements of An
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 Nanjyo, T.
 J. NUCL. SCI. TECHNOL. (TOKYO), 9(5), 290-300
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 111210 430000 511120 870092 870094
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 Shielding Benchmark Collection No. Sdt 10
 Plechaty, E. F.; Howerton, R. J.
 UCID-16372
 AVAILABILITY-DEP., NTIS \$5.50
 Lawrence Livermore Lab

4681. Date 730119
 111210 430000
 Calculational Models for LII Pulsed Spheres
 Plechaty, E. F.
 UCRL-74277(REV.1)
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4695. Date 730200
 430000
 Techniques for Fast Evaluation of Ge(Li)-Detector
 Gamma-Ray Spectra With Small Computers
 Nyman, B.
 UUIP-804
 AVAILABILITY-NTIS (U.S. SALES ONLY)
 Sweden

4809. Date 750500
 112B00 329000 423230 430000 870011
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 Detection Efficiency of A Cylindrical Gamma
 Radiation Detector
 Green, M. V.; Aamodt, R. L.; Johnston, G. S.
 HEALTH PHYS., 28(5), 624-628
 Army Installations

4816. Date 731015
 420000 421130 423230 430000
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 Ishikawa, H.; Takiue, M.
 NUCL. INSTR. METHODS, 112(3), 431-435
 Japan

4818. Date 750415
 111500 121100 329000 421120 421130 430000
 Simulation of a Double-Scattering Polarization
 Experiment With Fast Neutrons By Means of Monte
 Carlo Calculations
 Tornow, W.; Spiegelhauer, H.; Mack, G.
 NUCL. INSTR. METHODS, 125(3), 373-389
 Germany (West)

CATEGORY NUMBER 430000

4819..... Date 750415
430000

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Arnold, E. B.
NUCL. INSTR. METHODS, 125(3), 391-395
Michigan Schools

4844..... Date 750815
430000

Unfolding of Physical Spectra By Sequential Bayes
Methods. Part I. Linear Spline Models
Mendes, M.; De Polignac, C.; Delestre, C.
NUCL. INSTR. METHODS, 127(3), 405-411
France

4845..... Date 750815
430000

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Methods. Part II. Estimation of Parameters in
Non-Linear Models
Mendes, M.; De Polignac, C.
NUCL. INSTR. METHODS, 127(3), 413-419
Brazil

4874..... Date 750400
111110 122100 430000 810000
Endf/b-IV Dosimetry File
Magurno, B. A.
BNL-NCS-50446; ENDF-216
AVAILABILITY-NTIS \$8.75
Brookhaven Natl. Lab.

4888..... Date 740600
111110 421110 430000
Analysis of a Background Elimination Method in the
6-Li Spectrometry Technique
De Leeuw-Gierst, G.; De Leeuw, S.; Kamboj, B. K.
BLG-495
AVAILABILITY-NTIS
Belgium

4898..... Date 721000
111110 421140 430000
Interactive Graphical Computing for Simulating and
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Routti, J. T.
COMPUT. PHYS. COMMUN., 4(1), 33-39
Switzerland

CATEGORY NUMBER 430000

4899..... Date 730300
112760 329000 430000
Monte Carlo Calculations of Efficiency Values for
Various Source-to Detector Geometries
Holmberg, P.; Rieppo, R.; Blomster, K.
COMMENTAT. PHYS. MATH., 43(1), 21-30
Finland

4939..... Date 750200
111110 421140 430000 795112
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Neutron Flux-Spectral Uncertainties
McElroy, W. N.
HEDL-SA-774; NBS SPEC.PUB.-425, PP.189-192;
CONF-750303-65
AVAILABILITY-NTIS \$4.00
Hanford Eng Dev Lab.

CATEGORY NUMBER 510000
TIME DEPENDENT RESULTS

3675..... Date 730900
112120 510000 532000 870092
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Pertinent to The Thermal-Neutron Fission of 235-U
Perry, A. M.; Maienschein, F. C.; Vondy, D. R.
ORNL-TM-4197
AVAILABILITY-NTIS
Oak Ridge National Lab.

3686..... Date 730115
111220 329000 421160 510000 511110 540000 820000
Monte Carlo of D2O and H2O Neutron Moderators for
Time of Flight Experiments
Camarda, H. S.
NUCL. INSTR. METHODS, 106(2), 205-212
National Bureau of Standards

3731..... Date 730900
111110 329000 510000 511110 512210 795187 853100
Additional Analysis of Neutron and Secondary Gamma
Ray Transport in Concrete Using the Sam-Ce Monte
Carlo Code
Cohen, M. A.; Beer, M.
DNA-3182T; MR-7035
AVAILABILITY-MATHEMATICAL
APPLICATIONS GROUP, INC., 3
WESTCHESTER PLAZA, ELMSFORD, NEW
YORK 10523
Mathematical Appl. Group, Inc.

CATEGORY NUMBER 510000

3753. Date 721200
 111500 422140 510000
 Calculation of the Response of Bonner Spheres With Lii,
 He, and Mn Detectors. Comparison With
 Experimental Data for Lii
 Caizerques, R.; Poullot, G.
 CEA-R-4400 (IN FRENCH)
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$5.75
 France

3763. Date 730600
 111210 111220 310000 510000 540000 820000 861000
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 Down Problems Using Numerical Laplace
 Transforms-I. Infinite Media
 Beynon, T. D.; Coleman, M.
 J. NUCL. ENERGY, 27(6), 425-433
 England

3790. Date 731000
 122200 329000 510000 511110 810000
 Lawrence Livermore Laboratory Evaluated Nuclear
 Data Library (Endl) Translated Into the Endf/b
 Format
 Howerton, R. J.
 UCID-16376
 AVAILABILITY-DEP., NTIS \$4.50
 Lawrence Livermore Lab

3792. Date 731200
 112130 329000 510000 512110 795127 830000
 Effects of Air-Density Perturbations on the Transport of
 Gamma Rays Produced By Point Gamma-Ray
 Sources
 McGregor, B. J.; Mynatt, F. R.
 ORNL-TM-4266
 AVAILABILITY-DEP., NTIS \$5.25
 Oak Ridge National Lab.

4116. Date 740600
 111500 325000 510000 511110 861000 870092
 Functionals to Represent the Neutron Flux in Fast
 Pulsed Assemblies
 Knickle, H. N.; Daitch, P. B.
 NUCL. SCI. ENG., 54(2), 196-200
 Rhode Island Schools

CATEGORY NUMBER 510000

4161. Date 730300
 111210 122310 329000 510000 511110 795128 820000
 861000 870003 870007 870008
 Monte Carlo Calculations and Sensitivity Studies of the
 Time-Dependent Neutron Spectra Measured in the
 LII Pulsed Sphere Program
 Cramer, S. N.; Roussin, R. W.; Oblow, E. M.
 ORNL-TM-4072
 AVAILABILITY-DEP., NTIS \$14.00
 Oak Ridge National Lab.

4165. Date 740300
 111500 321000 510000
 A Direct Calculation of the Time-Dependent Spatial
 Moments of the One-Speed Neutron Transport
 Model
 Ganapol, B. D.
 NUCL. SCI. ENG., 53(3), 350-351
 France

4260. Date 710000
 111210 32A000 329000 510000 511110 795129 795154
 795172 795180 830000 870007 870008
 Multigroup Monte Carlo and Sn Methods for Air
 Transport
 Harris, D. R.; Koenig, D. R.; Preeg, W.
 LA-DC-13269; CONF-711125, PP.209-227;
 ORNL-RSIC-33, PP.209-227
 AVAILABILITY-DEP., NTIS
 Los Alamos Scientific Lab

4263. Date 710000
 111130 111400 32A000 510000 511110 795082 795089
 830000
 Effects of Source Asymmetry on Radiation Transport in
 Infinite Air
 McGregor, B. J.
 ORNL-RSIC-33, PP.341-359; CONF-711125-5
 AVAILABILITY-DEP., NTIS
 Oak Ridge National Lab.

4274. Date 740700
 111110 310000 32A000 510000 521130 795180 795184
 Approximate Numerical Solutions to the
 Time-Dependent Neutron Transport Equation Using
 the Task Algorithm
 Tomlinson, E. T.
 ORNL-TM-4595
 AVAILABILITY-NTIS \$5.45
 Oak Ridge National Lab.

CATEGORY NUMBER 510000

4342. Date 691117
 111210 421130 421200 430000 510000 511120 853100
 Time-Dependent Fast Neutron and Secondary Gamma
 Ray Spectrum Measurements In Concrete. Vol. I
 Harris, L., Jr.; Kendrick, H.; Naliboff, Y. D.;
 Sperling, S. M.
 GA-9751, VOL. I; DASA-2401-I; AD-711839
 AVAILABILITY-NTIS
 Gulf General Atomic

4422. Date 741100
 111210 122310 329000 510000 511120 853100 870008
 Measurements and Calculations of the Neutron Spectra
 Emitted From Concrete Spheres Bombarded With
 14-Mev Neutrons. (Tech. Note)
 Hansen, L. F.; Anderson, J. D.; Doyas, R. J.;
 Howerton, R. J.; Komoto, T.; Logan, C. M.;
 Wong, C.; Kammerdiener, J. L.
 NUCL. SCI. ENG., 55(3), 345-348
 Lawrence Livermore Lab

4536. Date 720800
 020000 310000 510000 511110
 An Analytic Time-Dependent Neutron Transport
 Benchmark Solution
 Ganapol, B.
 EIR-220
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Switzerland

4580. Date 740700
 111210 222000 230000 510000 532000 870092 870094
 Decay Heating Measurements and Calculations for
 Irradiated 235-U, 233-U, 239-Pu, and 232-Th (Lwr
 Development Program)
 Gunst, S. B.; Conway, D. E.; Connor, J. C.
 WAPD-TM-1183
 AVAILABILITY-DEP., NTIS \$6.75
 Bettis Atomic Power Lab.

4626. Date 740200
 321000 510000 511110 795180
 The Continued Fraction Approximation: a
 Time-Dependent Transport Method
 Yingling, W. A.; Bridgman, C. J.
 NUCL. SCI. ENG., 53(2), 123-136
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CATEGORY NUMBER 510000

4627. Date 740200
 321000 510000 511110
 Exact Time-Dependent Spatial and Legendre Moments
 for the Monoenergetic Transport Equation
 Canfield, E. H.
 NUCL. SCI. ENG., 53(2), 137-140
 Lawrence Livermore Lab

4734. Date 710000
 111500 310000 510000
 Phase Space Time Evolution Method
 Tavel, M. A.; Zucker, M. S.
 TRANSP., THEORY AND STAT. PHYS., 1(2),
 115-143
 New York Schools

4832. Date 750900
 111220 112400 112500 112600 329000 510000 512220
 793000 794000 795203 870006
 Analysis of Neutron Scattering and Gamma-Ray
 Production Integral Experiments On Carbon for
 Neutron Energies From 1 to 15 Mev
 Cramer, S. N.; Oblo, E. M.
 NUCL. SCI. ENG., 58(1), 33-53; ORNL-TM-4494
 Oak Ridge National Lab.

CATEGORY NUMBER 511110
 PENETRATION - NEUTRON - PRIMARY
 - CALCULATION

3503. Date 710615
 111210 111500 32A000 511110 512210 793000 795082
 Effect of Material Composition on Neutron Penetration
 of Concrete Slabs
 Chilton, A. B.
 NBS-10425
 AVAILABILITY-OFFICE OF THE DIRECTOR,
 NATIONAL BUREAU OF STANDARDS,
 WASHINGTON, D. C. 20234
 National Bureau of Standards

3505. Date 710400
 111500 112B00 311000 32A000 511110 512210 610000
 795082 853100
 Adjoint Sn Calculations of Coupled Neutron and
 Gamma-Ray Transport Through Concrete Slabs
 Roussin, R. W.; Schmidt, F. A. R.
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 Oak Ridge National Lab.

CATEGORY NUMBER 511110

3510. Date 720000
 111500 112B00 32A000 32F000 511110 512110 522130
 795022 795054 795066 820000 861000 870006
 The Removal PI Method for Calculation of Radiation
 Distribution in Shielding
 Valenta, V.
 ZJE-131
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Czechoslovakia

3516. Date 720200
 111500 112B00 112200 32A000 329000 511110 512110
 795042 795082 795127 820000 870013
 Nuclear Radiation Analysis. Summary Report
 Knies, R. J.; Byrn, N. R.; Smith, H. T.
 NASA-CR-123636; N72-24728
 AVAILABILITY-NTIS \$4.50
 Teledyne Brown Eng. Co.

3542. Date 720800
 111210 220000 329000 511110 795178 844000
 Radiation Transport Codes for Potential Applications
 Related to Radiobiology And Radiotherapy Using
 Protons, Neutrons, and Negatively Charged Pions
 Armstrong, T. W.
 ORNL-TM-3816
 AVAILABILITY-DEP., NTIS
 Oak Ridge National Lab.

3553. Date 680500
 329000 511110 521130 861000 870011
 Use of a Monte Carlo Method for the Calculation of
 Propagation of Long Range Neutrons
 Lanore, J. M.
 CEA-N-934 (IN FRENCH)
 AVAILABILITY-COMMISSARIAT A L'ENERGIE
 ATOMIQUE, FONTENAY-AUX
 ROSES(FRANCE). CENTRE D'ETUDES
 NUCLEAIRES
 France

3586. Date 720100
 111110 112110 220000 329000 511110 512210 610000
 Calculated Depth Dose Table for 252-Cf Sources in
 Tissue
 Krishnaswamy, V.
 PHYS. MED. BIOL., 17(1), 56-63
 Pennsylvania Schools

CATEGORY NUMBER 511110

3595. Date 720700
 111110 220000 32A000 511110 795042 845000 870098
 Calculated Neutron Dose Rates for Implantable 252-Cf
 Sources
 Windham, J. P.; Shapiro, A.; Kereiakes, J. G.
 PHYS. MED. BIOL., 17(4), 493-502
 Ohio Schools

3603. Date 720400
 111110 220000 32A000 511110 512110 512210 760000
 795082 844000 870098
 Calculated Dose Rate From 252-Cf Radiotherapy Source
 Stoddard, D. H.
 RADIOLOGY, 103(1), 187-190
 E. I. Dupont Denemours

3614. Date 730803
 111220 329000 511110 512210 795187 870006 870007
 Sam-Ce Monte Carlo Calculations of Nitrogen and
 Carbon Ball Integral Experiments
 Cohen, M. O.; Beer, M.
 DNA-3160Z; MR-7033
 AVAILABILITY-MATHEMATICAL
 APPLICATIONS GROUP, INC., 3
 WESTCHESTER PLAZA, ELMSFORD, NEW
 YORK 10523
 Mathematical Appl. Group, Inc.

3627. Date 730600
 111110 325000 511110
 Three-Dimensional Power Distribution Analysis
 Hassan, H. A.; Wittkopf, W. A.
 BAW-10061
 AVAILABILITY-BABCOCK AND WILCOX, POWER
 GENERATION GROUP, NUCLEAR POWER
 GENERATION DIV., P.O.BOX 1260,
 LYNCHBURG, VA. 24505
 Babcock and Wilcox Co.

3633. Date 730600
 111110 325000 511110 551110
 An Energy Dependent Spatial Mesh Approximation for
 Neutron Group Diffusion Problems. (Lwbr
 Development Program)
 Yasinsky, J. B.; Natelson, M.
 WAPD-TM-1062
 AVAILABILITY-NTIS
 Westinghouse

CATEGORY NUMBER 511110

3652. Date 710825
 111110 328000 421130 430000 511110 511120 521110
 521210 820000 861000
 Orders-Of-Scattering Method for Fast-Neutron
 Transport
 Thiesing, J. W.; Meyer, W.
 COO-2049-9
 AVAILABILITY-DEP., NTIS
 Kansas Schools

3653. Date 721200
 111500 330000 511110
 A Comparison of the Space Legendre Polynomials
 Approach With Other Methods Used for the
 Solution of the Integral Transport Equation
 Stepanek, J.
 EJR-231
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 \$4.25
 Switzerland

3657. Date 720000
 111110 326000 511110
 Theory and Calculation Programs for Solution of the
 Neutron Transport Equation According to Pn and
 the Double Pn Method for Slab Geometry
 Schumann, U.; Bartsch, G.
 TUBIK-16 (IN GERMAN)
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 \$10.25
 Germany (West)

3658. Date 721100
 111110 310000 32A000 511110 521130 810000
 Incorporation of Outer Iteration Techniques Into Task
 Algorithm
 Lillie, R. A.
 ORNL-TM-3958
 AVAILABILITY-NTIS
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3669. Date 730800
 32E000 327000 511110 521110
 A Method of Moments Applied to An Invariant
 Imbedding Solution of a Certain Class of Fredholm
 Integral Equations.
 Boicourt, G. P.
 LA-5356-T; LA-5356-T
 AVAILABILITY-NTIS \$5.45
 Los Alamos Scientific Lab

CATEGORY NUMBER 511110

3686. Date 730115
 111220 329000 421160 510000 511110 540000 820000
 Monte Carlo of D2o and H2o Neutron Moderators for
 Time of Flight Experiments
 Camarda, H. S.
 NUCL. INSTR. METHODS, 106(2), 205-212
 National Bureau of Standards

3690. Date 730200
 111110 329000 511110 870012
 Monte Carlo Method and Variance Reduction in the
 Shielding Calculation
 Rataj, J.
 UJV-2995-R
 AVAILABILITY-NUCLEAR RESEARCH
 INSTITUTE, INFORMATION CENTRE, REZ,
 CZECHOSLOVAKIA
 Czechoslovakia

3731. Date 730900
 111110 329000 510000 511110 512210 795187 853100
 Additional Analysis of Neutron and Secondary Gamma
 Ray Transport in Concrete Using the Sam-Ce Monte
 Carlo Code
 Cohen, M. A.; Beer, M.
 DNA-3182T; MR-7035
 AVAILABILITY-MATHEMATICAL
 APPLICATIONS GROUP, INC., 3
 WESTCHESTER PLAZA, ELMSFORD, NEW
 YORK 10523
 Mathematical Appl. Group, Inc.

3746. Date 720000
 010000 111110 111210 220000 329000 420000 511110
 845000
 Developments in Neutron Dosimetry for Radiation
 Protection
 Auxier, J. A.
 CONF-721203-3
 AVAILABILITY-DEP., NTIS
 Oak Ridge National Lab.

3790. Date 731000
 122200 329000 510000 511110 810000
 Lawrence Livermore Laboratory Evaluated Nuclear
 Data Library (Endl) Translated Into the Endf/b
 Format
 Howerton, R. J.
 UCID-16376
 AVAILABILITY-DEP., NTIS \$4.50
 Lawrence Livermore Lab

CATEGORY NUMBER 511110

3829. Date 740100
 111500 511110 820000 842000 853100 861000 882000
 Spectra and Dose Fractions of Monoenergetic Neutrons
 Passed Through Different Shields and Their
 Application for Dose-Meter Evaluation
 Makra, S.; Palfalvi, J.; Vertes, P.
 HEALTH PHYS., 26(1), 29-39
 Hungary

3833. Date 740100
 111210 122310 511110 717000 870003 870041
 Additional Results Concerning Cross-Section Sensitivity
 of Tritium Breeding In a Fusion Reactor Blanket:
 Effects of Cross Sections of 6-Li, 7-Li, and 93-Nb
 Tobias, M.; Steiner, D.
 ORNL-TM-4201; NUCL. FUSION, 14(2), 153-163
 AVAILABILITY-DEP., NTIS \$3.00
 Oak Ridge National Lab.

3882. Date 710100
 111500 32D000 511110 521110
 Energy-Dependent Transmission and Reflection in Thin
 Slabs
 Larson, H. A.; McCormick, N. J.
 TRANSP., THEORY AND STAT. PHYS., 1(1), 5-23
 Washington Schools

3883. Date 730000
 111110 32A000 325000 511110 795082 861000 870011
 Comparison of Transport and Diffusion Theory for Fast
 Reactor Shielding Calculations
 Sahin, S.
 ATOMKERNENERGIE, 22(1), 24-25
 Oak Ridge National Lab.

3913. Date 721000
 327000 511110 512110 853100
 Moments Method Calculations of Neutron and
 Gamma-Ray Penetration in Bulk Media
 Simmons, G. L.; Eisenhauer, C.; Spencer, L. V.
 CONF-721018, PP.268-283
 AVAILABILITY-OECD
 National Bureau of Standards

3926. Date 721000
 32F000 511110 795022 853100 853200 853400 853600
 853800
 Choice of Characteristic Element Components in
 Concrete for Shielding Calculations on Biological
 Shields for Power Reactors
 Schultz, H.; Vogt, H. G.
 CONF-721018, PP.702-716
 AVAILABILITY-OECD
 Germany (West)

CATEGORY NUMBER 511110

3942. Date 721000
 111110 32F000 511110 853100
 Comparison of Dine Neutron Attenuation Calculations
 With Experimental Results for a Wide Variety of
 Simulated Concrete Configurations for a Fast And
 Thermal Reactor Spectrum
 Verschuur, K. A.
 CONF-721018, PP.996-1008
 AVAILABILITY-OECD {
 Netherlands (Holland)

3964. Date 710000
 111220 421160 511110 870011
 Measurement of Neutron Spectrum in An Anhydrous
 Sodium Carbonate Pile
 Kanda, K.; Nakagome, Y.; Kimura, I.
 ANN. REPTS. RES. REACTOR INST. KYOTO
 UNIV., 4, 25-33
 Japan

3969. Date 660000
 32A000 511110 521130 820000 861000 870001
 Transmission of Neutrons Through Plane Parallel,
 Multi-Layer
 Germogenova, T. A.; Suvorov, A. P.; Utkin, V. A.
 ORNL-TR-2021(REV.)
 AVAILABILITY-DEP., NTIS
 Russia

3978. Date 700331
 111110 122310 422140 511110 820000 841000 853100
 861000
 Neutron Average Energies: Calculations and Theory of
 Measurements
 Makra, S.
 KFKI-70-6-HP
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Hungary

3980. Date 710600
 111110 112110 32A000 511110 511120 512110 512120
 512210 512220 710000 795082 795089
 Comparison of Experimentally Measured and Calculated
 Radiation Environment Internal to the Pax R-1
 Reactor
 Hill, D. J.; Rankin, W. D.
 NUCL. TECH., 11(2), 175-184
 Westinghouse

CATEGORY NUMBER 511110

4026. Date 670901
 329000 511110 521110 795044 861000
 Monte Carlo Calculations of Fast-Neutron Transmission
 and Reflection By Iron Slabs
 Long, J. J.; Wells, M. B.
 RRA-T75
 AVAILABILITY-RADIATION RESEARCH
 ASSOCIATES, INC., 3550 HULEN ST., FORT
 WORTH, TEXAS 76107
 Radiation Research Assoc.

4038. Date 721100
 111500 421000 511110 713000 870079
 Self-Shielding in Stacked Foils
 Nisle, R. G.; Harker, Y. D.
 ANCR-1066
 AVAILABILITY-DEP., NTIS
 Aerojet-General

4043. Date 720000
 111110 421000 511110 631000 820000
 Exit Tube Effect Upon the Measured Space-Energy
 Neutron Spectra
 Hussein, A.; Kawi, A. A.; Naguib, K.; Zakharkin, I.;
 Hamouda, I.
 AREAEE-133
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Egypt

4058. Date 730900
 111110 122110 32A000 511110 870092
 Calculation of Neutron Angular Flux Emerging From
 Shells of Natural Uranium Surrounding a Central
 Source
 West, P. H.
 AWRE-0-35/73
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.00
 England

4105. Date 701200
 111110 511110
 Fast Neutron Spectrum in the Reflector of a Swimming
 Pool Reactor Behind Metallic Slabs
 Brousse, J. C.
 CEA-R-3799 (IN FRENCH); CEA-R-3799 (IN
 FRENCH)
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 France

CATEGORY NUMBER 511110

4116. Date 740600
 111500 325000 510000 511110 861000 870092
 Functionals to Represent the Neutron Flux in Fast
 Pulsed Assemblies
 Knickle, H. N.; Daiteh, P. B.
 NUCL. SCI. ENG., 54(2), 196-200
 Rhode Island Schools

4133. Date 731100
 111110 112110 32A000 511110 512110 512210 793000
 795082 841000 870098 882000 883000
 252-Cf Shielding With Water-Extended Polyester
 Stoddard, D. H.
 DP-1339
 AVAILABILITY-DEP., NTIS \$4.00
 E. I. Dupont Denemours

4155. Date 730300
 111130 311000 32A000 511110 521120 551110 731200
 830000 861000
 Application of Adjoint Difference and Surface Integral
 Methods to Selected Deep-Penetration Radiation
 Transport Problems
 Robinson, J. C.; Stevens, P. N.; Hoffman, T. J.
 BRL-CR-98; NEUT-0150-3; AD-765487
 AVAILABILITY-NTIS
 Tennessee Schools

4161. Date 730300
 111210 122310 329000 510000 511110 795128 820000
 861000 870003 870007 870008
 Monte Carlo Calculations and Sensitivity Studies of the
 Time-Dependent Neutron Spectra Measured in the
 LL Pulsed Sphere Program
 Cramer, S. N.; Roussin, R. W.; Oblow, E. M.
 ORNL-TM-4072
 AVAILABILITY-DEP., NTIS \$14.00
 Oak Ridge National Lab.

4164. Date 710600
 010000 111110 32A000 511110 511120 512110 512120
 632110 712000 793000 795082
 Recent Developments in the Shielding of Neutron
 Sources
 Claiborne, H. C.
 ORNL-RSIC-32; CONF-710402-VOL.1,1-65-68
 AVAILABILITY-DEP., NTIS
 Oak Ridge National Lab.

CATEGORY NUMBER 511110

4174. Date 740800
 111500 330000 511110
 Generalized Collision Probabilities and Neutron
 Transport Eigenvalue Problems
 Lefvert, T.
 NUCL. SCI. ENG., 54(4), 369-375
 Sweden

4193. Date 731000
 32E000 511110
 Invariant Imbedding and Radiation Dosimetry V: Finite
 Order Intensity Of Radiation in a Target Slab
 Ueno, S.; Vasudevan, R.; Bellman, R.
 MATH.BIOSCI., 18(1-2), 55-66
 California Schools

4205. Date 720900
 111110 32A000 511110 795042 870092 870094 870098
 Subcritical Multiplication of Californium-252 Neutrons
 and Its Applications
 Hansen, L. E.; Wogman, N. A.; Perkins, R. W.;
 Clayton, E. D.
 NUCL. TECH., 15(2), 422-430
 Battelle Memorial Inst.

4215. Date 690800
 111110 112400 112500 112600 32A000 511110 512110
 512210 522130 552110 552220 716000 795089 810000
 Some Characteristics of Secondary Gamma Ray
 Transport in Asymmetric Snap Shields
 Mynatt, F. R.; Williams, L. R.
 ANS-SD-7, PP.113-135; CONF-671140, PP.113-135
 AVAILABILITY-DEP., NTIS \$3.00
 Oak Ridge National Lab.

4225. Date 731000
 111110 122110 122310 32A000 511110 713000 870092
 870094
 A Systematic Test of the Endf-B/3 Evaluated
 Cross-Section Library on "Clean" Critical
 Assemblies
 Wagschal, J. J.; Yaari, A.
 STI/PUB-343,V2,PP.83-101;
 CONF-730302,V2,PP.83-101; IAEA-SM-170/19
 AVAILABILITY-IAEA
 Israel

4256. Date 711021
 111500 311000 32A000 511110 512110 512210 610000
 853100
 Effect of Material Composition, Especially Water
 Content, on Neutron Penetration of Concrete Slabs
 Chilton, A. B.
 ANS-SD-13, ARTICLE 6

CATEGORY NUMBER 511110

AVAILABILITY-ANS
 Illinois Schools

4259. Date 710000
 111500 112B00 329000 511110 512110 521120 522120
 795199 795200 830000 861000
 The Simulation of Low Energy Photon Transport and
 the Simulation of The Adjoint Neutron Transport
 Equation With Monte Carlo
 Carter, L. L.; Cashwell, E. D.; Schrandt, R. G.
 LA-DC-13275; CONF-711125-1;
 ORNL-RSIC-33,PP.197-207
 AVAILABILITY-DEP., NTIS
 Los Alamos Scientific Lab

4260. Date 710000
 111210 32A000 329000 510000 511110 795129 795154
 795172 795180 830000 870007 870008
 Multigroup Monte Carlo and Sn Methods for Air
 Transport
 Harris, D. R.; Koenig, D. R.; Preeg, W.
 LA-DC-13269; CONF-711125,PP.209-227;
 ORNL-RSIC-33,PP.209-227
 AVAILABILITY-DEP., NTIS
 Los Alamos Scientific Lab

4263. Date 710000
 111130 111400 32A000 510000 511110 795082 795089
 830000
 Effects of Source Asymmetry on Radiation Transport in
 Infinite Air
 McGregor, B. J.
 ORNL-RSIC-33,PP.341-359; CONF-711125-5
 AVAILABILITY-DEP., NTIS
 Oak Ridge National Lab.

4278. Date 700300
 010000 32A000 32E000 32F000 326000 329000 511110
 620000 710000 722100 795022 795081 795121 820000
 861000 870092
 Key Problems in Radiation Shielding in the Federal
 Republic of Germany
 Bunemann, D.
 ANS-SD-8,PP.82-108; AD-712532,PP.82-108
 AVAILABILITY-NTIS
 Germany (West)

4280. Date 700300
 010000 32A000 32F000 511110 521130 632120 721100
 795040 795042 795066 795072 795121 820000 853100
 861000 870006
 Today's Approaches to Reactor Shielding Problems
 Nicks, R.; Penkuhn, H.; Ponti, C.
 ANS-SD-8,PP.113-138; AD-712532,PP.113-138

CATEGORY NUMBER 511110

AVAILABILITY-NTIS

Italy

4281..... Date 700300
 010000 511110 512110 521130 522110 710000 713000
 721100 722100 820000 841000 861000 870013 870050
 Latest Research on Reactor Shielding in Japan
 Hyodo, T.; Miyasaka, S.; Nakata, M.
 ANS-SD-8,PP.139-155; AD-712532,PP 139-155
 AVAILABILITY-NTIS
 Japan

4287..... Date 740900
 020000 111110 421110 421130 422140 511110 551110
 713000 861000
 Sdt 11. the Ornl Benchmark Experiment for Neutron
 Transport Through Iron And Stainless Steel, Part I
 Maerker, R. E.
 ORNL-TM-4222; ENDF-188
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4288..... Date 740900
 020000 111110 421110 421130 422140 511110 551110
 713000 870011
 Sdt 12. the Ornl Benchmark Experiment for Neutron
 Transport Through Sodium
 Maerker, R. E.
 ORNL-TM-4223; ENDF-189
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4295..... Date 740700
 111110 111210 220000 329000 511110 512210 551110
 552210 845000
 Distributions for the Design of Dosimetric Experiments
 in a Tissue Equivalent Medium
 Jones, T. D.
 HEALTH PHYS., 27(1), 87-96
 Oak Ridge National Lab.

4351..... Date 740800
 111110 111210 111500 329000 511110 521110 795017
 795171 820000
 Monte Carlo Calculated Spectra of Neutrons
 Transmitted Through and Reflected From
 Homogeneous Water Slabs
 Palfalvi, J.; Koblinger, L.
 KFKI-74-63
 AVAILABILITY-DEP. NTIS (U.S. SALES ONLY)
 \$5.50
 Hungary

CATEGORY NUMBER 511110

4363..... Date 740400
 111210 32A000 511110 717000 795082 870006
 Calculation of Fusion Spectrum in Graphite
 Freim, J. B.; Draper, E. L., Jr.
 CONF-721111,PP.944-963
 AVAILABILITY-NTIS
 Pacific Northwest Lab

4369..... Date 730000
 111110 111500 511110 794000 795171 820000 842000
 861000 882000
 Calculation and Comparison of Leakage Neutron
 Spectra
 Makra, S.; Palfalvi, J.; Zarand, P.
 KFKI-72-67; STI/PUB/318,V.1,47-57; CONF-721203-11
 AVAILABILITY-IAEA
 Hungary

4371..... Date 730000
 111110 220000 423140 511110 820000 870092
 Prediction of Fast Neutron Spectra in Criticality
 Accidents
 Cross, W. G.; Ing, H.
 STI/PUB/318,VOL.1,73-86; CONF-721203,V.1,73-86;
 IAEA-SM-167/45
 AVAILABILITY-IAEA
 Canada

4411..... Date 740700
 020000 111110 32A000 329000 421130 422140 511110
 511120 512210 713000 793000 795017 795046 795082
 795089 795127 842000 870011
 Shielding Benchmark Problems
 Simmons, G. L.(Ed.)
 ORNL-RSIC-25(SUPPL.2); ANS-SD-9(SUPPL.2)
 AVAILABILITY-DEP., NTIS \$5.45
 Oak Ridge National Lab.

4438..... Date 740000
 111210 210000 511110 531000 717000 795042
 Some Neutronics Aspects of Laser-Fusion Reactors
 Frank, T.; Dudziak, D.; Heck, E.
 LA-UR-74-592; CONF-740402-13;
 CONF-740402-P2,101-113
 AVAILABILITY-DEP., NTIS \$4.00
 Los Alamos Scientific Lab

4453..... Date 740800
 111500 326000 511110
 The Solution of the Multigroup Neutron Transport
 Equation Using Spherical Harmonics
 Fletcher, J. K.
 TRC-REPORT-2547
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REACTOR GROUP, RISLEY, WARRINGTON,
LANCASHIRE. WA3 6AT
England

4472. Date 720000
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Italy

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4411..... Date 740700
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AVAILABILITY-DEP., NTIS
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 AVAILABILITY-DEP., NTIS \$5.50
 Lawrence Livermore Lab

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 Lawrence Livermore Lab

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4817. Date 750515
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 Brocker, B.; Clausen, K.; Schneider-Kuhnle, P.;
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 Kappler, F.; Rusch, D.; Werle, H.; Wiese, H. W.
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 SUITE 707, WASHINGTON, D.C. 20037 (U.S.
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CATEGORY NUMBER 511120

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 Cramer, S. N.; Oblow, E. M.
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4910. Date 751000
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 861000 870004 870041
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 Spectra From Spheres Of Iron, Niobium, Beryllium,
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4911. Date 751000
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CATEGORY NUMBER 511120

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 Stainless Steel Through Measurements and Analyses
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 Kimura, I.; Kobayashi, K.; Hayashi, S. A.;
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4918. Date 751000
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4936. Date 751000
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CATEGORY NUMBER 512110
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 - CALCULATION

3506. Date 721100
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 ASSOCIATES, INC., 3550 HULEN STREET,
 FORT WORTH, TEXAS 76107
 Radiation Research Assoc.

3510..... Date 720000
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 Valenta, V.
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3516..... Date 720200
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 Stoddard, D. H.
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 Kuspa, J. P.; Tsoulfanidis, N.
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3823..... Date 730500
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3860..... Date 690600
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3970..... Date 690000
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CATEGORY NUMBER 512110

Germany (West)

3980. Date 710600
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Comparison of Experimentally Measured and Calculated
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Dutton, L. M.

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England

3998. Date 700000
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Krueger, F. W.

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AVAILABILITY-DEP., NTIS

Germany (West)

4001. Date 700500
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Texas Schools

4018. Date 670600
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Edgerton, Germeshausen, + Grier

CATEGORY NUMBER 512110

4024. Date 711200
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 Distributions Of Multiple Scattered Gamma
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Stehfest, H.

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Germany (West)

4076. Date 721100
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Poland

4124. Date 740700
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Prediction of Gamma-Ray Spectra at Deep Penetration
 Utilizing The Equilibrium Angular Distribution

Johnson, D. M.

NUCL. SCI. ENG., 54(3), 235-253

England

4133. Date 731100
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252-Cf Shielding With Water-Extended Polyester

Stoddard, D. H.

DP-1339

AVAILABILITY-DEP., NTIS \$4.00

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4164. Date 710600
 010000 111110 32A000 511110 511120 512110 512120
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 Sources

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Oak Ridge National Lab.

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 Razani, A.
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4200..... Date 730500
 112720 220000 328000 512110
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 Thames, H. D.
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4215..... Date 690800
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 Transport in Asymmetric Snap Shields
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4256..... Date 711021
 111500 311000 32A000 511110 512110 512210 610000
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 Content, on Neutron Penetration of Concrete Slabs
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4259..... Date 710000
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 Los Alamos Scientific Lab

CATEGORY NUMBER 512110

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4285..... Date 740800
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 Woolson, W. A.; Huszar, L.; Harris, R. J., Jr.
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 1200 PROSPECT STREET, P.O. BOX 2351, LA
 JOLLA, CALIF. 92037
 Science Applications, Inc.

4336..... Date 720400
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 Transport of Photons Through Air Using Source-Energy
 Band Structure From 300 Kev to 2 Kev
 Banks, N. E.; Coleman, W. A.
 BRL-R-1577
 AVAILABILITY-DEFENSE DOCUMENTATION
 CENTER, CAMERON STATION,
 ALEXANDRIA, VIRGINIA 22314
 Army Installations

4337..... Date 720400
 112B00 329000 512110 513110 830000
 Transport of Photons Through Air Using Source-Energy
 Band Structure From 300 Kev to 2 Kev. Appendix B -
 Data for Source Energies 190-160, 160-140, And
 140-120 Kev
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 BRL-R-1577, APPENDIX B
 AVAILABILITY-DEFENSE DOCUMENTATION
 CENTER, CAMERON STATION,
 ALEXANDRIA, VIRGINIA 22314
 Army Installations

4338..... Date 720400
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 Transport of Photons Through Air Using Source-Energy
 Band Structure from 300 Kev to 2 Kev. Appendix C -
 Data for Source Energies 120-105, 105-90, and 90-75
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 CENTER, CAMERON STATION,
 ALEXANDRIA, VIRGINIA 22314

CATEGORY NUMBER 512110

Army Installations

4339..... Date 720400
112B00 329000 512110 513110 830000

Transport of Photons Through Air Using Source-Energy
Band Structure From 300 Kev to 2 Kev. Appendix D
- Data for Source Energies 75-65, 65-55, and 55-45
Kev

Banks, N. E.; Coleman, W. A.

BRL-R-1577, APPENDIX D

AVAILABILITY-DEFENSE DOCUMENTATION
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ALEXANDRIA, VIRGINIA 22314

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4340..... Date 720400
112B00 329000 512110 513110 830000

Transport of Photons Through Air Using Source-Energy
Band Structure From 300 Kev to 2 Kev. Appendix E
- Data for Source Energies 45-35, 35-30, and 30-25
Kev

Banks, N. E.; Coleman, W. A.

BRL-R-1577, APPENDIX E

AVAILABILITY-DEFENSE DOCUMENTATION
CENTER, CAMERON STATION,
ALEXANDRIA, VIRGINIA 22314

Army Installations

4341..... Date 720400
112B00 329000 512110 513110 830000

Transport of Photons Through Air Using Source-Energy
Band Structure From 300 Kev to 2 Kev. Appendix F
- Data for Source Energies 25-20, 20-15, 15-10, 10-8,
8-6, 6-4, and 4-2 Kev

Banks, N. E.; Coleman, W. A.

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AVAILABILITY-DEFENSE DOCUMENTATION
CENTER, CAMERON STATION,
ALEXANDRIA, VIRGINIA 22314

Army Installations

4490..... Date 750200
112B00 327000 512110 632110 632120 820000 853100
870013

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Infinite-Medium Gamma-Ray Buildup Factors for
Monoenergetic, Point Isotropic Sources in Water,
Aluminum, And Concrete

Morris, E. E.; Chilton, A. B.; Vetter, A. F.

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4544..... Date 720000
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Patau, J. P.

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France

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Dellin, T. A.

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AVAILABILITY-DEP., NTIS

Sandia Corporation

4588..... Date 701200
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Effect of Absorber Thickness on

Narrow-Beam-Collimated Geometry Condition

Gopal, S.; Sanjeevaiah, H.; Sanjeevaiah, B.

CONF-701219(V.2), 513-517

AVAILABILITY-DEPARTMENT OF ATOMIC
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India

4596..... Date 730100
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Conversion Factors for 60-Co Radiation in Water

Eisenlohr, H. H.; Abedin-Zadeh, R.

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Electrons in The Discrete Sn Method

Stephan, B. G.; Bridgman, C. J.

J. COMP. PHYS., 11(2), 269-295

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4762..... Date 741200
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795178 845000

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Neutrons, Negatively Charged Pions, Protons, and
Alpha Particles in Radiotherapy

Alsmiller, R. G., Jr.; Santoro, R. T.;

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4802..... Date 741100
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New York Schools

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Connecticut Schools

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Hubbard, L. B.
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South Carolina Schools

4828..... Date 750600
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731200 830000 853100
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New York Schools

CATEGORY NUMBER 512120

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Goswami, B.; Chaudhuri, N.
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Dickson, H. W.; Haywood, F. F.
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Oak Ridge National Lab.

3867..... Date 720400
112720 220000 423250 512120 845000
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Orton, C. G.; Seibert, J. B.
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3870..... Date 730000
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Franceschi, L. D.; Gentili, A.; Sabbatini, V.
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Italy

3963..... Date 721000
421200 512120 522210 853100 861000 870082
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Johnson, W. R.; Thompson, W. L.; Risher, D. H.;
Hassler, L. A.; Rogers, J. E.
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AVAILABILITY-OECD
Virginia Schools

3980..... Date 710600
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512210 512220 710000 795082 795089
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Radiation Environment Internal to the Pax R-1
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CATEGORY NUMBER 512120

4025. Date 661100
 112500 423230 512120 853100
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 Concrete
 Johnson, W. R.
 NDL-TR-82; AD-643754
 AVAILABILITY-NTIS
 Virginia Schools

4125. Date 740700
 112720 421200 512120 522230 853100 861000
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 Johnson, D. M.; Woollam, P. B.
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4164. Date 710600
 010000 111110 32A000 511110 511120 512110 512120
 632110 712000 793000 795082
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 Sources
 Claiborne, H. C.
 ORNL-RSIC-32; CONF-710402-VOL.1,1-65-68
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4217. Date 690800
 111220 112720 112920 220000 423210 423240 511120
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 Radiation Shielding Studies at the Canadian Defence
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 Clifford, C. E. (Can)
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4349. Date 740600
 111210 122310 329000 512120 512220 861000 863000
 Measurements of Neutron and Gamma-Ray Spectra
 From Iron and Tungsten Spheres Bombarded With
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 Arthur, E. D.; Auchampaugh, G. F.; Drake, D. M.
 LA-5563
 AVAILABILITY-DEP., NTIS \$4.00
 Los Alamos Scientific Lab

CATEGORY NUMBER 512120

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 September 7, 1973
 Dickson, H. W.; Haywood, F. F.; Becker, K.
 ORNL-TM-4566
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4595. Date 730100
 010000 220000 423240 512120
 National and International Radiation Dose
 Intercomparisons. Proceedings of A Panel Held in
 Vienna, 13-17 December 1971
 IAEA,
 STI/PUB-338; CONF-711225
 AVAILABILITY-IAEA \$6.00
 Iaea

4729. Date 741200
 112760 512120 830000
 Measuring Radioactivity in the Environment - the
 Quality of the Data
 Jarvis, A. N.; Easterly, D. G.
 NUCL. TECH., 24(3), 447-450
 Environmental Protection Agency

CATEGORY NUMBER 512210
 PENETRATION - GAMMA-RAY - SECONDARY
 - CALCULATION

3503. Date 710615
 111210 111500 32A000 511110 512210 793000 795082
 Effect of Material Composition on Neutron Penetration
 of Concrete Slabs
 Chilton, A. B.
 NBS-10425
 AVAILABILITY-OFFICE OF THE DIRECTOR,
 NATIONAL BUREAU OF STANDARDS,
 WASHINGTON, D. C. 20234
 National Bureau of Standards

3505. Date 710400
 111500 112B00 311000 32A000 511110 512210 610000
 795082 853100
 Adjoint Sn Calculations of Coupled Neutron and
 Gamma-Ray Transport Through Concrete Slabs
 Roussin, R. W.; Schmidt, F. A. R.
 NUCL. ENG. DESIGN, 15(3), 319-343
 Oak Ridge National Lab.

CATEGORY NUMBER 512210

3586..... Date 720100
 111110 112110 220000 329000 511110 512210 610000
 Calculated Depth Dose Table for 252-Cf Sources in
 Tissue
 Krishnaswamy, V.
 PHYS. MED. BIOL., 17(1), 56-63
 Pennsylvania Schools

3603..... Date 720400
 111110 220000 32A000 511110 512110 512210 760000
 795082 844000 870098
 Calculated Dose Rate From 252-Cf Radiotherapy Source
 Stoddard, D. H.
 RADIOLOGY, 103(1), 187-190
 E. I. Dupont Denemours

3614..... Date 730803
 111220 329000 511110 512210 795187 870006 870007
 Sam-Ce Monte Carlo Calculations of Nitrogen and
 Carbon Ball Integral Experiments
 Cohen, M. O.; Beer, M.
 DNA-3160Z; MR-7033
 AVAILABILITY-MATHEMATICAL
 APPLICATIONS GROUP, INC., 3
 WESTCHESTER PLAZA, ELMSFORD, NEW
 YORK 10523
 Mathematical Appl. Group, Inc.

3731..... Date 730900
 111110 329000 510000 511110 512210 795187 853100
 Additional Analysis of Neutron and Secondary Gamma
 Ray Transport in Concrete Using the Sam-Ce Monte
 Carlo Code
 Cohen, M. A.; Beer, M.
 DNA-3182T; MR-7035
 AVAILABILITY-MATHEMATICAL
 APPLICATIONS GROUP, INC., 3
 WESTCHESTER PLAZA, ELMSFORD, NEW
 YORK 10523
 Mathematical Appl. Group, Inc.

3920..... Date 721000
 32A000 512210
 Characteristics of Secondary Gamma Radiation From
 the Heavy Component Of Nuclear Reactor Shielding
 Abagyan, A. A.; Vrazhonv, Yu. N.;
 Germogenova, T. A.; Degtyarev, S. F.;
 Dubinin, A. A.; Zhuravlev, V. I.;
 Kazansky, Yu. A.; Utkin, V. A.
 CONF-721918, PP.557-578
 AVAILABILITY-OECD
 Russia

CATEGORY NUMBER 512210

3953..... Date 721000
 112400 112500 32A000 512210 795042
 Anisotropy of Photon Emission in Transport
 Calculations
 Dudziak, D. J.; Bosler, G. E.
 CONF-721000, PP.1232-1248; LA-DC-72-1010
 AVAILABILITY-OECD
 Los Alamos Scientific Lab

3980..... Date 710600
 111110 112110 32A000 511110 511120 512110 512120
 512210 512220 710000 795082 795089
 Comparison of Experimentally Measured and Calculated
 Radiation Environment Internal to the Pax R-1
 Reactor
 Hill, D. J.; Rankin, W. D.
 NUCL. TECH., 11(2), 175-184
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3989..... Date 691000
 112200 121200 512110 512210 610000 794000 861000
 870082
 The Importance of Bremsstrahlung in the Shielding of
 Gamma Rays Having Energies Less Than 10 Mev
 Dutton, L. M.
 AEEW-R-675
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY),
 UK 9S .6D.
 England

4013..... Date 700700
 112400 329000 512210 795127 830000
 Sensitivity of Secondary Gamma-Ray Dose to Angular
 Distribution of Gamma Rays From Neutron
 Inelastic Scattering
 Straker, E. A.
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4133..... Date 731100
 111110 112110 32A000 511110 512110 512210 793000
 795082 841000 870098 882000 883000
 252-Cf Shielding With Water-Extended Polyester
 Stoddard, D. H.
 DP-1339
 AVAILABILITY-DEP., NTIS \$4.00
 E. I. Dupont Denemours

CATEGORY NUMBER 512210

4215..... Date 690800
 111110 112400 112500 112600 32A000 511110 512110
 512210 522130 552110 552220 716000 795089 810000
 Some Characteristics of Secondary Gamma Ray
 Transport in Asymmetric Snap Shields
 Mynatt, F. R.; Williams, L. R.
 ANS-SD-7, PP.113-135; CONF-671140, PP.113-135
 AVAILABILITY-DEP., NTIS \$3.00
 Oak Ridge National Lab.

4256..... Date 711021
 111500 311000 32A000 511110 512110 512210 610000
 853100
 Effect of Material Composition, Especially Water
 Content, on Neutron Penetration of Concrete Slabs
 Chilton, A. B.
 ANS-SD-13, ARTICLE 6
 AVAILABILITY-ANS
 Illinois Schools

4295..... Date 740700
 111110 111210 220000 329000 511110 512210 551110
 552210 845000
 Distributions for the Design of Dosimetric Experiments
 in a Tissue Equivalent Medium
 Jones, T. D.
 HEALTH PHYS., 27(1), 87-96
 Oak Ridge National Lab.

4411..... Date 740700
 020000 111110 32A000 329000 421130 422140 511110
 511120 512210 713000 793000 795017 795046 795082
 795089 795127 842000 870011
 Shielding Benchmark Problems
 Simmons, G. L.(Ed.)
 ORNL-RSIC-25(SUPPL.2); ANS-SD-9(SUPPL.2)
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4649..... Date 741100
 112B00 220000 32A000 511110 512210 845000
 Neutron and Capture Gamma Spectra in a
 Tissue-Equivalent Slab for Isotropic Irradiation
 Abagyan, A. A.; Dubinin, A. A.; Obaturov, G. M.;
 Shalin, V. A.; Zhuravlev, V. I.; Vrazhnov, Yu. N.;
 Kostin, E. I.
 HEALTH PHYS., 27(5), 481-489
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CATEGORY NUMBER 512210

4802..... Date 741100
 111110 112110 511110 512110 512210 610000 845000
 870090
 Calculated Depth Dose Tables for Californium-252 Seed
 Sources in Tissue
 Krishnaswamy, V.
 PHYS. MED. BIOL., 19(6), 886-888
 New York Schools

4894..... Date 760300
 111220 329000 511120 512210 794000 795203 870007
 Analysis of Neutron Scattering and Gamma-Ray
 Production Integral Experiments On Nitrogen for
 Neutron Energies From 1 to 15 Mev
 Cramer, S. N.; Oblow, E. M.
 ORNL/TM-5220
 AVAILABILITY-NTIS \$4.50
 Oak Ridge National Lab.

4946..... Date 750312
 111110 122110 122210 511110 512210 532000 719B00
 794000 795082 853100 861000 870006
 Neutron-Coupled Gamma-Ray Cross-Section
 Requirements for Gas-Cooled Fast Breeder Reactors
 Nagel, M.; Cerbone, R. J.
 GA-A-13329; NBS SPEC.PUB.-425, PP.444-446;
 CONF-750303-66
 AVAILABILITY-DEP., NTIS \$4.00
 Gulf General Atomic

CATEGORY NUMBER 512220
 PENETRATION - GAMMA-RAY - SECONDARY
 - EXPERIMENT

3707..... Date 710100
 111110 511120 512220 718000
 Investigations on the Primary Reactor Shielding of the
 Nuclear Ship "Otto Hahn"
 Fiebig, P.; Frisins, F.; Hackbarth, H.; Richter, G.
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 Germany (West)

3962..... Date 721000
 112770 421200 512220 820000 861000 870082
 Benchmark Data for High Energy Gamma Penetration
 Bishop, G. B.; Smitton, C.; Packwood, A.
 CONF-721018, PP.1472-1492
 AVAILABILITY-OECD
 England

CATEGORY NUMBER 512220

3980..... Date 710600
111110 112110 32A000 511110 511120 512110 512120
512210 512220 710000 795082 795089

Comparison of Experimentally Measured and Calculated
Radiation Environment Internal to the Pax R-1
Reactor

Hill, D. J.; Rankin, W. D.
NUCL. TECH., 11(2), 175-184
Westinghouse

4036..... Date 730400
112200 220000 512220 845000

Rbe of High-Energy Bremsstrahlung
Kovalev, V. P.; Kapchigashev, S. P.; Tsuladze, N. G.
AEC-TR-7421, PP.190-193
AVAILABILITY-DEP., NTIS
Russia

4157..... Date 721221
111220 112500 122310 122350 329000 421160 421200
511120 512220 853100

Time-Dependent Fast-Neutron and Secondary
Gamma-Ray Spectrum Measurements In Concrete -
Vol. 3

Harris, L., Jr.; Kendrick, H.
GULF-RT-A12456; DNA-2401-3; AD-760035
AVAILABILITY-NTIS
Gulf General Atomic

4244..... Date 711100
111210 112400 112500 112600 32A000 421200 512220
870007

Study of Secondary Gamma Rays in Liquid Nitrogen By
Unfolding Ge(Li) Spectra

Reynolds, G. M.; Sperling, S. M.
ANS-SD-12, ARTICLE 3
AVAILABILITY-ANS
Science Applications, Inc.

4349..... Date 740600
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Measurements of Neutron and Gamma-Ray Spectra
From Iron and Tungsten Spheres Bombarded With
Neutrons From the 2-H(T,n) 4-He Reaction

Arthur, E. D.; Auchampaugh, G. F.; Drake, D. M.
LA-5563
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Los Alamos Scientific Lab

CATEGORY NUMBER 512220

4355..... Date 741000
112120 421200 512220

The Spectrum of Gamma Rays With Energies Greater
Than 1.8 Mev Produced By Fissions and
Short-Lived Fission Products in the Health Physics
Research Reactor

Thorngate, J. H.; Christian, D. J.; Sumner, G. K.
ORNL-TM-4636
AVAILABILITY-DEP., NTIS
Oak Ridge National Lab.

4377..... Date 730000
111210 220000 511120 512220 845000

Depth-Dose Measurements of D-T Neutrons in
Tissue-Equivalent Phantoms

Broers-Challiss, J. E.; Engels, A. C.; Bouts, C. J.;
Broerse, J. J.
STI/PUB/318, V.1, 201-210; CONF-721203, V.1, 201-210;

IAEA-SM-167/72
AVAILABILITY-IAEA
Netherlands (Holland)

4799..... Date 740900
111110 111210 220000 329000 423120 423220 511120
512220 845000

Measured and Calculated Dose Distributions From
Neutrons Incident on A Tissue-Equivalent Phantom
Hubbell, H. H., Jr.; Chen, W. L.; Shinpaugh, W. H.;
Jones, T. D.

HEALTH PHYS., 27(3), 289-297
Oak Ridge National Lab.

4817..... Date 750515
111220 421130 511120 512220 760000 842000 861000
870082 882000

Intensity Measurements and Shielding of a Fast-Neutron
Beam for Biological And Medical Applications
Meulders, J. P.; Leleux, P.; Macq, P. C.; Pirart, C.;
Valenduc, G.

NUCL. INSTR. METHODS, 126(1), 81-85
Belgium

4832..... Date 750900
111220 112400 112500 112600 329000 510000 512220
793000 794000 795203 870006

Analysis of Neutron Scattering and Gamma-Ray
Production Integral Experiments On Carbon for
Neutron Energies From 1 to 15 Mev

Cramer, S. N.; Oblo, E. M.
NUCL. SCI. ENG., 58(1), 33-53; ORNL-TM-4494
Oak Ridge National Lab.

CATEGORY NUMBER 512220

4840. Date 751000
111210 112500 112600 421130 511120 512220 830000
870007

Measurement of the Neutron and Gamma-Ray Spectra
Originating From a 14-Mev Neutron Source in
Liquid Nitrogen and Liquid Air
Brocker, B.; Clausen, K.; Schneider-Kuhnle, P.;
Weinert, M.
NUCL. SCI. ENG., 58(2), 226-238
Germany (West)

4908. Date 751000
111220 122310 122330 421160 421200 511120 512220
810000

Integral Measurements to Test Shielding Cross Sections
Harris, L., Jr.; Young, J. C.; Lurie, N. A.;
Steinman, D. K.; Friesenhahn, S. J.; Bryan, D. E.;
Gober, W. E.; Schanzler, L.
NBS SPEC.PUB.-425, PP.161-164;
CONF-750303, PP.161-164
AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
SOLD IN SETS ONLY
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4950. Date 750300
010000 020000 511120 512220 810000
Benchmark Experiments for Nuclear Data
Bohn, E. M.; Maerker, R. E.; McCrosson, F. J.;
Labauve, R. J.; Magurno, B. A.; Schenter, R. E.
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AVAILABILITY-NTIS \$4.00 AS CONF-750303-52
Argonne National Lab.

CATEGORY NUMBER 513110
PENETRATION - X-RAY - PRIMARY
- CALCULATION

4022. Date 730000
113100 329000 513110
Absorbed Dose to Selected Internal Organs From
Typical Diagnostic Exposures
Poston, J. W.; Warner, G. G.
CONF-730907-5
AVAILABILITY-DEP., NTIS \$3.00
Oak Ridge National Lab.

4112. Date 740600
113100 121200 122210 32A000 513110 810000
Relativistic Compton Scattering By the Discrete
Ordinates Method
Stephan, B. G.; Bridgman, C. J.
NUCL. SCI. ENG., 54(2), 101-115
Air Corps Installations

CATEGORY NUMBER 513110

4285. Date 740800
111300 112130 512110 513110 632110 795179 830000
Models of Photon Radiation Transport in Air
Woolson, W. A.; Huszar, L.; Harris, R. J., Jr.
DNA-3279T
AVAILABILITY-SCIENCE APPLICATIONS, INC.,
1200 PROSPECT STREET, P.O. BOX 2351, LA
JOLLA,
CALIF.92037
Science Applications, Inc.

4336. Date 720400
112B00 329000 512110 513110 830000
Transport of Photons Through Air Using Source-Energy
Band Structure From 300 Kev to 2 Kev
Banks, N. E.; Coleman, W. A.
BRL-R-1577
AVAILABILITY-DEFENSE DOCUMENTATION
CENTER, CAMERON STATION,
ALEXANDRIA, VIRGINIA 22314
Army Installations

4337. Date 720400
112B00 329000 512110 513110 830000
Transport of Photons Through Air Using Source-Energy
Band Structure from 300 Kev to 2 Kev. Appendix B -
Data for Source Energies 190 160, 160-140, And
140-120 Kev
Banks, N. E.; Coleman, W. A.
BRL-R-1577, APPENDIX B
AVAILABILITY-DEFENSE DOCUMENTATION
CENTER, CAMERON STATION,
ALEXANDRIA, VIRGINIA 22314
Army Installations

4338. Date 720400
112B00 329000 512110 513110 830000
Transport of Photons Through Air Using Source-Energy
Band Structure from 300 Kev to 2 Kev. Appendix C -
Data for Source Energies 120 105, 105-90, and 90-75
Kev
Banks, N. E.; Coleman, W. A.
BRL-R-1577, APPENDIX C
AVAILABILITY-DEFENSE DOCUMENTATION
CENTER, CAMERON STATION,
ALEXANDRIA, VIRGINIA 22314
Army Installations

CATEGORY NUMBER 513110

4339..... Date 720400
 112B00 329000 512110 513110 830000
 Transport of Photons Through Air Using Source-Energy
 Band Structure From 300 Kev to 2 Kev. Appendix D
 - Data for Source Energies 75-65, 65-55, and 55-45
 Kev

Banks, N. E.; Coleman, W. A.
 BRL-R-1577, APPENDIX D
 AVAILABILITY-DEFENSE DOCUMENTATION
 CENTER, CAMERON STATION,
 ALEXANDRIA, VIRGINIA 22314
 Army Installations

4340..... Date 720400
 112B00 329000 512110 513110 830000
 Transport of Photons Through Air Using Source-Energy
 Band Structure From 300 Kev to 2 Kev. Appendix E
 - Data for Source Energies 45-35, 35-30, and 30-25
 Kev

Banks, N. E.; Coleman, W. A.
 BRL-R-1577, APPENDIX E
 AVAILABILITY-DEFENSE DOCUMENTATION
 CENTER, CAMERON STATION,
 ALEXANDRIA, VIRGINIA 22314
 Army Installations

4341..... Date 720400
 112B00 329000 512110 513110 830000
 Transport of Photons Through Air Using Source-Energy
 Band Structure From 300 Kev to 2 Kev. Appendix F
 - Data for Source Energies 25-20, 20-15, 15-10, 10-8,
 8-6, 6-4, and 4-2 Kev

Banks, N. E.; Coleman, W. A.
 BRL-R-1577, APPENDIX F
 AVAILABILITY-DEFENSE DOCUMENTATION
 CENTER, CAMERON STATION,
 ALEXANDRIA, VIRGINIA 22314
 Army Installations

4343..... Date 740900
 113100 121200 310000 513110 523100 870004 870013
 870079
 Analytic X-Ray Transport Theory for Numerical
 Computation
 Cole, R. K., Jr.
 NUCL. SCI. ENG., 55(1), 76-84
 Sandia Corporation

CATEGORY NUMBER 513110

4562..... Date 721200
 112B00 113100 121200 512110 513110 610000 613000
 810000

Handbook of Photo-Compton Current Data
 Dellin, T. A.
 SCL-RR-720086
 AVAILABILITY-DEP., NTIS
 Sandia Corporation

4660..... Date 730400
 113100 220000 513110 613000 760000 870029 870082
 Parameterization of 4 Mv Depth-Dose Data for the
 Clinac-4 Accelerator
 Dixon, R. L.
 RADIOLOGY, 10(001), 207-211
 North Carolina Schools

4730..... Date 730200
 113100 121200 122210 32A000 512110 513110
 Compton Scattering From a Maxwellian Distribution of
 Electrons in The Discrete Sn Method
 Stephan, B. G.; Bridgman, C. J.
 J. COMP. PHYS., 11(2), 269-295
 Air Corps Installations

4748..... Date 730900
 113100 220000 329000 513110 820000
 Calculation of X-Ray Spectra in the Diagnostic Energy
 Range, Due Regard Being Paid to Scattered
 Radiation. (Letter to the Editor)
 Reiss, K. H.; Steinle, B.
 PHYS. MED. BIOL., 18(5), 746-747
 Germany (West)

CATEGORY NUMBER 513120
PENETRATION - X-RAY - PRIMARY
- EXPERIMENT

3589..... Date 720500
 113100 220000 423250 513120 770000
 Intercomparisons of Absorbed Dose and Dose
 Distribution for X-Irradiations Using Mailed Lif
 Thermoluminescent Dosimeters
 Puite, K. J.; Crebolder, D. L.; Hogeweg, B.;
 Broerse, J. J.
 PHYS. MED. BIOL., 17(3), 390-399
 Netherlands (Holland)

CATEGORY NUMBER 513120

3605. Date 700000
111500 423300 513120 760000 842000 843000

Transmission of Low-Energy X-Ray Through Various
Locally Available Materials
Lee, H.; Terrado, J.; Petel, R.; Bustamante, N.
PHILIPPINES NUCL. J., 2(2), 215-222
Philippines

3668. Date 731100
113100 513120 710000

Panoramic Dental X-Ray Installation Structural
Shielding and Operator Protection Requirements
Zelac, R. E.
HEALTH PHYS., 25(5), 521-524
Pennsylvania Schools

4468. Date 740500
113100 220000 423250 513120 845000
Energy Dependence of Thermoluminescent Dosimeters
for X-Ray Dose and Dose Distribution
Measurements in a Mouse Phantom
Puite, K. J.; Crebolder, D. L.
PHYS. MED. BIOL., 19(3), 341-347
Netherlands (Holland)

4478. Date 730800
113100 220000 513120 760000 870013 870082
Percentage Depth Dose for High Energy X-Ray Beams
in Radiotherapy
Rawlinson, J. A.; Johns, H. E.
AM. J. ROENTGENOL., 118(4), 919-922
Canada

4848. Date 750600
113100 423110 513120 523200 853100
Transmission in Concrete and Scatter Angular
Distribution of 25-Mv X-Rays From a Betatron and
a Linear Accelerator
De Almeida, C. E.; Rosanky, S. L.; Marbach, J. R.;
Almond, P. R.
HEALTH PHYS., 28(6), 771-775
Texas Schools

4849. Date 750600
113100 421300 513120 523100 760000 810000
Spectra of Primary X-Ray and Secondary Photons From
Shielding Materials For 4- 30 Mv X-Rays
Maruyama, T.; Sakata, S.; Kumamoto, Y.;
Hashizume, T.; Hattori, H.; Kanamori, H.;
Yamamoto, M.
HEALTH PHYS., 28(6), 771-791
Japan

CATEGORY NUMBER 513200
PENETRATION - X-RAY - SECONDARY
AND BREMSSTRAHLUNG

3993. Date 720600
113100 513200 863000
Calculated Bremsstrahlung Spectra From Thick
Tungsten Targets
Storm, E.
PHYS. REV. A, 5(6), 2328-2338
Los Alamos Scientific Lab

4663. Date 740000
112200 322000 513200 632120 853100 853700 861000
870082
Transmission of Betatron Bremsstrahlung Through
Materials
Hyodo, T.
BULL. INST. CHEM. RES., 52(1), 1-7
Japan

4752. Date 700000
113100 513200 760000 870013
Exposure Rates From Diagnostic X-Ray Units
McCullough, E. C.; Cameron, J. R.
BRIT. J. RADIOL., 43(511), 448-451
Wisconsin Schools

CATEGORY NUMBER 521110
INTERFACE EFFECTS - ALBEDO AND
SCATTERING -
NEUTRON - CALCULATION

3501. Date 680000
521110 861000
Differential Albedo of Neutrons for Iron at a Strongly
Inclined Beam. (Pages 339-350)
Germogenova, T. A.; Kobozev, M. G.; Suvorov, A. P.
MOSCOW; ATOMIZDAT
AVAILABILITY-MOSCOW; ATOMIZDAT (1968)
Russia

3651. Date 710600
111110 328000 521110 861000
Orders-Of-Scattering Calculation for the Reflection of
Collimated, Polyenergetic Fast Neutrons From a
Six-Inch-Thick Steel Slab
Thiesing, J. W.; Meyer, W.
COO-2049-8
AVAILABILITY-DEP., NTIS
Kansas Schools

CATEGORY NUMBER 521110

3652..... Date 710825
 111110 328000 421130 430000 511110 511120 521110
 521210 820000 861000
 Orders-Of-Scattering Method for Fast-Neutron
 Transport
 Thiesing, J. W.; Meyer, W.
 COO-2049-9
 AVAILABILITY-DEP., NTIS
 Kansas Schools

3669..... Date 730800
 32E000 327000 511110 521110
 A Method of Moments Applied to An Invariant
 Imbedding Solution of a Certain Class of Fredholm
 Integral Equations.
 Boicourt, G. P.
 LA-5356-T; LA-5356-T
 AVAILABILITY-NTIS \$5.45
 Los Alamos Scientific Lab

3882..... Date 710100
 111500 32D000 511110 521110
 Energy-Dependent Transmission and Reflection in Thin
 Slabs
 Larson, H. A.; McCormick, N. J.
 TRANSP., THEORY AND STAT. PHYS., 1(1), 5-23
 Washington Schools

4015..... Date 721000
 111210 329000 421000 521110 750000 795145
 Monte Carlo Characterization of the Near-Field Energy
 and Angular Distribution for the Henre D-T
 Neutron Generator
 O'dell, A. A.
 EGG-1183-2298
 AVAILABILITY-DEP., NTIS \$4.00
 Edgerton, Germeshausen, + Grier

4026..... Date 670901
 329000 511110 521110 795044 861000
 Monte Carlo Calculations of Fast-Neutron Transmission
 and Reflection By Iron Slabs
 Long, J. J.; Wells, M. B.
 RRA-T75
 AVAILABILITY-RADIATION RESEARCH
 ASSOCIATES, INC., 3550 HULEN ST., FORT
 WORTH, TEXAS 76107
 Radiation Research Assoc.

CATEGORY NUMBER 521110

4140..... Date 721000
 111500 310000 521110
 Green's Function Approach to Anisotropic Multigroup
 Velocity in Plane Geometry
 El Wakil, S. A.
 ATOMKERNENERGIE, 20(2), 115-116
 Egypt

4277..... Date 700300
 010000 210000 32A000 329000 521110 521130 531000
 710000 861000 870011
 Recent Advances in Reactor Shielding in France
 Rastoin, J.
 ANS-SD-8, PP.60-81; AD-712532, PP.60-81
 AVAILABILITY-NTIS
 France

4351..... Date 740800
 111110 111210 111500 329000 511110 521110 795017
 795171 820000
 Monte Carlo Calculated Spectra of Neutrons
 Transmitted Through and Reflected From
 Homogeneous Water Slabs
 Palfalvi, J.; Koblinger, L.
 KFKI-74-63
 AVAILABILITY-DEP. NTIS (U.S. SALES ONLY)
 \$5.50
 Hungary

4456..... Date 730000
 111110 324000 521110 632110 795238 853100
 Rapid Method of Calculating the Flux and Neutron
 Spectra in the Case of A Criticality Accident (Carnac
 Program)
 Bessis, J.
 ORNL-TR-2825; CEA-N-1612 (IN FRENCH)
 AVAILABILITY-DEP., NTIS
 France

4473..... Date 730100
 111500 321000 521110
 A New Method for the Calculation of the Emergent
 Distributions for The Anisotropic Slab Albedo
 Problem
 Shultis, J. K.
 J. COMP. PHYS., 11(109), 126
 Kansas Schools

CATEGORY NUMBER 521120
INTERFACE EFFECTS - AIR OVER GROUND
- NEUTRON -
CALCULATION

4155..... Date 730300
 111130 311000 32A000 511110 521120 551110 731200
 830000 861000

Application of Adjoint Difference and Surface Integral
 Methods to Selected Deep-Penetration Radiation
 Transport Problems

Robinson, J. C.; Stevens, P. N.; Hoffman, T. J.
 BRL-CR-98; NEUT-0150-3; AD-765487

AVAILABILITY-NTIS
 Tennessee Schools

4259..... Date 710000
 111500 112B00 329000 511110 512110 521120 522120
 795199 795200 830000 861000

The Simulation of Low Energy Photon Transport and
 the Simulation of The Adjoint Neutron Transport
 Equation With Monte Carlo

Carter, L. L.; Cashwell, E. D.; Schrandt, R. G.

LA-DC-13275; CONF-711125-1;

ORNL-RSIC-33, PP.197-207

AVAILABILITY-DEP., NTIS
 Los Alamos Scientific Lab

4262..... Date 711100
 111210 32A000 521120 522120 551110 795195 830000

Two-Dimensional Coupled Neutron-Gamma Sn
 Transport From a 14.1 Mev Neutron Source in Air
 Over Ground Using the Lasl Twotran-Fc Program

Sandmeier, H. A.; Lathrop, K. D.; Brinkley, F. W.;
 Hansen, G. E.; Campbell, J. E.

LA-DC-13294; CONF-11125, PP.291-298;

ORNL-RSIC-33, PP.291-298

AVAILABILITY-DEP., NTIS
 Los Alamos Scientific Lab

4921..... Date 751000
 111110 111210 329000 521120 522120 795203

A Comparison of Air-Over-Ground Transport
 Calculations Using Different Cross Sections

Saccenti, J. C.; Woolson, W. A.

NBS SPEC.PUB.-425, PP.431-435;

CONF-750303, PP.431-435

AVAILABILITY-GOP \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY

Army Installations

CATEGORY NUMBER 521130
INTERFACE EFFECTS - LAMINAR LAYERS
- NEUTRON -
CALCULATION

3513..... Date 730800
 111210 32A000 329000 521130 717000 794000 795042
 795082 795127 870003 870006

Analysis of a Bench-Mark Calculation of Tritium
 Breeding in a Fusion Reactor Blanket: the United
 States Contribution

Steiner, D.

ORNL-TM-4177

AVAILABILITY-DEP., NTIS \$4.00
 Oak Ridge National Lab.

3536..... Date 710000
 111110 112110 32A000 32F000 521130 522130 710000
 810000

Calculations of the Shielding of Reactor Zrr

Stoces, B.; Burian, J.; Rataj, J.

ORNL-TR-2654; UJV-2649-R (IN RUSSIAN)

AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 Czechoslovakia

3537..... Date 730600
 111210 122310 32A000 521130 717000 795123 870003
 870006 870041

Cross-Section Sensitivity of Tritium Breeding in a Fusion
 Reactor Blanket: Effects of Uncertainties in Cross
 Sections of 6-Li, 7-Li, and 93-Nb

Tobias, M.; Steiner, D.

ORNL-TM-4200

AVAILABILITY-NTIS

Oak Ridge National Lab.

3547..... Date 730600
 111210 210000 32A000 521130 531000 532000 717000
 795082 861000 870003 870006 870041 870082

Magnet Shield Design for Fusion Reactors

Kriese, J. T.; Steiner, D.

ORNL-TM-4256

AVAILABILITY-NTIS

Oak Ridge National Lab.

3553..... Date 680500
 329000 511110 521130 861000 870011

Use of a Monte Carlo Method for the Calculation of
 Propagation of Long Range Neutrons

Lanore, J. M.

CEA-N-934 (IN FRENCH)

AVAILABILITY-COMMISSARIAT A L'ENERGIE
 ATOMIQUE, FONTENAY-AUX

ROSES(FRANCE). CENTRE D'ETUDES
 NUCLEAIRES

France

CATEGORY NUMBER 521130

3558..... Date 730300
 111110 111120 111220 32A000 521130 712000 795082
 861000 870082
 Neutron Shielding Problems in the Shipping of High
 Burnup Thermal Reactor Fuel
 Bailey, H. S.; Evatt, R. N.; Gyorey, G. L.;
 Ruiz, C. F.
 NUCL. TECH., 17(3), 217-223
 General Electric Co.

3570..... Date 730600
 111110 112110 311000 32A000 521130 522130 620000
 795082 795126 863000 870003 870011 881000
 The Development and Application of a Discrete
 Ordinates Adjoint Difference Method for
 One-Dimensional Shield Weight Optimization
 Childs, R. L.; Engle, W. W., Jr.; Robinson, J. C.;
 Mynatt, F. R.
 ORNL-TM-4196
 AVAILABILITY-DEP., NTIS \$5.25
 Oak Ridge National Lab.

3629..... Date 730400
 111110 122110 32A000 325000 521130 713000 861000
 862000 870011 870092 870094 882000
 One-Dimensional Calculations in Support of the
 Reactivity Surveillance Procedures for the Fast Test
 Reactor
 Flanagan, G. F.; Simpson, D. B.; Buhl, A. R.
 ORNL-TM-4014
 AVAILABILITY-AT (TECHNICAL INFORMATION
 CENTER, OAK RIDGE, TENN. 37830) \$5.45
 Oak Ridge National Lab.

3649..... Date 720300
 111110 329000 521130 713000 810000
 Results of Monte Carlo Calculation for Zppr Assembly 2
 Fillmore, F. L.
 ANL-7928
 AVAILABILITY-NTIS
 Argonne National Lab.

3658..... Date 721100
 111110 310000 32A000 511110 521130 810000
 Incorporation of Outer Iteration Techniques Into Task
 Algorithm
 Lillie, R. A.
 ORNL-TM-3958
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

CATEGORY NUMBER 521130

3696..... Date 731000
 111110 421130 521130 521230 795089 870092 881000
 Measured and Calculated Fast Neutron Spectra in a
 Depleted Uranium And Lithium Hydride Shielded
 Reactor
 Lahti, G. P.; Mueller, R. A.
 NASA-TM-X 2906
 AVAILABILITY-NTIS
 National Aeronautics Support Agencies

3709..... Date 720000
 111110 32B000 521130 540000
 Thermal Neutron Transport Near a Moderator
 Discontinuity Using the Method Of Weighted
 Residuals. I. Theory
 Beynon, T. D.; Moon, J. R.
 J. PHYS. D, 5(5), 931-949
 England

3744..... Date 720800
 111210 210000 329000 521130 531000 717000 810000
 Shielding of Superconducting Magnets in a Fusion
 Reactor
 McCracken, G. M.; Blow, S.
 CLM-R-120
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 UK 50 PENCE
 England

3760..... Date 730500
 111110 330000 521130 820000 870013 870082
 A Study of Neutron Diffusion Lengths in
 Heterogeneous, Non Multiplying Plate Assemblies
 Siddiqui, S. A.; Williams, M. M.
 J. NUCL. ENERGY, 27(5), 273-301
 England

3778..... Date 740100
 111110 112110 112120 32A000 521130 522130 620000
 710000 795082 853100 861000 870013 870082
 Calculation of Energy Depositions and Dose Rates in
 Proposed Shielding Surrounding the Tsr-II Reactor
 Uchida, S.; Lewin, J.; Maerker, R. E.
 ORNL-TM-4450
 AVAILABILITY-NTIS \$4.00
 Oak Ridge National Lab.

3821..... Date 730400
 111110 111220 32A000 521130 713000 870092
 The Inelastic Scattering Reaction in Calculation of Fast
 Reactor Neutron Spectra (Tech. Note)
 Fricke, M. P.; Neill, J. M.
 NUCL. SCI. ENG., 50(4), 392-396
 Gulf General Atomic

CATEGORY NUMBER 521130

3887..... Date 711200
111110 112110 112120 325000 521130 522130
An Analysis of Shielding Design of Triga Mark-II
Reactor - After Power Upgrading By 2.5 Folds
Lee, C. K.
J. KOREAN NUCL. SOC., 3(4), 185-197
Korea

3943..... Date 721000
32F000 512210 521130 795022 795121 883000
Application of Removal Diffusion Methods to Specific
Reactor Shielding Problems
Herrnberger, V.; Tai, A.S.; Zuber, J. F.
CONF-721018, PP.1009-1025
AVAILABILITY-OECD
Switzerland

3966..... Date 720000
111110 112110 112120 32F000 521130 522130 620000
710000 713000 853100 861000 870006
Optimization of Shielding for the "Zrr" Fast Testing
Reactor
Fritz, Z.; Jechort, P.; Valenta, V.; Vlachovsky, K.
ZJE-129
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$9.50
Czechoslovakia

3969..... Date 660000
32A000 511110 521130 820000 861000 870001
Transmission of Neutrons Through Plane Parallel,
Multi-Layer
Germogenova, T. A.; Suvorov, A. P.; Utkin, V. A.
ORNL-TR-2021(REV.)
AVAILABILITY-DEP., NTIS
Russia

4012..... Date 700700
112500 521130 870092
Estimation of Spatial Distributions of Neutron Captures
in Resonance Absorbers
Bogart, D.
NUCL. SCI. ENG., 41(1), 37-46
National Aeronautics Support Agencies

4020..... Date 730200
111110 112110 329000 521130 710000 870011
Calculation of the Neutron Spectrum in the Lower Part
of the Phenix Exchanger Using Tripoli
Nimal, J. C.; Vergnaud, T.
CEA-N-1579; ANL-TRANS-995
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$4.25
France

CATEGORY NUMBER 521130

4120..... Date 740300
111210 122310 32A000 521130 717000 795082 795204
870003 870006 870041
Cross-Section Sensitivity of Breeding Ratio in a
Fusion-Reactor Blanket
Bartine, D. E.; Alsmiller, R. G., Jr.; Oblo, E. M.;
Mynatt, F. R.
NUCL. SCI. ENG., 53(3), 304-318; ORNL-TM-4208
Oak Ridge National Lab.

4134..... Date 740500
111500 321000 330000 521130
Extension of Case's Method to the Two-Region Critical
Cylinder and Its Application As An Analytic
Standard
Westfall, R. M.
NASA-TM-X-71522; N74-17424
AVAILABILITY-NTIS \$9.50
Virginia Schools

4182..... Date 740800
111210 32A000 521130 522130 531000 532000 551110
552210 620000 717000 795082 795089 795126 810000
Shielding Design Calculations for Ormak - F/bx
Gabriel, T. A.; Santoro, R. T.; Engle, W. W., Jr.
ORNL-TM-4619
AVAILABILITY-NTIS
Oak Ridge National Lab.

4214..... Date 690800
111110 112400 112500 32F000 521130 522130 795022
810000
Application of Spinney's Method to Secondary
Gamma-Ray Calculations
Greenborg, J.
ANS-SD-7, PP.101-111; CONF-671140, PP.101-111
AVAILABILITY-DEP., NTIS \$3.00
Douglas United Nuclear Corp.

4222..... Date 731000
111210 121100 329000 521130 717000 870003 870006
Influence of Nuclear Data on Tritium Breeding in a
Thermonuclear Reactor
Ogloblin, A. A.; Chulkov, L. V.; Yan'kov, G. B.
STI/PUB-343, V.2, PP.21-40; CONF-730302, V.2, PP.21-40;
IAEA-SM-170/21
AVAILABILITY-IAEA
Russia

CATEGORY NUMBER 521130

4227..... Date 731000
111110 122110 32A000 325000 521130 795082 870006
870092

Effects of Different Nuclear Computer Codes and Data
Libraries on The Evaluation of the Critical
Htr-Experiment Cesar II

Scherer, W.

STI/PUB-343,V2,PP.135-145;

CONF-730302,V2,PP.135-145; IAEA-SM-170/79

AVAILABILITY-IAEA

Germany (West)

4253..... Date 711021
111110 32A000 421130 421140 521130 551110 710000
713000 795082 795089 810000 861000 870011

Fftf Related Studies in the Ornl-Lmfbr Shielding
Program

Mynatt, F. R.; Clifford, C. E. (Usa);

Muckenthaler, F. J.; Maerker, R. E.;

Gritzner, M. L.; Williams, L. R.; Rathbun, J. L.

ANS-SD-13, ARTICLE 3

AVAILABILITY-ANS

Oak Ridge National Lab.

4274..... Date 740700
111110 310000 32A000 510000 521130 795180 795184

Approximate Numerical Solutions to the
Time-Dependent Neutron Transport Equation Using
the Task Algorithm

Tomlinson, E. T.

ORNL-TM-4595

AVAILABILITY-NTIS \$5.45

Oak Ridge National Lab.

4277..... Date 700300
010000 210000 32A000 329000 521110 521130 531000
710000 861000 870011

Recent Advances in Reactor Shielding in France

Rastoin, J.

ANS-SD-8,PP.60-81; AD-712532,PP.60-81

AVAILABILITY-NTIS

France

4280..... Date 700300
010000 32A000 32F000 511110 521130 632120 721100
795040 795042 795066 795072 795121 820000 853100
861000 870006

Today's Approaches to Reactor Shielding Problems

Nicks, R.; Penkuhn, H.; Ponti, C.

ANS-SD-8,PP.113-138; AD-712532,PP.113-138

AVAILABILITY-NTIS

Italy

CATEGORY NUMBER 521130

4281..... Date 700300
010000 511110 512110 521130 522110 710000 713000
721100 722100 820000 841000 861000 870013 870050

Latest Research on Reactor Shielding in Japan

Hyodo, T.; Miyasaka, S.; Nakata, M.

ANS-SD-8,PP.139-155; AD-712532,PP 139-155

AVAILABILITY-NTIS

Japan

4335..... Date 730300
111210 121100 32A000 521130 717000 810000

Neutronic Studies of D-T Fusion Reactor Blankets

Brockmann, H.

JUL-931-RG (IN GERMAN); JUL-931-RG(IN
GERMAN)

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$5.50

Germany (West)

4345..... Date 740900
020000 111110 32A000 521130 710000 713000 810000

Calculations of a Fast-Neutron Shielding Experiment for
Evaluating Approximate Shielding Design Methods
(Tech. Note)

Adkins, C. R.

NUCL. SCI. ENG., 55(1), 89-96

Pennsylvania Schools

4347..... Date 740900
111110 310000 32A000 325000 521130 713000

An Accelerated Spectral Synthesis Technique (Tech.
Note)

Price, W. G., Jr.; Duderstadt, J. J.

NUCL. SCI. ENG., 55(1), 98-103

Michigan Schools

4391..... Date 740000
111110 111210 521130 710000 717000 795082 810000
870092 870094

A Modular Fission-Fusion Hybrid Blanket

Hansborough, L. D.; Werner, R. W.

CONF-740402-P1,211-222

AVAILABILITY-NTIS

Lawrence Livermore Lab

4392..... Date 740000
111110 111210 329000 521130 717000 810000 870092
870094

Neutronics Analysis of a 2500 Mwth Fast Fission
Natural Uranium Blanket For A Dt Fusion Reactor

Lee, J. D.

CONF-740402-P1,223-237

AVAILABILITY-NTIS

Lawrence Livermore Lab

CATEGORY NUMBER 521130

4394..... Date 740000
 111110 111210 521130 522130 710000 717000 793000
 794000 795082 810000 870092 870094
 Neutronic and Photonic Analyses of Fusion Reactor
 Blankets Containing Natural Uranium
 Parish, T. A.; Draper, E. L., Jr.
 CONF-740402-P1,256-270
 AVAILABILITY-NTIS
 Texas Schools

4395..... Date 740000
 111110 111210 329000 521130 710000 717000 810000
 870092 870094
 Calculations of a Fast Fission Blanket for Dt Fusion
 Reactors With Two Evaluated Data Libraries
 Haight, R. C.; Lee, J. D.
 CONF-740402-P1,271-280
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4418..... Date 741100
 111210 32A000 521130 717000 793000 794000 795082
 810000
 A Comparative Study of Several Fusion Reactor Blanket
 Designs
 Abdou, M. A.; Conn, R. W.
 NUCL. SCI. ENG., 55(3), 256-266
 Wisconsin Schools

4423..... Date 741100
 111110 122110 521130
 Multiregion Equivalence Relation for Resonance
 Heterogeneity Effects (Tech. Note)
 Ishiguro, Y.
 NUCL. SCI. ENG., 55(3), 349-351
 Japan

4427..... Date 741000
 111210 122310 32A000 521130 717000 795082 810000
 Comparison of the Cross-Section Sensitivity of the
 Tritium Breeding Ratio In Various Fusion-Reactor
 Blankets
 Alsmiller, R. G., Jr.; Santoro, R. T.; Barish, J.;
 Gabriel, T. A.
 ORNL-TM-4696
 AVAILABILITY-DEP., NTIS \$4.75
 Oak Ridge National Lab.

CATEGORY NUMBER 521130

4436..... Date 740000
 111210 122310 521130 717000 795082 810000 870003
 Tritium Breeding in Ceramic Lithium-Compound
 Blanket
 Seki, Y.; Sako, K.; Tanaka, K.; Hiraoka, T.
 CONF-740402-P2,77-86
 AVAILABILITY-NTIS
 Japan

4437..... Date 740000
 111210 220000 521130 522130 717000 793000 794000
 795082 810000 870003
 Neutronics and Photonics Study of Fusion Reactor
 Blankets
 Abdou, M. A.; Maynard, C. W.
 CONF-740402-P2,87-100
 AVAILABILITY-NTIS
 Wisconsin Schools

4440..... Date 740000
 111210 122310 311000 32A000 521130 717000 810000
 Blanket Design and Cross-Section Sensitivity
 Calculations Based On Perturbation Methods
 Gerstl, S. A. W.
 CONF-740402-P2,136-144
 AVAILABILITY-NTIS
 Argonne National Lab.

4441..... Date 740000
 111210 122310 311000 32A000 521130 717000 793000
 794000 795082 795248 810000
 Tritium Breeding Potential of the Princeton Reference
 Fusion Power Plant
 Greenspan, E.; Price, W. G., Jr.
 CONF-740402-P2,145-154
 AVAILABILITY-NTIS
 New Jersey Schools

4442..... Date 740000
 111210 121100 220000 521130 717000 870073 870082
 Use of Tantalum and Liquid Lead in a Fusion Reactor
 Blanket
 Davey, W. G.; Beck, C. L.; Palmer, R. G.
 CONF-740402-P2,155-165
 AVAILABILITY-NTIS
 Argonne National Lab.

4481..... Date 720400
 111500 329000 511110 521130 795017 795232 820000
 861000 870006
 Monte Carlo Calculation of Neutrons Transmitted
 Through Matter
 Hirayama, H.; Nakamura, T.
 MEM. FAC. ENG. (KYOTO UNIV.), 34(2), 187-200

CATEGORY NUMBER 521130

Japan

4493..... Date 750200
 111110 122110 32A000 521130 719A00 820000 861000
 Additional Few-Group and Multigroup Calculations of
 Neutron Penetration. (Tech. Note)
 Shure, K.
 NUCL. SCI. ENG., 56(2), 219-224
 Bettis Atomic Power Lab.

4500..... Date 750100
 111210 32A000 521130 522130 531000 532000 717000
 794000 795046 810000
 Radioactivity Induced in a Theta-Pinch Fusion Reactor
 Dudziak, D. J.; Krakowski, R. A.
 NUCL. TECH., 25(1), 32-55
 Los Alamos Scientific Lab

4503..... Date 740920
 111210 112930 222000 32A000 521130 522130 717000
 795082 810000
 Environmental Assessment for Fusion Reactor Utilizing
 Brookhaven Minimum Activity Blanket
 Anderson, R. V.
 AI-AEC-13136
 AVAILABILITY-DEP., NTIS \$5.45
 Atomics International

4620..... Date 740000
 111210 32A000 521130 522130 531000 532000 717000
 795042 810000
 Preliminary Appraisal of a Fusion/fission (Hybrid)
 Reactor Based on The Linear Theta Pinch
 Bosler, G. E.; Dudziak, D. J.; Ellis, W. R.
 CONF-740805,710-718
 AVAILABILITY-AMERICAN SOCIETY OF
 MECHANICAL ENGINEERS, UNITED
 ENGINEERING CENTER, 345 EAST 7TH ST.,
 NEW YORK, N.Y. 10017
 Los Alamos Scientific Lab

4806..... Date 750600
 111210 210000 32A000 521130 522130 717000 793000
 794000 795087
 New Concepts for Controlled Fusion Reactor Blanket
 Design
 Conn, R. W.; Kulcinski, G. L.; Avci, H.;
 El-Maghrabi, M.
 NUCL. TECH., 26(2), 125-145
 Wisconsin Schools

CATEGORY NUMBER 521130

4896..... Date 76030
 111210 122310 210000 32A000 521130 717000 793000
 794000 795082 861000 870006
 Uncertainties in Calculated Heating and Radiation
 Damage in the Toroidal Field Coil of a Tokamak
 Experimental Power Reactor Due to Neutron
 Cross-Section Errors
 Alsmiller, R. G., Jr.; Barish, J.; Weisbin, C. R.
 ORNL/TM-5198
 AVAILABILITY-NTIS \$6.00
 Oak Ridge National Lab.

4911..... Date 751000
 010000 111110 122110 122310 511110 511120 521130
 521230 793000 794000 810000 861000
 Shielding Benchmark Experiments and Sensitivity
 Studies in Progress at Some European Laboratories
 Hehn, G.; Mattes, W.; Nicks, R.; Matthes, W.;
 Rief, H.
 NBS SPEC.PUB.-425,PR177-183;
 CONF-750303,PP.177-183
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Germany (West)

4920..... Date 751000
 111210 329000 521130 841000 853100
 Use of Monte Carlo Method in the Estimation of Fast
 Neutrons Leaked Through A Concrete-Paraffin
 Shielding
 Chuang, L. S.; Wong, K. C.
 NBS SPEC.PUB.-425,PP.426-430;
 CONF-750303,PP.426-430
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Hongkong

4935..... Date 751000
 111210 122100 122310 521130 717000 810000
 A Sensitivity Study of Data Deficiencies, Weighting
 Functions, And 14 Mev Neutron Source Spectrum
 Effects in a 238-U Fueled Fusion Fission Hybrid
 Blanket
 Newman, D. F.; Leonard, B. R., Jr.; Jenquin, U. P.;
 Lessor, D. L.; Stewart, K. B.
 NBS SPEC.PUB.-425,PP.680-682;
 CONF-750303,PP.680-682
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Battelle-Northwest

CATEGORY NUMBER 521130

4936..... Date 751000
 111210 329000 511120 521130 717000 870092
 238-U Pulsed Measurements and Ctr Fusion-Fission
 Blanket Calculations
 Wong, C.; Anderson, J. D.; Haight, R. C.;
 Hansen, L. F.; Komoto, T.
 UCRL-76263; NBS SPEC.PUB.-425, PP.704-707;
 CONF-750303, PP.704-707
 AVAILABILITY-DEP., NTIS \$4.00
 Lawrence Livermore Lab

4937..... Date 751000
 111210 122110 32A000 521130 717000 870041
 Application of Bondarenko Formalism to Fusion
 Reactors
 Soran, P. D.; Dudziak, D. J.
 NBS SPEC.PUB.-425, PP.722-728;
 CONF-750303, PP.722-728
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Los Alamos Scientific Lab

CATEGORY NUMBER 521210
 INTERFACE EFFECTS - ALBEDO AND
 SCATTERING -
 NEUTRON - EXPERIMENT

3652..... Date 710825
 111110 328000 421130 430000 511110 511120 521110
 521210 820000 861000
 Orders-Of-Scattering Method for Fast-Neutron
 Transport
 Thiesing, J. W.; Meyer, W.
 COO-2049-9
 AVAILABILITY-DEP., NTIS
 Kansas Schools

3803..... Date 730600
 111220 329000 421120 521210 842000 861000 870013
 870082
 Experimental Fast-Neutron Albedo From Plane
 Scatterers
 Segal, Y.; German, U.; Notea, A.
 NUCL. SCI. ENG., 51(2), 223-234
 Israel

4217..... Date 690800
 111220 112720 112920 220000 423210 423240 511120
 512120 521210 845000 853100
 Radiation Shielding Studies at the Canadian Defence
 Research Board
 Clifford, C. E. (Can)
 ANS-SD-7, PP.157-168; CONF-671140, PP.157-168
 AVAILABILITY-DEP., NTIS \$3.00

CATEGORY NUMBER 521210

Canada

4219..... Date 690800
 111500 329000 521210 632110 632120 721100 853100
 861000 870006
 On Neutron Penetration in Duct Systems With Large
 Cross Section
 Spencer, L. V.; Woolf, S.
 ANS-SD-7, PP.199-221; CONF-671140, PP.199-221
 AVAILABILITY-DEP., NTIS \$3.00
 National Bureau of Standards

4866..... Date 720100
 111110 111220 220000 423135 423250 521210 845000
 Personnel Albedo Neutron Dosimeter With
 Thermoluminescent 6-Lif and 7-Lif
 Hoy, J. E.
 DP-1277
 AVAILABILITY-NTIS
 E. I. Dupont Denemours

CATEGORY NUMBER 521230
 INTERFACE EFFECTS - LAMINAR LAYERS
 - NEUTRON -
 EXPERIMENT

3521..... Date 710600
 111110 32A000 421130 521230 716000 794000 795082
 795089 820000 870082
 Measured and Calculated Fast Neutron Spectra in a
 Lead-And-Water Shielded Reactor
 Lahti, G. P.; Wrights, G. N.
 NASA-TM-X-67861; N71-28968
 AVAILABILITY-NTIS
 National Aeronautics Support Agencies

3618..... Date 730700
 111110 421130 521230 713000 810000
 Measurements of Neutron Spectrum and Reaction Rates
 in a Gas Cooled Fast Reactor Lattice
 Richmond, R.; Heer, W.; Ruegger, B.; Seth, S.;
 Steiner, W.; Wydler, P.; Surcher, W.
 EIR-239
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 \$5.25
 Germany (West)

3630..... Date 730500
 111110 32A000 329000 421130 422120 422140 511120
 521230 795082 795089 795127 861000 870006 870011
 882000
 Comparison of Rod-Versus Slab-Type Core Neutron
 Shields for Fmfr Applications. Final Report, April,
 1973.

CATEGORY NUMBER 521230

Weiss, M. L.; Harless, W. H.
GEAP-13822-5
AVAILABILITY-DEP., NTIS \$5.00
General Electric Co.

3677..... Date 730300
111110 422110 521230 551120 820000 861000
Neutron Propagation in Laminated Iron-Water Shields
Nicks, R.; Perlini, G.
ISP-1973/03
AVAILABILITY-EURATOM, JOINT NUCLEAR
RESEARCH CENTRE, ISPRA
ESTABLISHMENT, 21020 ISPRA (VA), ITALY
Italy

3696..... Date 731000
111110 421130 521130 521230 795089 870092 881000
Measured and Calculated Fast Neutron Spectra in a
Depleted Uranium And Lithium Hydride Shielded
Reactor
Lahti, G. P.; Mueller, R. A.
NASA-TM-X 2906
AVAILABILITY-NTIS
National Aeronautics Support Agencies

3739..... Date 720700
111110 422110 430000 521230 710000 794000
Radiation Dosimetry in Wr-I Reactor. III.
Determination of Flux Density
Mehta, K. K.; Stadnyk, A. M.
AECL-3797
AVAILABILITY-ATOMIC ENERGY CANADA
LTD., CHALK RIVER, ONTARIO
Canada

3840..... Date 731100
111110 421160 430000 521230 810000
Comparison of Proton-Recoil and Time-Of-Flight
Neutron Spectral Measurements With Transport
Calculations in Two Uranium-235-Fueled Fast
Subcritical Reactors
Verbinski, V. V.; Young, J. C.; Neill, J. M.
NUCL. SCI. ENG., 52(3), 330-342
Gulf General Atomic

4051..... Date 720000
111110 421140 430000 521230 713000 795112
Ebr-II Dosimetry Tests
Jackson, J. L.; Kellogg, L. S.; McElroy, W. N.;
Ulseth, J. A.
HEDL-SA-548; CONF-730910-2
AVAILABILITY-DEP., NTIS \$3.00
Hanford Eng Dev Lab.

CATEGORY NUMBER 521230

4510..... Date 740400
111210 122110 32A000 421130 421160 521230 861000
870011
Measurement and Calculation of Neutron Spectra at a
Sodium-Iron Interface
Kappler, F.
KFK-1959(IN GERMAN)
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$7.50
Germany (West)

4542..... Date 721000
111110 421140 511120 521230 795048 795121 820000
883000
Deep Penetration of Neutrons in Hydrogenous Shields
Chinaglia, B.; Bosio, G.
EUR-4743
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Italy

4600..... Date 730000
111110 112110 112500 32A000 521230 532000 713000
795082 861000 870011
Use of Integral Experiments to Improve Neutron
Propagation and Gamma Heating Calculations
Oceraias, Y.; Caumette, P.; Devillers, C.; Bussac, J.
CONF-731015, PP.486-505
AVAILABILITY-IAEA
France

4656..... Date 720500
111210 423110 521230 842000 861000 882000
Attenuation of 15 Mev Neutrons in Multilayer Shields
Composed of Steel, Polyethylene, and Borated
Materials
Maruyama, T.; Bouts, C. J.
PHYS. MED. BIOL., 17(3), 420-424
Netherlands (Holland)

4830..... Date 750800
111500 32A000 521230 717000 793000 794000 795082
861000 870003 870006
Uranium-238 to Uranium-235 Fission-Ratio Distribution
in Spherical Lithium-Metal Assemblies With and
Without a Graphite Reflector
Maekawa, H.; Seki, Y.; Hiraoka, T.; Moriyama, M.
NUCL. SCI. ENG., 57(4), 335-340
Japan

CATEGORY NUMBER 521230

4911. Date 751000
 010000 111110 122110 122310 511110 511120 521130
 521230 793000 794000 810000 861000
 Shielding Benchmark Experiments and Sensitivity
 Studies in Progress at Some European Laboratories
 Hehn, G.; Mattes, W.; Nicks, R.; Matthes, W.;
 Rief, H.
 NBS SPEC.PUB.-425,PR177-183;
 CONF-750303,PP.177-183
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Germany (West)

CATEGORY NUMBER 522110
 INTERFACE EFFECTS - ALBEDO AND
 SCATTERING -
 GAMMA-RAY - CALCULATION

3506. Date 721100
 112760 32A000 329000 512110 522110 795046 795082
 830000 853100
 Boundary Dose Rates Due to Gamma Rays at Power
 Reactor Sites
 Wells, M. B.; Collins, D. G.; Neuendorf, W. P.
 RRA-M7202
 AVAILABILITY-RADIATION RESEARCH
 ASSOCIATES, INC., 3550 HULEN STREET,
 FORT WORTH, TEXAS 76107
 Radiation Research Assoc.

3539. Date 730300
 112B00 512110 522110 632120 853100
 An Approximation of Dose Transmission and Reflection
 Probabilities For Gamma-Rays Obliquely Incident
 and for a Plane Isotropic Source on Finite Concrete
 Barriers
 Harima, Y.
 BULL. TOKYO INSTITUTE OF TECH., 116, 97-113
 Japan

3823. Date 730500
 112B00 121200 329000 512110 522110 632300 810000
 Low Energy Components of Scattered Gamma
 Radiation
 Minato, S.
 NUCL. SCI. ENG., 51(1), 32-40
 Japan

CATEGORY NUMBER 522110

3852. Date 681200
 112300 522110 810000
 Energy and Space Distribution of Backscattered
 Gamma-Radiation. (Abstract)
 Zol'nikov, P. P.; Sukhanova, K. A.;
 Dvinyaninov, B. L.
 SOVIET J. AT. ENERGY (ENGLISH TRANSL.),
 25(6), 1350
 Russia

4001. Date 700500
 32E000 512110 522110
 Solutions of the Equations of Radiative Transfer By An
 Invariant Imbedding Approach
 Adams, C. N.; Kattawar, G. W.
 J. QUANT. SPECTROSC. RADIATIVE TRANSFER,
 10(5), 341-356
 Texas Schools

4002. Date 690700
 328000 522110
 On the Influence of Atomic Number and Density in
 Material Studies By Backscattering of Quantum
 Radiation
 Dahn, E.
 ISOTOPENPRAXIS, 5, 252-256
 Germany (West)

4186. Date 740000
 112B00 32E000 512110 522110
 Radiation Transport With Anisotropic Scattering
 Razani, A.
 J. QUANT. SPECTROSC. RADIATIVE TRANSFER,
 14(5), 339-349
 Iran

4281. Date 700300
 010000 511110 512110 521130 522110 710000 713000
 721100 722100 820000 841000 861000 870013 870050
 Latest Research on Reactor Shielding in Japan
 Hyodo, T.; Miyasaka, S.; Nakata, M.
 ANS-SD-8,PP.139-155; AD-712532,PP 139-155
 AVAILABILITY-NTIS
 Japan

CATEGORY NUMBER 522120
 INTERFACE EFFECTS - AIR OVER GROUND
 - GAMMA-RAY -
 CALCULATION

3616. Date 730900
 112930 423250 522120 632120
 Comparison of Measured and Calculated Radiation
 Exposure From a Boiling Water Reactor Plume

CATEGORY NUMBER 522120

Gogolak, C. V.
HASL-277
AVAILABILITY-NTIS
Atomic Energy Commission (U.S.)

3988..... Date 710600
112B00 329000 522120
Terrestrial Gamma-Radiation Field, in Natural
Environment
Minato, S.
J. NUCL. SCI. TECHNOL. (TOKYO), 8(6), 342-347
Japan

4018..... Date 670600
112B00 327000 512110 522120 522130 610000 830000
Distribution Functions of Air-Scattered Gamma Rays
Above Isotropic Plane Sources
Michael, J. A.; Lamonds, H. A.
CEX-73.1; EGG-1183-2160
AVAILABILITY-NTIS \$10.60
Edgerton, Gerneshausen, + Grier

4259..... Date 710000
111500 112B00 329000 511110 512110 521120 522120
795199 795200 830000 861000
The Simulation of Low Energy Photon Transport and
the Simulation of The Adjoint Neutron Transport
Equation With Monte Carlo
Carter, L. L.; Cashwell, E. D.; Schrandt, R. G.
LA-DC-13275; CONF-711125-1;
ORNL-RSIC-33, PP.197-207
AVAILABILITY-DEP., NTIS
Los Alamos Scientific Lab

4262..... Date 711100
111210 32A000 521120 522120 551110 795195 830000
Two-Dimensional Coupled Neutron-Gamma Sn
Transport From a 14.1 Mev Neutron Source in Air
Over Ground Using the Lasl Twotran-Fc Program
Sandmeier, H. A.; Lathrop, K. D.; Brinkley, F. W.;
Hansen, G. E.; Campbell, J. E.
LA-DC-13294; CONF-111125, PP.291-298;
ORNL-RSIC-33, PP.291-298
AVAILABILITY-DEP., NTIS
Los Alamos Scientific Lab

4770..... Date 740000
112930 220000 522120
Age Factors for Dose Rates From An Infinite Cloud of a
Photon Emitter
Poston, J. W.; Snyder, J. W.; Warner, G. G.
CONF-741018-5
AVAILABILITY-DEP., NTIS

CATEGORY NUMBER 522120

Oak Ridge National Lab.

4921..... Date 751000
111110 111210 329000 521120 522120 795203
A Comparison of Air-Over-Ground Transport
Calculations Using Different Cross Sections
Saccenti, J. C.; Woolson, W. A.
NBS SPEC.PUB.-425, PP.431-435;
CONF-750303, PP.431-435
AVAILABILITY-GOP \$19.45 PER 2 VOL. SET -
SOLD IN SETS ONLY
Army Installations

CATEGORY NUMBER 522130
INTERFACE EFFECTS - LAMINAR LAYERS
- GAMMA-RAY -
CALCULATION

3510..... Date 720000
111500 112B00 32A000 32F000 511110 512110 522130
795022 795054 795066 820000 861000 870006
The Removal P1 Method for Calculation of Radiation
Distribution in Shielding
Valenta, V.
ZJE-131
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Czechoslovakia

3536..... Date 710000
111110 112110 32A000 32F000 521130 522130 710000
810000
Calculations of the Shielding of Reactor Zrr
Stoces, B.; Burian, J.; Rataj, J.
ORNL-TR-2654; UJV-2649-R (IN RUSSIAN)
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Czechoslovakia

3570..... Date 730000
111110 112110 311000 32A000 521130 522130 620000
795082 795126 863000 870003 870011 881000
The Development and Application of a Discrete
Ordinates Adjoint Difference Method for
One-Dimensional Shield Weight Optimization
Childs, R. L.; Engle, W. W., Jr.; Robinson, J. C.;
Mynatt, F. R.
ORNL-TM-4196
AVAILABILITY-DEP., NTIS \$5.25
Oak Ridge National Lab.

CATEGORY NUMBER 522130

3646. Date 730900
112B00 112200 329000 512110 522130 632110 870013
870082

Calculation of Gamma-Ray Buildup Factors Including
the Contribution Of Bremsstrahlung

Kuspa, J. P.; Tsoulfanidis, N.
NUCL. SCI. ENG., 52(1), 117-123
Missouri Schools

3778. Date 740100
111110 112110 112120 32A000 521130 522130 620000
710000 795082 853100 861000 870013 870082

Calculation of Energy Depositions and Dose Rates in
Proposed Shielding Surrounding the Tsr-II Reactor

Uchida, S.; Lewin, J.; Maerker, R. E.

ORNL-TM-4450

AVAILABILITY-NTIS \$4.00

Oak Ridge National Lab.

3848. Date 681100
522130 632300

Passage of Gamma Rays Through An Inhomogeneous
Barrier (Letter to the Editor)

Kol'chuzhkin, A. M.; Uchaikin, V. V.

SOVIET J. AT. ENERGY (ENGLISH TRANSL.),
25(5), 1259-1261

Russia

3887. Date 711200
111110 112110 112120 325000 521130 522130

An Analysis of Shielding Design of Triga Mark-II
Reactor - After Power Upgrading By 2.5 Folds

Lee, C. K.

J. KOREAN NUCL. SOC., 3(4), 185-197

Korea

3966. Date 720000
111110 112110 112120 32F000 521130 522130 620000
710000 713000 853100 861000 870006

Optimization of Shielding for the "Zrr" Fast Testing
Reactor

Fritz, Z.; Jechort, P.; Valenta, V.; Vlachovsky, K.

ZJE-129

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$9.50

Czechoslovakia

4018. Date 670600
112B00 327000 512110 522120 522130 610000 830000

Distribution Functions of Air-Scattered Gamma Rays
Above Isotropic Plane Sources

Michael, J. A.; Lamonds, H. A.

CEX-73.1; EGG-1183-2160

AVAILABILITY-NTIS \$10.60

CATEGORY NUMBER 522130

Edgerton, Germeshausen, + Grier

4182. Date 740800
111210 32A000 521130 522130 531000 532000 551110
552210 620000 717000 795082 795089 795126 810000

Shielding Design Calculations for Ormak - F/bx

Gabriel, T. A.; Santoro, R. T.; Engle, W. W., Jr.

ORNL-TM-4619

AVAILABILITY-NTIS

Oak Ridge National Lab.

4214. Date 690800
111110 112400 112500 32F000 521130 522130 795022
810000

Application of Spinney's Method to Secondary
Gamma-Ray Calculations

Greenborg, J.

ANS-SD-7, PP.101-111; CONF-671140, PP.101-111

AVAILABILITY-DEP., NTIS \$3.00

Douglas United Nuclear Corp.

4215. Date 690800
111110 112400 112500 112600 32A000 511110 512110
512210 522130 552110 552220 716000 795089 810000

Some Characteristics of Secondary Gamma Ray
Transport in Asymmetric Snap Shields

Mynatt, F. R.; Williams, L. R.

ANS-SD-7, PP.113-135; CONF-671140, PP.113-135

AVAILABILITY-DEP., NTIS \$3.00

Oak Ridge National Lab.

4306. Date 730400
112720 112730 220000 522130 842000 845000

Use of Lead Loaded Rubber Gauntlets in Mixed
Beta-Gamma Radiation Fields

Charles, M. W.

RD/B/N-2647

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$3.00

England

4394. Date 740000
111110 111210 521130 522130 710000 717000 793000
794000 795082 810000 870092 870094

Neutronic and Photonic Analyses of Fusion Reactor
Blankets Containing Natural Uranium

Parish, T. A.; Draper, E. L., Jr.

CONF-740402-P1, 256-270

AVAILABILITY-NTIS

Texas Schools

CATEGORY NUMBER 522130

4437. Date 740000
 111210 220000 521130 522130 717000 793000 794000
 795082 810000 870003
 Neutronics and Photonics Study of Fusion Reactor
 Blankets
 Abdou, M. A.; Maynard, C. W.
 CONF-740402-P2,87-100
 AVAILABILITY-NTIS
 Wisconsin Schools

4500. Date 750100
 111210 32A000 521130 522130 531000 532000 717000
 794000 795046 810000
 Radioactivity Induced in a Theta-Pinch Fusion Reactor
 Dudziak, D. J.; Krakowski, R. A.
 NUCL. TECH., 25(1), 32-55
 Los Alamos Scientific Lab

4503. Date 740920
 111210 112930 222000 32A000 521130 522130 717000
 795082 810000
 Environmental Assessment for Fusion Reactor Utilizing
 Brookhaven Minimum Activity Blanket
 Anderson, R. V.
 AI-AEC-13136
 AVAILABILITY-DEP., NTIS \$5.45
 Atomics International

4617. Date 740900
 112760 326000 522130 820000 851000
 Computer Modeling of Terrestrial Gamma-Radiation
 Fields
 Kirkegaard, P.; Lovborg, L.
 RISO-303
 AVAILABILITY-LIBRARY, DANISH ATOMIC
 ENERGY COMMISSION, RISO, DK-4000
 ROSKILDE, DENMARK
 Denmark

4620. Date 740000
 111210 32A000 521130 522130 531000 532000 717000
 795042 810000
 Preliminary Appraisal of a Fusion/fission (Hybrid)
 Reactor Based on The Linear Theta Pinch
 Bosler, G. E.; Dudziak, D. J.; Ellis, W. R.
 CONF-740805,710-718
 AVAILABILITY-AMERICAN SOCIETY OF
 MECHANICAL ENGINEERS, UNITED
 ENGINEERING CENTER, 345 EAST 7TH ST.,
 NEW YORK, N.Y. 10017
 Los Alamos Scientific Lab

CATEGORY NUMBER 522130

4806. Date 750600
 111210 210000 32A000 521130 522130 717000 793000
 794000 795087
 New Concepts for Controlled Fusion Reactor Blanket
 Design
 Conn, R. W.; Kulcinski, G. L.; Avci, H.;
 El-Maghrabi, M.
 NUCL. TECH., 26(2), 125-145
 Wisconsin Schools

4878. Date 740800
 111210 32A000 522130 531000 532000 710000 717000
 795082 810000
 Fusion Power Plant
 Mills, R. G. (Ed.)
 MATT-1050
 AVAILABILITY-NTIS \$32.23
 New Jersey Schools

CATEGORY NUMBER 522210
 INTERFACE EFFECTS - ALBEDO AND
 SCATTERING -
 GAMMA-RAY - EXPERIMENT

3762. Date 730500
 112730 421200 430000 522210 853100 861000 870013
 Backscattering of 137-Cs Gamma Rays By Finite
 Barriers
 Elias, E.; Segal, Y.; Notea, A.
 J. NUCL. ENERGY, 27(5), 351-362
 Israel

3847. Date 680900
 112730 522210 870006 870082
 Back Scattering of Gamma-Radiation By Heterogeneous
 Barriers
 Pozdneev, D. B.
 SOVIET J. AT. ENERGY (ENGLISH TRANSL.),
 25(3), 1001-1002
 Russia

3963. Date 721000
 421200 512120 522210 853100 861000 870082
 Gamma-Ray Transport at 6 and 8 Mev
 Johnson, W. R.; Thompson, W. L.; Risher, D. H.;
 Hassler, L. A.; Rogers, J. E.
 CONF-721018, PP.1493-1508
 AVAILABILITY-OECD
 Virginia Schools

CATEGORY NUMBER 522210

3999. Date 700000
 112720 112730 522210 853100 853200 861000 870082
 Investigation of the Energy Distribution of Singly
 Scattered and Multiply Scattered Gamma Radiation.
 I. Backscattered and Attenuated Radiation
 Wechselberger, E.
 ATOMKERNENERGIE, 16, 64-70
 Germany (West)

4092. Date 720900
 522210 853100 861000 870082
 Experimentally Measured Dose Albedos of Intermediate
 Energy Bremsstrahlung
 Crites, T. R.
 NUCL. SCI. ENG., 49(1), 103-106
 gg
 Sandia Corporation

CATEGORY NUMBER 522220
 INTERFACE EFFECTS - AIR OVER GROUND
 - GAMMA-RAY -
 EXPERIMENT

3729. Date 730900
 112720 112920 423210 522220 632500 731200
 In-And-Down Scattered Radiation in a Simple Concrete
 Structure
 Schmoke, M. A.
 BRL-R-1665
 AVAILABILITY-DEFENSE DOCUMENTATION
 CENTER, CAMERON STATION,
 ALEXANDRIA, VIRGINIA 22314
 Ballistic Research Lab.

3830. Date 740100
 112920 423230 522220 731100
 Environmental and Fallout Gamma Radiation
 Protection Factors Provided By Civilian Vehicles
 Burson, Z. G.
 HEALTH PHYS., 26(1), 41-44
 Edgerton, Germeshausen, + Grier

CATEGORY NUMBER 522230
 INTERFACE EFFECTS - LAMINAR LAYERS
 - GAMMA-RAY -
 EXPERIMENT

3543. Date 7006000
 112710 220000 423230 522230 760000 853100 861000
 Comparison of the Background Spectra in Eight German
 Whole-Body Counters And A Model Structure With
 Layered Shield
 Futtermenger, W.
 ORNL-TR-2532; ABS-TUH-1065(IN GERMAN)
 AVAILABILITY-DEP., NTIS

CATEGORY NUMBER 522230

Germany (West)

3818. Date 740100
 112730 522230 632120 883000
 Calculated and Measured Dose Buildup Factors for
 Gamma Rays Penetrating Multilayered Slabs
 (Tech.Note)
 Burke, G. D.; Beck, H. L.
 NUCL. SCI. ENG., 53(1), 109-112
 Atomic Energy Commission (U.S.)

4039. Date 720800
 1mm111110 112500 32A000 423250 522230 632110 715000
 795048 870004 870013 885000 886000
 Gamma Heating in Reflector Heat Shield of Gas Core

Reactor
 Lofthouse, J. H.; Kunze, J. F.V: YY Young, T. EoMMoog
 Young, R. C.
 ANCR-1077; NASA-CR-120903; N72-33651
 AVAILABILITY-DEP., NTIS
 Aerojet-General

4125. Date 740700
 112720 421200 512120 522230 853100 861000
 Experimental Evidence of An Equilibrium Property in
 Gamma-Ray Angular Spectra Penetrating Bulk
 Shields
 Johnson, D. M.; Woollam, P. B.
 NUCL. SCI. ENG., 54(3), 254-262
 England

CATEGORY NUMBER 523100
 REFLECTION AND INTERFACE EFFECTS
 - X-RAY -
 CALCULATION

3634. Date 730000
 113100 220000 329000 523100 760000 845000
 Monte Carlo Calculations on Chest X-Ray
 Examinations. Results For Monoenergetic Beams
 Koblinger, L.
 KFKI-73-19
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 \$3.00
 Hungary

4343. Date 740900
 113100 121200 310000 513110 523100 870004 870013
 870079
 Analytic X-Ray Transport Theory for Numerical
 Computation
 Cole, R. K., Jr.
 NUCL. SCI. ENG., 55(1), 76-84
 Sandia Corporation

CATEGORY NUMBER 523100

4632..... Date 740200
 113100 523100
 Early Time Air Fireball Model for Near Surface Energy Release
 Pomraning, G. C.
 NUCL. SCI. ENG., 53(2), 220-225
 Science Applications, Inc.

4847..... Date 750600
 113100 220000 329000 523100 795170
 Monte Carlo Calculations of Scattered X-Rays From Snyder Phantoms
 Koblinger, L.
 HEALTH PHYS., 28(6), 751-754
 Hungary

4849..... Date 750600
 113100 421300 513120 523100 760000 810000
 Spectra of Primary X-Ray and Secondary Photons From Shielding Materials For 4- 30 Mv X-Rays
 Maruyama, T.; Sakata, S.; Kumamoto, Y.; Hashizume, T.; Hattori, H.; Kanamori, H.; Yamamoto, M.
 HEALTH PHYS., 28(6), 771-791
 Japan

CATEGORY NUMBER 523200
 REFLECTION AND INTERFACE EFFECTS
 - X-RAY -
 EXPERIMENT

4848..... Date 750600
 113100 423110 513120 523200 853100
 Transmission in Concrete and Scatter Angular Distribution of 25-Mv X-Rays From a Betatron and a Linear Accelerator
 De Almeida, C. E.; Rosanky, S. L.; Marbach, J. R.; Almond, P. R.
 HEALTH PHYS., 28(6), 771-775
 Texas Schools

CATEGORY NUMBER 531000
 HEATING - NEUTRON

3547..... Date 730600
 111210 210000 32A000 521130 531000 532000 717000
 795082 861000 870003 870006 870041 870082
 Magnet Shield Design for Fusion Reactors
 Kriese, J. T.; Steiner, D.
 ORNL-TM-4256
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

CATEGORY NUMBER 531000

3623..... Date 720300
 111110 112110 112120 420000 531000 532000
 Nuclear Heat Dose Rate Separation By Calculation and Measurement
 Haack, K.
 RISO-119
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 \$9.50
 Denmark

3744..... Date 720800
 111210 210000 329000 521130 531000 717000 810000
 Shielding of Superconducting Magnets in a Fusion Reactor
 McCracken, G. M.; Blow, S.
 CLM-R-120
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 UK 50 PENCE
 England

4182..... Date 740800
 111210 32A000 521130 522130 531000 532000 551110
 552210 620000 717000 795082 795089 795126 810000
 Shielding Design Calculations for Ormak - F/bx
 Gabriel, T. A.; Santoro, R. T.; Engle, W. W., Jr.
 ORNL-TM-4619
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4261..... Date 711025
 111130 111210 122110 122210 531000 532000 830000
 An Automated Method to Calculate Non-Fission Neutron and Neutron Induced Gamma Heating in Air and Other Materials From Basic Multigroup Cross Section Data
 Sandmeier, H. A.; Hansen, G. E.; Asprey, M. E.
 LA-DC-13295; CONF-711125-10;
 ORNL-RSIC-33, PP.229-237
 AVAILABILITY-DEP., NTIS
 Los Alamos Scientific Lab

4277..... Date 700300
 010000 210000 32A000 329000 521110 521130 531000
 710000 861000 870011
 Recent Advances in Reactor Shielding in France
 Rastoin, J.
 ANS-SD-8, PP.60-81; AD-712532, PP.60-81
 AVAILABILITY-NTIS
 France

CATEGORY NUMBER 531000

4406. Date 740000
 111210 531000 532000 793000 794000 795082 810000
 On the Thermal State of the Fusion Blanket
 Nishikawa, M.; Ioki, K.; Naito, T.; Asami, N.
 CONF-740402-P1,634-641
 AVAILABILITY-NTIS
 Japan

4500. Date 750100
 111210 32A000 521130 522130 531000 532000 717000
 794000 795046 810000
 Radioactivity Induced in a Theta-Pinch Fusion Reactor
 Dudziak, D. J.; Krakowski, R. A.
 NUCL. TECH., 25(1), 32-55
 Los Alamos Scientific Lab

4512. Date 740828
 111210 32A000 329000 531000 532000 710000 717000
 795082 795127 810000
 Conceptual Design of a Mirror Reactor for a Fusion
 Engineering Research Facility (Fert)
 Batzer, T. H.; Burleigh, R. C.; Carlson, G. A.;
 Dexter, W. L.; Hamilton, G. W.; Harvey, A. R.;
 Hickman, R. G.; Hoffman, M. A.; Hooper, E. B.;
 Moir, R. W.; Silver, W. J.; Smith, B. H.;
 Taylor, C. E.; Werner, R. W.; Wilcox, T. P.
 UCRL-51617
 AVAILABILITY-DEP., NTIS \$7.60
 Lawrence Livermore Lab

4620. Date 740000
 111210 32A000 521130 522130 531000 532000 717000
 795042 810000
 Preliminary Appraisal of a Fusion/fission (Hybrid)
 Reactor Based on The Linear Theta Pinch
 Bosler, G. E.; Dudziak, D. J.; Ellis, W. R.
 CONF-740805,710-718
 AVAILABILITY-AMERICAN SOCIETY OF
 MECHANICAL ENGINEERS, UNITED
 ENGINEERING CENTER, 345 EAST 7TH ST.,
 NEW YORK, N.Y. 10017
 Los Alamos Scientific Lab

4638. Date 750400
 111210 32A000 531000 532000 717000 793000 795082
 810000
 Calculation Methods for Nuclear Heating - Part II:
 Applications To Fusion-Reactor Blankets and
 Shields
 Abdou, M. A.; Maynard, C. W.
 NUCL. SCI. ENG., 56(4), 381-398
 Wisconsin Schools

CATEGORY NUMBER 531000

4760. Date 720900
 111110 112110 112120 531000 532000 820000 861000
 Measurements of Gamma Heating in the 'essor' Reactor
 Guardini, S.
 ENERGA NUCL. MILAN, 19(8-9), 515-521
 Italy

4878. Date 740800
 111210 32A000 522130 531000 532000 710000 717000
 795082 810000
 Fusion Power Plant
 Mills, R. G. (Ed.)
 MATT-1050
 AVAILABILITY-NTIS \$32.23
 New Jersey Schools

CATEGORY NUMBER 532000
HEATING - GAMMA-RAY

3547. Date 730600
 111210 210000 32A000 521130 531000 532000 717000
 795082 861000 870003 870006 870041 870082
 Magnet Shield Design for Fusion Reactors
 Kriese, J. T.; Steiner, D.
 ORNL-TM-4256
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

3623. Date 720300
 111110 112110 112120 420000 531000 532000
 Nuclear Heat Dose Rate Separation By Calculation and
 Measurement
 Haack, K.
 RISO-119
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 \$9.50
 Denmark

3675. Date 730900
 112120 510000 532000 870092
 Fission-Product Afterheat - a Review of Experiments
 Pertinent to The Thermal-Neutron Fission of 235-U
 Perry, A. M.; Maienschein, F. C.; Vondy, D. R.
 ORNL-TM-4197
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4032. Date 730000
 112120 423240 532000
 Calorimetric Measurement of Residual Power of
 Rapsodie and Fortissimo Fuel Elements
 Devillers, C.; Lhiaubet, G.; Lott, M.; N'guyen Van
 Dat.; Dufreche, F.
 AEC-TR-7477

CATEGORY NUMBER 532000

AVAILABILITY-DEP., NTIS \$4.50
France

4060. Date 600100
532000
Calorimeter Measurement of the Kiwi-a Gamma
Radiation
Storm, E.; Bemis, E.
LA-2407
AVAILABILITY-DEP., NTIS
Los Alamos Scientific Lab

4074. Date 720800
112110 112130 112400 112500 32A000 325000 423250
532000 551110 552110 552220 713000 810000
Analysis of Joyo Mock-Up Experimental Data By
Two-Dimensional Gamma-Ray Heating Distribution
Calculation Code 2d-Gamm
Iwaki, T.; Seki, Y.; Osada, H.
JAPFNR-105; PNC-J-72-18
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$4.00
Japan

4097. Date 740400
112120 532000
A Method of Computing Fission-Product Decay Heat in
a Reactor With Time-Dependent Flux
Barclay, F. W.; Dormuth, K. W.
NUCL. SCI. ENG., 53(4), 436-439
Canada

4115. Date 740600
112120 121100 532000 870090 870092 870094
Calculation of the Decay Power of Fission Products
Tasaka, K.; Sasamoto, N.
NUCL. SCI. ENG., 54(2), 177-189
Japan

4170. Date 740100
111110 112750 532000 710000 713000 870011
Fast Test Reactor Sodium Activity
Kidman, R. B.; Marr, D. R.
HEDL-TME-74-7
AVAILABILITY-AT USAEC(TIC) \$4.00
Westinghouse

4182. Date 740800
111210 32A000 521130 522130 531000 532000 551110
552210 620000 717000 795082 795089 795126 810000
Shielding Design Calculations for Ormak - F/bx
Gabriel, T. A.; Santoro, R. T.; Engle, W. W., Jr.
ORNL-TM-4619
AVAILABILITY-NTIS

CATEGORY NUMBER 532000

Oak Ridge National Lab.

4195. Date 730800
111110 112110 112120 112760 423250 532000 810000
Reactor Gamma Heat Measurements With Calorimeters
and Thermoluminescence Dosimeters
Haack, K.; Majborn, B.
NUCL. INSTR. METHODS, 111(2), 283-286
Denmark

4261. Date 711025
111130 111210 122110 122210 531000 532000 830000
An Automated Method to Calculate Non-Fission
Neutron and Neutron Induced Gamma Heating in
Air and Other Materials From Basic Multigroup
Cross Section Data
Sandmeier, H. A.; Hansen, G. E.; Asprey, M. E.
LA-DC-13295; CONF-711125-10;
ORNL-RSIC-33, PP.229-237
AVAILABILITY-DEP., NTIS
Los Alamos Scientific Lab

4307. Date 730700
111110 112120 532000 810000
Current Status of Fission Product Data
Davies, B. S.; Tobias, A.
RD/B/M-2747
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$3.00
England

4406. Date 740000
111210 531000 532000 793000 794000 795082 810000
On the Thermal State of the Fusion Blanket
Nishikawa, M.; Ioki, K.; Naito, T.; Asami, N.
CONF-740402-PI, 634-641
AVAILABILITY-NTIS
Japan

4500. Date 750100
111210 32A000 521130 522130 531000 532000 717000
794000 795046 810000
Radioactivity Induced in a Theta-Pinch Fusion Reactor
Dudziak, D. J.; Krakowski, R. A.
NUCL. TECH., 25(1), 32-55
Los Alamos Scientific Lab

4512. Date 740828
111210 32A000 329000 531000 532000 710000 717000
795082 795127 810000
Conceptual Design of a Mirror Reactor for a Fusion
Engineering Research Facility (Ferf)
Batzer, T. H.; Burleigh, R. C.; Carlson, G. A.;
Dexter, W. L.; Hamilton, G. W.; Harvey, A. R.;

CATEGORY NUMBER 532000

Hickman, R. G.; Hoffman, M. A.; Hooper, E. B.;
Moir, R. W.; Silver, W. J.; Smith, B. H.;
Taylor, C. E.; Werner, R. W.; Wilcox, T. P.

UCRL-51617

AVAILABILITY-DEP., NTIS \$7.60

Lawrence Livermore Lab

4553. Date 730000
112120 532000

Calorimetric Measurements of the Energy Released By
U-235 Fission Products For Decay Times Between
70 and 7.16 Million Seconds

Lott, M.; Lhiaubet, G.; Dufreche, F.; Devillers, C.; De
Tourreil, R.

LA-TR-74-1

AVAILABILITY-DEP., NTIS \$3.00

France

4558. Date 731100
532000 719B00

Afterheat Calculations for the Htgr

Sund, R. E.

GULF-GA-A12499; GA-LTR-4

AVAILABILITY-DEP., NTIS \$4.50

Gulf General Atomic

4580. Date 740700
112120 222000 230000 510000 532000 870092 870094

Decay Heating Measurements and Calculations for
Irradiated 235-U, 233-U, 239-Pu, and 232-Th (Lwbr
Development Program)

Gunst, S. B.; Conway, D. E.; Connor, J. C.

WAPD-TM-1183

AVAILABILITY-DEP., NTIS \$6.75

Bettis Atomic Power Lab.

4600. Date 730000
111110 112110 112500 32A000 521230 532000 713000
795082 861000 870011

Use of Integral Experiments to Improve Neutron
Propagation and Gamma Heating Calculations

Oeraies, Y.; Caumette, P.; Devillers, C.; Bussac, J.

CONF-731015, PP. 486-505

AVAILABILITY-IAEA

France

4604. Date 731000
112120 230000 532000 713000 719A00

A Study of Long-Term Heat Generation in Nuclear
By-Products From Lwr And Lmfbr Systems

Angelo, J. A., Jr.; Post, R. G.; Haskin, F. E.;
Lewis, C.

STI/PUB-343, V.1, 71-88; CONF-730302, V.1, 71-88;

IAEA-SM-170/58

CATEGORY NUMBER 532000

AVAILABILITY-IAEA, VIENNA

Arizona Schools

4620. Date 740000
111210 32A000 521130 522130 531000 532000 717000
795042 810050

Preliminary Appraisal of a Fusion/fission (Hybrid)
Reactor Based on The Linear Theta Pinch

Bosler, G. E.; Dudziak, D. J.; Ellis, W. R.

CONF-740805, 710-718

AVAILABILITY-AMERICAN SOCIETY OF
MECHANICAL ENGINEERS, UNITED
ENGINEERING CENTER, 345 EAST 7TH ST.,
NEW YORK, N.Y. 10017

Los Alamos Scientific Lab

4629. Date 740200
111110 112110 423250 532000 713000

Gamma-Ray Heating Measurements in Zero-Power Fast
Reactors With Thermoluminescent Dosimeters

Simons, G. G.; Yule, T. J.

NUCL. SCI. ENG., 53(2), 162-175

Argonne National Lab.

4630. Date 740200
111110 112110 112120 32A000 423250 532000 551110
552110 552210 713000 795082 810000

Analyses and Measurements of Gamma-Ray Heating in
the Demonstration Benchmark Plutonium-Fueled
Critical Assembly

Simons, G. G.; Olson, A. P.

NUCL. SCI. ENG., 53(2), 176-196

Argonne National Lab.

4638. Date 750400
111210 32A000 531000 532000 717000 793000 795082
810000

Calculation Methods for Nuclear Heating - Part II:
Applications To Fusion-Reactor Blankets and
Shields

Abdou, M. A.; Maynard, C. W.

NUCL. SCI. ENG., 56(4), 381-398

Wisconsin Schools

4657. Date 720300
112110 532000

Measurements of Gamma-Heat in the Jmtr

Hayashi, T.; Andoh, H.; Takahashi, H.; Onodera, K.

J. NUCL. SCI. TECHNOL. (TOKYO), 9(3), 133-142

Japan

CATEGORY NUMBER 532000

4666. Date 730600
 112120 221000 532000 795163 810000
 Calculations of Fission Product Energy Release
 Tobias, A.
 RD/B/N-2710
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$3.50
 England

4716. Date 741200
 112120 112760 230000 532000 719A00 719B00
 Nuclear Fuel Cycle and the Isotopic Compositions
 Angelo, J. A., Jr.; Post, R. G.
 NUCL. TECH., 24(3), 323-330
 Florida Schools

4760. Date 720900
 111110 112110 112120 531000 532000 820000 861000
 Measurements of Gamma Heating in the 'essor' Reactor
 Guardini, S.
 ENERGA NUCL. MILAN, 19(8-9), 515-521
 Italy

4784. Date 730400
 112720 532000
 Experimental Determination of Absorbed Gamma Doses
 in Lead Cylinders
 Gileadi, A. E.; Griffin, L.
 PRNC-163
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$5.25
 Puerto Rico

4842. Date 750600
 112120 532000 610000 870090 870092 870094
 Gamma-Ray Energy Release in the Decay of Fission
 Products
 Sasamoto, N.; Nemoto, T.
 NUCL. ENG. DESIGN, 32(2), 252-276
 Japan

4878. Date 740800
 111210 32A000 522130 531000 532000 710000 717000
 795082 810000
 Fusion Power Plant
 Mills, R. G. (Ed.)
 MATT-1050
 AVAILABILITY-NTIS \$32.23
 New Jersey Schools

CATEGORY NUMBER 532000

4905. Date 751000
 112120 123000 221000 532000
 Radioactive Decay Heat Analyses
 Schenter, R. E.; Schmittroth, F.
 NBS SPEC.PUB.-425, PP.21-28; CONF-750303, PP.21-28
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Hanford Eng Dev Lab.

4906. Date 751000
 112120 122330 532000
 Sensitivity of the Afterheat From 235-U and 239-Pu
 Thermal Fission to Errors In Fission Product
 Nuclear Data
 Devillers, C.; Nimal, B.; Fiche, C.; Noel, J. P.;
 Blachot, J.; De Tourreil, R.
 NBS SPEC.PUB.-425, PP.29-38; CONF-750303, PP.29-38
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 France

4924. Date 751000
 112120 532000 870092
 Decay Heat Analysis for An Lmfbr Fuel Assembly Using
 Endf/b-Iv Data
 Weisbin, C. R.; Morrison, G. W.; Kee, C. W.
 NBS SPEC.PUB.-425, PP.455-458;
 CONF-750303, PP.455-458
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Oak Ridge National Lab.

4946. Date 750312
 111110 122110 122210 511110 512210 532000 719B00
 794000 795082 853100 861000 870006
 Neutron-Coupled Gamma-Ray Cross-Section
 Requirements for Gas-Cooled Fast Breeder Reactors
 Nagel, M.; Cerbone, R. J.
 GA-A-13329; NBS SPEC.PUB.-425, PP.444-446;
 CONF-750303-66
 AVAILABILITY-DEP., NTIS \$4.00
 Gulf General Atomic

CATEGORY NUMBER 540000
 NEUTRON THERMALIZATION AND
 LOW-ENERGY
 SPECTRA

3508. Date 730117
 111210 421160 511120 540000 861000 870006
 Livermore Pulsed Sphere Program: Low-Energy
 Measurements on Carbon, Iron, And Concrete
 Wong, C.; Anderson, J. D.; Brown, P.;
 Hanson, L. F.; Kammerdiener, J. L.; Logan, C.;

CATEGORY NUMBER 540000

Pohl, B.
UCRL-51144, ADDENDUM
AVAILABILITY-DEP., NTIS \$6.00
Lawrence Livermore Lab

3686. Date 730115
111220 329000 421160 510000 511110 540000 820000
Monte Carlo of D₂O and H₂O Neutron Moderators for
Time of Flight Experiments
Camarda, H. S.
NUCL. INSTR. METHODS, 106(2), 205-212
National Bureau of Standards

3709. Date 720000
111110 32B000 521130 540000
Thermal Neutron Transport Near a Moderator
Discontinuity Using the Method Of Weighted
Residuals. I. Theory
Beynon, T. D.; Moon, J. R.
J. PHYS. D, 5(5), 931-949
England

3757. Date 730300
111110 121100 310000 540000
Multiple-Scattering and Transport of Neutrons
Nishigori, T.
J. NUCL. ENERGY, 27(3), 171-183
Japan

3763. Date 730600
111210 111220 310000 510000 540000 820000 861000
Direct Solutions of Time-Dependent Neutron Slowing
Down Problems Using Numerical Laplace
Transforms-I. Infinite Media
Beynon, T. D.; Coleman, M.
J. NUCL. ENERGY, 27(6), 425-433
England

3984. Date 710600
111110 422110 540000 632300 721200 820000 830000
Neutron Transmission Through Air-Filled Ducts in
Water Shields
Mohammed, F.; Belov, S.; Megahid, R.; Hamouda, I.
ISOTOPE RADIAT. RES., 4, 1-7
Egypt

4057. Date 730000
111110 421160 511120 540000 820000
Experimental Investigation of Space-Energy
Distributions of Slow Neutrons In Water Near Plane
Absorber
Hussein, A.; El-Konsol, S.; Novikov, A.; Zakharkin, I.;
Hamouda, I.
AREAEE-166

CATEGORY NUMBER 540000

AVAILABILITY-NTIS
Egypt

4080. Date 730000
111110 422110 540000 820000
A Study of Slow Neutron Space-Energy Distributions in
Water Near Cadmium, Boron-Carbide and Copper
Rod Elements
Hussein, A.; Eid, Y.; Abdel Kawi, A.; Zakharkin, I.;
Hamouda, I.
AREAEE-172

AVAILABILITY-SCIENTIFIC INFORMATION
DIVISION, ATOMIC ENERGY POST OFFICE,
CAIRO, EGYPT
Egypt

4113. Date 740600
111210 421160 540000 870082 870092 870094
Neutron Pulses Slowing Down in Heavy Media Analysis
With Applications of The Lead Spectrometer
Sawan, M.; Conn, R. W.
NUCL. SCI. ENG., 54(2), 127-142
Wisconsin Schools

4357. Date 740300
122110 540000
Standard Thermal Energy Group Structure for
Generation of Thermal Group Constants From
Endf/b Data
Finch, D. R.
DP-1346; ENDF-196
AVAILABILITY-DEP., NTIS \$4.00
E. I. Dupont Denemours

4416. Date 741000
540000 820000
Incomplete Neutron Thermalization in Light Water Ice
at 77, 21, and 4 K. (Tech. Note)
Gangwani, G. S.; Kothari, L. S.
NUCL. SCI. ENG., 55(2), 242-243
India

4475. Date 720200
111110 324000 540000 870001
Generalized Exact Solution of the Slowing Down
Equation
Dawn, T. Y.
J. NUCL. SCI. TECHNOL. (TOKYO), 9(2), 93-96

CATEGORY NUMBER 540000

4628. Date 740200
 111500 121100 324000 540000
 Neutron Slowing Down Via Inelastic Scattering in Heavy
 Moderators- I. Steady State
 Lineberry, M. J.; Corngold, N.
 NUCL. SCI. ENG., 53(2), 153-161
 California Schools

4667. Date 730000
 111220 325000 424000 540000 551110 851000
 Calibration of Neutron Gauges for Measuring of the Soil
 Moisture Content In The 4 Pi Geometry. I. Two
 Group Diffusion Theory, Case of An Empty Hole
 Wozniak, J.
 ITJ-27
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.50
 Poland

4948. Date 750000
 111110 329000 540000
 A Comparison of 'vim' and 'mc2-2': Two Detailed
 Solutions of the Neutron Slowing-Down Problem
 Prael, R. E.; Henryson, H., II
 NBS SPEC.PUB.-425, PP.451-454; CONF-750303-35
 AVAILABILITY-NTIS AS CONF-750303-35
 Argonne National Lab.

CATEGORY NUMBER 551110
 TWO DIMENSIONS - NEUTRON - PRIMARY
 - CALCULATION

3538. Date 730200
 111110 32A000 551110 795089
 New Spatial Differencing for the Neutron Transport
 Equation
 Arkuszewski, J. J.
 EIR-232
 AVAILABILITY-EIDGENOESSISCHES INSTITUT
 FUER REAKTORFORSCHUNG,
 WUERENLINGEN, SWITZERLAND
 Switzerland

3633. Date 730600
 111110 325000 511110 551110
 An Energy Dependent Spatial Mesh Approximation for
 Neutron Group Diffusion Problems. (Lwbr
 Development Program)
 Yasinsky, J. B.; Natelson, M.
 WAPD-TM-1062
 AVAILABILITY-NTIS
 Westinghouse

CATEGORY NUMBER 551110

3635. Date 711000
 32A000 551110 552210 716000 795089 863000 870003
 870092 881000
 Effect of Angular Quadrature on Results of
 Two-Dimensional Space Power Reactor Shield
 Calculations
 Connolley, D. J.; Lahti, G. P.
 NASA-TM-X-67937; N71-37066
 AVAILABILITY-NTIS
 National Aeronautics Support Agencies

3643. Date 730900
 310000 32B000 551110
 The Application of Phase-Space Finite Elements to the
 Two-Dimensional Neutron Transport Equation in
 X-Y Geometry
 Miller, W. F.; Lewis, E. E.; Rossow, E. C.
 NUCL. SCI. ENG., 52(1), 12-22
 Illinois Schools

3644. Date 730900
 32D000 32E000 551110
 Two-Dimensional Neutron Transport Calculations Using
 the Response Matrix Method
 Filippone, W. L.
 NUCL. SCI. ENG., 52(1), 23-24
 Mexico

3681. Date 730300
 111110 112110 325000 422110 551110 710000 713000
 810000
 Analysis of the Ftr/emc Neutron Shielding Experiment
 Boulette, E.; Marr, D.; Bunch, W.
 HEDL-TME-73-27
 AVAILABILITY-AT (TIC) AEC
 Westinghouse

3740. Date 720200
 111110 32C000 551110 713000
 Applications of Finite Element Methods in Reactor
 Mathematics. Numerical Solution of the Neutron
 Diffusion Equation
 Kaper, H. G.; Leaf, G. K.; Lindeman, A. J.
 ANL-7925
 AVAILABILITY-NTIS \$3.00
 Argonne National Lab.

3754. Date 710000
 111220 220000 329000 551110 552210 845000
 Evaluation of the Components of the Absorbed Dose in
 the Interior Of Organisms Exposed to Neutrons
 Doussset, M.; Ricourt, A.; Lemaire, G.
 CEA-CONF-1976; CONF-721203-2
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)

CATEGORY NUMBER 551110

France

3755. Date 730200
 111110 32C000 551110 810000
 Finite Element Method Applied to Neutron Diffusion Problems
 Deppe, L. O.; Hansen, K. F.
 COO-2262-1; MITNE-145
 AVAILABILITY-DEP., NTIS \$8.25
 Massachusetts Schools

3858. Date 690400
 111210 111500 329000 551110 842000
 Monte-Carlo Calculation of Neutron Penetration Through Cylindrical Polyethylene Layers
 Miroschnikov, G. V.; Solodukhin, G. V.; Miroschnikova, A. I.
 SOVIET J. AT. ENERGY (ENGLISH TRANSL.), 26(4), 422-423
 Russia

4072. Date 720300
 111110 32A000 32F000 551110 552210 713000 795125 810000
 Evaluation of the Two-Dimensional Shielding Code for a Fast Reactor Shield Design and Its Application
 Tanaka, Y.; Suzuki, I.; Otani, M.
 JAPFNR-68; PNC-J-213-72-3-1
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Japan

4074. Date 720800
 112110 112130 112400 112500 32A000 325000 423250 532000 551110 552110 552220 713000 810000
 Analysis of Joyo Mock-Up Experimental Data By Two-Dimensional Gamma-Ray Heating Distribution Calculation Code 2d-Gamm
 Iwaki, T.; Seki, Y.; Osada, H.
 JAPFNR-105; PNC-J-72-18
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY) \$4.00
 Japan

4132. Date 740700
 111110 325000 551110 713000 870011 870092 885000
 Anisotropic Neutron Diffusion in Lattices of the Zero-Power Plutonium Reactor Experiments
 Gelbard, E. M.
 NUCL. SCI. ENG., 54(3), 327-340
 Argonne National Lab.

CATEGORY NUMBER 551110

4155. Date 730300
 111130 311000 32A000 511110 521120 551110 731200 830000 861000
 Application of Adjoint Difference and Surface Integral Methods to Selected Deep-Penetration Radiation Transport Problems
 Robinson, J. C.; Stevens, P. N.; Hoffman, T. J.
 BRL-CR-98; NEUT-0150-3; AD-765487
 AVAILABILITY-NTIS
 Tennessee Schools

4173. Date 740800
 111500 32A000 551110
 Weighted Central Difference Equations for the Neutron Transport Equation
 Madsen, N. K.
 NUCL. SCI. ENG., 54(4), 376-386
 Lawrence Livermore Lab

4177. Date 740800
 111500 32C000 325000 551110
 Application of the Finite Element Method to Two-Dimensional Diffusion Problems
 Deppe, L. O.; Hansen, K. F.
 NUCL. SCI. ENG., 54(4), 456-465
 Massachusetts Schools

4182. Date 740800
 111210 32A000 521130 522130 531000 532000 551110 552210 620000 717000 795082 795089 795126 810000
 Shielding Design Calculations for Ormak - F/bx
 Gabriel, T. A.; Santoro, R. T.; Engle, W. W., Jr.
 ORNL-TM-4619
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4253. Date 711021
 111110 32A000 421130 421140 521130 551110 710000 713000 795082 795089 810000 861000 870011
 Fftf Related Studies in the Ornl-Lmfbr Shielding Program
 Mynatt, F. R.; Clifford, C. E. (Usa); Muckenthaler, F. J.; Maerker, R. E.; Gritzner, M. L.; Williams, L. R.; Rathbun, J. L.
 ANS-SD-13, ARTICLE 3
 AVAILABILITY-ANS
 Oak Ridge National Lab.

CATEGORY NUMBER 551110

4255. Date 711021
111110 310000 322000 325000 551110 552110 552210
710000 713000

Two-Dimensional Shielding Calculation Using a
Combination of Diffusion Theory and Line-Of-Sight
Method

Vossebrecker, H.
ANS-SD-13, ARTICLE 5
AVAILABILITY-ANS
Germany (West)

4262. Date 711100
111210 32A000 521120 522120 551110 795195 830000

Two-Dimensional Coupled Neutron-Gamma Sn
Transport From a 14.1 Mev Neutron Source in Air
Over Ground Using the Lasl Twotran-Fc Program
Sandmeier, H. A.; Lathrop, K. D.; Brinkley, F. W.;
Hansen, G. E.; Campbell, J. E.

LA-DC-13294; CONF-11125, PP.291-298;
ORNL-RSIC-33, PP.291-298
AVAILABILITY-DEP., NTIS
Los Alamos Scientific Lab

4264. Date 710000
111130 111400 32A000 551110 795195 830000

Two Dimensional Air Transport From a Point
Anisotropic Source
Lathrop, K. D.

LA-DC-13268; CONF-711125-4;
ORNL-RSIC-33, PP.401-408
AVAILABILITY-DEP., NTIS
Los Alamos Scientific Lab

4287. Date 740900
020000 111110 421110 421130 422140 511110 551110
713000 861000

Sdt 11. the Ornl Benchmark Experiment for Neutron
Transport Through Iron And Stainless Steel, Part I
Maerker, R. E.

ORNL-TM-4222; ENDF-188
AVAILABILITY-NTIS
Oak Ridge National Lab.

4288. Date 740900
020000 111110 421110 421130 422140 511110 551110
713000 870011

Sdt 12. the Ornl Benchmark Experiment for Neutron
Transport Through Sodium
Maerker, R. E.

ORNL-TM-4223; ENDF-189
AVAILABILITY-NTIS
Oak Ridge National Lab.

CATEGORY NUMBER 551110

4295. Date 740700
111110 111210 220000 329000 511110 512210 551110
552210 845000

Distributions for the Design of Dosimetric Experiments
in a Tissue Equivalent Medium

Jones, T. D.
HEALTH PHYS., 27(1), 87-96
Oak Ridge National Lab.

4353. Date 721200
111110 32A000 329000 422110 551110 770000 795089
795127 870013 870098

The Neutron Environment of a Cf-252 Facility
Wyatt, R. M.

LSU THESIS (MASTERS)
AVAILABILITY-LOUISIANA STATE UNIV.,
BATON ROUGE, LA. 70803
Louisiana Schools

4413. Date 730800

111110 32C000 325000 551110
Finite Element Methods for Reactor Analysis
Kang, C. M.; Hansen, K. F.
NUCL. SCI. ENG., 51(4), 456-495
Massachusetts Schools

4420. Date 741100
111110 310000 551110

Solution of Two-Dimensional Diffusion Equation By the
Finite Fourier Transformation
Kobayashi, K.; Ohtani, N.; Jung, J.
NUCL. SCI. ENG., 55(3), 320-328
Japan

4425. Date 740619
111110 325000 551110 713000 719B00 810000

Neutronics Analysis of the 300 Mw(E) Gas Cooled Fast
Reactor Demonstration Plant
Bhattacharyya, S. K.; Bohn, E. M.

ZPR-TM-169
AVAILABILITY-AUTHORS, ARGONNE
NATIONAL LAB., APPLIED PHYSICS DIV.,
9700 SOUTH CASS AVENUE, ARGONNE,
ILLINOIS 60439
Argonne National Lab.

4429. Date 740300
111110 551110 795089 795123 810000

Calculation of the Hprr Neutron Spectrum for Simulated
Nuclear Accident Conditions
Poston, J. W.; Knight, J. R.; Whitesides, G. E.
HEALTH PHYS., 26(3), 217-221
Oak Ridge National Lab.

CATEGORY NUMBER 551110

4560. Date 730900
 111110 32A000 551110 713000 795195 810000
 Fast Burst Reactor Neutron Transport Calculations
 Schmidt, T. R.
 SLA-73-140
 AVAILABILITY-DEP., NTIS \$5.50
 Sandia Corporation

4581. Date 740800
 111110 325000 551110 713000 721100 810000
 Applicability of Two-Dimensional Shielding Code
 Tanaka, Y.; Suzuki, I.; Takemura, M.; Suzuki, T.
 JAPFNR-167
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$5.45
 Japan

4609. Date 730800
 111500 329000 551110 845000
 Spectrum of Neutrons Backscattering From a Finite
 Phantom
 Noack, K.; Heinzlmann, B.; Wand, H.; Giessing, R.;
 Linemann, H.
 SZS-153, PP. 137-142 (IN GERMAN)
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Germany (West)

4630. Date 740200
 111110 112110 112120 32A000 423250 532000 551110
 552110 552210 713000 795082 810000
 Analyses and Measurements of Gamma-Ray Heating in
 the Demonstration Benchmark Plutonium-Fueled
 Critical Assembly
 Simons, G. G.; Olson, A. P.
 NUCL. SCI. ENG., 53(2), 176-196
 Argonne National Lab.

4635. Date 750400
 111110 325000 551110 810000
 A Generalized Diffusion Theory for Calculating the
 Neutron Transport Scalar Flux
 Alcouffe, R. E.
 NUCL. SCI. ENG., 56(1), 321-339
 Los Alamos Scientific Lab

4639. Date 750400
 111110 330000 551110
 Transmission Probability Method of Integral Neutron
 Transport Calculation For Two-Dimensional
 Rectangular Cells. (Tech. Note)
 Hagblom, H.; Ahlin, A.
 NUCL. SCI. ENG., 56(4), 411-422
 Sweden

CATEGORY NUMBER 551110

4641. Date 750400
 111110 32C000 551110 810000
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 Program 'fem 2d'. (Tech. Note)
 Schmidt, F. A.; Franke, H. P.
 NUCL. SCI. ENG., 56(4), 431-433
 Germany (West)

4661. Date 730600
 111110 321000 330000 551110 810000
 An Integral Transport Theory Calculation of Neutron
 Flux Distributions In Rectangular Lattice Cells
 Wood, J.; Williams, M. M.
 J. NUCL. ENERGY, 27(6), 377-394
 England

4667. Date 730000
 111220 325000 424000 540000 551110 851000
 Calibration of Neutron Gauges for Measuring of the Soil
 Moisture Content In The 4 Pi Geometry. I. Two
 Group Diffusion Theory, Case of An Empty Hole
 Wozniak, J.
 ITJ-27
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.50
 Poland

4822. Date 750500
 111110 325000 551110
 A New Method for the Numerical Solution of the
 Two-Dimensional Neutron Diffusion Equation
 Aoki, K.; Tsuiki, M.
 NUCL. SCI. ENG., 57(1), 53-62
 Japan

4829. Date 750800
 111500 321000 326000 551110
 The Extended P1 Approximation of the
 Multidimensional Neutron Transport Equation
 Sigg, B.
 NUCL. SCI. ENG., 57(4), 277-291
 Switzerland

4836. Date 751000
 111110 310000 32D000 32E000 551110
 High-Order Response Matrix Equations in
 Two-Dimensional Geometry
 Weiss, Z.; Lindahl, S. O.
 NUCL. SCI. ENG., 58(2), 166-181
 Sweden

CATEGORY NUMBER 551110

4838..... Date 751000
 111110 330000 511110 551110 795082 795222
 A Numerical Method for Solving Integral Equations of
 Neutron Transport - II.
 Loyalka, S. K.; Tsai, R. W.
 NUCL. SCI. ENG., 58(2), 193-202
 Missouri Schools

4839..... Date 751000
 111110 32C000 330000 551110
 A Two-Dimensional Finite Element Method for Integral
 Neutron Transport Calculations
 Lewis, E. E.; Miller, W. F., Jr.; Henry, T. P.
 NUCL. SCI. ENG., 58(2), 203-212
 Illinois Schools

4865..... Date 751000
 111110 32A000 551110 795195 870092
 Effects of Neutron Streaming and Geometric Models on
 Molten Fuel Recriticality Accidents
 McLaughlin, T. P.
 LA-6127-M/S
 AVAILABILITY-NTIS \$4.00
 Los Alamos Scientific Lab

4925..... Date 751000
 122310 311000 32A000 551110 853100 861000
 A Two Dimensional Cross Section Sensitivity Analysis
 of Iron in a Concrete Shield
 Albert, T. E.; Simmons, G. L.
 NBS SPEC.PUB.-425,PP.459-463;
 CONF-750303,PP.459-463
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Science Applications, Inc.

CATEGORY NUMBER 551120
 TWO DIMENSIONS - NEUTRON - PRIMARY
 - EXPERIMENT

3677..... Date 730300
 111110 422110 521230 551120 820000 861000
 Neutron Propagation in Laminated Iron-Water Shields
 Nicks, R.; Perlini, G.
 ISP-1973/03
 AVAILABILITY-EURATOM, JOINT NUCLEAR
 RESEARCH CENTRE, ISPRA
 ESTABLISHMENT, 21020 ISPRA (VA), ITALY
 Italy

CATEGORY NUMBER 551120

3827..... Date 740100
 111110 122310 421120 421130 422120 551120 795082
 795089 795127 870011
 Final Report on a Benchmark Experiment for Neutron
 Transport in Thick Sodium
 Maerker, R. E.; Muckenthaler, F. J.; Childs, R. L.;
 Gritzner, M. L.
 ORNL-4880
 AVAILABILITY-DEP., NTIS \$5.45
 Oak Ridge National Lab.

3900..... Date 721000
 111110 326000 551120
 Investigation of Intra-Vessel Shielding for the Bn-600
 Reactor of the Bfs-2 Rig
 Bakov, A. T.; Bondarenko, V. V.; Voropaev, A. I.;
 Efimov, E. F.; Kazansky, Yu. A.;
 Kulakovsky, M. Ya.; Savitsky, V. I.;
 Troyanov, M. F.; Fomenko, V. P.;
 Khokhlov, G. N.
 CONF-721018,PP.41-57
 AVAILABILITY-OECD
 Russia

3961..... Date 721000
 32A000 422110 551120 721200 820000
 Comparison of One and Two Dimensional Discrete
 Ordinate Calculations With Experimental Results
 Fuse, T.; Yamaji, A.; Miura, T.
 CONF-721018,PP.1459-1471
 AVAILABILITY-OECD
 Japan

4160..... Date 720000
 111110 220000 421140 511120 551120 820000 842000
 Neutron Spectral Measurements in a Neck Tissue
 Phantom
 Filipiak, B.
 INR-1443
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$3.00
 Poland

4383..... Date 731009
 111110 321000 421130 551120 861000 870003 870013
 870082 882000
 Fast-Neutron Transport in Shields Having Limited
 Transverse Dimensions
 Bass, L. P.; Bozin, G. M.; Germogenova, T. A.;
 Degtyarev, S. G.; Suvorov, A. P.;
 Tikhonov, V. K.; Tsypin, S. G.; Shul'gin, A. I.
 FTD-HT-23-854-73; AD-768493
 AVAILABILITY-NTIS
 Russia

CATEGORY NUMBER 552110
TWO DIMENSIONS - GAMMA-RAY - PRIMARY
- CALCULATION

3710..... Date 711000
 112720 328000 552110 760000 820000
 A Model Simulating Photon Transport in a Finite
 Medium
 Thames, H. D., Jr.
 MATH.BIOSCI., 12(1-2), 173-184
 Texas Schools

4074..... Date 720800
 112110 112130 112400 112500 32A000 325000 423250
 532000 551110 552110 552220 713000 810000
 Analysis of Joyo Mock-Up Experimental Data By
 Two-Dimensional Gamma-Ray Heating Distribution
 Calculation Code 2d-Gamm
 Iwaki, T.; Seki, Y.; Osada, H.
 JAPFNR-105; PNC-J-72-18
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.00
 Japan

4215..... Date 690800
 111110 112400 112500 112600 32A000 511110 512110
 512210 522130 552110 552220 716000 795089 810000
 Some Characteristics of Secondary Gamma Ray
 Transport in Asymmetric Snap Shields
 Mynatt, F. R.; Williams, L. R.
 ANS-SD-7, PP.113-135; CONF-671140, PP.113-135
 AVAILABILITY-DEP., NTIS \$3.00
 Oak Ridge National Lab.

4255..... Date 711021
 111110 310000 322000 325000 551110 552110 552210
 710000 713000
 Two-Dimensional Shielding Calculation Using a
 Combination of Diffusion Theory and Line-Of-Sight
 Method
 Vossebrecker, H.
 ANS-SD-13, ARTICLE 5
 AVAILABILITY-ANS
 Germany (West)

4630..... Date 740200
 111110 112110 112120 32A000 423250 532000 551110
 552110 552210 713000 795082 810000
 Analyses and Measurements of Gamma-Ray Heating in
 the Demonstration Benchmark Plutonium-Fueled
 Critical Assembly
 Simons, G. G.; Olson, A. P.
 NUCL. SCI. ENG., 53(2), 176-196
 Argonne National Lab.

CATEGORY NUMBER 552110

4662..... Date 730500
 112B00 220000 329000 552110 760000 845000
 Photon Fluence Calculations for Estimating Dose
 Distribution in the Thorax
 Sidwell, J. M.; Burlin, T. E.
 BRIT. J. RADIOD., 46(545), 360-364
 England

CATEGORY NUMBER 552210
TWO DIMENSIONS - GAMMA-RAY -
SECONDARY
-
CALCULATION

3635..... Date 711000
 32A000 551110 552210 716000 795089 863000 870003
 870092 881000
 Effect of Angular Quadrature on Results of
 Two-Dimensional Space Power Reactor Shield
 Calculations
 Connolley, D. J.; Lahti, G. P.
 NASA-TM-X-67937; N71-37066
 AVAILABILITY-NTIS
 National Aeronautics Support Agencies

3754..... Date 710000
 111220 220000 329000 551110 552210 845000
 Evaluation of the Components of the Absorbed Dose in
 the Interior Of Organisms Exposed to Neutrons
 Dousset, M.; Ricourt, A.; Lemaire, G.
 CEA-CONF-1976; CONF-721203-2
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 France

4072..... Date 720300
 111110 32A000 32F000 551110 552210 713000 795125
 810000
 Evaluation of the Two-Dimensional Shielding Code for a
 Fast Reactor Shield Design and Its Application
 Tanaka, Y.; Suzuki, I.; Otani, M.
 JAPFNR-68; PNC-J-213-72-3-1
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Japan

4182..... Date 740800
 111210 32A000 521130 522130 531000 532000 551110
 552210 620000 717000 795082 795089 795126 810000
 Shielding Design Calculations for Ormak - F/bx
 Gabriel, T. A.; Santoro, R. T.; Engle, W. W., Jr.
 ORNL-TM-4619
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

CATEGORY NUMBER 552210

4255..... Date 711021
111110 310000 322000 325000 511110 552110 552210
710000 713000

Two-Dimensional Shielding Calculation Using a
Combination of Diffusion Theory and Line-Of-Sight
Method

Vossebrecker, H.
ANS-SD-13, ARTICLE 5
AVAILABILITY-ANS
Germany (West)

4295..... Date 740700
111110 111210 220000 329000 511110 512210 551110
552210 845000

Distributions for the Design of Dosimetric Experiments
in a Tissue Equivalent Medium

Jones, T. D.
HEALTH PHYS., 27(1), 87-96
Oak Ridge National Lab.

4630..... Date 740200
111110 112110 112120 32A000 423250 532000 551110
552110 552210 713000 795082 810000

Analyses and Measurements of Gamma-Ray Heating in
the Demonstration Benchmark Plutonium-Fueled
Critical Assembly

Simons, G. G.; Olson, A. P.
NUCL. SCI. ENG., 53(2), 176-196
Argonne National Lab.

CATEGORY NUMBER 552220
TWO DIMENSIONS - GAMMA-RAY -
SECONDARY

EXPERIMENT

4074..... Date 720800
112110 112130 112400 112500 32A000 325000 423250
532000 551110 552110 552220 713000 810000

Analysis of Joyo Mock-Up Experimental Data By
Two-Dimensional Gamma-Ray Heating Distribution
Calculation Code 2d-Gamm

Iwaki, T.; Seki, Y.; Osada, H.
JAPFNR-105; PNC-J-72-18
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$4.00
Japan

CATEGORY NUMBER 552220

4215..... Date 690800
111110 112400 112500 112600 32A000 511110 512110
512210 522130 552110 552220 716000 795089 810000

Some Characteristics of Secondary Gamma Ray
Transport in Asymmetric Snap Shields

Mynatt, F. R.; Williams, L. R.
ANS-SD-7, PP.113-135; CONF-671140, PP.113-135
AVAILABILITY-DEP., NTIS \$3.00
Oak Ridge National Lab.

CATEGORY NUMBER 610000
FORMULAS, GRAPHS, TABLES, AND
NOMOGRAMS - NEUTRON
AND GAMMA-RAY

3505..... Date 710400
111500 112B00 311000 32A000 511110 512210 610000
795082 853100

Adjoint Sn Calculations of Coupled Neutron and
Gamma-Ray Transport Through Concrete Slabs

Roussin, R. W.; Schmidt, F. A. R.
NUCL. ENG. DESIGN, 15(3), 319-343
Oak Ridge National Lab.

3532..... Date 730700
000000 111130 111400 112110 112120 112800 610000
721100 722100 731100 731200 731300 810000

Shielding Against Initial Radiation From Nuclear
Weapons

Abbott, L. S.
ORNL-RSIC-36
AVAILABILITY-RSIC
Oak Ridge National Lab.

3585..... Date 720000
112730 610000 632110

Dose Distributions About 137-Cs Sources in Tissue
Krishnaswamy, V.
RADIOLOGY, 105, 181-184
New York Schools

3586..... Date 720100
111110 112110 220000 329000 511110 512210 610000
Calculated Depth Dose Table for 252-Cf Sources in
Tissue

Krishnaswamy, V.
PHYS. MED. BIOL., 17(1), 56-63
Pennsylvania Schools

CATEGORY NUMBER 610000

3606. Date 720100
112720 220000 610000 631000 760000 820000
Calculation of the Absolute Depth Dose in the Central
Ray of a 66-Co Radiation Field
Eisenlohr, H. H.; Abedin-Zadeh, R.
STRAHLENTHERAPIE, 143(1), 90-97
Iaea

3673. Date 730700
112710 220000 610000
Effective Absorbed Energies
Barber, L. R.; Cloutier, R. J.; Watson, E. E.
ORAU-120
AVAILABILITY-NTIS \$4.00
Oak Ridge Associated Univ.

3782. Date 731000
112710 610000
Nuclear Level Schemes A=45 Through A=257 From
Nuclear Data Sheets
Nuclear Data Group (Eds.)
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AVAILABILITY-\$23.50
Oak Ridge National Lab.

3820. Date 730400
121100 610000
Interpolation of Tabular Secondary Neutron and Photon
Energy Distributions
Doyas, R. J.; Perkins, S. T.
NUCL. SCI. ENG., 50(4), 390-392
Lawrence Livermore Lab

3831. Date 721100
112730 610000
Computer Evaluation of Sievert's Integral By Recursive
Formula
Worthley, B. W.; Nicholls, R. L.
PHYS. MED. BIOL., 17(6), 854-857
England

3846. Date 680900
112B00 610000 631000
Universal Nomograms for Calculating Absorbed Doses
From Plane Radiators. (Abstract)
Drozov, V. E.; Suroegin, L. M.; Orlenko, P. A.;
Tikhonov, V. P.
SOVIET J. AT. ENERGY (ENGLISH TRANSL.),
25(3), 997-998
Russia

CATEGORY NUMBER 610000

3873. Date 731121
220000 610000 613000
Data for Protection Against Ionizing Radiation From
External Sources: Supplement to Icrp Publication 15
ICRP
ICRP-21
AVAILABILITY-PERGAMON PRESS \$7.50
Internat. Com. for Radiol. Prot.

3970. Date 690000
512110 610000 632110
Radiation Shielding of a Cylindrical Self-Absorbing
Source in the Axial Direction
Kruger, G. W.; Seeligmann, P.
ORNL-TR-2319
AVAILABILITY-DEP., NTIS
Germany (West)

3989. Date 691000
112200 121200 512110 512210 610000 794000 861000
870082
The Importance of Bremsstrahlung in the Shielding of
Gamma Rays Having Energies Less Than 10 Mev
Dutton, L. M.
AEEW-R-675
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY),
UK 9S 6D.
England

4010. Date 700200
121200 610000
A Nomogram for Calculating the Energy Relations in
Compton Scattering. (Notes)
Andrews, H. L.
HEALTH PHYS., 18(2), 158-159
New York Schools

4018. Date 670600
112B00 327000 512110 522120 522130 610000 830000
Distribution Functions of Air-Scattered Gamma Rays
Above Isotropic Plane Sources
Michael, J. A.; Lamonds, H. A.
CEX-73.1; EGG-1183-2160
AVAILABILITY-NTIS \$10.60
Edgerton, Germeshausen, + Grier

4024. Date 711200
112B00 329000 512110 610000 820000 861000 870050
870082
Tabulated Values of Spatial, Directional, and Energy
Distributions Of Multiple Scattered Gamma
Radiation
Stehfest, H.
BMBW-FBK-71-2(SUPPL.)

CATEGORY NUMBER 610000

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Germany (West)

4111. Date 740500
112B00 121200 610000
Legendre Polynomial Expansion of the Klein-Nishina
Differential Cross Section
Weise, K. E.; Foderaro, A.
NUCL. SCI. ENG., 54(1), 85-93
Pennsylvania Schools

4137. Date 730600
610000 632110
First Flight Escape Probability for a Spherical Shell
With An Empty Central Region
Lefvert, T.
J. NUCL. ENERGY, 27(6), 415-423
Sweden

4159. Date 731000
112720 112920 610000 632500 731200 853100
Effects of Building Eccentricity Upon the Basement
Ceiling Attenuation Factor, Bc(Xc, Omega)
Schmoke, M. A.; Zink, J.
BRL-R-1679
AVAILABILITY-NTIS
Army Installations

4256. Date 711021
111500 311000 32A000 511110 512110 512210 610000
853100
Effect of Material Composition, Especially Water
Content, on Neutron Penetration of Concrete Slabs
Chilton, A. B.
ANS-SD-13, ARTICLE 6
AVAILABILITY-ANS
Illinois Schools

4286. Date 740400
020000 111110 210000 610000
Nuclear Reactor Neutron Energy Spectra
Serpan, C. Z., Jr.; Menke, B. H.
ASTM-DS-52
AVAILABILITY-AMERICAN SOCIETY FOR
TESTING AND MATERIALS, 1916 RACE
STREET, PHILADELPHIA, PA. 19103 \$26.00
American Soc. for Testing Matls

CATEGORY NUMBER 610000

4297. Date 740100
112710 123000 221000 222000 610000
Tables for Reaction Gamma-Ray Spectroscopy. Part I.
A=6 to A=20
De Meijer, R. J.; Plendl, H. S.
AT.DATA + NUCL. DATA TABLES, 13(1), 1-33
Florida Schools

4325. Date 740400
111110 112710 610000 713000 719A00 795217 870092
870094
Calculation and Compilations of Composition,
Radioactivity, Thermal Power, Gamma and Neutron
Release Rates of Fission Products and Actinides of
Spent Power Reactor Fuels and Their Reprocessing
Wastes
Haug, H. O.
KFK-1945
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Germany (West)

4334. Date 720500
112B00 122200 610000 810000
Mass Absorption Coefficient for X-Rays. a Tabular
Comparison of the Values According to the Formula
of Kelly and Heinrich
Preuss, E.
JUL-856-TP(IN GERMAN)
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Germany (West)

4496. Date 750100
112B00 121200 610000 632110 632120 632200 810000
Compact Tables of Functions for Use in Shielding
Calculations. (Tech. Note)
Shure, K.; Wallace, O. J.
NUCL. SCI. ENG., 56(1), 84-94
Bettis Atomic Power Lab.

4539. Date 721031
610000
Nomographs for Determining the Thickness or
Radiation Shields For Two-Particle Radiation
Source
Simons, D. G.
NOLTR-72-260; AD-754756
AVAILABILITY-NTIS
Naval Installations

CATEGORY NUMBER 610000

4562. Date 721200
112B00 113100 121200 512110 513110 610000 613000
810000

Handbook of Photo-Compton Current Data
Dellin, T. A.
SCL-RR-720086
AVAILABILITY-DEP., NTIS
Sandia Corporation

4575. Date 721123
112930 610000 830000
Nomograms for the Computation of the Atmospheric
Diffusion of a Radioactive Pollutant
Fritelli, L.
RT/PROT-(72)7
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Italy

4579. Date 741100
112710 220000 329000 610000 632200 845000
A Tabulation of Dose Equivalent Per Microcurie-Day
for Source and Target Organs of An Adult for
Various Radionuclides
Snyder, W. S.; Ford, M. R.; Warner, G. G.;
Watson, S. B.
ORNL-5000
AVAILABILITY-NTIS \$10.60
Oak Ridge National Lab.

4611. Date 740000
010000 122100 610000 810000
2200 M/s Neutron Activation Cross-Sections
Sher, R.
STI/DOC-10/156, PP.1-13
AVAILABILITY-IAEA
California Schools

4612. Date 740000
010000 122100 610000 810000
Tables and Graphs of Cross-Sections for (N,p), (N,alpha)
and (N,2n) Reactions in the Neutron Energy Region
1 - 37 Mev
Bormann, M.; Neuert, H.; Scobel, W.
STI/DOC-10/156, PP.87-272
AVAILABILITY-IAEA
Germany (West)

4613. Date 740000
010000 122100 610000 810000
Cross-Sections for Fission Neutron Spectrum Induced
Reactions
Calamand, A.
STI/DOC-10/156, PP.273-324
AVAILABILITY-IAEA

CATEGORY NUMBER 610000

Iaea

4614. Date 740000
010000 122200 610000 810000
Photonuclear Cross-Sections
Bulow, B.; Forkman, B.
STI/DOC-10-156, PP.475-558
AVAILABILITY-IAEA
Sweden

4645. Date 730000
111110 111220 511110 610000 632110 853100
Dose Due to Practical Neutron Energy Distributions
Incident on Concrete Shielding Walls
Wyckoff, J. M.; Chilton, A. B.
CONF-730907-P1, PP.694-699
AVAILABILITY-DEP., NTIS
National Bureau of Standards

4654. Date 720100
112720 220000 610000 760000 820000 845000
Scatter-Air Ratios
Cunningham, J. R.
PHYS. MED. BIOL., 17(1), 42-51
Canada

4781. Date 730000
112500 610000
Tables for Prompt Gamma-Ray Spectroscopy I: A=6 to
A=20
De Meijer, R. J.; Plendl, H. S.
ORO-1797-47
AVAILABILITY-DEP., NTIS \$4.50
Florida Schools

4802. Date 741100
111110 112110 511110 512110 512210 610000 845000
870090
Calculated Depth Dose Tables for Californium-252 Seed
Sources in Tissue
Krishnaswamy, V.
PHYS. MED. BIOL., 19(6), 886-888
New York Schools

4828. Date 750600
112120 112500 112600 327000 512110 610000 632500
731200 830000 853100
Structure Shielding Against Initial Radiations From
Nuclear Explosions. I. Attenuation of Air Secondary
and Fission Product Gamma Rays
Spencer, L. V.
NUCL. SCI. ENG., 57(2), 129-154
National Bureau of Standards

CATEGORY NUMBER 610000

4842. Date 750600
 112120 532000 610000 870090 870092 870094
 Gamma-Ray Energy Release in the Decay of Fission
 Products
 Sasamoto, N.; Nemoto, T.
 NUCL. ENG. DESIGN, 32(2), 252-276
 Japan

4854. Date 750000
 112120 610000 810000
 Fission Product Data Library
 Hep, J.; Valenta, V.
 ZJE-158
 AVAILABILITY-SKODA WORKS, NUCLEAR
 POWER CONSTRUCTION DEPARTMENT,
 INFORMATION CENTRE, PLZEN,
 CZECHOSLOVAKIA
 Czechoslovakia

4862. Date 751100
 112710 220000 329000 610000 632200 845000
 A Tabulation of Dose Equivalent Per Microcurie-Day
 for Source and Target Organs of An Adult for
 Various Radionuclides
 Snyder, W. S.; Ford, M. R.; Warner, G. G.;
 Watson, S. B.
 ORNL-5000, PART 2
 AVAILABILITY-NTIS \$10.60
 Oak Ridge National Lab.

4913. Date 751000
 111220 112120 610000 870092 870094
 Fission-Product Gamma-Ray and Photoneutron Spectra
 Stamatelatos, M. G.; England, T. R.
 NBS SPEC.PUB.-425, PP.193-198;
 CONF-750303, PP.193-198
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Los Alamos Scientific Lab

CATEGORY NUMBER 613000
 FORMULAS, GRAPHS, TABLES, AND
 NOMOGRAMS - X-RAY

3607. Date 720200
 113100 220000 613000 760000
 Depth Dose Tables for 42- and 25-Mv X-Rays of a
 42-Mev Betatron
 Fehrentz, D.; Kuzma, I.
 STRAHLENTHERAPIE, 143(2), 194-196
 Germany (West)

CATEGORY NUMBER 613000

3873. Date 731121
 220000 610000 613000
 Data for Protection Against Ionizing Radiation From
 External Sources: Supplement to Icrp Publication 15
 ICRP
 ICRP-21
 AVAILABILITY-PERGAMON PRESS \$7.50
 Internat. Com. for Radiol. Prot.

3886. Date 720100
 113100 220000 423300 613000 820000 844000
 Depth Dose and Scatter Analysis of 10 Mv X-Rays
 Khan, F. M.; Moore, V. C.; Sato, S.
 RADIOLOGY, 102(1), 165-169
 Hospitals

4562. Date 721200
 112B00 113100 121200 512110 513110 610000 613000
 810000
 Handbook of Photo-Compton Current Data
 Dellin, T. A.
 SCL-RR-720086
 AVAILABILITY-DEP., NTIS
 Sandia Corporation

4564. Date 730700
 113100 122200 613000 810000
 Approximation for X-Ray Cross Sections
 Sullivan, T. D.
 SLA-73-562
 AVAILABILITY-DEP., NTIS \$3.50
 Sandia Corporation

4660. Date 730400
 113100 220000 513110 613000 760000 870029 870082
 Parameterization of 4 Mv Depth-Dose Data for the
 Clinac-4 Accelerator
 Dixon, R. L.
 RADIOLOGY, 10(001), 207-211
 North Carolina Schools

CATEGORY NUMBER 620000
 SHIELD SHAPING, PLACEMENT, AND
 OPTIMIZATION

3550. Date 690400
 620000 722100 853100
 Gaps in Concrete Shields
 Lettnin, H.; Sebok, F.
 ORNL-TR-2162; ATOMKERNENERGIE, 14, 125-128
 AVAILABILITY-RSIC
 Germany (West)

CATEGORY NUMBER 620000

3570. Date 730600
 111110 112110 311000 32A000 521130 522130 620000
 795082 795126 863000 870003 870011 881000
 The Development and Application of a Discrete
 Ordinates Adjoint Difference Method for
 One-Dimensional Shield Weight Optimization
 Childs, R. L.; Engle, W. W., Jr.; Robinson, J. C.;
 Mynatt, F. R.
 ORNL-TM-4196
 AVAILABILITY-DEP., NTIS \$5.25
 Oak Ridge National Lab.

3573. Date 730626
 111110 112110 620000 710000 716000 870040 881000
 Radiation Shielding for Zirconium Hydride Reactor
 Systems
 Keshishian, V.; Facha, J. V.; Thomson, R. J.;
 Welch, F. H.
 AI-AEC-13081; N73-33608
 AVAILABILITY-DEP., NTIS \$11.75
 Atomics International

3700. Date 720000
 620000
 Shielding Optimization By Differential Dynamic
 Programming Method And Experiment
 Kanai, Y.; Yamaji, A.; Takeuchi, K.
 CONF-721018-23
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$3.00
 Japan

3778. Date 740100
 111110 112110 112120 32A000 521130 522130 620000
 710000 795082 853100 861000 870013 870082
 Calculation of Energy Depositions and Dose Rates in
 Proposed Shielding Surrounding the Tsr-II Reactor
 Uchida, S.; Lewin, J.; Maerker, R. E.
 ORNL-TM-4450
 AVAILABILITY-NTIS \$4.00
 Oak Ridge National Lab.

3862. Date 690900
 620000
 On Optimizing the Shape of the Medium in the Presence
 of Radiation
 Abgyan, A. A.; Petrov, E. E.; Pupko, V. Ya.
 SOVIET J. AT. ENERGY (ENGLISH TRANSL.),
 27(3), 935-939
 Russia

CATEGORY NUMBER 620000

3893. Date 720300
 112760 620000 760000
 An Examination of Synchronous Shielding in 60-Co
 Rotational Therapy
 Rawlinson, J. A.; Cunningham, J. R.
 RADIOLOGY, 102(3), 667-671
 Canada

3904. Date 721000
 620000 713000
 Problems Related to the Definition of the Shielding of a
 Large Fast Power Reactor
 Moreau, J.
 CONF-721018, PP.103-121
 AVAILABILITY-OECD
 France

3966. Date 720000
 111110 112110 112120 32F000 521130 522130 620000
 710000 713000 853100 861000 870006
 Optimization of Shielding for the "Zrr" Fast Testing
 Reactor
 Fritz, Z.; Jechort, P.; Valenta, V.; Vlachovsky, K.
 ZJE-129
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$9.50
 Czechoslovakia

4131. Date 740200
 620000 710000 870003 881000
 Lithium Hydride a Space Age Shielding Material
 Welch, F. H.
 NUCL. ENG. DESIGN, 26(3), 444-460
 Atomics International

4182. Date 740800
 111210 32A000 521130 522130 531000 532000 551110
 552210 620000 717000 795082 795089 795126 810000
 Shielding Design Calculations for Ormak - F/bx
 Gabriel, T. A.; Santoro, R. T.; Engle, W. W., Jr.
 ORNL-TM-4619
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4278. Date 700300
 010000 32A000 32E000 32F000 326000 329000 511110
 620000 710000 722100 795022 795081 795121 820000
 861000 870092
 Key Problems in Radiation Shielding in the Federal
 Republic of Germany
 Bunemann, D.
 ANS-SD-8, PP.82-108; AD-712532, PP.82-108
 AVAILABILITY-NTIS
 Germany (West)

CATEGORY NUMBER 620000

4569. Date 720000
 111110 112110 620000 710000 861000 870006
 Optimization of Shielding for the Zrr Fast Testing
 Reactor
 Fritz, Z.; Jechort, P.; Valenta, V.; Vlachovsky, K.
 SJE-129
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Czechoslovakia

4577. Date 721123
 112710 230000 620000 712000 853100
 Handmade Concrete Containers for Radioactive Waste.
 Rel. Between Intensity Of Exposure at Contact,
 Contained Activity, and Characteristic Geom. in The
 Case of Low and Intermediate Lev. of Activity
 Moccaldi, A.; Rossi, M.
 RT/PROT-72-38 (IN ITALIAN)
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$3.25
 Italy

CATEGORY NUMBER 631000
 GROSS MODELS FOR APPROXIMATE
 CALCULATIONS

3606. Date 720100
 112720 220000 610000 631000 760000 820000
 Calculation of the Absolute Depth Dose in the Central
 Ray of a 66-Co Radiation Field
 Eisenlohr, H. H.; Abedin-Zadeh, R.
 STRAHLENTHERAPIE, 143(1), 90-97
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3631. Date 720000
 325000 631000
 Two-Dimensional Shielding Calculations Using a
 Combination of Diffusion Theory and Line-Of-Sight
 Method
 Vossebrecker, H.
 ATOMKERNENERGIE, 19(1), 14-16
 Germany (West)

3664. Date 710000
 620000 631000 710000
 Studies for Bulk Shield Optimization for Apsara
 Reactor. Computer Code 'shield' and Applications to
 Other Studies
 Sankaranarayanan, S.; Narain, R.; Sen Gupta, S. N.
 CONF-701138, PP.119-131
 AVAILABILITY-BHABHA ATOMIC RESEARCH
 CENTRE, TROMBAY, BOMBAY, INDIA (1971)
 India

CATEGORY NUMBER 631000

3689. Date 721100
 112930 220000 631000 713000
 Calculation of Doses Due to Accidentally Released
 Plutonium From An Lmfbr
 Fish, B. R.; Keilholtz, G. W.; Snyder, W. S.;
 Swisher, S. D.
 ORNL-NSIC-74
 AVAILABILITY-NTIS \$15.00, MF
 Oak Ridge National Lab.

3722. Date 710000
 220000 631000
 Dose to Body Organs From a Source of Photons in One
 of Them: Validity of The Reciprocity Theorem
 Snyder, W. S.; Warner, G. G.
 CONF-681013, PP.146-153
 AVAILABILITY-LE VESINET, FRANCE; SERVICE
 CENTRAL DE PROTECTION CONTRE LES
 RAYONNEMENTS IONISANTS (1971)
 Oak Ridge National Lab.

3768. Date 730901
 112720 112920 631000 632120 731200 795115
 Validity of Scale-Modeling for Gamma-Ray Attenuation
 Verser, F. A.; Donnert, H. J.
 KEES-SR-113; AD-766140-8
 AVAILABILITY-DEPT. OF NUCL. ENG., KANSAS
 STATE UNIVERSITY, MANHATTAN, KANSAS
 66506
 Kansas Schools

3846. Date 680900
 112B00 610000 631000
 Universal Nomograms for Calculating Absorbed Doses
 From Plane Radiators. (Abstract)
 Drozdov, V. E.; Suroegin, L. M.; Orlenko, P. A.;
 Tikhonov, V. P.
 SOVIET J. AT. ENERGY (ENGLISH TRANSL.),
 25(3), 997-998
 Russia

3851. Date 681200
 112600 112720 631000 721100 721200 722100 722200
 Transmission of Fast Neutrons and Gamma Rays
 Through Rectangular Slots (Abstract)
 Broder, D. L.; Kozlovskii, S. A.; Kyz'yurov, V. S.;
 Popkov, K. K.; Smetanin, A. A.
 SOVIET J. AT. ENERGY (ENGLISH TRANSL.),
 25(6), 1348-1349
 Russia

CATEGORY NUMBER 631000

3929..... Date 721000
511120 631000 810000
Reactor Shielding As a Source of Radiation
Bolshakov, A. V.; Madeev, V. G.; Rudakov, An. N.;
Uksusov, E. I.
CONF-721018, PP. 757-770
AVAILABILITY-OECD
Russia

3950..... Date 721000
631000 718000
A Study on Shielding Effect of Gamma Rays By Ship
Structures
Ueki, K.; Yamakoshi, H.; Nakata, M.
CONF-721018, PP. 1166-1179
AVAILABILITY-OECD
Japan

4043..... Date 720000
111110 421000 511110 631000 820000
Exit Tube Effect Upon the Measured Space-Energy
Neutron Spectra
Hussein, A.; Kawi, A. A.; Naguib, K.; Zakharkin, I.;
Hamouda, I.
AREAEE-133
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Egypt

4146..... Date 730000
112B00 220000 310000 631000 845000
Internal Dose Calculation According to the Extended
Concept of Absorbed Fractions Exact and
Approximate Solution
Roedler, H. D.; Kaul, A.
ANN. OCCUP. HYG., 21(4), 249-253
Germany (West)

4758..... Date 720600
112720 220000 631000 760000
Calculation of Isodose Curves in Remote Gamma
Therapy
Galina, L. S.
MED. RADIOL., 17(6), 84-85
Russia

4759..... Date 720600
112710 220000 631000 760000
Effect of the Irradiation Field Size on the Depth Dose
With Shaping Devices In Gamma Therapy
Stavitskii, R. V.; Pasyukova, I. E.
MED. RADIOL., 17(6), 86-90
Russia

CATEGORY NUMBER 631000

4761..... Date 720900
112120 631000 715000
Crew Radiation Dose From a High-Impulse Gas-Core
Nuclear Rocket Plume
Masser, C. C.
J. SPACECRAFT ROCKETS, 9(8), 597-601
National Aeronautics Support Agencies

CATEGORY NUMBER 632110
SPECIAL MODELS FOR APPROXIMATE
CALCULATIONS -
CALCULATED ATTENUATION KERNELS
(INCLUDES
BUILDUP FACTORS)

3585..... Date 720000
112730 610000 632110
Dose Distributions About 137-Cs Sources in Tissue
Krishnaswamy, V.
RADIOLOGY, 105, 181-184
New York Schools

3590..... Date 720600
111500 112B00 327000 632110 861000
Calculation of Buildup Factors at Deep Penetrations
Nikolaishvili, Sh. S.; Gabrashvili, A. I.;
Dzhgarkava, N. N.; Iordanishvili, E. A.
SOVIET J. AT. ENERGY (ENGLISH transl.),
32(6), 600-601
Russia

3646..... Date 730900
112B00 112200 329000 512110 522130 632110 870013
870082
Calculation of Gamma-Ray Buildup Factors Including
the Contribution Of Bremsstrahlung
Kuspa, J. P.; Tsoulfanidis, N.
NUCL. SCI. ENG., 52(1), 117-123
Missouri Schools

3860..... Date 690600
112B00 329000 512110 632110 861000
Scattered Gamma-Ray Buildup Factors for Oblique
Incidence
Goryachev, I. V.; Kuznetsov, V. G.;
Manchevskii, V. I.; Sakovich, V. A.;
Shcherbakov, V. I.; Yakubovich, M. M.
SOVIET J. AT. ENERGY (ENGLISH transl.),
26(6), 642-643
Russia

CATEGORY NUMBER 632110

3970..... Date 690000
 512110 610000 632110
 Radiation Shielding of a Cylindrical Self-Absorbing
 Source in the Axial Direction
 Kruger, G. W.; Seeligmann, P.
 ORNL-TR-2319
 AVAILABILITY-DEP., NTIS
 Germany (West)

4137..... Date 730600
 610000 632110
 First Flight Escape Probability for a Spherical Shell
 With An Empty Central Region
 Lefvert, T.
 J. NUCL. ENERGY, 27(6), 415-423
 Sweden

4164..... Date 710600
 010000 111110 32A000 511110 511120 512110 512120
 632110 712000 793000 795082
 Recent Developments in the Shielding of Neutron
 Sources
 Claiborne, H. C.
 ORNL-RSIC-32; CONF-710402-VOL.1,1-65-68
 AVAILABILITY-DEP., NTIS
 Oak Ridge National Lab.

4219..... Date 690800
 111500 329000 521210 632110 632120 721100 853100
 861000 870006
 On Neutron Penetration in Duct Systems With Large
 Cross Section
 Spencer, L. V.; Woolf, S.
 ANS-SD-7, PP.199-221; CONF-671140, PP.199-221
 AVAILABILITY-DEP., NTIS \$3.00
 National Bureau of Standards

4265..... Date 711115
 111500 32A000 632110 830000
 Air Transport Calculations Using the Lasl-Nwef
 Neutron-Gamma Air Flux Tape And the Nwef
 Computer Program Cdr
 Campbell, J. E.; Sandmeier, H. A.
 NWEF-1090; LA-DC-13293; CONF-711125-7
 AVAILABILITY-DEP., NTIS
 Air Corps Installations

4285..... Date 740800
 111300 112130 512110 513110 632110 795179 830000
 Models of Photon Radiation Transport in Air
 Woolson, W. A.; Huszar, L.; Harris, R. J., Jr.
 DNA-3279T
 AVAILABILITY-SCIENCE APPLICATIONS, INC.,
 1200 PROSPECT STREET, P.O. BOX 2351, LA

CATEGORY NUMBER 632110

JOLLA, CALIF. 92037
 Science Applications, Inc.

4433..... Date 740400
 221000 632110 632120
 A Method for the Calculation of Beta-Ray Dose
 Valley, J. F.; Kushelevsky, A. P.; Lerch, P.
 HEALTH PHYS., 26(4), 295-300
 Switzerland

4451..... Date 740600
 112B00 121200 632110 632120 810000
 Gamma-Ray Dose and Energy Absorption Build-Up
 Factor Data for Use in Reactor Shield Calculations
 Wallace, O. J.
 WAPD-TM-1012
 AVAILABILITY-DEP., NTIS \$6.00
 Bettis Atomic Power Lab.

4456..... Date 730000
 111110 324000 521110 632110 795238 853100
 Rapid Method of Calculating the Flux and Neutron
 Spectra in the Case of A Criticality Accident (Carnac
 Program)
 Bessis, J.
 ORNL-TR-2825; CEA-N-1612 (IN FRENCH)
 AVAILABILITY-DEP., NTIS
 France

4466..... Date 740900
 111210 511120 632110 632120 717000 810000
 Observed Penetration of 14-Mev Neutrons in Various
 Materials
 Logan, C. M.; Komoto, T. T.
 UCRL-51663
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4484..... Date 731000
 111210 329000 511110 632110 820000 842000
 Build-Up Factors for 14.1-Mev Neutrons in Different
 Materials
 Deimel, E.; Deimel, P.
 KERNTECHNIK, 15(10), 464-467
 Germany (West)

4490..... Date 750200
 112B00 327000 512110 632110 632120 820000 853100
 870013
 Tabulation and Empirical Representation of
 Infinite-Medium Gamma-Ray Buildup Factors for
 Monoenergetic, Point Isotropic Sources in Water,
 Aluminum, And Concrete
 Morris, E. E.; Chilton, A. B.; Vetter, A. F.

CATEGORY NUMBER 632110

NUCL. SCI. ENG., 56(2), 171-178
Illinois Schools

4496. Date 750100
112B00 121200 610000 632110 632120 632200 810000
Compact Tables of Functions for Use in Shielding
Calculations. (Tech. Note)
Shure, K.; Wallace, O. J.
NUCL. SCI. ENG., 56(1), 84-94
Bettis Atomic Power Lab.

4514. Date 740900
112760 220000 222000 632110 795048 845000 870094
Dose-To-The-Population Estimates for Use of
Radioisotope Powered Cardiac Pacemakers
McKee, R. W.; Clark, L. L.; Cole, B. M.;
Libby, R. A.
BNWL-1858
AVAILABILITY-DEP., NTIS \$5.45
Battelle-Northwest

4645. Date 730000
111110 111220 511110 610000 632110 853100
Dose Due to Practical Neutron Energy Distributions
Incident on Concrete Shielding Walls
Wyckoff, J. M.; Chilton, A. B.
CONF-730907-P1, PP.694-699
AVAILABILITY-DEP., NTIS
National Bureau of Standards

4757. Date 690000
32F000 632110 632300 853100
Analytical Radiation Shielding Calculations for Concrete
- Formulas And Parameters
Schmidt, F. A.
NUCL. ENG. DESIGN, 10(3), 308-324
Oak Ridge National Lab.

4851. Date 750600
112930 220000 221000 222000 632110 632120 795270
845000
Subdosa - a Computer Program for Calculating External
Doses From Accidental Atmospheric Releases of
Radionuclides
Strenge, D. L.; Watson, E. C.; Houston, J. R.
BNWL-B-351
AVAILABILITY-NTIS \$7.60 MF \$2.25
Battelle-Northwest

CATEGORY NUMBER 632120
SPECIAL MODELS FOR APPROXIMATE
CALCULATIONS -
SEMIEMPIRICAL ATTENUATION KERNELS
(INCLUDES
BUILDUP FACTORS)

3539. Date 730300
112B00 512110 522110 632120 853100
An Approximation of Dose Transmission and Reflection
Probabilities For Gamma-Rays Obliquely Incident
and for a Plane Isotropic Source on Finite Concrete
Barriers
Harima, Y.
BULL. TOKYO INSTITUTE OF TECH., 116, 97-113
Japan

3616. Date 730900
112930 423250 522120 632120
Comparison of Measured and Calculated Radiation
Exposure From a Boiling Water Reactor Plume
Gogolak, C. V.
HASL-277
AVAILABILITY-NTIS
Atomic Energy Commission (U.S.)

3663. Date 710000
112B00 330000 512110 632120 795153
Validity of the Empirical Formulae for Buildup Factors
in Multiregion Systems
Gopinath, D. V.; Santhanam, K.
CONF-701138, PP.111-118
AVAILABILITY-BHABHA ATOMIC RESEARCH
CENTRE, TROMBAY, BOMBAY, INDIA (1971)
India

3768. Date 730901
112720 112920 631000 632120 731200 795115
Validity of Scale-Modeling for Gamma-Ray Attenuation
Verser, F. A.; Donnert, H. J.
KEES-SR-113; AD-766140-8
AVAILABILITY-DEPT. OF NUCL. ENG., KANSAS
STATE UNIVERSITY, MANHATTAN, KANSAS
66506
Kansas Schools

3818. Date 740100
112730 522230 632120 883000
Calculated and Measured Dose Buildup Factors for
Gamma Rays Penetrating Multilayered Slabs
(Tech.Note)
Burke, G. D.; Beck, H. L.
NUCL. SCI. ENG., 53(1), 109-112
Atomic Energy Commission (U.S.)

CATEGORY NUMBER 632120

3870. Date 730000
 112720 423250 512120 632120 853100
 Thermoluminescence in Concrete Measurements for
 Determining Gamma-Ray Transmission Curve and
 Build-Up Factors
 Franceschi, L. D.; Gentili, A.; Sabbatini, V.
 NUCL. INSTR. METHODS, 109(1), 25-27
 Italy

3889. Date 710400
 112720 112730 632120 820000 861000
 Passage of Gamma-Rays Through Heterogeneous Media
 Broder, D. L.; Gureev, V. I.; Kozlovskii, S. A.
 KERNENERGIE, 14(4), 121-124
 Russia

3998. Date 700000
 112B00 512110 632120 853200 853700
 Gamma-Ray Shielding By High-Density Concretes With
 Densities From 3.2 Up To 3.8 G/cm Super 3
 Krueger, F. W.
 ORNL-TR-2424
 AVAILABILITY-DEP., NTIS
 Germany (West)

4219. Date 690800
 111500 329000 521210 632110 632120 721100 853100
 861000 870006
 On Neutron Penetration in Duct Systems With Large
 Cross Section
 Spencer, L. V.; Woolf, S.
 ANS-SD-7, PP.199-221; CONF-671140, PP.199-221
 AVAILABILITY-DEP., NTIS \$3.00
 National Bureau of Standards

4271. Date 730000
 112B00 632120 722100
 Lgh-G: a Program for the Calculation of Gamma
 Radiation Through Partially Shielded Gaps
 Fiebig, R.; Rybaczok, P.
 ORNL-TR-2831; GKSS-73/E/17(IN GERMAN)
 AVAILABILITY-NTIS
 Germany (West)

4280. Date 700300
 010000 32A000 32F000 511110 521130 632120 721100
 795040 795042 795066 795072 795121 820000 853100
 861000 870006
 Today's Approaches to Reactor Shielding Problems
 Nicks, R.; Penkuhn, H.; Ponti, C.
 ANS-SD-8, PP.113-138; AD-712532, PP.113-138
 AVAILABILITY-NTIS
 Italy

CATEGORY NUMBER 632120

4433. Date 740400
 221000 632110 632120
 A Method for the Calculation of Beta-Ray Dose
 Valley, J. F.; Kushelevsky, A. P.; Lerch, P.
 HEALTH PHYS., 26(4), 295-300
 Switzerland

4451. Date 740600
 112B00 121200 632110 632120 810000
 Gamma-Ray Dose and Energy Absorption Build-Up
 Factor Data for Use in Reactor Shield Calculations
 Wallace, O. J.
 WAPD-TM-1012
 AVAILABILITY-DEP. NTIS \$6.00
 Bettis Atomic Power Lab.

4466. Date 740900
 111210 511120 632110 632120 717000 810000
 Observed Penetration of 14-Mev Neutrons in Various
 Materials
 Logan, C. M.; Komoto, T. T.
 UCRL-51663
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4490. Date 750200
 112B00 327000 512110 632110 632120 820000 853100
 870013
 Tabulation and Empirical Representation of
 Infinite-Medium Gamma-Ray Buildup Factors for
 Monoenergetic, Point Isotropic Sources in Water,
 Aluminum, And Concrete
 Morris, E. E.; Chilton, A. B.; Vetter, A. F.
 NUCL. SCI. ENG., 56(2), 171-178
 Illinois Schools

4496. Date 750100
 112B00 121200 610000 632110 632120 632200 810000
 Compact Tables of Functions for Use in Shielding
 Calculations. (Tech. Note)
 Shure, K.; Wallace, O. J.
 NUCL. SCI. ENG., 56(1), 84-94
 Bettis Atomic Power Lab.

4663. Date 740000
 112200 322000 513200 632120 853100 853700 861000
 870082
 Transmission of Betatron Bremsstrahlung Through
 Materials
 Hyodo, T.
 BULL. INST. CHEM. RES., 52(1), 1-7
 Japan

CATEGORY NUMBER 632120

4851. Date 750600
112930 220000 221000 222000 632110 632120 795270
845000

Subdosa - a Computer Program for Calculating External
Doses From Accidental Atmospheric Releases of
Radionuclides

Streng, D. L.; Watson, E. C.; Houston, J. R.
BNWL-B-351

AVAILABILITY-NTIS \$7.60 MF \$2.25

Battelle-Northwest

CATEGORY NUMBER 632200
SPECIAL MODELS FOR APPROXIMATE
CALCULATIONS -
GEOMETRIC TRANSFORMATIONS

3784. Date 731100
632200

Use of Multiple 4 Pi Radiation Sources for
Quasi-Uniform Irradiation Of Square Surfaces

Clark, R. W.; Freiwald, D. A.

LA-5455

AVAILABILITY-NTIS \$4.00

Los Alamos Scientific Lab

4189. Date 731200
112720 632200 710000 770000 830000 870082

Evaluation of Air-Scatter Exposure Rates Outside the
Boundary of a Large Gamma Garden

Murthy, M. S.; Vyas, A.; Murthy, B. K.; Chandra, B.
INTERN. J. APPL. RADIATION ISOTOPES, 24(12),

671-676

India

4291. Date 740900
111500 112B00 322000 329000 632200

Ray Tracing Through Reactor Shields

Wallace, O. J.; Cook, N. D.

NUCL. TECH., 23(3), 306-317

Bettis Atomic Power Lab.

4358. Date 720900
111210 632200 717000

Neutron Flux Asymmetry in Toroidal Geometries

Daenner, W.

IPP-4-101

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$4.50

Germany (West)

CATEGORY NUMBER 632200

4496. Date 750100
112B00 121200 610000 632110 632120 632200 810000

Compact Tables of Functions for Use in Shielding
Calculations. (Tech. Note)

Shure, K.; Wallace, O. J.

NUCL. SCI. ENG., 56(1), 84-94

Bettis Atomic Power Lab.

4579. Date 741100
112710 220000 329000 610000 632200 845000

A Tabulation of Dose Equivalent Per Microcurie-Day
for Source and Target Organs of An Adult for
Various Radionuclides

Snyder, W. S.; Ford, M. R.; Warner, G. G.;
Watson, S. B.

ORNL-5000

AVAILABILITY-NTIS \$10.60

Oak Ridge National Lab.

4745. Date 721100
112B00 220000 632200 845000

Average Geometrical Factor in Absorbed Dose
Calculation

Lane, R. G.; Greenfield, M. A.

J. NUCL. MED., MIRD, 13(11), 858-859

Wisconsin Schools

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Peschel, R. E.; Schultz, R. J.

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Sjostrand, N. G.; Dahl, E. B.

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 Hebble, T. L.
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 Low Energy Components of Scattered Gamma
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 Cawley, R. G.
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Structure
Schmoke, M. A.
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AVAILABILITY-DEFENSE DOCUMENTATION
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ALEXANDRIA, VIRGINIA 22314
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Reynolds, R. S.
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Typical American Houses With Fallout Shelters
Reynolds, R. S.; Faw, R. E.; Robinson, M. J.
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Kansas Schools

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Smyrl, E.
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Montana Schools

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Calculations for Basement Core Structures
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731200 830000 853100
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Nuclear Explosions. I. Attenuation of Air Secondary
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Keshishian, V.; Facha, J. V.; Thomson, R. J.;
Welch, F. H.
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Sankaranarayanan, S.; Narain, R.; Sen Gupta, S. N.
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Boulette, E.; Marr, D.; Bunch, W.
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Mehta, K. K.; Stadnyk, A. M.
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A Storage and Handling Facility for Californium-252
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Veerling, J. P., Jr.; Oliver, G. D., Jr.; Moore, E. B.
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Texas Schools

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Germany (West)

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Reactor Rfr In Connection With Its Power Increase
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Van Halem, H.; Kuiken, R.
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England

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England

3938..... Date 721000
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Shielding of Fuel Handling Systems and Auxiliary
Components of the Phenix Reactor
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France

3941..... Date 721000
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AVAILABILITY-OECD
England

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CATEGORY NUMBER 710000

AVAILABILITY-OECD
Italy

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Optimization of Shielding for the "Zrr" Fast Testing
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Czechoslovakia

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Westinghouse

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Van De Graff Accelerators
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Japan

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Gerullis, W.; Michaelis, U. E.
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Germany (West)

CATEGORY NUMBER 710000

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 Calculation of the Neutron Spectrum in the Lower Part
 of the Phenix Exchanger Using Tripoli
 Nimal, J. C.; Vergnaud, T.
 CEA-N-1579; ANL-TRANS-995
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 \$4.25
 France

4034..... Date 730400
 111110 325000 710000 719B00
 Calculations of the Three-Dimensional Power
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 Anderson, D. W.
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 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
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 Welch, F. H.
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 Atomics International

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 111110 112750 532000 710000 713000 870011
 Fast Test Reactor Sodium Activity
 Kidman, R. B.; Marr, D. R.
 HEDL-TME-74-7
 AVAILABILITY-AT USAEC(TIC) \$4.00
 Westinghouse

4189..... Date 731200
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 Evaluation of Air-Scatter Exposure Rates Outside the
 Boundary of a Large Gamma Garden
 Murthy, M. S.; Vyas, A.; Murthy, B. K.; Chandra, B.
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 India

4220..... Date 690800
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 Shielding of Ground Based Strategic Weapon Systems
 Against Initial Nuclear Radiation
 Ray, G. W.
 ANS-SD-7, PP.223-239; CONF-671140, PP.223-239
 AVAILABILITY-DEP., NTIS \$3.00
 Aerospace Corp.

CATEGORY NUMBER 710000

4251..... Date 711021
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 32A000 329000 710000 713000 810000
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 Lewellen, J. W.; Hannum, W. H.; Hemmig, P. B.
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 Atomic Energy Commission (U.S.)

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 111110 710000 713000
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 Rathbun, J. L.; Gerstl, S. A.; Fox, P. F.;
 Bunch, W. L.; Boulette, E. T.
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 AVAILABILITY-ANS
 Westinghouse

4253..... Date 711021
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 713000 795082 795089 810000 861000 870011
 Fftf Related Studies in the Ornl-Lmfbr Shielding
 Program
 Mynatt, F. R.; Clifford, C. E. (Usa);
 Muckenthaler, F. J.; Maerker, R. E.;
 Gritzner, M. L.; Williams, L. R.; Rathbun, J. L.
 ANS-SD-13, ARTICLE 3
 AVAILABILITY-ANS
 Oak Ridge National Lab.

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 710000 713000
 Two-Dimensional Shielding Calculation Using a
 Combination of Diffusion Theory and Line-Of-Sight
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 Vossebrecker, H.
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 AVAILABILITY-ANS
 Germany (West)

4277..... Date 700300
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 710000 861000 870011
 Recent Advances in Reactor Shielding in France
 Rastoin, J.
 ANS-SD-8, PP.60-81; AD-712532, PP.60-81
 AVAILABILITY-NTIS
 France

CATEGORY NUMBER 710000

4278..... Date 700300
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620000 710000 722100 795022 795081 795121 820000
861000 870092

Key Problems in Radiation Shielding in the Federal
Republic of Germany

Bünemann, D.

ANS-SD-8, PP.82-108; AD-712532, PP.82-108

AVAILABILITY-NTIS

Germany (West)

4281..... Date 700300
010000 511110 512110 521130 522110 710000 713000
721100 722100 820000 841000 861000 870013 870050

Latest Research on Reactor Shielding in Japan

Hyodo, T.; Miyasaka, S.; Nakata, M.

ANS-SD-8, PP.139-155; AD-712532, PP.139-155

AVAILABILITY-NTIS

Japan

4311..... Date 660700
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Neutron Monte Carlo Calculation for a 1000-Mw
Propulsion Reactor

Watson, C. W.; Graves, G. A.; Streetman, J. R.

LA-3635

AVAILABILITY-DEP., NTIS \$5.25

Los Alamos Scientific Lab

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020000 111110 32A000 521130 710000 713000 810000
Calculations of a Fast-Neutron Shielding Experiment for
Evaluating Approximate Shielding Design Methods
(Tech. Note)

Adkins, C. R.

NUCL. SCI. ENG., 55(1), 89-96

Pennsylvania Schools

4384..... Date 740000
111210 710000 717000 810000
Preliminary Design of a Minimum Size Technical
Feasibility Tokamak Fusion Reactor

Bertolini, E.; Brunelli, B.; Engelmann, F.;

Gasparotto, M.; Hoffman, M. A.; Merzagora, N.;

Biggio, M.; Casini, G.; Cuniberti, R.; Farfaletti

Casali, F.; Peter, F.; Bobbio, S.; Coccoresse, E.;

Greco, O.; Sacerdoti, G.; Ricci, M. V.;

Spadoni, M.; Pasotti, G.; Sacchetti, N.

CONF-740402-P1,21-37

AVAILABILITY-NTIS

Italy

CATEGORY NUMBER 710000

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111210 710000 717000 810000

The Conceptual Design of a Tokamak Fusion Power
Reactor, Uwmak-I

Kulcinski, G. L.; Conn, R. W.

CONF-740402-P1,38-55

AVAILABILITY-NTIS

Wisconsin Schools

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Technological Implications for Tokamak Fusion
Reactors of the Uwmak-I Conceptual Design

Conn, R. W.; Kulcinski, G. L.

CONF-740402-P1,56-69

AVAILABILITY-NTIS

Wisconsin Schools

4387..... Date 740000
111210 710000 717000 810000

A Conceptual Laser Controlled Thermonuclear Reactor
Power Plant

Williams, J.; Merson, T.; Finch, F.; Schilling, F.;

Frank, T.

CONF-740402-P1,70-82

AVAILABILITY-NTIS

Los Alamos Scientific Lab

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111210 710000 717000 810000

A Laser Fusion Reactor Concept Utilizing Magnetic
Fields for Cavity Wall Protection

Frank, T.; Freiwald, D.; Merson, T.; Devaney, J.

CONF-740402-P1,83-95

AVAILABILITY-NTIS

Los Alamos Scientific Lab

4389..... Date 740000
111210 710000 717000 810000

The Preliminary Design of a Suppressed Ablation
Laser-Induced Fusion Reactor

Hovingh, J.; Maniscalco, J.; Peterson, M.;

Werner, R. W.

CONF-740402-P1,96-111

AVAILABILITY-NTIS

Lawrence Livermore Lab

4391..... Date 740000
111110 111210 521130 710000 717000 795082 810000

870092 870094

A Modular Fission-Fusion Hybrid Blanket

Hansborough, L. D.; Werner, R. W.

CONF-740402-P1,211-222

AVAILABILITY-NTIS

CATEGORY NUMBER 710000

Lawrence Livermore Lab

4393..... Date 740000
 111110 111210 710000 717000 810000 870092 870094
 Conceptual Design of a Fusion-Fission Hybrid Reactor
 Based on a Mirror Fusion Reactor With a
 Subcritical Gas Cooled Fission Blanket
 Wolkenhauer, W. C.; Leonard, B. R., Jr.;
 Sutey, A. M.; Moir, R. W.
 BNWL-SA-4865; CONF-740402-43;
 CONF-740402-P1,238-255
 AVAILABILITY-NTIS
 Pacific Northwest Lab

4394..... Date 740000
 111110 111210 521130 522130 710000 717000 793000
 794000 795082 810000 870092 870094
 Neutronic and Photonic Analyses of Fusion Reactor
 Blankets Containing Natural Uranium
 Parish, T. A.; Draper, E. L., Jr.
 CONF-740402-P1,256-270
 AVAILABILITY-NTIS
 Texas Schools

4395..... Date 740000
 111110 111210 329000 521130 710000 717000 810000
 870092 870094
 Calculations of a Fast Fission Blanket for Dt Fusion
 Reactors With Two Evaluated Data Libraries
 Haight, R. C.; Lee, J. D.
 CONF-740402-P1,271-280
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4397..... Date 740000
 111210 410000 710000 717000 810000
 Summary of a Conceptual Design of a Mirror Reactor
 for a Fusion Engineering Research Facility (Ferf)
 Taylor, C. E.
 CONF-740402-P1,294-305
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4401..... Date 740000
 111210 121100 710000 717000 810000 870006 870013
 Minimum Activity Blankets Using Aluminum Structure
 Powell, J.; Aronson, A.; Bezler, P.; Miles, F.;
 Winsche, W.
 CONF-740402-P1,533-547
 AVAILABILITY-NTIS
 Brookhaven Natl. Lab.

CATEGORY NUMBER 710000

4402..... Date 740000
 111210 112710 121100 220000 710000 717000 810000
 870023 870041
 A Comparative Analysis of D-T Fusion Reactor
 Radioactivity and Afterheat
 Dudziak, D. J.; Krakowski, R. A.
 LA-UR-74-629; CONF-740402-18;
 CONF-740402-P1,548-564
 AVAILABILITY-NTIS
 Los Alamos Scientific Lab

4407..... Date 740000
 111210 220000 710000 717000 810000
 Nuclear Design of the Magnet Shield for Fusion
 Reactors
 Abdou, M. A.; Maynard, C. W.
 CONF-740402-P1,685-698
 AVAILABILITY-NTIS
 Wisconsin Schools

4449..... Date 740000
 111210 32F000 511120 710000 717000 793000 794000
 795121 810000
 Nuclear Blanket and Shielding Problems in
 Demonstration Fusion Reactors
 Casini, G.; Cuniberti, R.
 CONF-740402-P2,238-249
 AVAILABILITY-NTIS
 Italy

4512..... Date 740828
 111210 32A000 329000 531000 532000 710000 717000
 795082 795127 810000
 Conceptual Design of a Mirror Reactor for a Fusion
 Engineering Research Facility (Ferf)
 Batzer, T. H.; Burleigh, R. C.; Carlson, G. A.;
 Dexter, W. L.; Hamilton, G. W.; Harvey, A. R.;
 Hickman, R. G.; Hoffman, M. A.; Hooper, E. B.;
 Moir, R. W.; Silver, W. J.; Smith, B. H.;
 Taylor, C. E.; Werner, R. W.; Wilcox, T. P.
 UCRL-51617
 AVAILABILITY-DEP., NTIS \$7.60
 Lawrence Livermore Lab

4569..... Date 720000
 111110 112110 620000 710000 861000 870006
 Optimalization of Shielding for the Zrr Fast Testing
 Reactor
 Fritz, Z.; Jechort, P.; Valenta, V.; Vlachovsky, K.
 SJE-129
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Czechoslovakia

CATEGORY NUMBER 710000

4750. Date 670518
710000
Calandria and Neutron Shields
Greenhalgh, F. G.; Paget, F. T.; Smith, D. R.;
Truelove, J. P.
CONF-670538, PP.31-44
AVAILABILITY-INSTITUTION OF MECHANICAL
ENGINEERS, LONDON
England

4751. Date 670518
710000
Rotating Shields
Emerson, D. C.; Flett, A.
CONF-670539, PP.81-97
AVAILABILITY-INSTITUTION OF MECHANICAL
ENGINEERS, LONDON
England

4875. Date 750000
111110 112750 222000 710000 713000
Experience in Operation of Phenix With Regard to
Shielding
Goddet, J.; Peyresblanques, H.; Galissian, F.;
Meffre, P.
ORNL-TR-4003; CONF-750411-10
AVAILABILITY-NTIS \$4.00
France

4878. Date 740800
111210 32A000 522130 531000 532000 710000 717000
795082 810000
Fusion Power Plant
Mills, R. G. (Ed.)
MATT-1050
AVAILABILITY-NTIS \$32.23
New Jersey Schools

CATEGORY NUMBER 711000
HOT CELLS

3636. Date 710000
010000 711000
Hot and Isotope Laboratories. Second Edition, Revised
and Enlarged
Reformatskii, I. A.
MOSCOW, ATOMIZDAT
Russia

CATEGORY NUMBER 711000

3659. Date 721100
112710 410000 711000
Description and Safety Analysis of Physical Examination
Hot Cells Building 3025
King, F. M.; Walls, A. A.
ORNL-TM-3911
AVAILABILITY-DEP., NTIS
Oak Ridge National Lab.

CATEGORY NUMBER 712000
SHIPPING CASKS

3514. Date 710825
112120 712000 740000
Atmx-500 Rail Car Modification
McDonald, E. P.
MLM-1812
AVAILABILITY-NTIS
Monsanto

3558. Date 730300
111110 111120 111220 32A000 521130 712000 795082
861000 870082
Neutron Shielding Problems in the Shipping of High
Burnup Thermal Reactor Fuel
Bailey, H. S.; Evatt, R. N.; Gyorey, G. L.;
Ruiz, C. F.
NUCL. TECH., 17(3), 217-223
General Electric Co.

3742. Date 721100
111110 712000 713000 810000
Specialists' Meeting on Handling and Transportation of
Spent Fuel Elements For Lmfbr's, Rome, 26-28
April 1972
IAEA
CONF-720445
AVAILABILITY-DEP., NTIS
Iaea

4086. Date 731000
712000
Directory of Packaging for Transportation of
Radioactive Materials
USAEC,
WASH-1279
AVAILABILITY-SUPT. OF DOC., U.S. GOV.
PRINTING OFFICE, WASHINGTON, D.C. 20402
\$2.60
Atomic Energy Commission (U.S.)

CATEGORY NUMBER 712000

4135. Date 740800
010000 712000
Everything You Always Wanted to Know About
Shipping High-Level Nuclear Wastes
AEC,
WASH-1264(REV.)
AVAILABILITY-GPO
Atomic Energy Commission (U.S.)

4164. Date 710600
010000 111110 32A000 511110 511120 512110 512120
632110 712000 793000 795082
Recent Developments in the Shielding of Neutron
Sources
Claiborne, H. C.
ORNL-RSIC-32; CONF-710402-VOL.1,1-65-68
AVAILABILITY-DEP., NTIS
Oak Ridge National Lab.

4207. Date 740200
111110 712000
Analysis of Neutron Shipping Container 6-Gs-I
Wigle, G. L.; Bringham, P. S.
LBL-2168
AVAILABILITY-NTIS \$5.45
Lawrence Berkeley Lab

4330. Date 740300
112710 712000 870092
Shielded Shipping Container for Fissile Material Class I
or Large Quantities Of Radioactive Material
Supplement
Noyes, H. E.
LA-4686-MS,SUPPL.
AVAILABILITY-DEP., NTIS \$4.00
Los Alamos Scientific Lab

4531. Date 730000
712000
Radioactive Material Shipping Packages: Their Design
and Safety Analysis
Shappert, L. B.
CONF-730546-1
AVAILABILITY-DEP., NTIS \$3.00
Oak Ridge National Lab.

4547. Date 711100
712000
Final Design Report for Fort St. Vrain Fuel Shipping
Cask With "As-Built" Information
Davis, C.; Cocciolone, D.; Backus, H.
GADR-55(REV.1)
AVAILABILITY-DEP., NTIS
Gulf General Atomic

CATEGORY NUMBER 712000

4577. Date 721123
112710 230000 620000 712000 853100
Handmade Concrete Containers for Radioactive Waste.
Rel. Between Intensity Of Exposure at Contact,
Contained Activity, and Characteristic Geom. in The
Case of Low and Intermediate Lev. of Activity
Moccaldi, A.; Rossi, M.
RT/PROT-72-38 (IN ITALIAN)
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$3.25
Italy

4698. Date 720411
712000
Analysis of the Neutron Shipping Container Model 4t
Hanson, C. L.; Coops, M. S.; Quigg, J. D.
UCRL-51195
AVAILABILITY-DEP., NTIS
Lawrence Livermore Lab

4705. Date 721000
329000 712000
Monte Carlo Method for Studying the Radioprotection
of a Radio Active Product Container (Example of
Radioprotection Calculations)
Demonsant, J.
LCA-NT-217-E-T(IN FRENCH)
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$3.75
France

4706. Date 721212
712000
Radioprotection of a Cylindrical Container
Warne-Janville, B.
LCA-NT-228-E-T(IN FRENCH)
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$3.00
France

4718. Date 741200
010000 230000 712000
Transportation of Nuclear Fuel and Waste
Brobst, W.
NUCL. TECH., 24(3), 343-355
Atomic Energy Commission (U.S.)

CATEGORY NUMBER 713000
FAST REACTORS

3527. Date 720800
010000 111110 112110 310000 32A000 32B000 32D000
32E000 32F000 325000 326000 329000 330000 710000
713000

CATEGORY NUMBER 713000

Numerical Reactor Calculations. Proceedings of a Seminar, Vienna, 17-21 January 1972
IAEA
STI/PUB/307
AVAILABILITY-IAEA, VIENNA(AUSTRIA) \$26.00
Austria

3554. Date 691000
111110 329000 713000
Propagation of Epithermal Neutrons in the Empty Lattice of the Reactor Edf3 - Application of Zeus Iv
Brisbois, J.; Rafalovitch, A.; Sonnet, A.
CEA-N-1194 (IN FRENCH)
AVAILABILITY-COMMISSARIAT A L'ENERGIE ATOMIQUE, FONTENAY-AUX ROSES(FRANCE), CENTRE D'ETUDES NUCLEAIRES
France

3618. Date 730700
111110 421130 521230 713000 810000
Measurements of Neutron Spectrum and Reaction Rates in a Gas Cooled Fast Reactor Lattice
Richmond, R.; Heer, W.; Ruegger, B.; Seth, S.; Steiner, W.; Wydler, P.; Surcher, W.
EIR-239
AVAILABILITY-DEP., NTIS (U.S.SALES ONLY) \$5.25
Germany (West)

3629. Date 730400
111110 122110 32A000 325000 521130 713000 861000 862000 870011 870092 870094 882000
One-Dimensional Calculations in Support of the Reactivity Surveillance Procedures for the Fast Test Reactor
Flanagan, G. F.; Simpson, D. B.; Buhl, A. R.
ORNL-TM-4014
AVAILABILITY-AT (TECHNICAL INFORMATION CENTER, OAK RIDGE, TENN. 37830) \$5.45
Oak Ridge National Lab.

3648. Date 720000
111110 121100 210000 713000 861000
Fast Neutron Damage in Stainless Steels
Agarwala, R. P.; Pande, B. M.; Anand, M. S.
BARC-661
AVAILABILITY-BHABHA ATOMIC RESEARCH CENTRE, BOMBAY, INDIA
India

CATEGORY NUMBER 713000

3649. Date 720300
111110 329000 521130 713000 810000
Results of Monte Carlo Calculation for Zppr Assembly 2
Fillmore, F. L.
ANL-7928
AVAILABILITY-NTIS
Argonne National Lab.

3676. Date 720800
111110 122100 122310 713000 861000 862000 870011
Status of Neutron Nuclear Data for Important Fast Reactor Structural And Coolant Materials
Schatz, B
KFK-1663
AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
Germany (West)

3681. Date 730300
111110 112110 325000 422110 551110 710000 713000 810000
Analysis of the Ftr/cmc Neutron Shielding Experiment
Boulette, E.; Marr, D.; Bunch, W.
HEDL-TME-73-27
AVAILABILITY-AT (TIC) AEC
Westinghouse

3689. Date 721100
112930 220000 631000 713000
Calculation of Doses Due to Accidentally Released Plutonium From An Lmfbr
Fish, B. R.; Keilholtz, G. W.; Snyder, W. S.; Swisher, S. D.
ORNL-NSIC-74
AVAILABILITY-NTIS \$15.00, MF
Oak Ridge National Lab.

3740. Date 720200
111110 32C000 551110 713000
Applications of Finite Element Methods in Reactor Mathematics. Numerical Solution of the Neutron Diffusion Equation
Kaper, H. G.; Leaf, G. K.; Lindeman, A. J.
ANL-7925
AVAILABILITY-NTIS \$3.00
Argonne National Lab.

3741. Date 730300
210000 713000 861000
A Ukaea Evaluation of Displacement Damage Models for Iron
Etherington, E. W.; Bramman, J. I.; Nelson, R. S.; Norgett, M. I.
AERE-R-7374
AVAILABILITY-NTIS (U.S. SALES ONLY)

CATEGORY NUMBER 713000

England

3742. Date 721100
 111110 712000 713000 810000
 Specialists' Meeting on Handling and Transportation of
 Spent Fuel Elements For Lmfbr's, Rome, 26-28
 April 1972
 IAEA
 CONF-720445
 AVAILABILITY-DEP., NTIS
 Iaca

3761. Date 730500
 111110 325000 713000
 On the Concept of Energy-Dependent Buckling in
 Multigroup Diffusion Theory-III
 Beynon, T. D.
 J. NUCL. ENERGY, 27(5), 327-334
 England

3781. Date 731100
 713000
 Radial Blanket and Shield Simulation Experiments
 Analysis of Experimental Results, Topical Report
 Rittenberger, R.; Gibson, G.; Ritts, J.
 WARD-SS-3045-3
 AVAILABILITY-USAEC, TIC, P.O. BOX 62, OAK
 RIDGE, TENN. 37830
 Westinghouse

3819. Date 730400
 111110 122110 122310 713000 870092 870094
 Adjustment of Multigroup Neutron Cross Sections By a
 Correlation Method
 Salvatores, M.
 NUCL. SCI. ENG., 50(4), 345-354
 Italy

3821. Date 730400
 111110 111220 32A000 521130 713000 870092
 The Inelastic Scattering Reaction in Calculation of Fast
 Reactor Neutron Spectra (Tech. Note)
 Fricke, M. P.; Neill, J. M.
 NUCL. SCI. ENG., 50(4), 392-396
 Gulf General Atomic

3901. Date 721000
 713000
 Shielding Studies for Phenix
 Culambourg, J.; Devillers, C.; Le Dieu De Ville, A.;
 Nimal, J. C.
 CONF-721018, PP.58-67
 AVAILABILITY-OECD
 France

CATEGORY NUMBER 713000

3902. Date 721000
 713000
 Shielding of Commercial Fast Reactors
 Brindley, K. W.
 CONF-721018, PP.68-86
 AVAILABILITY-OECD
 England

3903. Date 721000
 713000
 Shielding Problems in the Pec Reactor
 Cicognani, G.; Tavoni, R.; Travaglini, N.; Corbo, M.;
 Farinelli, U.; Tondinelli, L.; Canali, U.; Nicks, R.;
 Penkuhn, H.; Ponti, C.
 CONF-721018, PP.87-102
 AVAILABILITY-OECD
 Italy

3904. Date 721000
 620000 713000
 Problems Related to the Definition of the Shielding of a
 Large Fast Power Reactor
 Moreau, J.
 CONF-721018, PP.103-121
 AVAILABILITY-OECD
 France

3905. Date 721000
 713000
 Gas Cooled Fast Reactor Shield Design
 Haschke, D.; Ganapol, R.; Henniger, C.; Maeder, C.
 CONF-721018, PP.122-135
 AVAILABILITY-OECD
 Switzerland

3931. Date 721000
 32A000 325000 329000 713000 795203 795209
 Lmfbr Radiation Transport Methods Development
 Mynatt, F. R.; Gritzner, M. L.; Williams, L. R.;
 Clifford, C. E. (Usa)
 CONF-721018-4; CONF-721018, PP.788-806
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

3935. Date 721000
 112120 713000
 Activity and Shielding of the Blanket Gas Circuit of a
 Fast Power Reactor
 Costa, L.; De Fremont, R.
 CONF-721018, PP.881-897
 AVAILABILITY-OECD
 France

CATEGORY NUMBER 713000

3948. Date 721000
325000 713000

Three-Dimensional Analysis of the Ftr Shield Mock-Up
Experiment

Boulette, E. T.; Bunch, W. L.; Marr, D. R.
CONF-721018, PP.1131-1147; HEDL-SA-383
AVAILABILITY-OECD
Hanford Eng Dev Lab.

3958. Date 721000
112500 32A000 421140 713000

Investigation of the Distribution of Intermediate Neutron
and Capture Gamma Radiation in Fast Reactor
Shielding

Bolyatko, V. V.; Kulakovsky, M. Ya.;
Mashkovich, V. P.; Sinitsyn, B. I.;
Suvorov, A. P.; Troshin, V. S.; Khokhlov, V. F.;
Tsylin, S. G.

CONF-721018, PP.1404-1426
AVAILABILITY-OECD
Russia

3966. Date 720000
111110 112110 112120 32F000 521130 522130 620000
710000 713000 853100 861000 870006

Optimization of Shielding for the "Zrr" Fast Testing
Reactor

Fritz, Z.; Jechort, P.; Valenta, V.; Vlachovsky, K.
ZJE-129
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$9.50
Czechoslovakia

3997. Date 710700
111110 112110 713000

Experiences and Problems on Design and Construction
of Radiation Shielding. 4. Radiation Shielding for
Fast Breeder Reactors

Higashihara, Y.
NIPPON GENSHIRYOKU GAKKAISHI, 13(7),
400-408
Japan

4030. Date 721100
111220 410000 713000

Suitability of Various Accelerator Types As Neutron
Sources for Pulsed Experiments in Fast Reactor
Assemblies

Ritchie, A. I. M.
AAEC/TM-620
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$5.00
Australia

CATEGORY NUMBER 713000

4038. Date 721100
111500 421140 511110 713000 870079

Self-Shielding in Stacked Foils

Nisle, R. G.; Harker, Y. D.
ANCR-1066
AVAILABILITY-DEP., NTIS
Aerojet-General

4042. Date 730900
112120 121100 713000

Review of Fission Product Yield Data for Fast Neutron
Fission

Cuninghame, J. G.
AERE-R-7548
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$6.50
England

4051. Date 720000
111110 421140 430000 521230 713000 795112

Ebr-II Dosimetry Tests
Jackson, J. L.; Kellogg, L. S.; McElroy, W. N.;
Ulseth, J. A.
HEDL-SA-548; CONF-730910-2
AVAILABILITY-DEP., NTIS \$3.00
Hanford Eng Dev Lab.

4052. Date 730000
111110 410000 421140 430000 713000 795112

Fast Reactor Flux-Spectral Characterization
McElroy, W. N.
HEDL-SA-556; CONF-730910-3
AVAILABILITY-DEP., NTIS \$3.25
Hanford Eng Dev Lab.

4065. Date 711100
421200 713000

Use of Gamma Spectroscopy for Neutronic Analysis of
Lmfbr Blankets

Kang, C. S.; Rasmussen, N. C.; Driscoll, M. J.
COO-3060-2; MITNE-130
AVAILABILITY-DEP., NTIS
Massachusetts Schools

4072. Date 720300
111110 32A000 32F000 551110 552210 713000 795125
810000

Evaluation of the Two-Dimensional Shielding Code for a
Fast Reactor Shield Design and Its Application

Tanaka, Y.; Suzuki, I.; Otani, M.
JAPFNR-68; PNC-J-213-72-3-1
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Japan

CATEGORY NUMBER 713000

4074. Date 720800
112110 112130 112400 112500 32A000 325000 423250
532000 551110 552110 552220 713000 810000

Analysis of Joyo Mock-Up Experimental Data By
Two-Dimensional Gamma-Ray Heating Distribution
Calculation Code 2d-Gamm

Iwaki, T.; Seki, Y.; Osada, H.

JAPFNR-105; PNC-J-72-18

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$4.00

Japan

4085. Date 730400
111110 122110 713000

The One-Dimensional 70-Group PI Code (Production of
Fast Reactor Group Constants (1)-3)

Katsuragi, S.; Narita, H.; Suzuki, T.; Hasegawa, A.

JAPFNR-133; JAERI-MEMO-5237(IN JAPANESE)

AVAILABILITY-USAEC TECHNICAL

INFORMATION CENTER, OAK RIDGE, TENN.

Japan

4104. Date 720100
713000

Neutronics of An Lmfbr Blanket Mock-Up

Leung, T. C.; Driscoll, M. J.; Kaplan, I.;
Lanning, D. D.

COO-3060-1

AVAILABILITY-DEP., NTIS

Massachusetts Schools

4132. Date 740700
111110 325000 551110 713000 870011 870092 885000

Anisotropic Neutron Diffusion in Lattices of the
Zero-Power Plutonium Reactor Experiments

Gelbard, E. M.

NUCL. SCI. ENG., 54(3), 327-340

Argonne National Lab.

4170. Date 740100
111110 112750 532000 710000 713000 870011

Fast Test Reactor Sodium Activity

Kidman, R. B.; Marr, D. R.

HEDL-TME-74-7

AVAILABILITY-AT USAEC(TIC) \$4.00

Westinghouse

4225. Date 731000
111110 122110 122310 32A000 511110 713000 870092
870094

A Systematic Test of the Endf-B/3 Evaluated
Cross-Section Library on "Clean" Critical
Assemblies

Wagschal, J. J.; Yaari, A.

CATEGORY NUMBER 713000

STI/PUB-343,V2,PP.83-101;

CONF-730302,V2,PP.83-101; IAEA-SM-170/19

AVAILABILITY-IAEA

Israel

4226. Date 731000
111110 122110 122310 713000

The Role of Integral Experiments in the Production of
Nuclear Data For Reactor Core and Shield Design
and for Irradiation Experiments

Farinelli, U.

STI/PUB-343,V2,PP.103-119;

CONF-730302,V2,PP.103-119; IAEA-SM-170/38

AVAILABILITY-IAEA

Italy

4250. Date 711021
010000 713000

Proceedings of Invited Papers Fast Reactor Shielding
Schmoke, M. A. (Ed.)

ANS-SD-13

AVAILABILITY-ANS

American Nuclear Society

4251. Date 711021
111110 112110 112120 112400 112500 112600 122100
32A000 329000 710000 713000 810000

Projected Lmfbr Shielding Needs and Acc/rdt Programs

Lewellen, J. W.; Hannum, W. H.; Hemmig, P. B.

ANS-SD-13, ARTICLE 1

AVAILABILITY-ANS

Atomic Energy Commission (U.S.)

4252. Date 711021
111110 710000 713000

Shielding the Fast Flux Test Facility (Ftff)

Rathbun, J. L.; Gerstl, S. A.; Fox, P. F.;

Bunch, W. L.; Boulette, E. T.

ANS-SD-13, ARTICLE 2

AVAILABILITY-ANS

Westinghouse

4253. Date 711021
111110 32A000 421130 421140 521130 551110 710000

713000 795082 795089 810000 861000 870011

Ftff Related Studies in the Ornl-Lmfbr Shielding
Program

Mynatt, F. R.; Clifford, C. E. (Usa);

Muckenthaler, F. J.; Maerker, R. E.;

Gritzner, M. L.; Williams, L. R.; Rathbun, J. L.

ANS-SD-13, ARTICLE 3

AVAILABILITY-ANS

Oak Ridge National Lab.

CATEGORY NUMBER 713000

4255..... Date 711021
111110 310000 322000 325000 551110 552110 552210
710000 713000

Two-Dimensional Shielding Calculation Using a
Combination of Diffusion Theory and Line-Of-Sight
Method

Vossebrecker, H.
ANS-SD-13, ARTICLE 5
AVAILABILITY-ANS
Germany (West)

4268..... Date 720500
111110 122310 422110 713000 810000

Evaluation of Microscopic Integral Cross-Sections
Averaged in The Uranium-235 Thermal Fission
Neutron Spectrum (for 29 Nuclear Reactions
Relevant To Neutron Dosimetry and Fast Reactor
Technology)

Fabry, A.
BLG-465
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Belgium

4275..... Date 700300
010000 713000 740000

Problems in the Design and Construction of Fast
Reactor Shields

Hungerford, H. E.
ANS-SD-8, PP.1-47; AD-712532, PP.1-47
AVAILABILITY-NTIS
Indiana Schools

4281..... Date 700300
010000 511110 512110 521130 522110 710000 713000
721100 722100 820000 841000 861000 870013 870050

Latest Research on Reactor Shielding in Japan
Hyodo, T.; Miyasaka, S.; Nakata, M.
ANS-SD-8, PP.139-155; AD-712532, PP.139-155
AVAILABILITY-NTIS
Japan

4287..... Date 740900
020000 111110 421110 421130 422140 511110 551110
713000 861000

Sdt 11. the Ornl Benchmark Experiment for Neutron
Transport Through Iron And Stainless Steel, Part I

Maerker, R. E.
ORNL-TM-4222; ENDF-188
AVAILABILITY-NTIS
Oak Ridge National Lab.

CATEGORY NUMBER 713000

4288..... Date 740900
020000 111110 421110 421130 422140 511110 551110
713000 870011

Sdt 12. the Ornl Benchmark Experiment for Neutron
Transport Through Sodium

Maerker, R. E.
ORNL-TM-4223; ENDF-189
AVAILABILITY-NTIS
Oak Ridge National Lab.

4325..... Date 740400
111110 112710 610000 713000 719A00 795217 870092
870094

Calculation and Compilations of Composition,
Radioactivity, Thermal Power, Gamma and Neutron
Release Rates of Fission Products and Actinides of
Spent Power Reactor Fuels and Their Reprocessing
Wastes

Haug, H. O.
KFK-1945
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Germany (West)

4345..... Date 740900
020000 111110 32A000 521130 710000 713000 810000

Calculations of a Fast-Neutron Shielding Experiment for
Evaluating Approximate Shielding Design Methods
(Tech. Note)

Adkins, C. R.
NUCL. SCI. ENG., 55(1), 89-96
Pennsylvania Schools

4347..... Date 740900
111110 310000 32A000 325000 521130 713000
An Accelerated Spectral Synthesis Technique (Tech.
Note)

Price, W. G., Jr.; Duderstadt, J. J.
NUCL. SCI. ENG., 55(1), 98-103
Michigan Schools

4360..... Date 740800
010000 111110 112120 424000 713000 870092 870094

The State-Of-the Art in Non-Destructive Assay Systems
and Their Applications To An Lmfbr Aqueous Fuel
Reprocessing Plant

Shahrokh, F.; Robinson, J. C.; Mihalcz, J. T.;
Ackermann, N. J., Jr.
ORNL-TM-4586; ORNL-TM-4586
AVAILABILITY-DEP., NTIS \$5.45
Oak Ridge National Lab.

CATEGORY NUMBER 713000

4411..... Date 740700
020000 111110 32A000 329000 421130 422140 511110
511120 512210 713000 793000 795017 795046 795082
795089 795127 842000 870011
Shielding Benchmark Problems
Simmons, G. L.(Ed.)
ORNL-RSIC-25(SUPPL.2); ANS-SD-9(SUPPL.2)
AVAILABILITY-DEP., NTIS \$5.45
Oak Ridge National Lab.

4425..... Date 740619
111110 325000 551110 713000 719B00 810000
Neutronics Analysis of the 300 Mw(E) Gas Cooled Fast
Reactor Demonstration Plant
Bhattacharyya, S. K.; Bohn, E. M.
ZPR-TM-169
AVAILABILITY-AUTHORS, ARGONNE
NATIONAL LAB., APPLIED PHYSICS DIV.,
9700 SOUTH CASS AVENUE, ARGONNE,
ILLINOIS 60439
Argonne National Lab.

4489..... Date 741200
111110 121100 122110 324000 511110 713000 810000
Neutron Moderation in Fast Reactors in the Presence of
Wide Scattering Resonances: Analysis of Methods.
(Tech. Note)
Palmiotti, G.; Salvatores, M.
NUCL. SCI. ENG., 55(4), 476-480
Italy

4491..... Date 750200
111110 122110 32A000 511110 713000 810000
Practical Preprocessed Nuclear Data Files for Fast
Reactor Calculations. (Tech. Note)
Gur, Y.; Yiftah, S.
NUCL. SCI. ENG., 56(2), 202-210
Israel

4537..... Date 750200
112120 112750 112760 713000 870094 887000
Radionuclide Behavior During Normal Operation of
Liquid-Metal Cooled Fast Breeder Reactors. Part I:
Production
Erdman, C. A.; Reynolds, A. B.
NUCL. SAFETY, 16(1), 43-59
Virginia Schools

CATEGORY NUMBER 713000

4560..... Date 730900
111110 32A000 551110 713000 795195 810000
Fast Burst Reactor Neutron Transport Calculations
Schmidt, T. R.
SLA-73-140
AVAILABILITY-DEP., NTIS \$5.50
Sandia Corporation

4563..... Date 730800
112760 222000 713000 830000
Sandia Pulsed Reactor II (Spr II): Curie Release and
Dose Potential
Bonzon, L. L.
SLA-73-430
AVAILABILITY-DEP., NTIS \$4.00
Sandia Corporation

4578..... Date 720000
111110 421140 430000 511120 713000 795042 795108
810000
Measured and Calculated Neutron Spectra in the
Experimental Cavity of The Acpr
Croucher, D. W.; Lucoff, D. M.; Schmidt, T. R.;
Reil, K. O.; White, J. R.
SC-DC-721414; CONF-721109-3
AVAILABILITY-DEP., NTIS
Sandia Corporation

4581..... Date 740800
111110 325000 551110 713000 721100 810000
Applicability of Two-Dimensional Shielding Code
Tanaka, Y.; Suzuki, I.; Takemura, M.; Suzuki, T.
JAPFNR-167
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$5.45
Japan

4600..... Date 730000
111110 112110 112500 32A000 521230 532000 713000
795082 861000 870011
Use of Integral Experiments to Improve Neutron
Propagation and Gamma Heating Calculations
Oceraias, Y.; Caumette, P.; Devillers, C.; Bussac, J.
CONF-731015, PP.486-505
AVAILABILITY-IAEA
France

4604..... Date 731000
112120 230000 532000 713000 719A00
A Study of Long-Term Heat Generation in Nuclear
By-Products From Lwr And Lmfbr Systems
Angelo, J. A., Jr.; Post, R. G.; Haskin, F. E.;
Lewis, C.
STI/PUB-343,V.1,71-88; CONF-730302,V.1,71-88;

CATEGORY NUMBER 713000

IAEA-SM-170/58
 AVAILABILITY-IAEA, VIENNA
 Arizona Schools

4629..... Date 740200
 111110 112110 423250 532000 713000
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 Reactors With Thermoluminescent Dosimeters
 Simons, G. G.; Yule, T. J.
 NUCL. SCI. ENG., 53(2), 162-175
 Argonne National Lab.

4630..... Date 740200
 111110 112110 112120 32A000 423250 532000 551110
 552110 552210 713000 795082 810000
 Analyses and Measurements of Gamma-Ray Heating in
 the Demonstration Benchmark Plutonium-Fueled
 Critical Assembly
 Simons, G. G.; Olson, A. P.
 NUCL. SCI. ENG., 53(2), 176-196
 Argonne National Lab.

4658..... Date 720500
 111110 421150 421160 430000 713000
 Differential and Integral Measurements of An
 Intermediate Neutron Spectrum
 Nanjyo, T.
 J. NUCL. SCI. TECHNOL. (TOKYO), 9(5), 290-300
 Japan

4766..... Date 740000
 410000 713000
 Ornl Lmfbr Experimental Shielding Program
 Clifford, C. E. (Usa)
 CONF-740903-13
 AVAILABILITY-DEP., NTIS \$4.00
 Oak Ridge National Lab.

4841..... Date 750600
 112760 713000
 A Transport Model for Radioactive Corrosion Product
 Deposition in An Lmfbr
 Cooper, M. H.; Taylor, G. R.
 NUCL. ENG. DESIGN, 32(2), 246-251
 Westinghouse

4875..... Date 750000
 111110 112750 222000 710000 713000
 Experience in Operation of Phenix With Regard to
 Shielding
 Goddet, J.; Peyresblanques, H.; Galissian, F.;
 Meffre, P.
 ORNL-TR-4003; CONF-750411-10
 AVAILABILITY-NTIS \$4.00

CATEGORY NUMBER 713000

France

4891..... Date 701200
 010000 713000
 The Science of Reactor Shielding - An End to
 Empiricism in the 1970's. A Review of
 Contemporary United Kingdom Shielding
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 Butler, J.
 CONF-710228, PP.109-141; CONF-710228, PP.109-141
 AVAILABILITY-OECD \$5.00
 England

CATEGORY NUMBER 714000
ISOTOPE POWER SOURCES

3624..... Date 730815
 714000 716000
 A Bifold Nuclear Power Source
 Wolfe, R. A.; Stubbins, W. F.
 MLM-1982
 AVAILABILITY-NTIS
 Monsanto

4019..... Date 650607
 714000 870094
 Plutonium-238 Isotopic Power Sources: a Summary
 Report
 Grove, G. R.; Powers, J. A.; Goldenberg, N.;
 Kelly, D. P.; Prosser, D. L.
 MLM-1270
 AVAILABILITY-DEP., NTIS \$13.75
 Monsanto

4603..... Date 731000
 111110 112760 714000 716000
 Nuclear Data Requirements in the Design of the Bifold
 Nuclear Power Source
 Stubbins, W. F.; Wolfe, R. A.
 STI/PUB-343, V.1, 51-69; CONF-730302, V.1, 51-69;
 IAEA-SM-170/39
 AVAILABILITY-IAEA, VIENNA
 Ohio Schools

CATEGORY NUMBER 715000
NUCLEAR ENERGY ROCKET VEHICLE
PROPULSION

3515..... Date 690923
 420000 423240 715000
 Ruggedized Gamma Radiation Detector. Final Report
 Carrell, T. E.
 NASA-CR-102509; NA-69-609; N70-20649
 AVAILABILITY-NTIS

CATEGORY NUMBER 715000

North American Rockwell Corp.

3908..... Date 721000
329000 715000 795200

Monte Carlo Development and Applications in the Los
Alamos Nuclear Rocket Program

Watson, C. W.; Cashwell, E. D.

LA-DC-72-1078; CONF-721018-6;

CONF-721018, PP. 166-184

AVAILABILITY-NTIS

Los Alamos Scientific Lab

4021..... Date 620300
715000

Aspen II: Two-Staging and Radiation Shielding Effects
on Aspen Vehicle Performance

Bussard, R. W.

LA-2680

AVAILABILITY-DEP., NTIS \$5.75

Los Alamos Scientific Lab

4039..... Date 720800
111110 112500 32A000 423250 522230 632110 715000
795048 870004 870013 885000 886000

Gamma Heating in Reflector Heat Shield of Gas Core
Reactor

Lofthouse, J. H.; Kunze, J. F.; Young, T. E.;
Young, R. C.

ANCR-1077; NASA-CR-120903; N72-33651

AVAILABILITY-DEP., NTIS

Aerojet-General

4311..... Date 660700
111110 329000 710000 715000 810000

Neutron Monte Carlo Calculation for a 1000-Mw
Propulsion Reactor

Watson, C. W.; Graves, G. A.; Streetman, J. R.

LA-3635

AVAILABILITY-DEP., NTIS \$5.25

Los Alamos Scientific Lab

4322..... Date 670201
111110 112110 715000 810000

Radiation Analysis for Non-Nuclear Components of the
Nerva Development Engine NrX-A6 Reactor Test

Garrington, G.; Warman, E. A.

RN-TM-365

AVAILABILITY-DEP., NTIS \$6.00

Aerojet-General

CATEGORY NUMBER 715000

4761..... Date 720900
112120 631000 715000

Crew Radiation Dose From a High-Impulse Gas-Core
Nuclear Rocket Plume

Masser, C. C.

J. SPACECRAFT ROCKETS, 9(8), 597-601

National Aeronautics Support Agencies

4793..... Date 720400
715000

Common Radiation Analysis Model for 75,000 Pound
Thrust Nerva Engine (1137400e)

Warman, E. A.; Lindsey, B. A.

NASA-CR-132228; N73-24668

AVAILABILITY-NTIS \$10.75

Westinghouse

4858..... Date 640930
111110 112110 210000 715000 810000

Radiation Effects Data Book. Volume I. Radiation
Effects

Stinnett, W. D. (Ed.)

AGC-2277(VOL.1)(BK.1)

AVAILABILITY-DEP., NTIS \$20.00

Aerojet-General

4859..... Date 650430
111110 112110 210000 715000 810000

Radiation Effects Data Book. Volume I. Radiation
Effects

Stinnett, W. D. (Ed.)

AGC-2277(VOL.1)(REV.)

AVAILABILITY-DEP., NTIS \$14.75

Aerojet-General

4860..... Date 640930
111110 112110 210000 715000 810000

Radiation Effects Data Book. Volume I. Radiation
Effects

Stinnett, W. D.

AGC-2277(VOL.1)(BK.2)

AVAILABILITY-DEP., NTIS \$14.50

Aerojet-General

4861..... Date 630930
111110 112110 210000 715000 810000

Radiation Effects Data Book. Volume 2. Appendices

Stinnett, W. D.

AGC-2277(VOL.2)(REV)

AVAILABILITY-DEP., NTIS \$21.25

Aerojet-General

CATEGORY NUMBER 716000
SPACE NUCLEAR AUXILIARY POWER

3521..... Date 710600
 111110 32A000 421130 521230 716000 794000 795082
 795089 820000 870082
 Measured and Calculated Fast Neutron Spectra in a
 Lead-And-Water Shielded Reactor
 Lahti, G. P.; Wrights, G. N.
 NASA-TM-X-67861; N71-28968
 AVAILABILITY-NTIS
 National Aeronautics Support Agencies

3573..... Date 730626
 111110 112110 620000 710000 716000 870040 881000
 Radiation Shielding for Zirconium Hydride Reactor
 Systems
 Keshishian, V.; Facha, J. V.; Thomson, R. J.;
 Welch, F. H.
 AI-AEC-13081; N73-33608
 AVAILABILITY-DEP., NTIS \$11.75
 Atomics International

3624..... Date 730815
 714000 716000
 A Bifold Nuclear Power Source
 Wolfe, R. A.; Stubbins, W. F.
 MLM-1982
 AVAILABILITY-NTIS
 Monsanto

3635..... Date 711000
 32A000 551110 552210 716000 795089 863000 870003
 870092 881000
 Effect of Angular Quadrature on Results of
 Two-Dimensional Space Power Reactor Shield
 Calculations
 Connolley, D. J.; Lahti, G. P.
 NASA-TM-X-67937; N71-37066
 AVAILABILITY-NTIS
 National Aeronautics Support Agencies

4215..... Date 690800
 111110 112400 112500 112600 32A000 511110 512110
 512210 522130 552110 552220 716000 795089 810000
 Some Characteristics of Secondary Gamma Ray
 Transport in Asymmetric Snap Shields
 Mynatt, F. R.; Williams, L. R.
 ANS-SD-7, PP.113-135; CONF-671140, PP.113-135
 AVAILABILITY-DEP., NTIS \$3.00
 Oak Ridge National Lab.

CATEGORY NUMBER 716000

4603..... Date 731000
 111110 112760 714000 716000
 Nuclear Data Requirements in the Design of the Bifold
 Nuclear Power Source
 Stubbins, W. F.; Wolfe, R. A.
 STI/PUB-343,V.1,51-69; CONF-730302,V.1,51-69;
 IAEA-SM-170/39
 AVAILABILITY-IAEA, VIENNA
 Ohio Schools

4691..... Date 610115
 716000
 Snap 8 Reactor Preliminary Design Summary
 Rosenberg, H. (Ed.)
 NAA-SR-6207
 AVAILABILITY-DEP., NTIS \$4.25
 Atomics International

4693..... Date 730700
 716000 810000
 Shield Materials Recommended for Space Power
 Nuclear Reactors
 Kaszubinski, L. J.
 NASA-TM-X-2835; E-7347; N73-27580
 AVAILABILITY-NTIS
 National Aeronautics Support Agencies

4702..... Date 620709
 716000
 Snap 8 Reactor Development Plan
 Johnson, C. E.
 NAA-SR-7376
 AVAILABILITY-DEP., NTIS \$4.75
 Atomics International

4790..... Date 641230
 716000
 Preliminary Design of the 2 Mwt Reactor and Shield
 (Pwar-20) for The Snap-50/spur Powerplant
 Banach, H. J.
 PWAC-445
 AVAILABILITY-DEP., NTIS \$5.75
 Canel, Pratt, + Whitney Aircraft Co.

CATEGORY NUMBER 717000
FUSION REACTOR SHIELDING (CTR
NEUTRONICS)

3513..... Date 730800
 111210 32A000 329000 521130 717000 794000 795042
 795082 795127 870003 870006
 Analysis of a Bench-Mark Calculation of Tritium
 Breeding in a Fusion Reactor Blanket: the United
 States Contribution

CATEGORY NUMBER 717000

Steiner, D.
ORNL-TM-4177
AVAILABILITY-DEP., NTIS \$4.00
Oak Ridge National Lab.

3523. Date 730500
717000

Conceptual Design of the Blanket and Shield Region and
Related Systems for A Full Scale Toroidal Fusion
Reactor

Fraas, A. P.
ORNL-TM-3096
AVAILABILITY-NTIS
Oak Ridge National Lab.

3531. Date 730600
111210 122110 32A000 717000 795123 870003

Outline of Direct Methods Used in Computing the Cross
Section Sensitivity Of Neutronic Parameters in a
Fusion Reactor

Tobias, M. L.; Steiner, D.
ORNL-TM-4184
AVAILABILITY-NTIS
Oak Ridge National Lab.

3537. Date 730600
111210 122310 32A000 521130 717000 795123 870003
870006 870041

Cross-Section Sensitivity of Tritium Breeding in a Fusion
Reactor Blanket: Effects of Uncertainties in Cross
Sections of 6-Li, 7-Li, and 93-Nb

Tobias, M.; Steiner, D.
ORNL-TM-4200
AVAILABILITY-NTIS
Oak Ridge National Lab.

3547. Date 730600
111210 210000 32A000 521130 531000 532000 717000
795082 861000 870003 870006 870041 870082

Magnet Shield Design for Fusion Reactors

Kriese, J. T.; Steiner, D.
ORNL-TM-4256
AVAILABILITY-NTIS
Oak Ridge National Lab.

3575. Date 730800
111210 122110 122210 717000 810000
Coupled Neutron and Gamma-Ray Cross Section Sets
for Fusion Reactor Calculations

Kriese, J. T.
ORNL-TM-4277
AVAILABILITY-DEP., NTIS \$3.00
Oak Ridge National Lab.

CATEGORY NUMBER 717000

3611. Date 730300
717000

Laser Ctr Systems Studies
Williams, J. M.
LA-5145-MS
AVAILABILITY-NTIS
Los Alamos Scientific Lab

3621. Date 730200
717000

Fusion Power. An Assessment of Ultimate Potential
AEC
WASH-1239
AVAILABILITY-SUPT. OF DOC., U.S.GPO,
WASHINGTON, D.C. 20402 \$0.90
Atomic Energy Commission (U.S.)

3697. Date 720000
210000 717000

Radiation Damage Effects on Hydrogen Permeation in
Fusion Reactors

Perkins, H. K.; Axtmann, R. C.
COO-3028-5; CONF-730602-2
AVAILABILITY-DEP. NTIS \$3.00
New Jersey Schools

3724. Date 720000
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Review of Ornl Fusion Reactor Technology Studies
(November 1971)

Steiner, D.
CONF-721111-3
AVAILABILITY-DEP., NTIS
Oak Ridge National Lab.

3744. Date 720800
111210 210000 329000 521130 531000 717000 810000

Shielding of Superconducting Magnets in a Fusion
Reactor

McCracken, G. M.; Blow, S.
CLM-R-120
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
UK 50 PENCE
England

3783. Date 731000
717000 793000 794000 795082

Neutronic and Photonic Analyses of Simulated Fusion
Reactor Blankets Containing Thorium and Natural
Uranium

Parish, T. A.; Draper, E. L., Jr.
ESL-16; ESL-16
AVAILABILITY-ENERGY SYSTEMS
LABORATORIES, COLLEGE OF

CATEGORY NUMBER 717000

ENGINEERING, UNIVERSITY OF TEXAS AT AUSTIN

Texas Schools

3833. Date 740100
 111210 122310 511110 717000 870003 870041
 Additional Results Concerning Cross-Section Sensitivity
 of Tritium Breeding In a Fusion Reactor Blanket:
 Effects of Cross Sections of 6-Li, 7-Li, and 93-Nb
 Tobias, M.; Steiner, D.
 ORNL-TM-4201; NUCL. FUSION, 14(2), 153-163
 AVAILABILITY-DEP., NTIS \$3.00
 Oak Ridge National Lab.

3853. Date 731200
 717000
 A Review of Fusion-Fission (Hybrid) Concepts
 Leonard, B. R., Jr.
 NUCL. TECH., 20(3), 161-178
 Battelle Memorial Inst.

3910. Date 721000
 010000 717000
 Shielding Problems in Fusion Reactors
 Blow, S.; Mcracken, G. M.
 CONF-721018, PP.198-214
 AVAILABILITY-OECD
 England

4040. Date 731000
 111220 717000 870004
 Accelerator Be-Target Neutron Sources for the Ctr
 Materials Program
 Persiani, P. J.
 ANL/CTR-73-2
 AVAILABILITY-DEP., NTIS \$3.00
 Argonne National Lab.

4045. Date 730800
 010000 111210 410000 717000
 A Report on the Development of Intense Neutron
 Source Facilities for the Ctr Technology Program
 Persiani, P. J.
 ANL/CTR-73-1
 AVAILABILITY-DEP., NTIS \$3.75
 Argonne National Lab.

4071. Date 731000
 111210 122110 717000
 Sensitivity of Fusion Reactor Average Cross Sections to
 Thermal Broadening Of the 14-Mev Neutron Peak
 Muir, D. W.
 LA-5411-MS
 AVAILABILITY-DEP., NTIS \$4.00

CATEGORY NUMBER 717000

Los Alamos Scientific Lab

4108. Date 711111
 717000
 Estimate of Radiation Fluxes Expected to Hit First Wall
 of Dt and D3He Mirror Reactors
 Lee, J. D.
 UCID-15944
 AVAILABILITY-DEP., NTIS
 Lawrence Rad Lab

4118. Date 740100
 717000 795082 870023
 The Nuclear Performance of Vanadium As a Structural
 Material in Fusion Reactor Blankets
 Steiner, D.
 NUCL. FUSION, 14(1), 33-44; ORNL-TM-4353
 Oak Ridge National Lab.

4120. Date 740300
 111210 122310 32A000 521130 717000 795082 795204
 870003 870006 870041
 Cross-Section Sensitivity of Breeding Ratio in a
 Fusion-Reactor Blanket
 Bartine, D. E.; Alsmiller, R. G., Jr.; Oblow, E. M.;
 Mynatt, F. R.
 NUCL. SCI. ENG., 53(3), 304-318; ORNL-TM-4208
 Oak Ridge National Lab.

4171. Date 740800
 111210 121100 210000 220000 717000 793000 794000
 810000
 Macklib - 100-Group Neutron Fluence-To-Kerm
 Factors and Reaction Cross Sections Generated By
 the Mack Computer Program From Data in Endf
 Format
 Abdou, M. A.; Roussin, R. W.
 ORNL-TM-3995
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4182. Date 740800
 111210 32A000 521130 522130 531000 532000 551110
 552210 620000 717000 795082 795089 795126 810000
 Shielding Design Calculations for Ormak - F/bx
 Gabriel, T. A.; Santoro, R. T.; Engle, W. W., Jr.
 ORNL-TM-4619
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

CATEGORY NUMBER 717000

4221. Date 731000
 111210 111220 121100 717000 810000
 Problems of Measuring Nuclear Constants for
 Thermonuclear Reactors
 Kuz'min, E. A.; Ogloblin, A. A.; Sidorov, N. I.;
 Faiziev, A. R.; Chulkov, L. V.; Yan'kov, G. B.
 STI/PUB-343,V.2,PP3-19; CONF-730302,V.2,PP3-19;
 LA-TR-73-32
 AVAILABILITY-IAEA
 Russia

4222. Date 731000
 111210 121100 329000 521130 717000 870003 870006
 Influence of Nuclear Data on Tritium Breeding in a
 Thermonuclear Reactor
 Ogloblin, A. A.; Chulkov, L. V.; Yan'kov, G. B.
 STI/PUB-343,V.2,PP21-40; CONF-730302,V.2,PP21-40;
 IAEA-SM-170/21
 AVAILABILITY-IAEA
 Russia

4282. Date 740600
 010000 111210 32A000 329000 717000 810000
 Fusion Reactor Nuclear Analysis Methods and
 Applications
 Dudziak, D. J.
 LA-UR-883
 AVAILABILITY-NTIS
 Los Alamos Scientific Lab

4300. Date 740800
 010000 122200 717000 810000
 The Status of Neutron-Induced Nuclear Data for
 Controlled Thermonuclear Research Applications:
 Critical Reviews of Current Evaluations
 Steiner, D. (Comp.)
 USNDC-CTR-I
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4335. Date 730300
 111210 121100 32A000 521130 717000 810000
 Neutronic Studies of D-T Fusion Reactor Blankets
 Brockmann, H.
 JUL-931-RG (IN GERMAN); JUL-931-RG(IN
 GERMAN)
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$5.50
 Germany (West)

CATEGORY NUMBER 717000

4356. Date 740700
 111210 410000 717000
 Study of the Development of Neutron and Plasma
 Radiation Test Facilities For The Ctr Materials
 Program
 Persiani, P. J.
 ANL/CTR/74-01
 AVAILABILITY-NTIS \$4.00
 Argonne National Lab.

4358. Date 720900
 111210 632200 717000
 Neutron Flux Asymmetry in Toroidal Geometries
 Daenner, W.
 IPP-4-101
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.50
 Germany (West)

4361. Date 720000
 111210 32A000 717000 795042
 Neutronic Analysis of a Tritium-Production Integral
 Experiment
 Muir, D. W.; Wyman, M. E.
 LA-DC-72-1382; CONF-721111-12;
 CONF-721111,PP.910-917
 AVAILABILITY-DEP., NTIS
 Los Alamos Scientific Lab

4362. Date 740400
 111210 32A000 717000 795042
 Neutron and Gamma Heating Rates in Fusion-Reactor
 Blankets
 Perry, R. T., Jr.; Davidson, J. N.; Kohler, W. H.
 CONF-721111,PP.931-943
 AVAILABILITY-NTIS
 Texas Schools

4363. Date 740400
 111210 32A000 511110 717000 795082 870006
 Calculation of Fusion Spectrum in Graphite
 Freim, J. B.; Draper, E. L., Jr.
 CONF-721111,PP.944-963
 AVAILABILITY-NTIS
 Pacific Northwest Lab

4364. Date 740400
 32B000 717000
 Variational Methods for Ctr Blanket Studies
 Conn, R.; Stacey, W. M., Jr.
 CONF-721111,PP.964-969
 AVAILABILITY-NTIS
 Wisconsin Schools

CATEGORY NUMBER 717000

4384..... Date 740000
 111210 710000 717000 810000
 Preliminary Design of a Minimum Size Technical
 Feasibility Tokamak Fusion Reactor
 Bertolini, E.; Brunelli, B.; Engelmann, F.;
 Gasparotto, M.; Hoffman, M. A.; Merzagora, N.;
 Biggio, M.; Casini, G.; Cuniberti, R.; Farfaletti
 Casali, F.; Peter, F.; Bobbio, S.; Coccoresse, E.;
 Greco, O.; Sacerdoti, G.; Ricci, M. V.;
 Spadoni, M.; Pasotti, G.; Sacchetti, N.
 CONF-740402-P1,21-37
 AVAILABILITY-NTIS
 Italy

4385..... Date 740000
 111210 710000 717000 810000
 The Conceptual Design of a Tokamak Fusion Power
 Reactor, Uwmak-I
 Kulcinski, G. L.; Conn, R. W.
 CONF-740402-P1,38-55
 AVAILABILITY-NTIS
 Wisconsin Schools

4386..... Date 740000
 111210 710000 717000 810000
 Technological Implications for Tokamak Fusion
 Reactors of the Uwmak-I Conceptual Design
 Conn, R. W.; Kulcinski, G. L.
 CONF-740402-P1,56-69
 AVAILABILITY-NTIS
 Wisconsin Schools

4387..... Date 740000
 111210 710000 717000 810000
 A Conceptual Laser Controlled Thermonuclear Reactor
 Power Plant
 Williams, J.; Merson, T.; Finch, F.; Schilling, F.;
 Frank, T.
 CONF-740402-P1,70-82
 AVAILABILITY-NTIS
 Los Alamos Scientific Lab

4388..... Date 740000
 111210 710000 717000 810000
 A Laser Fusion Reactor Concept Utilizing Magnetic
 Fields for Cavity Wall Protection
 Frank, T.; Freiwald, D.; Merson, T.; Devaney, J.
 CONF-740402-P1,83-95
 AVAILABILITY-NTIS
 Los Alamos Scientific Lab

CATEGORY NUMBER 717000

4389..... Date 740000
 111210 710000 717000 810000
 The Preliminary Design of a Suppressed Ablation
 Laser-Induced Fusion Reactor
 Hovingh, J.; Maniscalco, J.; Peterson, M.;
 Werner, R. W.
 CONF-740402-P1,96-111
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4390..... Date 740000
 111110 111210 717000 810000 870092 870094
 Geometry and Performance of a Theta Pinch Power
 Breeder
 Braun, G. W.; Lidsky, L. M.
 CONF-740402-P1,199-210
 AVAILABILITY-NTIS
 Massachusetts Schools

4391..... Date 740000
 111110 111210 521130 710000 717000 795082 810000
 870092 870094
 A Modular Fission-Fusion Hybrid Blanket
 Hansborough, L. D.; Werner, R. W.
 CONF-740402-P1,211-222
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4392..... Date 740000
 111110 111210 329000 521130 717000 810000 870092
 870094
 Neutronics Analysis of a 2500 Mwth Fast Fission
 Natural Uranium Blanket For A Dt Fusion Reactor
 Lee, J. D.
 CONF-740402-P1,223-237
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4393..... Date 740000
 111110 111210 710000 717000 810000 870092 870094
 Conceptual Design of a Fusion-Fission Hybrid Reactor
 Based on a Mirror Fusion Reactor With a
 Subcritical Gas Cooled Fission Blanket
 Wolkenhauer, W. C.; Leonard, B. R., Jr.;
 Sutey, A. M.; Moir, R. W.
 BNWL-SA-4865; CONF-740402-43;
 CONF-740402-P1,238-255
 AVAILABILITY-NTIS
 Pacific Northwest Lab

CATEGORY NUMBER 717000

4394..... Date 740000
 111110 111210 521130 522130 710000 717000 793000
 794000 795082 810000 870092 870094
 Neutronic and Photonic Analyses of Fusion Reactor
 Blankets Containing Natural Uranium
 Parish, T. A.; Draper, E. L., Jr.
 CONF-740402-P1,256-270
 AVAILABILITY-NTIS
 Texas Schools

4395..... Date 740000
 111110 111210 329000 521130 710000 717000 810000
 870092 870094
 Calculations of a Fast Fission Blanket for Dt Fusion
 Reactors With Two Evaluated Data Libraries
 Haight, R. C.; Lee, J. D.
 CONF-740402-P1,271-280
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4396..... Date 740000
 111110 111210 410000 717000 810000
 Study of the Development of Neutron and Plasma
 Radiation Test Facilities For The Ctr Materials
 Program
 Persiani, P. J.
 CONF-740402-P1,283-293
 AVAILABILITY-NTIS
 Argonne National Lab.

4397..... Date 740000
 111210 410000 710000 717000 810000
 Summary of a Conceptual Design of a Mirror Reactor
 for a Fusion Engineering Research Facility (Ferb)
 Taylor, C. E.
 CONF-740402-P1,294-305
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4401..... Date 740000
 111210 121100 710000 717000 810000 870006 870013
 Minimum Activity Blankets Using Aluminum Structure
 Powell, J.; Aronson, A.; Bezler, P.; Miles, F.;
 Winsche, W.
 CONF-740402-P1,533-547
 AVAILABILITY-NTIS
 Brookhaven Natl. Lab.

CATEGORY NUMBER 717000

4402..... Date 740000
 111210 112710 121100 220000 710000 717000 810000
 870023 870041
 A Comparative Analysis of D-T Fusion Reactor
 Radioactivity and Afterheat
 Dudziak, D. J.; Krakowski, R. A.
 LA-UR-74-629; CONF-740402-18;
 CONF-740402-P1,548-564
 AVAILABILITY-NTIS
 Los Alamos Scientific Lab

4403..... Date 740000
 111210 112930 222000 717000
 An Environmental Impact Study of a Reference
 Theta-Pinch Reactor (Rtpr)
 Draley, J. E.; Marconi, V. A.; Coultas, T. A.;
 Krakowski, R. A.
 CONF-740402-P1,564-577
 AVAILABILITY-NTIS
 Argonne National Lab.

4405..... Date 740000
 111210 112710 717000 810000 870092
 Some Safety Considerations of Hybrid Reactors in
 Comparison With Fission And Fusion Reactors
 Wolkenhauer, W. C.; Stewart, C. W.; Werner, R. W.;
 Lee, J. D.
 BNWL-SA-4988; CONF-740402-P1,588-598
 AVAILABILITY-NTIS
 Pacific Northwest Lab

4407..... Date 740000
 111210 220000 710000 717000 810000
 Nuclear Design of the Magnet Shield for Fusion
 Reactors
 Abdou, M. A.; Maynard, C. W.
 CONF-740402-P1,685-698
 AVAILABILITY-NTIS
 Wisconsin Schools

4418..... Date 741100
 111210 32A000 521130 717000 793000 794000 795082
 810000
 A Comparative Study of Several Fusion Reactor Blanket
 Designs
 Abdou, M. A.; Conn, R. W.
 NUCL. SCI. ENG., 55(3), 256-266
 Wisconsin Schools

CATEGORY NUMBER 717000

4427..... Date 741000
 111210 122310 32A000 521130 717000 795082 810000
 Comparison of the Cross-Section Sensitivity of the
 Tritium Breeding Ratio In Various Fusion-Reactor
 Blankets
 Alsmiller, R. G., Jr.; Santoro, R. T.; Barish, J.;
 Gabriel, T. A.
 ORNL-TM-4696
 AVAILABILITY-DEP., NTIS \$4.75
 Oak Ridge National Lab.

4436..... Date 740000
 111210 122310 521130 717000 795082 810000 87000.
 Tritium Breeding in Ceramic Lithium-Compound
 Blanket
 Seki, Y.; Sako, K.; Tanaka, K.; Hiraoka, T.
 CONF-740402-P2,77-86
 AVAILABILITY-NTIS
 Japan

4437..... Date 740000
 111210 220000 521130 522130 717000 793000 794000
 795082 810000 870003
 Neutronics and Photonics Study of Fusion Reactor
 Blankets
 Abdou, M. A.; Maynard, C. W.
 CONF-740402-P2,87-100
 AVAILABILITY-NTIS
 Wisconsin Schools

4438..... Date 740000
 111210 210000 511110 531000 717000 795042
 Some Neutronics Aspects of Laser-Fusion Reactors
 Frank, T.; Dudziak, D.; Heck, E.
 LA-UR-74-592; CONF-740402-13;
 CONF-740402-P2,101-113
 AVAILABILITY-DEP., NTIS \$4.00
 Los Alamos Scientific Lab

4439..... Date 740000
 111210 210000 717000 795042
 Transmutation and Atom Displacement Rates in a
 Reference Theta Pinch Reactor
 Dudziak, D. J.
 LA-UR-74-611; CONF-740402-30;
 CONF-740402-P2,114-135
 AVAILABILITY-DEP., NTIS \$4.50
 Los Alamos Scientific Lab

CATEGORY NUMBER 717000

4440..... Date 740000
 111210 122310 311000 32A000 521130 717000 810000
 Blanket Design and Cross-Section Sensitivity
 Calculations Based On Perturbation Methods
 Gerstl, S. A. W.
 CONF-740402-P2,136-144
 AVAILABILITY-NTIS
 Argonne National Lab.

4441..... Date 740000
 111210 122310 311000 32A000 521130 717000 793000
 794000 795082 795248 810000
 Tritium Breeding Potential of the Princeton Reference
 Fusion Power Plant
 Greenspan, E.; Price, W. G., Jr.
 CONF-740402-P2,145-154
 AVAILABILITY-NTIS
 New Jersey Schools

4442..... Date 740000
 111210 121100 220000 521130 717000 870073 870082
 Use of Tantalum and Liquid Lead in a Fusion Reactor
 Blanket
 Davey, W. G.; Beck, C. L.; Palmer, R. G.
 CONF-740402-P2,155-165
 AVAILABILITY-NTIS
 Argonne National Lab.

4443..... Date 740000
 111210 122310 717000
 Sensitivity of Neutron Multigroup Cross Sections to
 Thermal Broadening Of The Fusion Peak
 Muir, D. W.
 LA-UR-74-613; CONF-740402-33;
 CONF-740402-P2,166-171
 AVAILABILITY-DEP., NTIS \$4.00
 Los Alamos Scientific Lab

4444..... Date 740000
 122310 717000 870004
 Effect of Be(N, 2n) Multigroup Treatment on
 Theta-Pinch Blankets Nucleonics
 Soran, P. D.; Dudziak, D. J.; Muir, D. W.
 LA-UR-74-608; CONF-740402-15;
 CONF-740402-P2,172-184
 AVAILABILITY-DEP., NTIS \$4.00
 Los Alamos Scientific Lab

CATEGORY NUMBER 717000

4445..... Date 730000
 111210 122310 717000 795123 870003
 Cross-Section Sensitivity of Tritium Breeding in Fusion
 Reactor Blankets
 Tobias, M.; Steiner, D.
 CONF-740402-3; CONF-740402-P2,185-192
 AVAILABILITY-DEP., NTIS \$3.00
 Oak Ridge National Lab.

4449..... Date 740000
 111210 32F000 511120 710000 717000 793000 794000
 795121 810000
 Nuclear Blanket and Shielding Problems in
 Demonstration Fusion Reactors
 Casini, G.; Cuniberti, R.
 CONF-740402-P2,238-249
 AVAILABILITY-NTIS
 Italy

4450..... Date 740000
 111210 310000 717000
 Transport Calculations for D-T Burning Tokamak
 Reactors
 Stacey, W. M., Jr.
 CONF-740402-2; CONF-740402-P2,390-399
 AVAILABILITY-NTIS
 Argonne National Lab.

4454..... Date 740800
 111210 410000 717000
 Possibilities of Neutron Sources at Nrts for Ctr Materials
 Testing
 Brugger, R. M.
 ANCR-1176
 AVAILABILITY-NTIS \$4.00
 Aerojet-General

4466..... Date 740900
 111210 511120 632110 632120 717000 810000
 Observed Penetration of 14-Mev Neutrons in Various
 Materials
 Logan, C. M.; Komoto, T. T.
 UCRL-51663
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4485..... Date 741200
 111210 310000 325000 717000
 Transport and Diffusion Equations in Toroidal
 Geometry
 Pomraning, G. C.; Stevens, C. A.
 NUCL. SCI. ENG., 55(4), 359-367
 Science Applications, Inc.

CATEGORY NUMBER 717000

4500..... Date 750100
 111210 32A000 521130 522130 531000 532000 717000
 794000 795046 810000
 Radioactivity Induced in a Theta-Pinch Fusion Reactor
 Dudziak, D. J.; Krakowski, R. A.
 NUCL. TECH., 25(1), 32-55
 Los Alamos Scientific Lab

4503..... Date 740920
 111210 112930 222000 32A000 521130 522130 717000
 795082 810000
 Environmental Assessment for Fusion Reactor Utilizing
 Brookhaven Minimum Activity Blanket
 Anderson, R. V.
 AI-AEC-13136
 AVAILABILITY-DEP., NTIS \$5.45
 Atomics International

4512..... Date 740828
 111210 32A000 329000 531000 532000 710000 717000
 795082 795127 810000
 Conceptual Design of a Mirror Reactor for a Fusion
 Engineering Research Facility (Ferf)
 Batzer, T. H.; Burleigh, R. C.; Carlson, G. A.;
 Dexter, W. L.; Hamilton, G. W.; Harvey, A. R.;
 Hickman, R. G.; Hoffman, M. A.; Hooper, E. B.;
 Moir, R. W.; Silver, W. J.; Smith, B. H.;
 Taylor, C. E.; Werner, R. W.; Wilcox, T. P.
 UCRL-51617
 AVAILABILITY-DEP., NTIS \$7.60
 Lawrence Livermore Lab

4519..... Date 741000
 111210 122100 717000 810000
 Nuclear Data for Ctr Related Projects
 Bhat, M. R.; Magurno, B. A.; Pearlstein, S.;
 Scheffel, F. M.
 BNL-19344; ENDF-212
 AVAILABILITY-DEP. NTIS \$6.00
 Brookhaven Natl. Lab.

4528..... Date 730600
 717000
 Studies of Fusion Reactor Blankets With Minimum
 Radioactive Inventory And With Tritium Breeding
 in Solid Lithium Compounds: a Preliminary Report
 Powell, J. R.; Miles, F. T.; Aronson, A.;
 Winsche, W. E.
 BNL-18236
 AVAILABILITY-DEP., NTIS \$8.50
 Brookhaven Natl. Lab.

CATEGORY NUMBER 717000

4545..... Date 721100
 111210 511110 717000 795082 870006
 Neutronic Calculations in a Simulated Fusion Reactor
 Blanket
 Barbee, S. G.
 NP-19709; NP-19709
 AVAILABILITY-NTIS
 Texas Schools

4555..... Date 740902
 111210 210000 717000 870006
 Silicon Carbide and Graphite Materials for Fusion
 Reactors
 Hopkins, G. R.
 GA-A13150; CONF-741105-38
 AVAILABILITY-DEP., NTIS \$4.50
 Gulf General Atomic

4584..... Date 750100
 111210 112930 220000 222000 230000 717000 810000
 Information Requirements for Controlled
 Thermonuclear Reactor Environmental Impact
 Statements
 Young, J. R.; Gore, B. F.; Mahlum, D. D.;
 Strand, J. A.; Thompson, R. C.; Soldat, J. K.
 BNWL-1883
 AVAILABILITY-NTIS \$7.60
 Battelle-Northwest

4602..... Date 731000
 010000 111110 111210 717000 810000
 Nuclear Data Requirements for Fusion-Fission (Hybrid)
 Reactors
 Wolkenhauer, W.C.; Leonard, B. R., Jr.
 STI/PUB-343,V.1,39-50; CONF-730302(VOL.1),39-50;
 IAEA-SM-170/56
 AVAILABILITY-IAEA, VIENNA
 Pacific Northwest Lab

4619..... Date 740900
 111210 210000 717000
 A Computational Method for the Evaluation of
 Radiation Effects Produced By Ctr-Related Neutron
 Spectra
 Parkin, D. M.; Goland, A. N.
 BNL-50,434
 AVAILABILITY-DEP., NTIS \$4.00
 Brookhaven Natl. Lab.

CATEGORY NUMBER 717000

4620..... Date 740000
 111210 32A000 521130 522130 531000 532000 717000
 795042 810000
 Preliminary Appraisal of a Fusion/fission (Hybrid)
 Reactor Based on The Linear Theta Pinch
 Bosler, G. E.; Dudziak, D. J.; Ellis, W. R.
 CONF-740805,710-718
 AVAILABILITY-AMERICAN SOCIETY OF
 MECHANICAL ENGINEERS, UNITED
 ENGINEERING CENTER, 345 EAST 7TH ST.,
 NEW YORK, N.Y. 10017
 Los Alamos Scientific Lab

4623..... Date 750500
 111210 32A000 511110 717000 793000 795082
 On the Matching of Fusion Breeders to Heavy-Water
 Reactors
 Lavergne, G.; Robinson, J. E.; Martel, J. G.
 NUCL. TECH., 26(1), 12-22
 Canada

4638..... Date 750400
 111210 32A000 531000 532000 717000 793000 795082
 810000
 Calculation Methods for Nuclear Heating - Part II:
 Applications To Fusion-Reactor Blankets and
 Shields
 Abdou, M. A.; Maynard, C. W.
 NUCL. SCI. ENG., 56(4), 381-398
 Wisconsin Schools

4671..... Date 710219
 717000
 Radiation and Heat Deposition Analysis of the Proposed
 Mirror Fusion Experiment (Mfx)
 Kearney, J. P.
 UCID-15806
 AVAILABILITY-DEP., NTIS \$4.00
 Lawrence Livermore Lab

4680..... Date 720615
 717000
 Neutronics of Sub-Critical Fast Fission Blankets for DT
 Fusion Reactors
 Lee, J. D.
 UCRL-73952
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

CATEGORY NUMBER 717000

4682. Date 730529
 210000 717000
 Simulation of 14-Mev Neutron Damage to Potential Ctr
 Materials
 Borg, R. J.
 UCRL-74675; CONF-730416-3
 AVAILABILITY-DEP., NTIS \$3.00
 Lawrence Livermore Lab

4683. Date 730600
 717000
 Proton Simulation of a Fusion-Reactor Neutron
 Environment
 Logan, C. M.; Anderson, J. D.
 UCRL-74792; CONF-730813-2
 AVAILABILITY-DEP., NTIS \$3.00
 Lawrence Livermore Lab

4684. Date 731017
 717000
 Geometry and Heterogeneous Effects on the Neutronic
 Performance of a Yin Yang Mirror Reactor Blanket
 Lee, J. D.
 UCRL-75141; CONF-731114-5
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4685. Date 740411
 122310 717000
 Calculations of a Fast Fission Blanket for Dt Fusion
 Reactors With Two Evaluated Data Libraries
 Haight, R. C.; Lee, J. D.
 UCRL-75627; CONF-740452-1
 AVAILABILITY-DEP., NTIS \$4.00
 Lawrence Livermore Lab

4687. Date 740400
 717000
 Neutronics Analysis of a 2500 Mw Thermal Fast Fission
 Natural Uranium Blanket for a Dt Fusion Reactor
 Lee, J. D.
 UCRL-75304
 AVAILABILITY-DEP., NTIS
 Lawrence Livermore Lab

4688. Date 740400
 717000
 Heat Flux Limitations on First-Wall Shields for Early
 Fusion Machines
 Hoffman, M. A.; Werner, R. W.
 UCRL-75622
 AVAILABILITY-DEP., NTIS
 Lawrence Livermore Lab

CATEGORY NUMRER 717000

4732. Date 750000
 000000 717000
 Fusion Reactor Physics - Principles and Technology
 Kammash, T.
 ANN ARBOR SCIENCE PUB.
 Michigan Schools

4763. Date 740000
 010000 111210 210000 717000 810000
 Forseeable Thermal, Mechanical, and Materials
 Engineering Problems of Fusion Reactor Power
 Plants
 Fraas, A. P.
 NUCL. ENG. DESIGN, 29(3), 295-310
 Oak Ridge National Lab.

4772. Date 740000
 111210 210000 717000
 Radiation Blistering of Structural Materials for Fusion
 Devices and Reactors
 Das, S. K.; Kaminsky, M.
 CONF-740104-7
 AVAILABILITY-DEP., NTIS \$3.00
 Argonne National Lab.

4788. Date 740227
 111210 717000
 Calculation of the Neutron Spectra From Nuclear
 Reactions in Focus Type Deuterium Plasmas. I.
 General Presentation and Mathematical Analysis
 Genta, P.; Millet, F.; Vezin, R.
 CEA-N-1711
 AVAILABILITY-DEP., NTIS \$14.00
 France

4791. Date 730000
 111210 717000
 First Wall Fluxes in a Theta Pinch Feasibility/dT
 Experiment
 Thomassen, K. I.; Oliphant, T. A.
 LA-UR-74-56; CONF-740104-18
 AVAILABILITY-DEP., NTIS \$3.00
 Los Alamos Scientific Lab

4796. Date 730000
 010000 717000
 Materials Problems in Magnetically Confined Pulsed
 Fusion Reactors
 Green, W. V.; Yeske, R. A.
 LA-UR-74-652; CONF-740222-1
 AVAILABILITY-DEP., NTIS \$4.00
 Los Alamos Scientific Lab

CATEGORY NUMBER 717000

4806. Date 750600
111210 210000 32A000 521130 522130 717000 793000
794000 795087

New Concepts for Controlled Fusion Reactor Blanket Design

Conn, R. W.; Kulcinski, G. L.; Avci, H.;
El-Maghrabi, M.
NUCL. TECH., 26(2), 125-145
Wisconsin Schools

4827. Date 750600
111210 122310 311000 32A000 717000 810000

Comparison of the Cross-Section Sensitivity of the
Tritium Breeding Ratio In Various Fusion-Reactor
Blankets

Alsmiller, R. G., Jr.; Santoro, R. T.; Barish, J.;
Gabriel, T. A.
NUCL. SCI. ENG., 57(2), 122-128
Oak Ridge National Lab.

4830. Date 750800
111500 32A000 521230 717000 793000 794000 795082
861000 870003 870006

Uranium-238 to Uranium-235 Fission-Ratio Distribution
in Spherical Lithium-Metal Assemblies With and
Without a Graphite Reflector

Maekawa, H.; Seki, Y.; Hiraoka, T.; Moriyama, M.
NUCL. SCI. ENG., 57(4), 335-340
Japan

4835. Date 751000
010000 111210 717000

The Technological Requirements for Power By Fusion
Steiner, D.

NUCL. SCI. ENG., 58(2), 107-165
Oak Ridge National Lab.

4852. Date 741200
111210 310000 32A000 717000 795082

Calculation of the Transport of Neutral Atoms in Highly
Ionized Plasmas Using Neutron Transport Methods
Greenspan, E.

NUCL. FUSION, 14(6), 771-778
New Jersey Schools

4869. Date 740900
717000

Stress and Neutronic Analysis of Stainless Steel
Structure for a Lithium Cooled Fusion Reactor
Blanket

Carruthers, H. M.; Constantine, G.;
Mitchell, J. T. D.; Stanbridge, J. R.
EUR-5182E, PP.803-818; CONF-740630, PP.803-818
AVAILABILITY-EUROPEAN COMMUNITY

CATEGORY NUMBER 717000

INFORMATION SERVICE, 2100 M ST., N.W.
SUITE 707, WASHINGTON, D.C. 20037 (U.S.
SALES ONLY)

England

4870. Date 740900
210000 717000

Radiation Damage in Structural Materials in a Fusion
Reactor Environment

Stals, L.

EUR-5182E, PP.819-832; CONF-740630, PP.819-832

AVAILABILITY-EUROPEAN COMMUNITY
INFORMATION SERVICE, 2100 M ST., N.W.
SUITE 707, WASHINGTON, D.C. 20037 (U.S.
SALES ONLY)

Belgium

4871. Date 740900
210000 717000 862000

A Model for Calculating the Damage Rate

Kaletta, D.; Ehrlich, K.

EUR-5182E, PP.833-840; CONF-740630, PP.833-840

AVAILABILITY-EUROPEAN COMMUNITY
INFORMATION SERVICE, 2100 M ST., N.W.
SUITE 707, WASHINGTON, D.C. 20037 (U.S.
SALES ONLY)

Germany (West)

4872. Date 740900
122100 717000

Measurement and Systematics of Cross Sections for
Common and Low Yield 14 Mev Neutron Induced
Nuclear Reactions on Structural Fr-Material and
Transmuted Species

Qaim, S. M.; Stocklin, G.

EUR-5182E, PP.939-947; CONF-740630, PP.939-947

AVAILABILITY-EUROPEAN COMMUNITY
INFORMATION SERVICE, 2100 M ST., N.W.
SUITE 707, WASHINGTON, D.C. 20037 (U.S.
SALES ONLY)

Germany (West)

4873. Date 740900
111210 511110 717000 795127 795254

Comparison of Different Anisotropic Scattering
Techniques in Neutron Transport Codes

Brockmann, H.

EUR-5182E, PP.949-964; CONF-740630, PP.949-964

AVAILABILITY-EUROPEAN COMMUNITY
INFORMATION SERVICE, 2100 M ST., N.W.
SUITE 707, WASHINGTON, D.C. 20037 (U.S.
SALES ONLY)

Germany (West)

CATEGORY NUMBER 717000

4878. Date 740800
 111210 32A000 522130 531000 532000 710000 717000
 795082 810000
 Fusion Power Plant
 Mills, R. G. (Ed.)
 MATT-1050
 AVAILABILITY-NTIS \$32.23
 New Jersey Schools

4893. Date 751100
 010000 111210 717000
 Comparative Study of the More Promising
 Combinations of Blanket Materials, Power
 Conversion Systems, and Tritium Recovery and
 Containment Systems For Fusion Reactors
 Fraas, A. P.
 ORNL-TM-4999
 AVAILABILITY-DEP., NTIS \$5.45
 Oak Ridge National Lab.

4896. Date 760300
 111210 122310 210000 32A000 521130 717000 793000
 794000 795082 861000 870006
 Uncertainties in Calculated Heating and Radiation
 Damage in the Toroidal Field Coil of a Tokamak
 Experimental Power Reactor Due to Neutron
 Cross-Section Errors
 Alsmiller, R. G., Jr.; Barish, J.; Weisbin, C. R.
 ORNL/TM-5198
 AVAILABILITY-NTIS \$6.00
 Oak Ridge National Lab.

4931. Date 751000
 010000 111210 717000
 Nuclear Data Needs for Fusion Reactor Design
 Steiner, D.
 NBS SPEC.PUB.-425, PP.646-650;
 CONF-750303, PP.646-650
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Oak Ridge National Lab.

4933. Date 751000
 010000 111210 122100 717000
 A Survey of Fast-Neutron Induced Reaction
 Cross-Section Data
 Qaim, S. M.
 NBS SPEC.PUB.-425, PP.664-673;
 CONF-750303, PP.664-673
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Germany (West)

CATEGORY NUMBER 717000

4934. Date 751000
 010000 122310 717000
 A Quantitative Assessment of Ctr Cross Section Needs
 Gerstl, S. A.; Dudziak, D. J.; Muir, D. W.
 NBS SPEC.PUB.-425, PP.674-679;
 CONF-750303, PP.674-679
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Los Alamos Scientific Lab

4935. Date 751000
 111210 122100 122310 521130 717000 810000
 A Sensitivity Study of Data Deficiencies, Weighting
 Functions, And 14 Mev Neutron Source Spectrum
 Effects in a 238-U Fueled Fusion Fission Hybrid
 Blanket
 Newman, D. F.; Leonard, B. R., Jr.; Jenquin, U. P.,
 Lessor, D. L.; Stewart, K. B.
 NBS SPEC.PUB.-425, PP.680-682;
 CONF-750303, PP.680-682
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Battelle-Northwest

4936. Date 751000
 111210 329000 511120 521130 717000 870092
 238-U Pulsed Measurements and Ctr Fusion-Fission
 Blanket Calculations
 Wong, C.; Anderson, J. D.; Haight, R. C.;
 Hansen, L. F.; Komoto, T.
 UCRL-76263; NBS SPEC.PUB.-425, PP.704-707;
 CONF-750303, PP.704-707
 AVAILABILITY-DEP., NTIS \$4.00
 Lawrence Livermore Lab

4937. Date 751000
 111210 122110 32A000 521130 717000 870041
 Application of Bondarenko Formalism to Fusion
 Reactors
 Soran, P. D.; Dudziak, D. J.
 NBS SPEC.PUB.-425, PP.722-728;
 CONF-750303, PP.722-728
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Los Alamos Scientific Lab

CATEGORY NUMBER 718000
SHIP PROPULSION

3707. Date 710100
 111110 511120 512220 718000
 Investigations on the Primary Reactor Shielding of the
 Nuclear Ship "Otto Hahn"
 Fiebig, P.; Frisins, F.; Hackbarth, H.; Richter, G.

CATEGORY NUMBER 718000

ATOMKERNENERGIE, 18(1), 71-78
Germany (West)

3950. Date 721000
631000 718000
A Study on Shielding Effect of Gamma Rays By Ship
Structures
Ueki, K.; Yamakoshi, H.; Nakata, M.
CONF-721018, PP.1166-1179
AVAILABILITY-OECD
Japan

4009. Date 710700
111110 112110 718000
Experiences and Problems on Design and Construction
of Radiation Shielding. 3. Shielding in Nuclear
Powered Ships
Kawai, Y.
NIPPON GENSHIRYOKU GAKKAISHI, 13(7),
396-400
Japan

CATEGORY NUMBER 719A00
LIGHT WATER COOLED REACTORS

3922. Date 721000
32F000 531000 532000 719A00 795048 795054 853100
Practical Analysis of Primary Concrete Shield for a Pwr
Su, S. D.; Patti, F.
CONF-721018, PP.628-646
AVAILABILITY-OECD
Burns and Roe

3934. Date 721000
719A00
Access to the Pressure Vessel of a Direct Cycle Bwr for
Inspection And Maintenance
Hock, R.; Seifferth, L.
CONF-721018, PP.860-880
AVAILABILITY-OECD
Germany (West)

3944. Date 721000
511120 719A00 853100
Control of Shield Calculation By Test Measurements in
the Biological Concrete Shield of Three German
Power Reactors
Futtermenger, W. H.; Schultz, H. G.; Hecht, G.;
Weber, H.; Hock, R.
CONF-721018, PP.1026-1046
AVAILABILITY-OECD
Germany (West)

CATEGORY NUMBER 719A00

4119. Date 740600
010000 719A00
Nuclear Power and Public Opinion
Kathren, R. I.
HEALTH PHYS., 26(6), 483-488
General Electric Co.

4325. Date 740400
111110 112710 610000 713000 719A00 795217 870092
870094
Calculation and Compilations of Composition,
Radioactivity, Thermal Power, Gamma and Neutron
Release Rates of Fission Products and Actinides of
Spent Power Reactor Fuels and Their Reprocessing
Wastes
Haug, H. O.
KFK-1945
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Germany (West)

4479. Date 740600
112930 719A00
A Study of the Fission Product Release From a Badly
Damaged Water-Cooled Reactor
Hsia, D. Y.; Chester, R. O.
ORNL-TM-4702
AVAILABILITY-NTIS
Oak Ridge National Lab.

4493. Date 750200
111110 122110 32A000 521130 719A00 820000 861000
Additional Few-Group and Multigroup Calculations of
Neutron Penetration. (Tech. Note)
Shure, K.
NUCL. SCI. ENG., 56(2), 219-224
Bettis Atomic Power Lab.

4604. Date 731000
112120 230000 532000 713000 719A00
A Study of Long-Term Heat Generation in Nuclear
By-Products From Lwr And Lmfbr Systems
Angelo, J. A., Jr.; Post, R. G.; Haskin, F. E.;
Lewis, C.
STI/PUB-343, V.1, 71-88; CONF-730302, V.1, 71-88;
IAEA-SM-170/58
AVAILABILITY-IAEA, VIENNA
Arizona Schools

CATEGORY NUMBER 719A00

4716..... Date 741200
 112120 112760 230000 532000 719A00 719B00
 Nuclear Fuel Cycle and the Isotopic Compositions
 Angelo, J. A., Jr.; Post, R. G.
 NUCL. TECH., 24(3), 323-330
 Florida Schools

4903..... Date 751000
 010000 122100 123000 719A00
 The Light Water Reactor Industry - Nuclear Data Needs
 Uotinen, V. O.; Robertson, J. D.; Tulenko, J. S.
 NBS SPEC.PUB.-425,PP.7-13; CONF-750303,PP.7-13
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Babcock and Wilcox Co.

CATEGORY NUMBER 719B00
 GAS COOLED REACTORS

3923..... Date 721000
 32A000 531000 532000 719B00 853100 882000
 Radiation Flux and Heating Levels in the Htgr
 Engholm, B. A.
 CONF-721018,PP.647-663
 AVAILABILITY-OECD
 Gulf General Atomic

3928..... Date 721000
 32F000 719B00 795121
 Heat Generation in Shield Layers of a High-Temperature
 Reactor
 Hofmann, K.; Wahsweiler, H. G.; Weicht, U.
 CONF-721018,PP.731-740
 AVAILABILITY-OECD
 Germany (West)

3930..... Date 721000
 329000 719B00 721100
 Some Problems Associated With Calculating the
 On-Load Dose Rates on the Pile Cap of An
 Advanced Gas Cooled Reactor
 Dutton, L. M. C.; Palit, A.
 CONF-721018,PP.771-787
 AVAILABILITY-OECD
 England

3946..... Date 721000
 719B00
 Computational Methods for Graphite Gas Cooled
 Reactors Shielding Comparison With Shielding
 Measurements Made During Start-Up Tests
 Brisois, J.; Duco, J.; Bourdeau, F.; Chapus, J.
 CONF-721018,PP.1046-1097
 AVAILABILITY-OECD

CATEGORY NUMBER 719B00

France

3947..... Date 721000
 521110 522110 719B00 721100 722100
 The Exploitation of a Simplified Albedo Theory for
 Neutron and Gamma-Ray Streaming in Practical
 Design Situations
 Miller, P. C.; Packwood, A.
 CONF-721018,PP.1098-1130
 AVAILABILITY-OECD
 England

4034..... Date 730400
 111110 325000 710000 719B00
 Calculations of the Three-Dimensional Power
 Distribution in the Fort St. Vrain Reactor Using
 U.K. Methods and Data
 Anderson, D. W.
 AEEW-R-858
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$3.00
 England

4130..... Date 740700
 111110 325000 719B00 719B00 721100
 Axial Neutron Streaming in Gas-Cooled Fast Reactors.
 (Tech. Note)
 Kohler, P.; Ligou, J.
 NUCL. SCI. ENG., 54(3), 357-360

4130..... Date 740700
 111110 325000 719B00 719B00 721100
 Axial Neutron Streaming in Gas-Cooled Fast Reactors.
 (Tech. Note)
 Kohler, P.; Ligou, J.
 NUCL. SCI. ENG., 54(3), 357-360

4425..... Date 740619
 111110 325000 551110 713000 719B00 810000
 Neutronics Analysis of the 300 Mw(E) Gas Cooled Fast
 Reactor Demonstration Plant
 Bhattacharyya, S. K.; Bohn, E. M.
 ZPR-TM-169
 AVAILABILITY-AUTHORS, ARGONNE
 NATIONAL LAB., APPLIED PHYSICS DIV.,
 9700 SOUTH CASS AVENUE, ARGONNE,
 ILLINOIS 60439
 Argonne National Lab.

CATEGORY NUMBER 719B00

4558..... Date 731100
532000 719B00
Afterheat Calculations for the Htgr
Sund, R. E.
GULF-GA-A12499; GA-LTR-4
AVAILABILITY-DEP., NTIS \$4.50
Gulf General Atomic

4716..... Date 741200
112120 112760 230000 532000 719A00 719B00
Nuclear Fuel Cycle and the Isotopic Compositions
Angelo, J. A., Jr.; Post, R. G.
NUCL. TECH., 24(3), 323-330
Florida Schools

4946..... Date 750312
111110 122110 122210 511110 512210 532000 719B00
794000 795082 853100 861000 870006
Neutron-Coupled Gamma-Ray Cross-Section
Requirements for Gas-Cooled Fast Breeder Reactors
Nagel, M.; Cerbone, R. J.
GA-A-13329; NBS SPEC.PUB.-425, PP.444-446;
CONF-750303-66
AVAILABILITY-DEP., NTIS \$4.00
Gulf General Atomic

CATEGORY NUMBER 721100
DUCTS, MAZES, VOIDS, AND STREAMING
- NEUTRONS -
CALCULATIONS

3532..... Date 730700
000000 111130 111400 112110 112120 112800 610000
721100 722100 731100 731200 731300 810000
Shielding Against Initial Radiation From Nuclear
Weapons
Abbott, L. S.
ORNL-RSIC-36
AVAILABILITY-RSIC
Oak Ridge National Lab.

3851..... Date 681200
112600 112720 631000 721100 721200 722100 722200
Transmission of Fast Neutrons and Gamma Rays
Through Rectangular Slots (Abstract)
Broder, D. L.; Kozlovskii, S. A.; Kyz'yurov, V. S.;
Popkov, K. K.; Smetanin, A. A.
SOVIET J. AT. ENERGY (ENGLISH TRANSL.),
25(6), 1348-1349
Russia

CATEGORY NUMBER 721100

3861..... Date 690800
632300 721100
Passage of Thermal and Intermediate Neutrons Through
a Shielding Nonuniformity
Broder, D. L.; Kozlovskii, S. A.; Kyz'yurov, V. S.;
Popkov, K. K.; Smetanin, A. A.
SOVIET J. AT. ENERGY (ENGLISH TRANSL.),
27(2), 853-854
Russia

3927..... Date 721000
32A000 721100 722100 795089
Streaming of Neutrons and Gamma-Rays Along Reactor
Coolant Pipes
Amin, E.; Hehn, G.; Zumach, W.
CONF-721018-26; CONF-721018, PP.717-730
AVAILABILITY-NTIS
Germany (West)

3930..... Date 721000
329000 719B00 721100
Some Problems Associated With Calculating the
On-Load Dose Rates on the Pile Cap of An
Advanced Gas Cooled Reactor
Dutton, L. M. C.; Palit, A.
CONF-721018, PP.771-787
AVAILABILITY-OECD
England

3947..... Date 721000
521110 522110 719B00 721100 722100
The Exploitation of a Simplified Albedo Theory for
Neutron and Gamma-Ray Streaming in Practical
Design Situations
Miller, P. C.; Packwood, A.
CONF-721018, PP.1098-1130
AVAILABILITY-OECD
England

3959..... Date 721000
721100 795081 795089 795127 795144 870011
Intercomparison of Different Methods to Calculate
Neutron Transport Along Sodium Ducts
Amin, E.; Diettrich, O.; Futtermenger, W.;
Gronefeld, G.; Hehn, G.; Herrnberger, V.;
Schmidt, F.; Vogt, H.; Vossebrecker, H.
CONF-721018, PP.1427-1443
AVAILABILITY-OECD
Germany (West)

CATEGORY NUMBER 721100

4130..... Date 740700
 111110 325000 719B00 719B00 721100
 Axial Neutron Streaming in Gas-Cooled Fast Reactors.
 (Tech. Note)
 Kohler, P.; Ligou, J.
 NUCL. SCI. ENG., 54(3), 357-360

4219..... Date 690800
 111500 329000 521210 632110 632120 721100 853100
 861000 870006
 On Neutron Penetration in Duct Systems With Large
 Cross Section
 Spencer, L. V.; Woolf, S.
 ANS-SD-7, PP.199-221; CONF-671140, PP.199-221
 AVAILABILITY-DEP., NTIS \$3.00
 National Bureau of Standards

4270..... Date 740500
 321000 721100
 The Dipole Response Coefficient for Cylindrical
 Channels in Neutron Diffusion Theory
 Love, M. D.; Kushneriuk, S. A.
 AECL-4826
 AVAILABILITY-CHALK RIVER NUCLEAR
 LABORATORIES, CHALK RIVER, ONTARIO
 Canada

4280..... Date 700300
 010000 32A000 32F000 511110 521130 632120 721100
 795040 795042 795066 795072 795121 820000 853100
 861000 870006
 Today's Approaches to Reactor Shielding Problems
 Nicks, R.; Penkuhn, H.; Ponti, C.
 ANS-SD-8, PP.113-138; AD-712532, PP.113-138
 AVAILABILITY-NTIS
 Italy

4281..... Date 700300
 010000 511110 512110 521130 522110 710000 713000
 721100 722100 820000 841000 861000 870013 870050
 Latest Research on Reactor Shielding in Japan
 Hyodo, T.; Miyasaka, S.; Nakata, M.
 ANS-SD-8, PP.139-155; AD-712532, PP.139-155
 AVAILABILITY-NTIS
 Japan

4581..... Date 740800
 111110 325000 551110 713000 721100 810000
 Applicability of Two-Dimensional Shielding Code
 Tanaka, Y.; Suzuki, I.; Takemura, M.; Suzuki, T.
 JAPFNR-167
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$5.45
 Japan

CATEGORY NUMBER 721200
 DUCTS, MAZES, VOIDS, AND STREAMING
 - NEUTRONS -
 EXPERIMENTS

3751..... Date 721100
 111210 421130 422120 422130 423120 721200 750000
 853100
 Shield Studies: Propagation of 14 Mev Neutrons in
 Access Baffles And Circular Channels
 Logre, P.; Bory, P.; Couvert, D.; Drouvin, G.
 CEA-R-4376 (IN FRENCH)
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 France

3850..... Date 681200
 326000 721200
 Investigation of the Accuracy of the P2-Approximation
 in Describing Neutron Diffusion in a Medium With
 a Duct
 Rumyantsev, G. Ya.; Dmitrieva, V. A.
 SOVIET J. AT. ENERGY (ENGLISH TRANSL.),
 25(6), 1346-1347
 Russia

3851..... Date 681200
 112600 112720 631000 721100 721200 722100 722200
 Transmission of Fast Neutrons and Gamma Rays
 Through Rectangular Slots (Abstract)
 Broder, D. L.; Kozlovskii, S. A.; Kyz'yurov, V. S.;
 Popkov, K. K.; Smetanin, A. A.
 SOVIET J. AT. ENERGY (ENGLISH TRANSL.),
 25(6), 1348-1349
 Russia

3949..... Date 721000
 329000 713000 721200 795144 853100 870011
 Neutron Streaming Along the Penetration of a Twice
 Bent Sodium Pipe
 Diettrich, O.; Marchal, A.; Nicks, R.; Perlini, G.;
 Muller, K.; Vossebrecker, H.; Oliva, A.
 CONF-721018, PP.1148-1165
 AVAILABILITY-OECD
 Italy

3961..... Date 721000
 32A000 422110 551120 721200 820000
 Comparison of One and Two Dimensional Discrete
 Ordinate Calculations With Experimental Results
 Fuse, T.; Yamaji, A.; Miura, T.
 CONF-721018, PP.1459-1471
 AVAILABILITY-OECD
 Japan

CATEGORY NUMBER 721200

3977..... Date 700331
 220000 410000 421140 422110 721200 820000 853100
 A Biological Irradiating Facility at the Hungarian
 Wwr-Sm Reactor
 Makra, S.; Zarand, P.; Sztanyik, L.; Muzsnay, L.
 KFKI-70-5-HP
 AVAILABILITY-DEP., NTIS
 Hungary

3984..... Date 710600
 111110 422110 540000 632300 721200 820000 830000
 Neutron Transmission Through Air-Filled Ducts in
 Water Shields
 Mohammed, F.; Belov, S.; Megahid, R.; Hamouda, I.
 ISOTOPE RADIAT. RES., 4, 1-7
 Egypt

4156..... Date 730400
 111110 32A000 421130 422140 721200 853100 861000
 870011
 Ornl Tsf Pipe Chase Neutron Streaming Experiment -
 Phase One
 McGregor, B. J.; Mynatt, F. R.; Muckenthaler, F. J.;
 Clifford, C. E. (Usa)
 ORNL-TM-4176
 AVAILABILITY-AT (TIC) USAEC
 Oak Ridge National Lab.

4557..... Date 690000
 721200 820000
 Neutron Transmission Through Ducts Perpendicular to
 Neutron Beam Axis In Water Shields
 Sayed Ahmed, F. M.; Belov, S.; Megahid, R.;
 Hamounda, I.
 UARAE-86; N71-38318
 AVAILABILITY-NTIS (U.S. SALES ONLY)
 Egypt

CATEGORY NUMBER 722100
 DUCTS, MAZES, VOIDS, AND STREAMING
 - GAMMA-RAY -
 CALCULATIONS

3532..... Date 730700
 000000 111130 111400 112110 112120 112800 610000
 721100 722100 731100 731200 731300 810000
 Shielding Against Initial Radiation From Nuclear
 Weapons
 Abbott, L. S.
 ORNL-RSIC-36
 AVAILABILITY-RSIC
 Oak Ridge National Lab.

CATEGORY NUMBER 722100

3550..... Date 690400
 620000 722100 853100
 Gaps in Concrete Shields
 Lettnin, H.; Sebok, F.
 ORNL-TR-2162; ATOMKERNENERGIE, 14, 125-128
 AVAILABILITY-RSIC
 Germany (West)

3851..... Date 681200
 112600 112720 631000 721100 721200 722100 722200
 Transmission of Fast Neutrons and Gamma Rays
 Through Rectangular Slots (Abstract)
 Broder, D. L.; Kozlovskii, S. A.; Kyz'yurov, V. S.;
 Popkov, K. K.; Smetanin, A. A.
 SOVIET J. AT. ENERGY (ENGLISH TRANSL.),
 25(6), 1348-1349
 Russia

3927..... Date 721000
 32A000 721100 722100 795089
 Streaming of Neutrons and Gamma-Rays Along Reactor
 Coolant Pipes
 Amin, E.; Hehn, G.; Zumach, W.
 CONF-721018-26; CONF-721018, PP.717-730
 AVAILABILITY-NTIS
 Germany (West)

3939..... Date 721000
 722100 853100
 Investigations Into the Gamma-Ray Attenuation in
 Concrete Shielding With Pipes
 Futtermenger, W. H.
 CONF-721018, PP.937-952
 AVAILABILITY-OECD
 Germany (West)

3947..... Date 721000
 521110 522110 719B00 721100 722100
 The Exploitation of a Simplified Albedo Theory for
 Neutron and Gamma-Ray Streaming in Practical
 Design Situations
 Miller, P. C.; Packwood, A.
 CONF-721018, PP.1098-1130
 AVAILABILITY-OECD
 England

4271..... Date 730000
 112B00 632120 722100
 Lgh-G: a Program for the Calculation of Gamma
 Radiation Through Partially Shielded Gaps
 Fiebig, R.; Rybaczok, P.
 ORNL-TR-2831; GKSS-73/E/17(IN GERMAN)
 AVAILABILITY-NTIS
 Germany (West)

CATEGORY NUMBER 722100

4278. Date 700300
 010000 32A000 32E000 32F000 326000 329000 511110
 620000 710000 722100 795022 795081 795121 820000
 861000 870092
 Key Problems in Radiation Shielding in the Federal
 Republic of Germany
 Bunemann, D.
 ANS-SD-8, PP.82-108; AD-712532, PP.82-108
 AVAILABILITY-NTIS
 Germany (West)

4281. Date 700300
 010000 511110 512110 521130 522110 710000 713000
 721100 722100 820000 841000 861000 870013 870050
 Latest Research on Reactor Shielding in Japan
 Hyodo, T.; Miyasaka, S.; Nakata, M.
 ANS-SD-8, PP.139-155; AD-712532, PP.139-155
 AVAILABILITY-NTIS
 Japan

4529. Date 730700
 722100
 Radiation Through Complex Geometrical Shielding
 Ducts
 Koban, J.
 BMFT-FBK-73-17 (IN GERMAN)
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$8.00
 Germany (West)

4843. Date 750700
 112720 112730 328000 632200 722100 861000 870082
 870092
 Radiation Leakage From Narrow Gaps in Shields
 Haworth, R.; Liquorish, R. A.; Taylor, C. B.
 NUCL. ENG. DESIGN, 32(3), 428-437
 England

CATEGORY NUMBER 722200
DUCTS, MAZES, VOIDS, AND STREAMING
- GAMMA-RAY -
EXPERIMENTS

3851. Date 681200
 112600 112720 631000 721100 721200 722100 722200
 Transmission of Fast Neutrons and Gamma Rays
 Through Rectangular Slots (Abstract)
 Broder, D. L.; Kozlovskii, S. A.; Kyz'yurov, V. S.;
 Popkov, K. K.; Smetanin, A. A.
 SOVIET J. AT. ENERGY (ENGLISH TRANSL.),
 25(6), 1348-1349
 Russia

CATEGORY NUMBER 722200

4147. Date 730000
 112B00 322000 722200
 The Design of a Double-Bent Duct By the
 Line-Of-Sight-Method
 Fiebig, R.; Yamaji, A.
 ATOMKERNENERGIE, 22(2), 105-112
 Germany (West)

CATEGORY NUMBER 731100
WEAPONS SHIELDING - VEHICLE

3519. Date 730300
 111110 311000 329000 731100 731200 795082 795089
 795127 820000 830000 861000
 Coupling of Forward and Adjoint Calculations to Solve
 Three Dimensional Deep Penetration Problems
 Slater, C. O.; Robinson, J. C.
 BRL-CR-100; NEUT-0150-4
 Tennessee Schools

3532. Date 730700
 000000 111130 111400 112110 112120 112800 610000
 721100 722100 731100 731200 731300 810000
 Shielding Against Initial Radiation From Nuclear
 Weapons
 Abbott, L. S.
 ORNL-RSIC-36
 AVAILABILITY-RSIC
 Oak Ridge National Lab.

3830. Date 740100
 112920 423230 522220 731100
 Environmental and Fallout Gamma Radiation
 Protection Factors Provided By Civilian Vehicles
 Burson, Z. G.
 HEALTH PHYS., 26(1), 41-44
 Edgerton, Germeshausen, + Grier

4183. Date 730928
 112720 112920 632300 731100 861000
 Computation of the Residual Radiation Transmission
 Factor for the Marine Corps Lvt7
 Cawley, R. G.
 NOLTR-73-137; AD-780428
 AVAILABILITY-NTIS-\$3.50
 Naval Installations

CATEGORY NUMBER 731200
WEAPONS SHIELDING - BUILDINGS,
BUNKERS, AND
SHELTERS

3519. Date 730300
 111110 311000 329000 731100 731200 795082 795089

CATEGORY NUMBER 731200

795127 820000 830000 861000
Coupling of Forward and Adjoint Calculations to Solve
Three Dimensional Deep Penetration Problems
Slater, C. O.; Robinson, J. C.
BRL-CR-100; NEUT-0150-4
Tennessee Schools

3532..... Date 730700
000000 111130 111400 112110 112120 112800 610000
721100 722100 731100 731200 731300 810000
Shielding Against Initial Radiation From Nuclear
Weapons
Abbott, L. S.
ORNL-RSIC-36
AVAILABILITY-RSIC
Oak Ridge National Lab.

3609..... Date 700000
010000 111130 111400 112130 112800 112910 731200
Protection From Penetrating Radiation of a Nuclear
Explosion
Kukhtevich, V. I.; Goryachev, I. V.; Trykov, L. A.
JPRS-53498
AVAILABILITY-NTIS
Russia

3729..... Date 730900
112720 112920 423210 522220 632500 731200
In-And-Down Scattered Radiation in a Simple Concrete
Structure
Schmoke, M. A.
BRL-R-1665
AVAILABILITY-DEFENSE DOCUMENTATION
CENTER, CAMERON STATION,
ALEXANDRIA, VIRGINIA 22314
Ballistic Research Lab.

3768..... Date 730901
112720 112920 631000 632120 731200 795115
Validity of Scale-Modeling for Gamma-Ray Attenuation
Verser, F. A.; Donnert, H. J.
KEES-SR-113; AD-766140-8
AVAILABILITY-DEPT. OF NUCL. ENG., KANSAS
STATE UNIVERSITY, MANHATTAN, KANSAS
66506
Kansas Schools

3793..... Date 731100
112120 112130 311000 329000 731200 853100
Initial Gamma Radiation Dose in Five Concrete
Structures
Beer, M.; Cohen, M. O.
MR-7037; AD-771324
AVAILABILITY-MATHEMATICAL

CATEGORY NUMBER 731200

APPLICATIONS GROUP, INC., 3
WESTCHESTER PLAZA, ELMSFORD, N. Y.
10523
Mathematical Appl. Group, Inc.

3798..... Date 730600
112920 423250 632500 731200
Gamma-Ray Attenuation in Basement Ceilings
Reynolds, R. S.
NUCL. SCI. ENG., 51(2), 102-112
Mississippi Schools

3874..... Date 730700
010000 112910 731200
Expedient Shelters Survey - Final Report
Cristy, G. A.
ORNL-4860
AVAILABILITY-DEP., NTIS \$7.60
Oak Ridge National Lab.

3973..... Date 710215
112720 112920 423240 632500 731200
A University Design Study of Reduction Factors in
Typical American Houses With Fallout Shelters
Reynolds, R. S.; Faw, R. E.; Robinson, M. J.
KEES-SR-92; AD-722856
AVAILABILITY-DEP., NTIS
Kansas Schools

4155..... Date 730300
111130 311000 32A000 511110 521120 551110 731200
830000 861000
Application of Adjoint Difference and Surface Integral
Methods to Selected Deep-Penetration Radiation
Transport Problems
Robinson, J. C.; Stevens, P. N.; Hoffman, T. J.
BRL-CR-98; NEUT-0150-3; AD-765487
AVAILABILITY-NTIS
Tennessee Schools

4159..... Date 731000
112720 112920 610000 632500 731200 853100
Effects of Building Eccentricity Upon the Basement
Ceiling Attenuation Factor, Bc(Xc, Omega)
Schmoke, M. A.; Zink, J.
BRL-R-1679
AVAILABILITY-NTIS
Army Installations

CATEGORY NUMBER 731200

4184. Date 731000
 111210 112A00 421140 423250 731200 853100
 Experimental Studies of the Neutron and Gamma
 Shielding Provided By Field Fortifications From a
 14-Mev Neutron Source
 Rexroad, R. E.; Jacobson, J. R.
 BRL-R-1681; AD-771126
 AVAILABILITY-NTIS
 Army Installations

4208. Date 690800
 010000 112400 112500 112600 122200 731200
 Proceedings of the Special Sessions on Gamma-Ray
 Production and Transport And Civil Defense
 Shielding
 Straker, E. A. (Ed.)
 ANS-SD-7; CONF-671140
 AVAILABILITY-NTIS \$3.00
 American Nuclear Society

4216. Date 690800
 112720 112920 632500 731200 795139 853100 861000
 Some Current Problems in Ocd Fallout Shielding
 Calculations
 Eisenhower, C.
 ANS-SD-7, PP.143-156; CONF-671140, PP.143-156
 AVAILABILITY-DEP., NTIS \$3.00
 National Bureau of Standards

4220. Date 690800
 111300 111400 112130 710000 731200
 Shielding of Ground Based Strategic Weapon Systems
 Against Initial Nuclear Radiation
 Ray, G. W.
 ANS-SD-7, PP.223-239; CONF-671140, PP.223-239
 AVAILABILITY-DEP., NTIS \$3.00
 Aerospace Corp.

4290. Date 740800
 112760 112920 423210 632500 731200 853100
 Experimental Evaluation of Depa Standard Method
 Calculations for Basement Core Structures
 Schmoke, M. A.; Post, W. J.
 BRL-R-1736; AD-784599
 AVAILABILITY-NTIS
 Army Installations

4616. Date 740205
 311000 329000 731200 795127
 Adjoint Monte Carlo Generation of Radiation Response
 Functions for Complex Missiles
 Scott, W. H., Jr.; Lonergan, J. A.; Woolson, W. A.
 DNA-3197F
 AVAILABILITY-SCIENCE APPLICATIONS, INC.,

CATEGORY NUMBER 731200

LA JOLLA, CALIF.
 Science Applications, Inc.

4785. Date 711200
 010000 731200
 Emp Directory for Shelter Design
 Bridges, J. E.; Miller, D. A.; Valentino, A. R.
 PEM-2
 AVAILABILITY-DEP., NTIS \$4.00
 Lawrence Livermore Lab

4786. Date 730000
 731200
 Nuclear Emp: Emp Hardening Approach for Sam-D
 Warner, G. L.; Doskocil, A. C.
 PEM-35
 AVAILABILITY-DEP., NTIS \$4.50
 Raytheon

4792. Date 700000
 731200
 Civil Defense. Second Edition
 Egorov, P. T.; Shlyakhov, I. A.; Alabin, N. I.
 ORNL-TR-2793
 AVAILABILITY-DEP., NTIS \$7.60
 Russia

4820. Date 750900
 112B00 328000 632300 731200 830000 853100
 A Simple Approach to Calculating Gamma Ray
 Skyshine for Reduced Shielding Applications
 Borak, T. B.
 HEALTH PHYS., 29(3), 423-425
 Argonne National Lab.

4828. Date 750600
 112120 112500 112600 327000 512110 610000 632500
 731200 830000 853100
 Structure Shielding Against Initial Radiations From
 Nuclear Explosions. I. Attenuation of Air Secondary
 and Fission Product Gamma Rays
 Spencer, L. V.
 NUCL. SCI. ENG., 57(2), 129-154
 National Bureau of Standards

CATEGORY NUMBER 731300
 WEAPONS SHIELDING - SHIPS AND
 COMPARTMENTED
 STRUCTURES

3518. Date 720320
 731300
 System of Ship-Shielding Codes
 Newell, J. M.; French, R. L.; Kimmell, R.;

CATEGORY NUMBER 731300

Mooney, L. G.

RRR-T706; DNA-2767T; AD-739339
 AVAILABILITY-NTIS
 Radiation Research Assoc.

3532..... Date 730700
 000000 111130 111400 112110 112120 112800 610000
 721100 722100 731100 731200 731300 810000
 Shielding Against Initial Radiation From Nuclear
 Weapons
 Abbott, L. S.
 ORNL-RSIC-36
 AVAILABILITY-RSIC
 Oak Ridge National Lab.

CATEGORY NUMBER 740000
SHIELD CONSTRUCTION AND
FABRICATION

3514..... Date 710825
 112120 712000 740000
 Atmx-500 Rail Car Modification
 McDonald, E. P.
 MLM-1812
 AVAILABILITY-NTIS
 Monsanto

3892..... Date 720200
 112760 740000 760000 870082
 Comments on Shielding By the Lead Shot Method
 Maruyama, Y.; Wrede, D.; Van Arsdale, E.; Sayeg, J.;
 Engels, E. P.
 RADIOLOGY, 102(2), 445
 Kentucky Schools

4006..... Date 720000
 710000 740000 853100
 Concrete Shields in Rheinsberg Nuclear Power Plant
 Gerullis, W.; Michaelis, U. E.
 KERNENERGIE, 15(1), 9-22
 Germany (West)

4275..... Date 700300
 010000 713000 740000
 Problems in the Design and Construction of Fast
 Reactor Shields
 Hungerford, H. E.
 ANS-SD-8, PP.1-47; AD-712532, PP.1-47
 AVAILABILITY-NTIS
 Indiana Schools

CATEGORY NUMBER 750000
ACCELERATOR SHIELDING (NEUTRON
GENERATORS)

3751..... Date 721100
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 853100
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 Logre, P.; Bory, P.; Couvert, D.; Drouvin, G.
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4015..... Date 721000
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4368..... Date 730600
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 Germany (West)

4540..... Date 720600
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 Martin, T. G.
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 Army Installations

4572..... Date 721000
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 Eder, O. J.; Zwiittlinger, H.
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CATEGORY NUMBER 760000
MEDICAL FACILITIES

3520. Date 701000
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3543. Date 700600
 112710 220000 423230 522230 760600 853100 861000

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 Futtermenger, W.
 ORNL-TR-2532; ABS-TUH-1065(IN GERMAN)
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3562. Date 710000
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3601. Date 710400
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3603. Date 720400
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 Stoddard, D. H.
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 Eisenlohr, H. H.; Abedin-Zadeh, R.
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3634. Date 730000
 113100 220000 329000 523100 760000 845000

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 KFKI-73-19
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 Poston, J. W.; Warner, G. G.
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 111110 710000 760000 870098
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 Vecrling, J. P., Jr.; Oliver, G. D., Jr.; Moore, E. B.
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3879..... Date 730400
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 Almond, P. R.; Smathers, J. B.; Oliver, G. D., Jr.;
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3893..... Date 720300
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 PHYS. MED. BIOL., 18(6), 779-799
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4654. Date 720100
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 Cunningham, J. R.
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4655. Date 720300.
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 Jones, T. D.; Auxier, J. A.
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 113100 220000 513110 613000 760000 870029 870082
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 Dixon, R. L.
 RADIOLOGY, 10(001), 207-211
 North Carolina Schools

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 McCullough, E. C.; Cameron, J. R.
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 Calculation of Isodose Curves in Remote Gamma
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 Galina, L. S.
 MED. RADIOLOGY, 17(6), 84-85
 Russia

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 With Shaping Devices In Gamma Therapy
 Stavitskii, R. V.; Pasynokova, I. E.
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 Meulders, J. P.; Leclux, P.; Macq, P. C.; Pirart, C.;
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4849. Date 750600
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 AVAILABILITY-NTIS \$4.00
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4929. Date 751000
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4930. Date 751000
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 Bewley, D. K.
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CATEGORY NUMBER 770000
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3589. Date 720500
 113100 220000 423250 513120 770000
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 Puite, K. J.; Crebolder, D. L.; Hogeweg, B.;
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4189. Date 731200
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 Murthy, M. S.; Vyas, A.; Murthy, B. K.; Chandra, B.
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4302. Date 730900
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 RISO-M-1651
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 Denmark

4353. Date 721200
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 795127 870013 870098
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 Wyatt, R. M.
 LSU THESIS (MASTERS)
 AVAILABILITY-LOUISIANA STATE UNIV.,
 BATON ROUGE, LA. 70803
 Louisiana Schools

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3503. Date 710615
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 Chilton, A. B.
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 AVAILABILITY-OFFICE OF THE DIRECTOR,
 NATIONAL BUREAU OF STANDARDS,
 WASHINGTON, D. C. 20234
 National Bureau of Standards

3504. Date 710400
 111500 220000 793000 794000 810000
 Heat Generation By Neutrons in Some Moderating and
 Shielding Shielding Materials
 Claiborne, H. C.; Solomito, M.; Ritts, J. J.
 NUCL. ENG. DESIGN, 15(3), 232-236; ORNL-TM-3157
 Oak Ridge National Lab.

3783. Date 731000
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 Neutronic and Photonic Analyses of Simulated Fusion
 Reactor Blankets Containing Thorium and Natural
 Uranium
 Parish, T. A.; Draper, E. L., Jr.
 ESL-16; ESL-16
 AVAILABILITY-ENERGY SYSTEMS
 LABORATORIES, COLLEGE OF
 ENGINEERING, UNIVERSITY OF TEXAS AT
 AUSTIN
 Texas Schools

CATEGORY NUMBER 793000

4133..... Date 731100
 111110 112110 32A000 511110 512110 512210 793000
 795082 841000 870098 882000 883000
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 Stoddard, D. H.
 DP-1339
 AVAILABILITY-DEP., NTIS \$4.00
 E. I. Dupont Denemours

4164..... Date 710600
 010000 111110 32A000 511110 511120 512110 512120
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 Claiborne, H. C.
 ORNL-RSIC-32; CONF-710402-VOL.1,1-65-68
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 Oak Ridge National Lab.

4171..... Date 740800
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 Abdou, M. A.; Roussin, R. W.
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 AVAILABILITY-NTIS
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4236..... Date 731000
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4394..... Date 740000
 111110 111210 521130 522130 710000 717000 793000
 794000 795082 810000 870092 870094
 Neutronic and Photonic Analyses of Fusion Reactor
 Blankets Containing Natural Uranium
 Parish, T. A.; Draper, E. L., Jr.
 CONF-740402-P1,256-270
 AVAILABILITY-NTIS
 Texas Schools

CATEGORY NUMBER 793000

4404..... Date 740000
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 Nigg, D. W.; Davidson, J. N.
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 AVAILABILITY-NTIS
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4406..... Date 740000
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 CONF-740402-P1,634-641
 AVAILABILITY-NTIS
 Japan

4411..... Date 740700
 020000 111110 32A000 329000 421130 422140 511110
 511120 512210 713000 793000 795017 795046 795082
 795089 795127 842000 870011
 Shielding Benchmark Problems
 Simmons, G. L.(Ed.)
 ORNL-RSIC-25(SUPPL.2); ANS-SD-9(SUPPL.2)
 AVAILABILITY-DEP., NTIS \$5.45
 Oak Ridge National Lab.

4418..... Date 741100
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 A Comparative Study of Several Fusion Reactor Blanket
 Designs
 Abdou, M. A.; Conn, R. W.
 NUCL. SCI. ENG., 55(3), 256-266
 Wisconsin Schools

4437..... Date 740000
 111210 220000 521130 522130 717000 793000 794000
 795082 810000 870003
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 AVAILABILITY-NTIS
 Wisconsin Schools

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 Greenspan, E.; Price, W. G., Jr.
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 AVAILABILITY-NTIS

CATEGORY NUMBER 793000

New Jersey Schools

4449..... Date 740000
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Casini, G.; Cuniberti, R.
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AVAILABILITY-NTIS

Italy

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Lavergne, G.; Robinson, J. E.; Martel, J. G.
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Canada

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Theoretical And Computational Algorithms
Abdou, M. A.; Maynard, C. W.
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Wisconsin Schools

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111210 32A000 531000 532000 717000 793000 795082
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Applications To Fusion-Reactor Blankets and
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Abdou, M. A.; Maynard, C. W.
NUCL. SCI. ENG., 56(4), 381-398
Wisconsin Schools

4806..... Date 750600
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794000 795087
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Design
Conn, R. W.; Kulcinski, G. L.; Avci, H.;
El-Maghrabi, M.
NUCL. TECH., 26(2), 125-145
Wisconsin Schools

CATEGORY NUMBER 793000

4830..... Date 750800
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861000 870003 870006
Uranium-238 to Uranium-235 Fission-Ratio Distribution
in Spherical Lithium-Metal Assemblies With and
Without a Graphite Reflector
Maekawa, H.; Seki, Y.; Hiraoka, T.; Moriyama, M.
NUCL. SCI. ENG., 57(4), 335-340
Japan

4832..... Date 750900
111220 112400 112500 112600 329000 510000 512220
793000 794000 795203 870006
Analysis of Neutron Scattering and Gamma-Ray
Production Integral Experiments On Carbon for
Neutron Energies From 1 to 15 Mev
Cramer, S. N.; Oblo, E. M.
NUCL. SCI. ENG., 58(1), 33-53; ORNL-TM-4494
Oak Ridge National Lab.

4896..... Date 760300
111210 122310 210000 32A000 521130 717000 793000
794000 795082 861000 870006
Uncertainties in Calculated Heating and Radiation
Damage in the Toroidal Field Coil of a Tokamak
Experimental Power Reactor Due to Neutron
Cross-Section Errors
Alsmiller, R. G., Jr.; Barish, J.; Weisbin, C. R.
ORNL/TM-5198
AVAILABILITY-NTIS \$6.00
Oak Ridge National Lab.

4911..... Date 751000
010000 111110 122110 122310 511110 511120 521130
521230 793000 794000 810000 861000
Shielding Benchmark Experiments and Sensitivity
Studies in Progress at Some European Laboratories
Hehn, G.; Mattes, W.; Nicks, R.; Matthes, W.;
Rief, H.
NBS SPEC.PUB.-425,PR177-183;
CONF-750303,PP.177-183
AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
SOLD IN SETS ONLY
Germany (West)

4912..... Date 751000
111220 122100 421130 511120 793000 795082 861000
Assessment of Neutron Group Constants for Iron and
Stainless Steel Through Measurements and Analyses
of Energy and Space Distributions of Neutrons in
Test Assemblies
Kimura, I.; Kobayashi, K.; Hayashi, S. A.;
Yamamoto, S.; Nishihara, H.; Ando, M.;
Kanazawa, S.; Nakagawa, M.

CATEGORY NUMBER 793000

NBS SPEC.PUB.-425,PP.184-188;
 CONF-750303,PP.184-188
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Japan

CATEGORY NUMBER 794000
 PERIPHERAL SHIELDING ROUTINE
 USED

3504. Date 710400
 111500 220000 793000 794000 810000
 Heat Generation By Neutrons in Some Moderating and
 Shielding Shielding Materials
 Claiborne, H. C.; Solomito, M.; Ritts, J. J.
 NUCL. ENG. DESIGN, 15(3), 232-236; ORNL-TM-3157
 Oak Ridge National Lab.

3513. Date 730800
 111210 32A000 329000 521130 717000 794000 795042
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 Analysis of a Beach-Mark Calculation of Tritium
 Breeding in a Fusion Reactor Blanket: the United
 States Contribution
 Steiner, D.
 ORNL-TM-4177
 AVAILABILITY-DEP., NTIS \$4.00
 Oak Ridge National Lab.

3521. Date 710600
 111110 32A000 421130 521230 716000 794000 795082
 795089 820000 870082
 Measured and Calculated Fast Neutron Spectra in a
 Lead-And-Water Shielded Reactor
 Lahti, G. P.; Wrights, G. N.
 NASA-TM-X-67861; N71-28968
 AVAILABILITY-NTIS
 National Aeronautics Support Agencies

3670. Date 721000
 430000 794000
 Spectral Unfolding: Its Mathematical Basis,
 Implementation and Application With Maze2. Final
 Report
 Sperling, M.
 DNA-2990F; SAI-72-574-LJ; AD-755190
 AVAILABILITY-SCIENCE APPLICATIONS,
 P.O.BOX 2351, 1250 PROSPECT STREET, LA
 JOLLA, CALIF. 92037
 Science Applications, Inc.

CATEGORY NUMBER 794000

3739. Date 720700
 111110 422110 430000 521230 710000 794000
 Radiation Dosimetry in Wr-I Reactor. III.
 Determination of Flux Density
 Mehta, K. K.; Stadnyk, A. M.
 AECL-3797
 AVAILABILITY-ATOMIC ENERGY CANADA
 LTD., CHALK RIVER, ONTARIO
 Canada

3756. Date 730000
 111110 122110 794000
 Iterated Sequential Transport Approximation for
 Anisotropic Spectral Moments
 Gibbs, D. C.; Becker, M.; Malaviya, B. K.
 COO-3058-32
 AVAILABILITY-DEP., NTIS
 New York Schools

3783. Date 731000
 717000 793000 794000 795082
 Neutronic and Photonic Analyses of Simulated Fusion
 Reactor Blankets Containing Thorium and Natural
 Uranium
 Parish, T. A.; Draper, E. L., Jr.
 ESL-16; ESL-16
 AVAILABILITY-ENERGY SYSTEMS
 LABORATORIES, COLLEGE OF
 ENGINEERING, UNIVERSITY OF TEXAS AT
 AUSTIN
 Texas Schools

3794. Date 730900
 111110 111400 421140 430000 794000 795108 795112
 Evaluation of Operational Characteristics of Selected
 Unfolding Codes
 Kilminster, D. T.
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 AVAILABILITY-NTIS
 Army Installations

3989. Date 691000
 112200 121200 512110 512210 610000 794000 861000
 870082
 The Importance of Bremsstrahlung in the Shielding of
 Gamma Rays Having Energies Less Than 10 Mev
 Dutton, L. M.
 AEEW-R-675
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY),
 UK 9S .6D.
 England

CATEGORY NUMBER 794000

4067..... Date 731200
 111110 421160 430000 794000 870098
 The 252-Cf Fission Neutron Spectrum From 0.5 to 13
 Mev (Lwbr Development Program)
 Green, L.; Mitchell, J. A.; Steen, N. M.
 WAPD-TM-1072
 AVAILABILITY-NTIS
 Bettis Atomic Power Lab.

4149..... Date 730400
 111110 122110 794000 795092 795094
 A Comparison of the Group Constants Generated By the
 Endf/b Processing Codes Etox and Supertog
 Wright, R. Q.; Schenter, R. E.; Jenkins, J. D.
 ORNL-TM-4041; ENDF-184
 AVAILABILITY-NTIS \$3.00
 Oak Ridge National Lab.

4171..... Date 740800
 111210 121100 210000 220000 717000 793000 794000
 810000
 Macklib - 100-Group Neutron Fluence-To-Kerma
 Factors and Reaction Cross Sections Generated By
 the Mack Computer Program From Data in Endf
 Format
 Abdou, M. A.; Roussin, R. W.
 ORNL-TM-3995
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4178..... Date 740800
 111500 121100 122110 794000
 A Rapid Computational Method for Multigroup Elastic
 Transfer. (Tech. Note)
 Becker, M.
 NUCL. SCI. ENG., 54(4), 465-467
 New York Schools

4194..... Date 730800
 111500 421130 430000 794000
 Organic Scintillator Neutron Detector Efficiency - a
 Comparison Of Experimental Results With
 Predictions
 Plasek, R.; Miljanic, D.; Valkovic, V.; Liebert, R. B.;
 Phillips, G. C.
 NUCL. INSTR. METHODS, 111(2), 251-252
 Texas Schools

CATEGORY NUMBER 794000

4248..... Date 710830
 111220 421130 421160 430000 794000
 Experimental Studies of Unfolding
 Kendrick, H.; Harris, L., Jr.
 GULF-RT-A10821; ANS-SD-12,ARTICLE 7
 AVAILABILITY-GULF RADIATION TECH., P.O.
 BOX 608, SAN DIEGO, CALIF. 92112
 Gulf General Atomic

4369..... Date 730000
 111110 111500 511110 794000 795171 820000 842000
 861000 882000
 Calculation and Comparison of Leakage Neutron
 Spectra
 Makra, S.; Palfalvi, J.; Zarand, P.
 KFKI-72-67; STI/PUB/318,V.1,47-57; CONF-721203-11
 AVAILABILITY-IAEA
 Hungary

4394..... Date 740000
 111110 111210 521130 522130 710000 717000 793000
 794000 795082 810000 870092 870094
 Neutronic and Photonic Analyses of Fusion Reactor
 Blankets Containing Natural Uranium
 Parish, T. A.; Draper, E. L., Jr.
 CONF-740402-P1,256-270
 AVAILABILITY-NTIS
 Texas Schools

4406..... Date 740000
 111210 531000 532000 793000 794000 795082 810000
 On the Thermal State of the Fusion Blanket
 Nishikawa, M.; Ioki, K.; Naito, T.; Asami, N.
 CONF-740402-P1,634-641
 AVAILABILITY-NTIS
 Japan

4418..... Date 741100
 111210 32A000 521130 717000 793000 794000 795082
 810000
 A Comparative Study of Several Fusion Reactor Blanket
 Designs
 Abdou, M. A.; Conn, R. W.
 NUCL. SCI. ENG., 55(3), 256-266
 Wisconsin Schools

4437..... Date 740000
 111210 220000 521130 522130 717000 793000 794000
 795082 810000 870003
 Neutronics and Photonics Study of Fusion Reactor
 Blankets
 Abdou, M. A.; Maynard, C. W.
 CONF-740402-P2,87-100
 AVAILABILITY-NTIS

CATEGORY NUMBER 794000

Wisconsin Schools

4441..... Date 740000
 111210 122310 311000 32A000 521130 717000 793000
 794000 795082 795248 810000
 Tritium Breeding Potential of the Princeton Reference
 Fusion Power Plant
 Greenspan, E.; Price, W. G., Jr.
 CONF-740402-P2,145-154
 AVAILABILITY-NTIS
 New Jersey Schools

4449..... Date 740000
 111210 32F000 511120 710000 717000 793000 794000
 795121 810000
 Nuclear Blanket and Shielding Problems in
 Demonstration Fusion Reactors
 Casini, G.; Cuniberti, R.
 CONF-740402-P2,238-249
 AVAILABILITY-NTIS
 Italy

4500..... Date 750100
 111210 32A000 521130 522130 531000 532000 717000
 794000 795046 810000
 Radioactivity Induced in a Theta-Pinch Fusion Reactor
 Dudziak, D. J.; Krakowski, R. A.
 NUCL. TECH., 25(1), 32-55
 Los Alamos Scientific Lab

4552..... Date 721016
 421130 430000 794000
 Proton-Recoil Proportional Counter for Neutron
 Spectrometry in Fast Reactors
 Verbinski, V. V.
 GULF-RT-B-12155
 AVAILABILITY-DEP., NTIS
 Gulf General Atomic

4637..... Date 750400
 111210 111500 121100 121200 220000 793000 794000
 Calculational Methods for Nuclear Heating - Part I:
 Theoretical And Computational Algorithms
 Abdou, M. A.; Maynard, C. W.
 NUCL. SCI. ENG., 56(4), 360-380
 Wisconsin Schools

4806..... Date 750600
 111210 210000 32A000 521130 522130 717000 793000
 794000 795087
 New Concepts for Controlled Fusion Reactor Blanket
 Design
 Conn, R. W.; Kulcinski, G. L.; Avci, H.;
 El-Maghrabi, M.

CATEGORY NUMBER 794000

NUCL. TECH., 26(2), 125-145
 Wisconsin Schools

4830..... Date 750800
 111500 32A000 521230 717000 793000 794000 795082
 861000 870003 870006
 Uranium-238 to Uranium-235 Fission-Ratio Distribution
 in Spherical Lithium-Metal Assemblies With and
 Without a Graphite Reflector
 Mackawa, H.; Seki, Y.; Hiraoka, T.; Moriyama, M.
 NUCL. SCI. ENG., 57(4), 335-340
 Japan

4832..... Date 750900
 111220 112400 112500 112600 329000 510000 512220
 793000 794000 795203 870006
 Analysis of Neutron Scattering and Gamma-Ray
 Production Integral Experiments On Carbon for
 Neutron Energies From 1 to 15 Mev
 Cramer, S. N.; Oblow, E. M.
 NUCL. SCI. ENG., 58(1), 33-53; ORNL-TM-4494
 Oak Ridge National Lab.

4894..... Date 760300
 111220 329000 511120 512210 794000 795203 870007
 Analysis of Neutron Scattering and Gamma-Ray
 Production Integral Experiments On Nitrogen for
 Neutron Energies From 1 to 15 Mev
 Cramer, S. N.; Oblow, E. M.
 ORNL/TM-5220
 AVAILABILITY-NTIS \$4.50
 Oak Ridge National Lab.

4896..... Date 760300
 111210 122310 210000 32A000 521130 717000 793000
 794000 795082 861000 870006
 Uncertainties in Calculated Heating and Radiation
 Damage in the Toroidal Field Coil of a Tokamak
 Experimental Power Reactor Due to Neutron
 Cross-Section Errors
 Alsmiller, R. G., Jr.; Barish, J.; Weisbin, C. R.
 ORNL/TM-5198
 AVAILABILITY-NTIS \$6.00
 Oak Ridge National Lab.

CATEGORY NUMBER 794000

4911. Date 751000
 010000 111110 122110 122310 511110 511120 521130
 521230 793000 794000 810000 861000
 Shielding Benchmark Experiments and Sensitivity
 Studies in Progress at Some European Laboratories
 Hehn, G.; Mattes, W.; Nicks, R.; Matthes, W.;
 Rief, H.
 NBS SPEC.PUB.-425,PR177-183;
 CONF-750303,PP.177-183
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Germany (West)

4946. Date 750312
 111110 122110 122210 511110 512210 532000 719B00
 794000 795082 853100 861000 870006
 Neutron-Coupled Gamma-Ray Cross-Section
 Requirements for Gas-Cooled Fast Breeder Reactors
 Nagel, M.; Cerbone, R. J.
 GA-A-13329; NBS SPEC.PUB.-425,PP.444-446;
 CONF-750303-66
 AVAILABILITY-DEP., NTIS \$4.00
 Gulf General Atomic

CATEGORY NUMBER 795017
RSIC-CCC-17, CODE O5R

4411. Date 740700
 020000 111110 32A000 329000 421130 422140 511110
 511120 512210 713000 793000 795017 795046 795082
 795089 795127 842000 870011
 Shielding Benchmark Problems
 Simmons, G. L.(Ed.)
 ORNL-RSIC-25(SUPPL.2); ANS-SD-9(SUPPL.2)
 AVAILABILITY-DEP., NTIS \$5.45
 Oak Ridge National Lab.

4481. Date 720400
 111500 329000 511110 521130 795017 795232 820000
 861000 870006
 Monte Carlo Calculation of Neutrons Transmitted
 Through Matter
 Hirayama, H.; Nakamura, T.
 MEM. FAC. ENG. (KYOTO UNIV.), 34(2), 187-200
 Japan

CATEGORY NUMBER 795022
RSIC-CCC-22, CODE MAC +
MAC-RAD

3510. Date 720000
 111500 112B00 32A000 32F000 511110 512110 522130
 795022 795054 795066 820000 861000 870006
 The Removal P1 Method for Calculation of Radiation

CATEGORY NUMBER 795022

Distribution in: Shielding
 Valenta, V.
 ZJE-131
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Czechoslovakia

3926. Date 721000
 32F000 511110 795022 853100 853200 853400 853600
 853800
 Choice of Characteristic Element Components in
 Concrete for Shielding Calculations on Biological
 Shields for Power Reactors
 Schultz, H.; Vogt, H. G.
 CONF-721018,PP.702-716
 AVAILABILITY-OECD
 Germany (West)

3943. Date 721000
 32F000 512210 521130 795022 795121 883000
 Application of Removal Diffusion Methods to Specific
 Reactor Shielding Problems
 Herrnberger, V.; Tai, A.S.; Zuber, J. F.
 CONF-721018,PP.1009-1025
 AVAILABILITY-OECD
 Switzerland

4214. Date 690800
 111110 112400 112500 32F000 521130 522130 795022
 810000
 Application of Spinney's Method to Secondary
 Gamma-Ray Calculations
 Greenborg, J.
 ANS-SD-7,PP.101-111; CONF-671140, PP.101-111
 AVAILABILITY-DEP., NTIS \$3.00
 Douglas United Nuclear Corp.

4278. Date 700300
 010000 32A000 32E000 32F000 326000 329000 511110
 620000 710000 722100 795022 795081 795121 820000
 861000 870092
 Key Problems in Radiation Shielding in the Federal
 Republic of Germany
 Bunemann, D.
 ANS-SD-8,PP.82-108; AD-712532,PP.82-108
 AVAILABILITY-NTIS
 Germany (West)

4892. Date 701200
 010000 32F000 795022
 Reactor Shielding in Switzerland
 Herrnberger, V.; Ligou, J.
 CONF-701228,PP.143-155
 AVAILABILITY-OECD \$5.00
 Switzerland

CATEGORY NUMBER 795040
RSIC-CCC-40, CODE NIOBE

4280..... Date 700300
 010000 32A000 32F000 511110 521130 632120 721100
 795040 795042 795066 795072 795121 820000 853100
 861000 870006
 Today's Approaches to Reactor Shielding Problems
 Nicks, R.; Penkuhn, H.; Ponti, C.
 ANS-SD-8,PP.113-138; AD-712532,PP.113-138
 AVAILABILITY-NTIS
 Italy

CATEGORY NUMBER 795042
RSIC-CCC-42, CODE DTF-IV

3513..... Date 730800
 111210 32A000 329000 521130 717000 794000 795042
 795082 795127 870003 870006
 Analysis of a Bench-Mark Calculation of Tritium
 Breeding in a Fusion Reactor Blanket; the United
 States Contribution
 Steiner, D.
 ORNL-TM-4177
 AVAILABILITY-DEP., NTIS \$4.00
 Oak Ridge National Lab.

3516..... Date 720200
 111500 112B00 112200 32A000 329000 511110 512110
 795042 795082 795127 820000 870013
 Nuclear Radiation Analysis. Summary Report
 Knies, R. J.; Byrn, N. R.; Smith, H. T.
 NASA-CR-123636; N72-24728
 AVAILABILITY-NTIS \$4.50
 Teledyne Brown Eng. Co.

3595..... Date 720700
 111110 220000 32A000 511110 795042 845000 870098
 Calculated Neutron Dose Rates for Implantable 252-Cf
 Sources
 Windham, J. P.; Shapiro, A.; Kereiakes, J. G.
 PHYS. MED. BIOL., 17(4), 493-502
 Ohio Schools

3789..... Date 730516
 111110 122310 32A000 421140 422130 511120 795042
 861000
 Benchmark Experiment of Neutron Propagation in Iron
 Martini, M.; Bozzi, L.
 RT/FI(73)19
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 \$3.00
 Italy

CATEGORY NUMBER 795042

3953..... Date 721000
 112400 112500 32A000 512210 795042
 Anisotropy of Photon Emission in Transport
 Calculations
 Dudziak, D. J.; Bosler, G. E.
 CONF-721000,PP.1232-1248; LA-DC-72-1010
 AVAILABILITY-OECD
 Los Alamos Scientific Lab

4094..... Date 740300
 122310 32A000 795042 842000 870041 870042 870073
 870082
 Transport Analysis of Measured Neutron Leakage
 Spectra From Spheres As Tests Of Evaluated
 High-Energy Cross Sections
 Bogart, D.; Shook, D. F.; Fieno, D.
 NUCL. SCI. ENG., 53(3), 285-303
 National Aeronautics Support Agencies

4205..... Date 720900
 111110 32A000 511110 795042 870092 870094 870098
 Subcritical Multiplication of Californium-252 Neutrons
 and Its Applications
 Hansen, L. E.; Wogman, N. A.; Perkins, R. W.;
 Clayton, E. D.
 NUCL. TECH., 15(2), 422-430
 Battelle Memorial Inst.

4280..... Date 700300
 010000 32A000 32F000 511110 521130 632120 721100
 795040 795042 795066 795072 795121 820000 853100
 861000 870006
 Today's Approaches to Reactor Shielding Problems
 Nicks, R.; Penkuhn, H.; Ponti, C.
 ANS-SD-8,PP.113-138; AD-712532,PP.113-138
 AVAILABILITY-NTIS
 Italy

4361..... Date 720000
 111210 32A000 717000 795042
 Neutronic Analysis of a Tritium-Production Integral
 Experiment
 Muir, D. W.; Wyman, M. E.
 LA-DC-72-1382; CONF-721111-12;
 CONF-721111,PP.910-917
 AVAILABILITY-DEP., NTIS
 Los Alamos Scientific Lab

CATEGORY NUMBER 795042

4362..... Date 740400
 111210 32A000 717000 795042
 Neutron and Gamma Heating Rates in Fusion-Reactor
 Blankets
 Perry, R. T., Jr.; Davidson, J. N.; Kohler, W. H.
 CONF-721111, PP.931-943
 AVAILABILITY-NTIS
 Texas Schools

4404..... Date 740000
 111210 112710 793000 795042 810000 861000
 The Induced Activity and Decay Power of the Structure
 of a Stainless Steel Fusion Reactor Blanket
 Nigg, D. W.; Davidson, J. N.
 CONF-740402-P1, 578-587
 AVAILABILITY-NTIS
 Texas Schools

4438..... Date 740000
 111210 210000 511110 531000 717000 795042
 Some Neutronics Aspects of Laser-Fusion Reactors
 Frank, T.; Dudziak, D.; Heck, E.
 LA-UR-74-592; CONF-740402-13;
 CONF-740402-P2, 101-113
 AVAILABILITY-DEP., NTIS \$4.00
 Los Alamos Scientific Lab

4578..... Date 720000
 111110 430000 511120 713000 795042 795108
 810000
 Measured and Calculated Neutron Spectra in the
 Experimental Cavity of The Acpr
 Croucher, D. W.; Lucoff, D. M.; Schmidt, T. R.;
 Reil, K. O.; White, J. R.
 SC-DC-721414; CONF-721109-3
 AVAILABILITY-DEP., NTIS
 Sandia Corporation

4620..... Date 740000
 111210 32A000 521130 522130 531000 532000 717000
 795042 810000
 Preliminary Appraisal of a Fusion/fission (Hybrid)
 Reactor Based on The Linear Theta Pinch
 Bosler, G. E.; Dudziak, D. J.; Ellis, W. R.
 CONF-740805, 710-718
 AVAILABILITY-AMERICAN SOCIETY OF
 MECHANICAL ENGINEERS, UNITED
 ENGINEERING CENTER, 345 EAST 7TH ST.,
 NEW YORK, N.Y. 10017
 Los Alamos Scientific Lab

CATEGORY NUMBER 795044
RSIC-CCC-44, CODE TORN

4026..... Date 670901
 329000 511110 521110 795044 861000
 Monte Carlo Calculations of Fast-Neutron Transmission
 and Reflection By Iron Slabs
 Long, J. J.; Wells, M. B.
 RRA-T75
 AVAILABILITY-RADIATION RESEARCH
 ASSOCIATES, INC., 3550 HULEN ST., FORT
 WORTH, TEXAS 76107
 Radiation Research Assoc.

CATEGORY NUMBER 795046
RSIC-CCC-46, CODE OGRE

3506..... Date 721100
 112760 32A000 329000 512110 522110 795046 795082
 830000 853100
 Boundary Dose Rates Due to Gamma Rays at Power
 Reactor Sites
 Wells, M. B.; Collins, D. G.; Neuendorf, W. P.
 RRA-M7202
 AVAILABILITY-RADIATION RESEARCH
 ASSOCIATES, INC., 3550 HULEN STREET,
 FORT WORTH, TEXAS 76107
 Radiation Research Assoc.

3720..... Date 7303h00
 112730 329000 424000 795046
 Monte-Carlo Simulation of Gamma-Ray Backscatter
 Soil Density Gauges
 Hopkins, W. C.; Gardner, R. P.
 NUCL. SCI. ENG., 24(3), 332-343
 North Carolina Schools

4411..... Date 740700
 020000 111110 32A000 329000 421130 422140 511110
 511120 512210 713000 793000 795017 795046 795082
 795089 795127 842000 870011
 Shielding Benchmark Problems
 Simmons, G. L.(Ed.)
 ORNL-RSIC-25(SUPPL.2); ANS-SD-9(SUPPL.2)
 AVAILABILITY-DEP., NTIS \$5.45
 Oak Ridge National Lab.

4500..... Date 750100
 111210 32A000 521130 522130 531000 532000 717000
 794000 795046 810000
 Radioactivity Induced in a Theta-Pinch Fusion Reactor
 Dudziak, D. J.; Krakowski, R. A.
 NUCL. TECH., 25(1), 32-55
 Los Alamos Scientific Lab

CATEGORY NUMBER 795048
RSIC-CCC-48, CODE QAD

3922. Date 721000
 32F000 531000 532000 719A00 795048 795054 853100
 Practical Analysis of Primary Concrete Shield for a Pwr
 Su, S. D.; Patti, F.
 CONF-721018, PP.628-646
 AVAILABILITY-OECD
 Burns and Roe

4039. Date 720800
 111110 112500 32A000 423250 522230 632110 715000
 795048 870004 870013 885000 886000
 Gamma Heating in Reflector Heat Shield of Gas Core
 Reactor
 Lofthouse, J. H.; Kunze, J. F.; Young, T. E.;
 Young, R. C.
 ANCR-1077; NASA-CR-120903; N72-33651
 AVAILABILITY-DEP., NTIS
 Aerojet-General

4514. Date 740900
 112760 220000 222000 632110 795048 845000 870094
 Dose-To-The-Population Estimates for Use of
 Radioisotope Powered Cardiac Pacemakers
 McKee, R. W.; Clark, L. L.; Cole, B. M.;
 Libby, R. A.
 BNWL-1858
 AVAILABILITY-DEP., NTIS \$5.45
 Battelle-Northwest

4542. Date 721000
 111110 421140 511120 521230 795048 795121 820000
 883000
 Deep Penetration of Neutrons in Hydrogenous Shields
 Chinaglia, B.; Bosio, G.
 EUR-4743
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Italy

CATEGORY NUMBER 795054
RSIC-CCC-54, CODE NRN

3510. Date 720000
 111500 112B00 32A000 32F000 511110 512110 522130
 795022 795054 795066 820000 861000 870006
 The Removal P1 Method for Calculation of Radiation
 Distribution in Shielding
 Valenta, V.
 ZJE-131
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Czechoslovakia

CATEGORY NUMBER 795054

3922. Date 721000
 32F000 531000 532000 719A00 795048 795054 853100
 Practical Analysis of Primary Concrete Shield for a Pwr
 Su, S. D.; Patti, F.
 CONF-721018, PP.628-646
 AVAILABILITY-OECD
 Burns and Roe

4279. Date 700300
 010000 795054 795072
 Key Problems in Reactor Shielding in Sweden
 Leimdorfer, M.
 ANS-SD-8, PP.109-112; AD-712532, PP.109-112
 AVAILABILITY-NTIS
 Sweden

CATEGORY NUMBER 795066
RSIC-CCC-66, CODE BIGGI

3510. Date 720000
 111500 112B00 32A000 32F000 511110 512110 522130
 795022 795054 795066 820000 861000 870006
 The Removal P1 Method for Calculation of Radiation
 Distribution in Shielding
 Valenta, V.
 ZJE-131
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Czechoslovakia

4280. Date 700300
 010000 32A000 32F000 511110 521130 632120 721100
 795040 795042 795066 795072 795121 820000 853100
 861000 870006
 Today's Approaches to Reactor Shielding Problems
 Nicks, R.; Penkuhn, H.; Ponti, C.
 ANS-SD-8, PP.113-138; AD-712532, PP.113-138
 AVAILABILITY-NTIS
 Italy

CATEGORY NUMBER 795072
RSIC-CCC-72, CODE COMPRASH

4279. Date 700300
 010000 795054 795072
 Key Problems in Reactor Shielding in Sweden
 Leimdorfer, M.
 ANS-SD-8, PP.109-112; AD-712532, PP.109-112
 AVAILABILITY-NTIS
 Sweden

CATEGORY NUMBER 795072

4280. Date 700300
010000 32A000 32F000 511110 521130 632120 721100
795040 795042 795066 795072 795121 820000 853100
861000 870006

Today's Approaches to Reactor Shielding Problems
Nicks, R.; Penkuhn, H.; Ponti, C.
ANS-SD-8, PP.113-138; AD-712532, PP.113-138
AVAILABILITY-NTIS
Italy

CATEGORY NUMBER 795081
RSIC-CCC-81, CODE UNC-SAM

3959. Date 721000
721100 795081 795089 795127 795144 870011
Intercomparison of Different Methods to Calculate
Neutron Transport Along Sodium Ducts
Amin, E.; Diettrich, O.; Futtermenger, W.;
Gronefeld, G.; Hehn, G.; Herrnberger, V.;
Schmidt, F.; Vogt, H.; Vossebrecker, H.
CONF-721018, PP.1427-1443
AVAILABILITY-OECD
Germany (West)

4278. Date 700300
010000 32A000 32E000 32F000 326000 329000 511110
620000 710000 722100 795022 795081 795121 820000
861000 870092
Key Problems in Radiation Shielding in the Federal
Republic of Germany
Bunemann, D.
ANS-SD-8, PP.82-108; AD-712532, PP.82-108
AVAILABILITY-NTIS
Germany (West)

4599. Date 740900
010000 795081 795082 795089 795121 795127 795132
795142 795144
Pilot Study on Shielding Programs
Devillers, C.; Ponti, C.; Rexer, G.; Hehn, G.;
Amin, E.; Sartori, E.; Pfister, G.; Burgart, C. E.;
Bernnat, W.; Hofmann, K.; Wahweiler, H. G.;
Weicht, U.; Travaglini, N.; Nicks, R.; Canali, U.;
Bignami, A.; Vogt, H. G.
NEA-CPL NEWSLETTER NO.17
AVAILABILITY-NEA COMPUTER PROGRAM
LIBRARY, CASELLA POSTALE N.15, 21027 -
ISPRA (VARESE), ITALY
Nuclear Energy Agency

CATEGORY NUMBER 795082
RSIC-CCC-82, CODE ANISN

3503. Date 710615
111210 111500 32A000 511110 512210 793000 795082
Effect of Material Composition on Neutron Penetration
of Concrete Slabs
Chilton, A. B.
NBS-10425
AVAILABILITY-OFFICE OF THE DIRECTOR,
NATIONAL BUREAU OF STANDARDS,
WASHINGTON, D. C. 20234
National Bureau of Standards

3505. Date 710400
111500 112B00 311000 32A000 511110 512210 610000
795082 853100
Adjoint Sn Calculations of Coupled Neutron and
Gamma-Ray Transport Through Concrete Slabs
Roussin, R. W.; Schmidt, F. A. R.
NUCL. ENG. DESIGN, 15(3), 319-343
Oak Ridge National Lab.

3506. Date 721100
112760 32A000 329000 512110 522110 795046 795082
830000 853100
Boundary Dose Rates Due to Gamma Rays at Power
Reactor Sites
Wells, M. B.; Collins, D. G.; Neuendorf, W. P.
RRA-M7202
AVAILABILITY-RADIATION RESEARCH
ASSOCIATES, INC., 3550 HULEN STREET,
FORT WORTH, TEXAS 76107
Radiation Research Assoc.

3513. Date 730800
111210 32A000 329000 521130 717000 794000 795042
795082 795127 870003 870006
Analysis of a Bench-Mark Calculation of Tritium
Breeding in a Fusion Reactor Blanket: the United
States Contribution
Steiner, D.
ORNL-TM-4177
AVAILABILITY-DEP., NTIS \$4.00
Oak Ridge National Lab.

3516. Date 720200
111500 112B00 112200 32A000 329000 511110 512110
795042 795082 795127 820000 870013
Nuclear Radiation Analysis. Summary Report
Knies, R. J.; Byrn, N. R.; Smith, H. T.
NASA-CR-123636; N72-24728
AVAILABILITY-NTIS \$4.50
Teledyne Brown Eng. Co.

CATEGORY NUMBER 795082

3510 Date 730300
111110 311000 329000 731100 731200 795082 795089
795127 820000 830000 861000

Coupling of Forward and Adjoint Calculations to Solve
Three Dimensional Deep Penetration Problems
Slater, C. O.; Robinson, J. C.
BRL-CR-100; NEUT-0150-4
Tennessee Schools

3521 Date 710600
111110 32A000 421130 521230 716000 794000 795082
795089 820000 870082

Measured and Calculated Fast Neutron Spectra in a
Lead-And-Water Shielded Reactor
Lahti, G. P.; Wrights, G. N.
NASA-TM-X-67861; N71-28968
AVAILABILITY-NTIS
National Aeronautics Support Agencies

3547 Date 730600
111210 210000 32A000 521130 531000 532000 717000
795082 861000 870003 870006 870041 870082

Magnet Shield Design for Fusion Reactors
Kriese, J. T.; Steiner, D.
ORNL-TM-4256
AVAILABILITY-NTIS
Oak Ridge National Lab.

3558 Date 730300
111110 111120 111220 32A000 521130 712000 795082
861000 870082

Neutron Shielding Problems in the Shipping of High
Burnup Thermal Reactor Fuel
Bailey, H. S.; Evatt, R. N.; Gyorey, G. L.;
Ruiz, C. F.
NUCL. TECH., 17(3), 217-223
General Electric Co.

3570 Date 730600
111110 112110 311000 32A000 521130 522130 620000
795082 795126 863000 870003 870011 881000

The Development and Application of a Discrete
Ordinates Adjoint Difference Method for
One-Dimensional Shield Weight Optimization
Childs, R. L.; Engle, W. W., Jr.; Robinson, J. C.;
Mynatt, F. R.
ORNL-TM-4196
AVAILABILITY-DEP., NTIS \$5.25
Oak Ridge National Lab.

CATEGORY NUMBER 795082

3603 Date 720400
111110 220000 32A000 511110 512110 512210 760000
795082 844000 870098

Calculated Dose Rate From 252-Cf Radiotherapy Source
Stoddard, D. H.
RADIOLOGY, 103(1), 187-190
E. I. Dupont Denemours

3630 Date 730500
111110 32A000 329000 421130 422120 422140 511120
521230 795082 795089 795127 861000 870006 870011
882000

Comparison of Rod-Versus Slab-Type Core Neutron
Shields for Fmfr Applications. Final Report, April,
1973.

Weiss, M. L.; Harless, W. H.
GEAP-13822-5
AVAILABILITY-DEP., NTIS \$5.00
General Electric Co.

3726 Date 731200
111400 122310 795082 795204 830000

Radiation Transport Cross-Section Sensitivity Analysis -
a General Approach Illustrated for a Thermonuclear
Source in Air

Bartine, D. E.; Oblow, E. M.; Mynatt, F. R.
ORNL-TM-4335
AVAILABILITY-NTIS
Oak Ridge National Lab.

3778 Date 740100
111110 112110 112120 32A000 521130 522130 620000
710000 795082 853100 861000 870013 870082

Calculation of Energy Depositions and Dose Rates in
Proposed Shielding Surrounding the Tsr-II Reactor
Uchida, S.; Lewin, J.; Maerker, R. E.

ORNL-TM-4450
AVAILABILITY-NTIS \$4.00
Oak Ridge National Lab.

3783 Date 731000
717000 793000 794000 795082

Neutronic and Photonic Analyses of Simulated Fusion
Reactor Blankets Containing Thorium and Natural
Uranium

Parish, T. A.; Draper, E. L., Jr.
ESL-16; ESL-16
AVAILABILITY-ENERGY SYSTEMS
LABORATORIES, COLLEGE OF
ENGINEERING, UNIVERSITY OF TEXAS AT
AUSTIN
Texas Schools

CATEGORY NUMBER 795082

3827. Date 740100
 111110 122310 421120 421130 422120 551120 795082
 795089 795127 870011
 Final Report on a Benchmark Experiment for Neutron
 Transport in Thick Sodium
 Maerker, R. E.; Muckenthaler, F. J.; Childs, R. L.;
 Gritzner, M. L.
 ORNL-4880
 AVAILABILITY-DEP., NTIS \$5.45
 Oak Ridge National Lab.

3883. Date 730000
 111110 32A000 325000 511110 795082 861000 870011
 Comparison of Transport and Diffusion Theory for Fast
 Reactor Shielding Calculations
 Sahin, S.
 ATOMKERNENERGIE, 22(1), 24-25
 Oak Ridge National Lab.

3960. Date 721000
 32A000 329000 330000 795082
 Comparison of New Transport Computational Methods
 for Reactor Shield Design
 Ganapol, B.; Herrnberger, V.; Paratte, J. M.
 CONF-721018, PP.1444-1458
 AVAILABILITY-OECD
 Switzerland

3980. Date 710600
 111110 112110 32A000 511110 511120 512110 512120
 512210 512220 710000 795082 795089
 Comparison of Experimentally Measured and Calculated
 Radiation Environment Internal to the Pax R-1
 Reactor
 Hill, D. J.; Rankin, W. D.
 NUCL. TECH., 11(2), 175-184
 Westinghouse

4118. Date 740100
 717000 795082 870023
 The Nuclear Performance of Vanadium As a Structural
 Material in Fusion Reactor Blankets
 Steiner, D.
 NUCL. FUSION, 14(1), 33-44; ORNL-TM-4353
 Oak Ridge National Lab.

4120. Date 740300
 111210 122310 32A000 521130 717000 795082 795204
 870003 870006 870041
 Cross-Section Sensitivity of Breeding Ratio in a
 Fusion-Reactor Blanket
 Bartine, D. E.; Alsmiller, R. G., Jr.; Oblo, E. M.;
 Mynatt, F. R.
 NUCL. SCI. ENG., 53(3), 304-318; ORNL-TM-4208

CATEGORY NUMBER 795082

Oak Ridge National Lab.

4133. Date 731100
 111110 112110 32A000 511110 512110 512210 793000
 795082 841000 870098 882000 883000
 252-Cf Shielding With Water-Extended Polyester
 Stoddard, D. H.
 DP-1339
 AVAILABILITY-DEP., NTIS \$4.00
 E. I. Dupont Denemours

4164. Date 710600
 010000 111110 32A000 511110 511120 512110 512120
 632110 712000 793000 795082
 Recent Developments in the Shielding of Neutron
 Sources
 Claiborne, H. C.
 ORNL-RSIC-32; CONF-710402-VOL.1, I-65-68
 AVAILABILITY-DEP., NTIS
 Oak Ridge National Lab.

4182. Date 740800
 111210 32A000 521130 522130 531000 532000 551110
 552210 620000 717000 795082 795089 795126 810000
 Shielding Design Calculations for Ormak - F/bx
 Gabriel, T. A.; Santoro, R. T.; Engle, W. W., Jr.
 ORNL-TM-4619
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4227. Date 731000
 111110 122110 32A000 325000 521130 795082 870006
 870092
 Effects of Different Nuclear Computer Codes and Data
 Libraries on The Evaluation of the Critical
 Htr-Experiment Cesar II
 Scherer, W.
 STI/PUB-343, V2, PP.135-145;
 CONF-730302, V2, PP.135-145; IAEA-SM-170/79
 AVAILABILITY-IAEA
 Germany (West)

4253. Date 711021
 111110 32A000 421130 421140 521130 551110 710000
 713000 795082 795089 810000 861000 870011
 Ftf Related Studies in the Ornl-Lmfbr Shielding
 Program
 Mynatt, F. R.; Clifford, C. E. (Usa);
 Muckenthaler, F. J.; Maerker, R. E.;
 Gritzner, M. L.; Williams, L. R.; Rathbun, J. L.
 ANS-SD-13, ARTICLE 3
 AVAILABILITY-ANS
 Oak Ridge National Lab.

CATEGORY NUMBER 795082

4263. Date 710000
111130 111400 32A000 510000 511110 795082 795089
830000

Effects of Source Asymmetry on Radiation Transport in
Infinite Air

Mcgregor, B. J.

ORNL-RSIC-33, PP.341-359; CONF-711125-5

AVAILABILITY-DEP., NTIS

Oak Ridge National Lab.

4363. Date 740400
111210 32A000 511110 717000 795082 870006
Calculation of Fusion Spectrum in Graphite
Freim, J. B.; Draper, E. L., Jr.
CONF-721111, PP.944-963
AVAILABILITY-NTIS
Pacific Northwest Lab

4391. Date 740000
111110 111210 521130 710000 717000 795082 810000
870092 870094

A Modular Fission-Fusion Hybrid Blanket

Hansborough, L. D.; Werner, R. W.

CONF-740402-P1, 211-222

AVAILABILITY-NTIS

Lawrence Livermore Lab

4394. Date 740000
111110 111210 521130 522130 710000 717000 793000
794000 795082 810000 870092 870094

Neutronic and Photonic Analyses of Fusion Reactor
Blankets Containing Natural Uranium

Parish, T. A.; Draper, E. L., Jr.

CONF-740402-P1, 256-270

AVAILABILITY-NTIS

Texas Schools

4406. Date 740000
111210 531000 532000 793000 794000 795082 810000

On the Thermal State of the Fusion Blanket

Nishikawa, M.; Ioki, K.; Naito, T.; Asami, N.

CONF-740402-P1, 634-641

AVAILABILITY-NTIS

Japan

4411. Date 740700
020000 111110 32A000 329000 421130 422140 511110
511120 512210 713000 793000 795017 795046 795082
795089 795127 842000 870011

Shielding Benchmark Problems

Simmons, G. L.(Ed.)

ORNL-RSIC-25(SUPPL.2); ANS-SD-9(SUPPL.2)

AVAILABILITY-DEP., NTIS \$5.45

Oak Ridge National Lab.

CATEGORY NUMBER 795082

4418. Date 741100
111210 32A000 521130 717000 793000 794000 795082
810000

A Comparative Study of Several Fusion Reactor Blanket
Designs

Abdou, M. A.; Conn, R. W.

NUCL. SCI. ENG., 55(3), 256-266

Wisconsin Schools

4427. Date 741000
111210 122310 32A000 521130 717000 795082 810000
Comparison of the Cross-Section Sensitivity of the
Tritium Breeding Ratio In Various Fusion-Reactor
Blankets

Alsmiller, R. G., Jr.; Santoro, R. T.; Barish, J.;
Gabriel, T. A.

ORNL-TM-4696

AVAILABILITY-DEP., NTIS \$4.75

Oak Ridge National Lab.

4436. Date 740000
111210 122310 521130 717000 795082 810000 870003
Tritium Breeding in Ceramic Lithium-Compound
Blanket

Seki, Y.; Sako, K.; Tanaka, K.; Hiraoka, T.

CONF-740402-P2, 77-86

AVAILABILITY-NTIS

Japan

4437. Date 740000
111210 220000 521130 522130 717000 793000 794000
795082 810000 870003

Neutronics and Photonics Study of Fusion Reactor
Blankets

Abdou, M. A.; Maynard, C. W.

CONF-740402-P2, 87-100

AVAILABILITY-NTIS

Wisconsin Schools

4441. Date 740000
111210 122310 311000 32A000 521130 717000 793000
794000 795082 795248 810000

Tritium Breeding Potential of the Princeton Reference
Fusion Power Plant

Greenspan, E.; Price, W. G., Jr.

CONF-740402-P2, 145-154

AVAILABILITY-NTIS

New Jersey Schools

CATEGORY NUMBER 795082

4499. Date 741200
111500 122110 310000 32A000 511110 795082 861000
Application of a Discrete-Energy, Discrete-Ordinates
Technique to the Study Of Neutron Transport in
Iron

Ching, J.; Goldstein, H.; Oblow, E. M.
ORNL-TM-4235
AVAILABILITY-DEP., NTIS \$5.45
Oak Ridge National Lab.

4503. Date 740920
111210 112930 222000 32A000 521130 522130 717000
795082 810000

Environmental Assessment for Fusion Reactor Utilizing
Brookhaven Minimum Activity Blanket
Anderson, R. V.
AI-AEC-13136
AVAILABILITY-DEP., NTIS \$5.45
Atomics International

4512. Date 740828
111210 32A000 329000 531000 532000 710000 717000
795082 795127 810000

Conceptual Design of a Mirror Reactor for a Fusion
Engineering Research Facility (Fert)

Batzer, T. H.; Burleigh, R. C.; Carlson, G. A.;
Dexter, W. L.; Hamilton, G. W.; Harvey, A. R.;
Hickman, R. G.; Hoffman, M. A.; Hooper, E. B.;
Moir, R. W.; Silver, W. J.; Smith, B. H.;
Taylor, C. E.; Werner, R. W.; Wilcox, T. P.

UCRL-51617
AVAILABILITY-DEP., NTIS \$7.60
Lawrence Livermore Lab

4545. Date 721100
111210 511110 717000 795082 870006

Neutronic Calculations in a Simulated Fusion Reactor
Blanket

Barbee, S. G.
NP-19709; NP-19709
AVAILABILITY-NTIS
Texas Schools

4599. Date 740900
010000 795081 795082 795089 795121 795127 795132
795142 795144

Pilot Study on Shielding Programs

Devillers, C.; Ponti, C.; Rexer, G.; Hehn, G.;
Amin, E.; Sartori, E.; Pfister, G.; Burgart, C. E.;
Bernnat, W.; Hofmann, K.; Wahsweiler, H. G.;
Weicht, U.; Travaglini, N.; Nicks, R.; Canali, U.;
Bignami, A.; Vogt, H. G.

NEA-CPL NEWSLETTER NO.17
AVAILABILITY-NEA COMPUTER PROGRAM

CATEGORY NUMBER 795082

LIBRARY, CASELLA POSTALE N.15, 21027 -
ISPRA (VARESE), ITALY
Nuclear Energy Agency

4600. Date 730000
111110 112110 112500 32A000 521230 532000 713000
795082 861000 870011

Use of Integral Experiments to Improve Neutron
Propagation and Gamma Heating Calculations
Oceriaes, Y.; Caumette, P.; Devillers, C.; Bussac, J.
CONF-731015, PP.486-505
AVAILABILITY-IAEA
France

4623. Date 750500
111210 32A000 511110 717000 793000 795082

On the Matching of Fusion Breeders to Heavy-Water
Reactors

Lavergne, G.; Robinson, J. E.; Martel, J. G.
NUCL. TECH., 26(1), 12-22
Canada

4630. Date 740200
111110 112110 112120 32A000 423250 532000 551110
552110 552210 713000 795082 810000

Analyses and Measurements of Gamma-Ray Heating in
the Demonstration Benchmark Plutonium-Fueled
Critical Assembly

Simons, G. G.; Olson, A. P.
NUCL. SCI. ENG., 53(2), 176-196
Argonne National Lab.

4638. Date 750400
111210 32A000 531000 532000 717000 793000 795082
810000

Calculation Methods for Nuclear Heating - Part II:
Applications To Fusion-Reactor Blankets and
Shields

Abdou, M. A.; Maynard, C. W.
NUCL. SCI. ENG., 56(4), 381-398
Wisconsin Schools

4640. Date 750400
111110 122310 422110 511120 795082 861000

A Benchmark Experiment of Neutron Propagation in
Iron Used to Test Endf/b Cross-Section Data. (Tech.
Note)

Martini, M.; Palmiotti, G.; Salvatores, M.
NUCL. SCI. ENG., 56(4), 427-431
Italy

CATEGORY NUMBER 795082

4830. Date 750800
111500 32A000 521230 717000 793000 794000 795082
861000 870003 870006

Uranium-238 to Uranium-235 Fission-Ratio Distribution
in Spherical Lithium-Metal Assemblies With and
Without a Graphite Reflector

Maekawa, H.; Seki, Y.; Hiraoka, T.; Moriyama, M.
NUCL. SCI. ENG., 57(4), 335-340
Japan

4838. Date 751000
111110 330000 511110 551110 795082 795222

A Numerical Method for Solving Integral Equations of
Neutron Transport - II.

Loyalka, S. K.; Tsai, R. W.
NUCL. SCI. ENG., 58(2), 193-202
Missouri Schools

4852. Date 741200
111210 310000 32A000 717000 795082

Calculation of the Transport of Neutral Atoms in Highly
Ionized Plasmas Using Neutron Transport Methods
Greenspan, E.

NUCL. FUSION, 14(6), 771-778
New Jersey Schools

4878. Date 740800
111210 32A000 522130 531000 532000 710000 717000
795082 810000

Fusion Power Plant
Mills, R. G. (Ed.)
MATT-1050

AVAILABILITY-NTIS \$32.23
New Jersey Schools

4896. Date 760300
111210 122310 210000 32A000 521130 717000 793000
794000 795082 861000 870006

Uncertainties in Calculated Heating and Radiation
Damage in the Toroidal Field Coil of a Tokamak
Experimental Power Reactor Due to Neutron
Cross-Section Errors

Alsmiller, R. G., Jr.; Barish, J.; Weisbin, C. R.
ORNL/TM-5198

AVAILABILITY-NTIS \$6.00
Oak Ridge National Lab.

4910. Date 751000
111110 111210 32A000 421130 511120 795082 842000
861000 870004 870041

Integral Test of Cross Sections Using Neutron Leakage
Spectra From Spheres Of Iron, Niobium, Beryllium,
and Polyethylene

Johnson, R. H.; Dorning, J. J.; Wehring, B. W.

CATEGORY NUMBER 795082

NBS SPEC.PUB.-425, PP.169-172;
CONF-750303, PP.169-172

AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
SOLD IN SETS ONLY
Illinois Schools

4912. Date 751000
111220 122100 421130 511120 793000 795082 861000

Assessment of Neutron Group Constants for Iron and
Stainless Steel Through Measurements and Analyses
of Energy and Space Distributions of Neutrons in
Test Assemblies

Kimura, I.; Kobayashi, K.; Hayashi, S. A.;
Yamamoto, S.; Nishihara, H.; Ando, M.;
Kanazawa, S.; Nakagawa, M.

NBS SPEC.PUB.-425, PP.184-188;
CONF-750303, PP.184-188

AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
SOLD IN SETS ONLY
Japan

4946. Date 750312
111110 122110 122210 511110 512210 532000 719B00
794000 795082 853100 861000 870006

Neutron-Coupled Gamma-Ray Cross-Section
Requirements for Gas-Cooled Fast Breeder Reactors
Nagel, M.; Cerbone, R. J.

GA-A-13329; NBS SPEC.PUB.-425, PP.444-446;
CONF-750303-66

AVAILABILITY-DEP., NTIS \$4.00
Gulf General Atomic

CATEGORY NUMBER 795087

RSIC-CCC-87, CODE LGH

4806. Date 750600
111210 210000 32A000 521130 522130 717000 793000
794000 795087

New Concepts for Controlled Fusion Reactor Blanket
Design

Conn, R. W.; Kulcinski, G. L.; Avci, H.;
El-Maghrabi, M.

NUCL. TECH., 26(2), 125-145
Wisconsin Schools

CATEGORY NUMBER 795089

RSIC-CCC-89, CODE DOT

3519. Date 730300
111110 311000 329000 731100 731200 795082 795089
795127 820000 830000 861000

Coupling of Forward and Adjoint Calculations to Solve
Three Dimensional Deep Penetration Problems

Slater, C. O.; Robinson, J. C.

CATEGORY NUMBER 795089

BRL-CR-100; NEUT-0150-4
Tennessee Schools

3521..... Date 710600
111110 32A000 421130 521230 716000 794000 795082
795089 820000 870082

Measured and Calculated Fast Neutron Spectra in a
Lead-And-Water Shielded Reactor

Lahti, G. P.; Wrights, G. N.
NASA-TM-X-67861; N71-28968

AVAILABILITY-NTIS

National Aeronautics Support Agencies

3538..... Date 730200
111110 32A000 551110 795089

New Spatial Differencing for the Neutron Transport
Equation

Arkuszewski, J. J.

EIR-232

AVAILABILITY-EIDGENOESSISCHES INSTITUT
FUER REAKTORFORSCHUNG,
WUERENLINGEN, SWITZERLAND

Switzerland

3630..... Date 730500
111110 32A000 329000 421130 422120 422140 511120
521230 795082 795089 795127 861000 870006 870011
882000

Comparison of Rod-Versus Slab-Type Core Neutron
Shields for Fmfr Applications. Final Report, April,
1973.

Weiss, M. L.; Harless, W. H.

GEAP-13822-5

AVAILABILITY-DEP., NTIS \$5.00

General Electric Co.

3635..... Date 711000
32A000 551110 552210 716000 795089 863000 870003
870092 881000

Effect of Angular Quadrature on Results of
Two-Dimensional Space Power Reactor Shield
Calculations

Connolly, D. J.; Lahti, G. P.

NASA-TM-X-67937; N71-37066

AVAILABILITY-NTIS

National Aeronautics Support Agencies

3696..... Date 731000
111110 421130 521130 521230 795089 870092 881000

Measured and Calculated Fast Neutron Spectra in a
Depleted Uranium And Lithium Hydride Shielded
Reactor

Lahti, G. P.; Mueller, R. A.

NASA-TM-X 2906

CATEGORY NUMBER 795089

AVAILABILITY-NTIS

National Aeronautics Support Agencies

3827..... Date 740100
111110 122310 421120 421130 422120 551120 795082
795089 795127 870011

Final Report on a Benchmark Experiment for Neutron
Transport in Thick Sodium

Maerker, R. E.; Muckenthaler, F. J.; Childs, R. L.;
Gritzner, M. L.

ORNL-4880

AVAILABILITY-DEP., NTIS \$5.45

Oak Ridge National Lab.

3927..... Date 721000
32A000 721100 722100 795089

Streaming of Neutrons and Gamma-Rays Along Reactor
Coolant Pipes

Amin, E.; Hehn, G.; Zumach, W.

CONF-721018-26; CONF-721018, PP.717-730

AVAILABILITY-NTIS

Germany (West)

3959..... Date 721000
721100 795081 795089 795127 795144 870011

Intercomparison of Different Methods to Calculate
Neutron Transport Along Sodium Ducts

Amin, E.; Dietrich, O.; Futtermenger, W.;
Gronefeld, G.; Hehn, G.; Herrnberger, V.;

Schmidt, F.; Vogt, H.; Vossebrecker, H.

CONF-721018, PP.1427-1443

AVAILABILITY-OECD

Germany (West)

3980..... Date 710600
111110 112110 32A000 511110 511120 512110 512120
512210 512220 710000 795082 795089

Comparison of Experimentally Measured and Calculated
Radiation Environment Internal to the Pax R-1
Reactor

Hill, D. J.; Rankin, W. D.

NUCL. TECH., 11(2), 175-184

Westinghouse

4182..... Date 740800
111210 32A000 521130 522130 531000 532000 551110
552210 620000 717000 795082 795089 795126 810000

Shielding Design Calculations for Ormak - F/bx

Gabriel, T. A.; Santoro, R. T.; Engle, W. W., Jr.

ORNL-TM-4619

AVAILABILITY-NTIS

Oak Ridge National Lab.

CATEGORY NUMBER 795089

4215..... Date 690800
 111110 112400 112500 112600 32A000 511110 512110
 512210 522130 552110 552220 716000 795089 810000
 Some Characteristics of Secondary Gamma Ray
 Transport in Asymmetric Snap Shields
 Mynatt, F. R.; Williams, L. R.
 ANS-SD-7, PP.113-135; CONF-671140, PP.113-135
 AVAILABILITY-DEP., NTIS \$3.00
 Oak Ridge National Lab.

4253..... Date 711021
 111110 32A000 421130 421140 521130 551110 710000
 713000 795082 795089 810000 861000 870011
 Fftf Related Studies in the Ornl-Lmfbr Shielding
 Program
 Mynatt, F. R.; Clifford, C. E. (Usa);
 Muckenthaler, F. J.; Maerker, R. E.;
 Gritzner, M. L.; Williams, L. R.; Rathbun, J. L.
 ANS-SD-13, ARTICLE 3
 AVAILABILITY-ANS
 Oak Ridge National Lab.

4263..... Date 710000
 111130 111400 32A000 510000 511110 795082 795089
 830000
 Effects of Source Asymmetry on Radiation Transport in
 Infinite Air
 Mcgregor, B. J.
 ORNL-RSIC-33, PP.341-359; CONF-711125-5
 AVAILABILITY-DEP., NTIS
 Oak Ridge National Lab.

4353..... Date 721200
 111110 32A000 329000 422110 551110 770000 795089
 795127 870013 870098
 The Neutron Environment of a Cf-252 Facility
 Wyatt, R. M.
 LSU THESIS (MASTERS)
 AVAILABILITY-LOUISIANA STATE UNIV.,
 BATON ROUGE, LA. 70803
 Louisiana Schools

4411..... Date 740700
 020000 111110 32A000 329000 421130 422140 511110
 511120 512210 713000 793000 795017 795046 795082
 795089 795127 842000 870011
 Shielding Benchmark Problems
 Simmons, G. L.(Ed.)
 ORNL-RSIC-25(SUPPL.2); ANS-SD-9(SUPPL.2)
 AVAILABILITY-DEP., NTIS \$5.45
 Oak Ridge National Lab.

CATEGORY NUMBER 795089

4429..... Date 740300
 111110 551110 795089 795123 810000
 Calculation of the Hprr Neutron Spectrum for Simulated
 Nuclear Accident Conditions
 Poston, J. W.; Knight, J. R.; Whitesides, G. E.
 HEALTH PHYS., 26(3), 217-221
 Oak Ridge National Lab.

4599..... Date 740900
 010000 795081 795082 795089 795121 795127 795132
 795142 795144
 Pilot Study on Shielding Programs
 Devillers, C.; Ponti, C.; Rexer, G.; Hehn, G.;
 Amin, E.; Sartori, E.; Pfister, G.; Burgart, C. E.;
 Bernnat, W.; Hofmann, K.; Wahsweiler, H. G.;
 Weicht, U.; Travaglini, N.; Nicks, R.; Canali, U.;
 Bignami, A.; Vogt, H. G.
 NEA-CPL NEWSLETTER NO.17
 AVAILABILITY-NEA COMPUTER PROGRAM
 LIBRARY, CASELLA POSTALE N.15, 21027 -
 ISPRA (VARESE), ITALY
 Nuclear Energy Agency

CATEGORY NUMBER 795092
RSIC-CCC-92, CODE SAP

4082..... Date 710000
 112120 795092 795094
 Beta and Gamma Activity of One Fission of 235-U and
 239-Pu
 De Turreil, R.; Costa, L.
 ORNL-TR-4082; J. NUCL. ENERGY, 25, 285-295
 AVAILABILITY-DEP., NTIS \$3.00
 France

4149..... Date 730400
 111110 122110 794000 795092 795094
 A Comparison of the Group Constants Generated By the
 Endf/b Processing Codes Etox and Supertog
 Wright, R. Q.; Schenter, R. E.; Jenkins, J. D.
 ORNL-TM-4041; ENDF-184
 AVAILABILITY-NTIS \$3.00
 Oak Ridge National Lab.

4169..... Date 740200
 111110 112120 121100 122100 795092 795094
 Status of Fission Product Yield Data for Thermal
 Reactors
 Walker, W. H.
 AECL-4704
 AVAILABILITY-CHALK RIVER NUCLEAR LABS,
 CHALK RIVER, ONT.
 Canada

CATEGORY NUMBER 795092

4315..... Date 720500
 111110 122310 795092 795094
 Effect of Uncertainty in Nuclear Constants on Nuclear
 Characteristics Sensitivity Analysis of Nuclear
 Constants for the Core of Monju Reactor
 Yamamoto, H.; Maki, K.; Zukeran, A.
 JAPFNR-78; PNC-SJ-202-72-5
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Japan

CATEGORY NUMBER 795094
 RSIC-CCC-94, CODE KAP-VI

4082..... Date 710000
 112120 795092 795094
 Beta and Gamma Activity of One Fission of 235-U and
 239-Pu
 De Tourreil, R.; Costa, L.
 ORNL-TR-4082; J. NUCL. ENERGY, 25, 285-295
 AVAILABILITY-DEP., NTIS \$3.00
 France

4149..... Date 730400
 111110 122110 794000 795092 795094
 A Comparison of the Group Constants Generated By the
 Endf/b Processing Codes Etox and Supertog
 Wright, R. Q.; Schenter, R. E.; Jenkins, J. D.
 ORNL-TM-4041; ENDF-184
 AVAILABILITY-NTIS \$3.00
 Oak Ridge National Lab.

4169..... Date 740200
 111110 112120 121100 122100 795092 795094
 Status of Fission Product Yield Data for Thermal
 Reactors
 Walker, W. H.
 AECL-4704
 AVAILABILITY-CHALK RIVER NUCLEAR LABS,
 CHALK RIVER, ONT.
 Canada

4315..... Date 720500
 111110 122310 795092 795094
 Effect of Uncertainty in Nuclear Constants on Nuclear
 Characteristics Sensitivity Analysis of Nuclear
 Constants for the Core of Monju Reactor
 Yamamoto, H.; Maki, K.; Zukeran, A.
 JAPFNR-78; PNC-SJ-202-72-5
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Japan

CATEGORY NUMBER 795108
 RSIC-CCC-108, CODE SPECTRA

3794..... Date 7309
 111110 111400 421140 430000 794000 795108 795112
 Evaluation of Operational Characteristics of Select
 Unfolding Codes
 Kilminster, D. T.
 BRL-R-1675
 AVAILABILITY-NTIS
 Army Installations

4056..... Date 711000
 111110 421150 430000 795108 795112
 Neutron Energy Spectrum Unfolding Method
 Krcevinac, S. B.
 IBK-1050; IBK-1050
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 England

4578..... Date 720000
 111110 421140 430000 511120 713000 795042 795108
 810000
 Measured and Calculated Neutron Spectra in the
 Experimental Cavity of The Acpr
 Croucher, D. W.; Lucoff, D. M.; Schmidt, T. R.;
 Reil, K. O.; White, J. R.
 SC-DC-721414; CONF-721109-3
 AVAILABILITY-DEP., NTIS
 Sandia Corporation

CATEGORY NUMBER 795112
 RSIC-CCC-112, CODE SAND

3732..... Date 730700
 111110 421140 795112
 Ebr-II Dosimetry Test (Reactor Runs 50g and 50h)
 Jackson, J. L.; Mcelroy, W. N.; Ulseth, J. A.;
 Kellogg, L. S.
 HEDL-TME-73-62
 AVAILABILITY-NTIS \$5.45
 Westinghouse

3794..... Date 730900
 111110 111400 421140 430000 794000 795108 795112
 Evaluation of Operational Characteristics of Selected
 Unfolding Codes
 Kilminster, D. T.
 BRL-R-1675
 AVAILABILITY-NTIS
 Army Installations

CATEGORY NUMBER 795112

4051. Date 720000
 111110 421140 430000 521230 713000 795112
 Ebr-II Dosimetry Tests
 Jackson, J. L.; Kellogg, L. S.; Mcelroy, W. N.;
 Ulseth, J. A.
 HEDL-SA-548; CONF-730910-2
 AVAILABILITY-DEP., NTIS \$3.00
 Hanford Eng Dev Lab.

4052. Date 730000
 111110 410000 421140 430000 713000 795112
 Fast Reactor Flux-Spectral Characterization
 Mcelroy, W. N.
 HEDL-SA-556; CONF-730910-3
 AVAILABILITY-DEP., NTIS \$3.25
 Hanford Eng Dev Lab.

4056. Date 711000
 111110 421150 430000 795108 795112
 Neutron Energy Spectrum Unfolding Method
 Krcevinac, S. B.
 IBK-1050; IBK-1050
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 England

4939. Date 750200
 111110 421140 430000 795112
 Endf/b Dosimetry Cross Section File Benchmark
 Neutron Flux-Spectral Uncertainties
 Mcelroy, W. N.
 HEDL-SA-774; NBS SPEC.PUB.-425, PP.189-192;
 CONF-750303-65
 AVAILABILITY-NTIS \$4.00
 Hanford Eng Dev Lab.

CATEGORY NUMBER 795114
RSIC-CCC-114, CODE SAM-C

3715. Date 730100
 112B00 220000 795114
 Gamma Ray Dose in a Cylindrical Phantom
 Enz, R. W.; Murphy, H. M.
 HEALTH PHYS., 24(1), 53-58
 Air Corps Installations

CATEGORY NUMBER 795115
RSIC-CCC-115, CODE GADJET

3768. Date 730901
 112720 112920 631000 632120 731200 795115
 Validity of Scale-Modeling for Gamma-Ray Attenuation
 Verser, F. A.; Donnert, H. J.
 KEES-SR-113; AD-766140-8
 AVAILABILITY-DEPT. OF NUCL. ENG., KANSAS

CATEGORY NUMBER 795115

STATE UNIVERSITY, MANHATTAN, KANSAS
 66506
 Kansas Schools

CATEGORY NUMBER 795121
RSIC-CCC-121, CODE SABINE

3928. Date 721000
 32F000 719B00 795121
 Heat Generation in Shield Layers of a High-Temperature
 Reactor
 Hofmann, K.; Wahsweiler, H. G.; Weicht, U.
 CONF-721018, PP.731-740
 AVAILABILITY-OECD
 Germany (West)

3943. Date 721000
 32F000 512210 521130 795022 795121 883000
 Application of Removal Diffusion Methods to Specific
 Reactor Shielding Problems
 Herrnberger, V.; Tai, A.S.; Zuber, J. F.
 CONF-721018, PP.1009-1025
 AVAILABILITY-OECD
 Switzerland

4278. Date 700300
 010000 32A000 32E000 32F000 326000 329000 511110
 620000 710000 722100 795022 795081 795121 820000
 861000 870092
 Key Problems in Radiation Shielding in the Federal
 Republic of Germany
 Bunemann, D.
 ANS-SD-8, PP.82-108; AD-712532, PP.82-108
 AVAILABILITY-NTIS
 Germany (West)

4280. Date 700300
 010000 32A000 32F000 511110 521130 632120 721100
 795040 795042 795066 795072 795121 820000 853100
 861000 870006
 Today's Approaches to Reactor Shielding Problems
 Nicks, R.; Penkuhn, H.; Ponti, C.
 ANS-SD-8, PP.113-138; AD-712532, PP.113-138
 AVAILABILITY-NTIS
 Italy

4449. Date 740000
 111210 32F000 511120 710000 717000 793000 794000
 795121 810000
 Nuclear Blanket and Shielding Problems in
 Demonstration Fusion Reactors
 Casini, G.; Cuniberti, R.
 CONF-740402-P2, 238-249
 AVAILABILITY-NTIS

CATEGORY NUMBER 795121

Italy

4542. Date 721000
 111110 421140 511120 521230 795048 795121 820000
 883000
 Deep Penetration of Neutrons in Hydrogenous Shields
 Chinaglia, B.; Bosio, G.
 EUR-4743
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Italy

4599. Date 740900
 010000 795081 795082 795089 795121 795127 795132
 795142 795144
 Pilot Study on Shielding Programs
 Devillers, C.; Ponti, C.; Rexer, G.; Hehn, G.;
 Amin, E.; Sartori, E.; Pfister, G.; Burgart, C. E.;
 Bernnat, W.; Hofmann, K.; Wahsweiler, H. G.;
 Weicht, U.; Travaglini, N.; Nicks, R.; Canali, U.;
 Bignami, A.; Vogt, H. G.
 NEA-CPL NEWSLETTER NO.17
 AVAILABILITY-NEA COMPUTER PROGRAM
 LIBRARY, CASELLA POSTALE N.15, 21027 -
 ISPRA (VARESE), ITALY
 Nuclear Energy Agency

CATEGORY NUMBER 795123
 RSIC-CCC-123, CODE XSDRN

3531. Date 730600
 111210 122110 32A000 717000 795123 870003
 Outline of Direct Methods Used in Computing the Cross
 Section Sensitivity Of Neutronic Parameters in a
 Fusion Reactor
 Tobias, M. L.; Steiner, D.
 ORNL-TM-4184
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

3537. Date 730600
 111210 122310 32A000 521130 717000 795123 870003
 870006 870041
 Cross-Section Sensitivity of Tritium Breeding in a Fusion
 Reactor Blanket: Effects of Uncertainties in Cross
 Sections of 6-Li, 7-Li, and 93-Nb
 Tobias, M.; Steiner, D.
 ORNL-TM-4200
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

CATEGORY NUMBER 795123

4429. Date 740300
 111110 551110 795089 795123 810000
 Calculation of the Hprr Neutron Spectrum for Simulated
 Nuclear Accident Conditions
 Poston, J. W.; Knight, J. R.; Whitesides, G. E.
 HEALTH PHYS., 26(3), 217-221
 Oak Ridge National Lab.

4445. Date 730000
 111210 122310 717000 795123 870003
 Cross-Section Sensitivity of Tritium Breeding in Fusion
 Reactor Blankets
 Tobias, M.; Steiner, D.
 CONF-740402-3; CONF-740402-P2, 185-192
 AVAILABILITY-DEP., NTIS \$3.00
 Oak Ridge National Lab.

CATEGORY NUMBER 795125
 RSIC-CCC-125, CODE RSAC

4072. Date 720300
 111110 32A000 32F000 551110 552210 713000 795125
 810000
 Evaluation of the Two-Dimensional Shielding Code for a
 Fast Reactor Shield Design and Its Application
 Tanaka, Y.; Suzuki, I.; Otani, M.
 JAPFNR-68; PNC-J-213-72-3-1
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Japan

CATEGORY NUMBER 795126
 RSIC-CCC-126, CODE ASOP

3570. Date 730600
 111110 112110 311000 32A000 521130 522130 620000
 795082 795126 863000 870003 870011 881000
 The Development and Application of a Discrete
 Ordinates Adjoint Difference Method for
 One-Dimensional Shield Weight Optimization
 Childs, R. L.; Engle, W. W., Jr.; Robinson, J. C.;
 Mynatt, F. R.
 ORNL-TM-4196
 AVAILABILITY-DEP., NTIS \$5.25
 Oak Ridge National Lab.

4182. Date 740800
 111210 32A000 521130 522130 531000 532000 551110
 552210 620000 717000 795082 795089 795126 810000
 Shielding Design Calculations for Ormak - F/bx
 Gabriel, T. A.; Santoro, R. T.; Engle, W. W., Jr.
 ORNL-TM-4619
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

CATEGORY NUMBER 795127
RSIC-CCC-127, CODE MORSE

3513..... Date 730800
 111210 32A000 329000 521130 717000 794000 795042
 795082 795127 870003 870006
 Analysis of a Bench-Mark Calculation of Tritium
 Breeding in a Fusion Reactor Blanket: the United
 States Contribution
 Steiner, D.
 ORNL-TM-4177
 AVAILABILITY-DEP., NTIS \$4.00
 Oak Ridge National Lab.

3516..... Date 720200
 111500 112B00 112200 32A000 329000 511110 512110
 795042 795082 795127 820000 870013
 Nuclear Radiation Analysis. Summary Report
 Knies, R. J.; Byrn, N. R.; Smith, H. T.
 NASA-CR-123636; N72-24728
 AVAILABILITY-NTIS \$4.50
 Teledyne Brown Eng. Co.

3519..... Date 730300
 111110 311000 329000 731100 731200 795082 795089
 795127 820000 830000 861000
 Coupling of Forward and Adjoint Calculations to Solve
 Three Dimensional Deep Penetration Problems
 Slater, C. O.; Robinson, J. C.
 BRL-CR-100; NEUT-0150-4
 Tennessee Schools

3630..... Date 730500
 111110 32A000 329000 421130 422120 422140 511120
 521230 795082 795089 795127 861000 870006 870011
 882000
 Comparison of Rod-Versus Slab-Type Core Neutron
 Shields for Fmfr Applications. Final Report, April,
 1973.
 Weiss, M. L.; Harless, W. H.
 GEAP-13822-5
 AVAILABILITY-DEP., NTIS \$5.00
 General Electric Co.

3792..... Date 731200
 112130 329000 510000 512110 795127 830000
 Effects of Air-Density Perturbations on the Transport of
 Gamma Rays Produced By Point Gamma-Ray
 Sources
 McGregor, B. J.; Mynatt, F. R.
 ORNL-TM-4266
 AVAILABILITY-DEP., NTIS \$5.25
 Oak Ridge National Lab.

CATEGORY NUMBER 795127

3827..... Date 740100
 111110 122310 421120 421130 422120 551120 795082
 795089 795127 870011
 Final Report on a Benchmark Experiment for Neutron
 Transport in Thick Sodium
 Maerker, R. E.; Muckenthaler, F. J.; Childs, R. L.;
 Gritzner, M. L.
 ORNL-4880
 AVAILABILITY-DEP., NTIS \$5.45
 Oak Ridge National Lab.

3959..... Date 721000
 721100 795081 795089 795127 795144 870011
 Intercomparison of Different Methods to Calculate
 Neutron Transport Along Sodium Ducts
 Amin, E.; Diettrich, O.; Futtermenger, W.;
 Gronefeld, G.; Hehn, G.; Herrnberger, V.;
 Schmidt, F.; Vogt, H.; Vossebrecker, H.
 CONF-721018, PP.1427-1443
 AVAILABILITY-OECD
 Germany (West)

4013..... Date 700700
 112400 329000 512210 795127 830000
 Sensitivity of Secondary Gamma-Ray Dose to Angular
 Distribution of Gamma Rays From Neutron
 Inelastic Scattering
 Straker, E. A.
 NUCL. SCI. ENG., 41(1), 147-148
 Oak Ridge National Lab.

4353..... Date 721200
 111110 32A000 329000 422110 551110 770000 795089
 795127 870013 870098
 The Neutron Environment of a Cf-252 Facility
 Wyatt, R. M.
 LSU THESIS (MASTERS)
 AVAILABILITY-LOUISIANA STATE UNIV.,
 BATON ROUGE, LA. 70803
 Louisiana Schools

4411..... Date 740700
 020000 111110 32A000 329000 421130 422140 511110
 511120 512210 713000 793000 795017 795046 795082
 795089 795127 842000 870011
 Shielding Benchmark Problems
 Simmons, G. L.(Ed.)
 ORNL-RSIC-25(SUPPL.2); ANS-SD-9(SUPPL.2)
 AVAILABILITY-DEP., NTIS \$5.45
 Oak Ridge National Lab.

CATEGORY NUMBER 795127

4512..... Date 740828
111210 32A000 329000 531000 532000 710000 717000
795082 795127 810000

Conceptual Design of a Mirror Reactor for a Fusion
Engineering Research Facility (Ferf)

Batzer, T. H.; Burleigh, R. C.; Carlson, G. A.;
Dexter, W. L.; Hamilton, G. W.; Harvey, A. R.;
Hickman, R. G.; Hoffman, M. A.; Hooper, E. B.;
Moir, R. W.; Silver, W. J.; Smith, B. H.;
Taylor, C. E.; Werner, R. W.; Wilcox, T. P.

UCRL-51617

AVAILABILITY-DEP., NTIS \$7.60

Lawrence Livermore Lab

4599..... Date 740900
010000 795081 795082 795089 795121 795127 795132
795142 795144

Pilot Study on Shielding Programs

Devillers, C.; Ponti, C.; Rexer, G.; Hehn, G.;
Amin, E.; Sartori, E.; Pfister, G.; Burgart, C. E.;
Bernnat, W.; Hofmann, K.; Wahweiler, H. G.;
Weicht, U.; Travaglini, N.; Nicks, R.; Canali, U.;
Bignami, A.; Vogt, H. G.

NEA-CPL NEWSLETTER NO.17

AVAILABILITY-NEA COMPUTER PROGRAM
LIBRARY, CASELLA POSTALE N.15, 21027 -
ISPRA (VARESE), ITALY

Nuclear Energy Agency

4615..... Date 740000
122110 122200 329000 795127 795203

The Morse Monte Carlo Radiation Transport Code
System

Emmett, M. B.

ORNL-4972

AVAILABILITY-NTIS \$10.60

Oak Ridge National Lab.

4616..... Date 740205
311000 329000 731200 795127

Adjoint Monte Carlo Generation of Radiation Response
Functions for Complex Missiles

Scott, W. H., Jr.; Lonergan, J. A.; Woolson, W. A.

DNA-3197F

AVAILABILITY-SCIENCE APPLICATIONS, INC.,
LA JOLLA, CALIF.

Science Applications, Inc.

CATEGORY NUMBER 795127

4873..... Date 740900
111210 511110 717000 795127 795254

Comparison of Different Anisotropic Scattering
Techniques in Neutron Transport Codes

Brockmann, H.

EUR-5182E, PP.949-964; CONF-740630, PP.949-964

AVAILABILITY-EUROPEAN COMMUNITY
INFORMATION SERVICE, 2100 M ST., N.W.,
SUITE 707, WASHINGTON, D.C. 20037 (U.S.
SALES ONLY)

Germany (West)

CATEGORY NUMBER 795128

RSIC-CCC-128, CODE O6R

4161..... Date 730300
111210 122310 329000 510000 511110 795128 820000
861000 870003 870007 870008

Monte Carlo Calculations and Sensitivity Studies of the
Time-Dependent Neutron Spectra Measured in the
LLI Pulsed Sphere Program

Cramer, S. N.; Roussin, R. W.; Oblow, E. M.

ORNL-TM-4072

AVAILABILITY-DEP., NTIS \$14.00

Oak Ridge National Lab.

CATEGORY NUMBER 795129

RSIC-CCC-129, CODE TWOTRAN

4260..... Date 710000
111210 32A000 329000 510000 511110 795129 795154
795172 795180 830000 870007 870008

Multigroup Monte Carlo and Sn Methods for Air
Transport

Harris, D. R.; Koenig, D. R.; Precg, W.

LA-DC-13269; CONF-711125, PP.209-227;

ORNL-RSIC-33, PP.209-227

AVAILABILITY-DEP., NTIS

Los Alamos Scientific Lab

CATEGORY NUMBER 795130

RSIC-CCC-130, CODE DTF 69

4565..... Date 730300
111500 32A000 511110 795130 842000 861000 863000
870014

Reduction of Neutron Damage in Silicon By Thick
Shields of Iron, Tungsten, And Polyethylene

Ewing, R. I.; Renken, J. H.; Adams, K. G.

SLA-73-184

AVAILABILITY-DEP., NTIS \$3.00

Sandia Corporation

CATEGORY NUMBER 795132
RSIC-CCC-132, CODE ATTOW

4599..... Date 740900
 010000 795081 795082 795089 795121 795127 795132
 795142 795144

Pilot Study on Shielding Programs

Devillers, C.; Ponti, C.; Rexer, G.; Hehn, G.;
 Amin, E.; Sartori, E.; Pfister, G.; Burgart, C. E.;
 Bernnat, W.; Hofmann, K.; Wahsweiler, H. G.;
 Weicht, U.; Travaglini, N.; Nicks, R.; Canali, U.;
 Bignami, A.; Vogt, H. G.

NEA-CPL NEWSLETTER NO.17

AVAILABILITY-NEA COMPUTER PROGRAM
LIBRARY, CASELLA POSTALE N.15, 21027 -
ISPRA (VARESE), ITALY

Nuclear Energy Agency

CATEGORY NUMBER 795139
RSIC-CCC-139, CODE CONSTRIP V

4216..... Date 690800
 112720 112920 632500 731200 795139 853100 861000
 Some Current Problems in Ocd Fallout Shielding
 Calculations

Eisenhauer, C.

ANS-SD-7, PP.143-156; CONF-671140, PP.143-156

AVAILABILITY-DEP., NTIS \$3.00

National Bureau of Standards

CATEGORY NUMBER 795142
RSIC-CCC-142, CODE MERCURE 4

4599..... Date 740900
 010000 795081 795082 795089 795121 795127 795132
 795142 795144

Pilot Study on Shielding Programs

Devillers, C.; Ponti, C.; Rexer, G.; Hehn, G.;
 Amin, E.; Sartori, E.; Pfister, G.; Burgart, C. E.;
 Bernnat, W.; Hofmann, K.; Wahsweiler, H. G.;
 Weicht, U.; Travaglini, N.; Nicks, R.; Canali, U.;
 Bignami, A.; Vogt, H. G.

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AVAILABILITY-NEA COMPUTER PROGRAM
LIBRARY, CASELLA POSTALE N.15, 21027 -
ISPRA (VARESE), ITALY

Nuclear Energy Agency

CATEGORY NUMBER 795144
RSIC-CCC-144, CODE TIMOC

3949..... Date 721000
 329000 713000 721200 795144 853100 870011

Neutron Streaming Along the Penetration of a Twice
 Bent Sodium Pipe

Diettrich, O.; Marchal, A.; Nicks, R.; Perlini, G.;

CATEGORY NUMBER 795144

Muller, K.; Vossebrecker, H.; Ol

CONF-721018, PP.1148-1165

AVAILABILITY-OECD

Italy

3959..... Date 721000
 721100 795081 795089 795127 795144 870011

Intercomparison of Different Methods to Calculate
 Neutron Transport Along Sodium Ducts

Amin, E.; Diettrich, O.; Futtermenger, W.;
 Gronefeld, G.; Hehn, G.; Herrnberger, V.;

Schmidt, F.; Vogt, H.; Vossebrecker, H.

CONF-721018, PP.1427-1443

AVAILABILITY-OECD

Germany (West)

4599..... Date 740900
 010000 795081 795082 795089 795121 795127 795132
 795142 795144

Pilot Study on Shielding Programs

Devillers, C.; Ponti, C.; Rexer, G.; Hehn, G.;
 Amin, E.; Sartori, E.; Pfister, G.; Burgart, C. E.;
 Bernnat, W.; Hofmann, K.; Wahsweiler, H. G.;
 Weicht, U.; Travaglini, N.; Nicks, R.; Canali, U.;
 Bignami, A.; Vogt, H. G.

NEA-CPL NEWSLETTER NO.17

AVAILABILITY-NEA COMPUTER PROGRAM
LIBRARY, CASELLA POSTALE N.15, 21027 -
ISPRA (VARESE), ITALY

Nuclear Energy Agency

CATEGORY NUMBER 795145
RSIC-CCC-145, CODE SORS

4669..... Date 700225
 329000 511110 795145 841000 842000 882000

Monte Carlo Calculations of Neutron Attenuation

Czirr, J. B.; Van Hemert, R. L.

UCID-15604

AVAILABILITY-DEP., NTIS \$4.00

Lawrence Livermore Lab

CATEGORY NUMBER 795153
RSIC-CCC-153, CODE ASFIT

3662..... Date 710000
 111500 330000 511110 521110 795153

Fast-Neutron Transport in Finite Slabs

Santhanam, K.; Gopinath, D. V.

CONF-701138, PP.95-110

AVAILABILITY-BHABHA ATOMIC RESEARCH
CENTRE, TROMBAY, BOMBAY, INDIA (1971)
 India

CATEGORY NUMBER 795153

3663..... Date 710000
 112B00 330000 512110 632120 795153
 Validity of the Empirical Formulae for Buildup Factors
 in Multiregion Systems
 Gopinath, D. V.; Santhanam, K.
 CONF-701138, PP.111-118
 AVAILABILITY-BHABHA ATOMIC RESEARCH
 CENTRE, TROMBAY, BOMBAY, INDIA (1971)
 India

3814..... Date 731200
 32A000 795153
 Some Modifications in the Anisotropic Source - Flux
 Iteration Technique (Tech. Note)
 Gopinath, D. V.; Santhanam, K.; Burte, D. P.
 NUCL. SCI. ENG., 52(4), 494-498
 India

4897..... Date 701200
 32A000 795153
 Work on Radiation Transport in India
 Gopinath, D. V.
 CONF-701228, PP.157-165
 AVAILABILITY-OECD \$5.00
 India

CATEGORY NUMBER 795154
 RSIC-CCC-154, CODE ANDYMG 3

4260..... Date 710000
 111210 32A000 329000 510000 511110 795129 795154
 795172 795180 830000 870007 870008
 Multigroup Monte Carlo and Sn Methods for Air
 Transport
 Harris, D. R.; Koenig, D. R.; Preeg, W.
 LA-DC-13269; CONF-711125, PP.209-227;
 ORNL-RSIC-33, PP.209-227
 AVAILABILITY-DEP., NTIS
 Los Alamos Scientific Lab

CATEGORY NUMBER 795163
 RSIC-CCC-163, CODE
 FISSP-CLOUD

3876..... Date 730900
 112120 112710 112920 795163
 The Weerie Program for Assessing the Radiological
 Consequences of Airborne Effluents From Nuclear
 Installations
 Clarke, R. H.
 HEALTH PHYS., 25(3), 267-280
 England

CATEGORY NUMBER 795163

4666..... Date 730600
 112120 221000 532000 795163 810000
 Calculations of Fission Product Energy Release
 Tobias, A.
 RD/B/N-2710
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$3.50
 England

CATEGORY NUMBER 795170
 RSIC-CCC-170, CODE DISDOS

3541..... Date 720000
 112B00 220000 329000 795170 820000 844000
 Effect of Differences in the Elemental Composition of
 Human Phantoms on The Absorbed Energy
 Fraction of External Photon Radiation (Short
 Communication)
 Koblinger, L.
 ACTA BIOCHEM. BIOPHYS., 7(2), 189-192
 Hungary

4847..... Date 750600
 113100 220000 329000 523100 795170
 Monte Carlo Calculations of Scattered X-Rays From
 Snyder Phantoms
 Koblinger, L.
 HEALTH PHYS., 28(6), 751-754
 Hungary

CATEGORY NUMBER 795171
 RSIC-CCC-171, CODE MUSPALB

4369..... Date 730000
 111110 111500 511110 794000 795171 820000 842000
 861000 882000
 Calculation and Comparison of Leakage Neutron
 Spectra
 Makra, S.; Palfalvi, J.; Zarand, P.
 KFKI-72-67; STI/PUB/318, V.1, 47-57; CONF-721203-11
 AVAILABILITY-IAEA
 Hungary

CATEGORY NUMBER 795172
 RSIC-CCC-172, CODE TRANZIT

4260..... Date 710000
 111210 32A000 329000 510000 511110 795129 795154
 795172 795180 830000 870007 870008
 Multigroup Monte Carlo and Sn Methods for Air
 Transport
 Harris, D. R.; Koenig, D. R.; Preeg, W.
 LA-DC-13269; CONF-711125, PP.209-227;
 ORNL-RSIC-33, PP.209-227

CATEGORY NUMBER 795172

AVAILABILITY-DEP., NTIS
Los Alamos Scientific Lab

CATEGORY NUMBER 795178
RSIC-CCC-178, CODE HETC

3542. Date 720800
111210 220000 329000 511110 795178 844000
Radiation Transport Codes for Potential Applications
Related to Radiobiology And Radiotherapy Using
Protons, Neutrons, and Negatively Charged Pions
Armstrong, T. W.
ORNL-TM-3816
AVAILABILITY-DEP., NTIS
Oak Ridge National Lab.

4762. Date 741200
111210 111220 112720 220000 329000 511110 512110
795178 845000
Calculations Related to the Possible Use of Photons,
Neutrons, Negatively Charged Pions, Protons, and
Alpha Particles in Radiotherapy
Alsmiller, R. G., Jr.; Santoro, R. T.;
Armstrong, T. W.; Barish, J.; Chandler, K. C.;
Chapman, G. T.
RADIATION RES., 60(3), 369-387; ORNL-TM-4369
Oak Ridge National Lab.

4769. Date 740000
010000 795178
Calculations of the Transport of Fast Neutrons (<50
Mev) Through Matter
Alsmiller, R. G., Jr.
CONF-740940-1
AVAILABILITY-DEP., NTIS \$5.75
Oak Ridge National Lab.

CATEGORY NUMBER 795180
RSIC-CCC-180, CODE TDA

4260. Date 710000
111210 32A000 329000 510000 511110 795129 795154
795172 795180 830000 870007 870008
Multigroup Monte Carlo and Sn Methods for Air
Transport
Harris, D. R.; Koenig, D. R.; Preeg, W.
LA-DC-13269; CONF-711125, PP.209-227;
ORNL-RSIC-33, PP.209-227
AVAILABILITY-DEP., NTIS
Los Alamos Scientific Lab

CATEGORY NUMBER 795180

4274. Date 740700
111110 310000 32A000 510000 521130 795180 795184
Approximate Numerical Solutions to the
Time-Dependent Neutron Transport Equation Using
the Task Algorithm
Tomlinson, E. T.
ORNL-TM-4595
AVAILABILITY-NTIS \$5.45
Oak Ridge National Lab.

4626. Date 740200
321000 510000 511110 795180
The Continued Fraction Approximation: a
Time-Dependent Transport Method
Yingling, W. A.; Bridgman, C. J.
NUCL. SCI. ENG., 53(2), 123-136
Air Corps Installations

CATEGORY NUMBER 795184
RSIC-CCC-184, CODE TASK

4274. Date 740700
111110 310000 32A000 510000 521130 795180 795184
Approximate Numerical Solutions to the
Time-Dependent Neutron Transport Equation Using
the Task Algorithm
Tomlinson, E. T.
ORNL-TM-4595
AVAILABILITY-NTIS \$5.45
Oak Ridge National Lab.

CATEGORY NUMBER 795187
RSIC-CCC-187, CODE SAM-CE

3614. Date 730803
111220 329000 511110 512210 795187 870006 870007
Sam-Ce Monte Carlo Calculations of Nitrogen and
Carbon Ball Integral Experiments
Cohen, M. O.; Beer, M.
DNA-3160Z; MR-7033
AVAILABILITY-MATHEMATICAL
APPLICATIONS GROUP, INC., 3
WESTCHESTER PLAZA, ELMSFORD, NEW
YORK 10523
Mathematical Appl. Group, Inc.

3731. Date 730900
111110 329000 510000 511110 512210 795187 853100
Additional Analysis of Neutron and Secondary Gamma
Ray Transport in Concrete Using the Sam-Ce Monte
Carlo Code
Cohen, M. A.; Beer, M.
DNA-3182T; MR-7035
AVAILABILITY-MATHEMATICAL

CATEGORY NUMBER 795187

APPLICATIONS GROUP, INC., 3
WESTCHESTER PLAZA, ELMSFORD, NEW
YORK 10523
Mathematical Appl. Group, Inc.

CATEGORY NUMBER 795192
RSIC-CCC-192, CODE SAM-CEP

3728. Date 730900
111210 122310 329000 511110 795192 870007
Sensitivity of the Transport of 14-Mev Neutrons to the
Shape of the Nitrogen Elastic Angular Distribution
Beverly, W. B.
BRL-R-1666
AVAILABILITY-NTIS
Ballistic Research Lab.

3869. Date 730200
329000 795192
Correlated Sampling Monte Carlo Neutron Transport
Using Samcep: Three Studies
Beverly, W. B.; Engebretson, A. C.
BRL-R-1633
AVAILABILITY-NTIS
Army Installations

4922. Date 751000
111210 122310 511110 795192 830000 870007
The Sensitivity of Neutron Air Transport to Nitrogen
Cross Section Uncertainties
Niiler, A.; Beverly, W. B.; Banks, N. E.
NBS SPEC.PUB.-425, PP.436-439;
CONF-750303, PP.436-439
AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
SOLD IN SETS ONLY
Army Installations

CATEGORY NUMBER 795195
RSIC-CCC-195, CODE TWOTRAN

4262. Date 711100
111210 32A000 521120 522120 551110 795195 830000
Two-Dimensional Coupled Neutron-Gamma Sn
Transport From a 14.1 Mev Neutron Source in Air
Over Ground Using the Lasl Twotran-Fc Program
Sandmeier, H. A.; Lathrop, K. D.; Brinkley, F. W.;
Hansen, G. E.; Campbell, J. E.
LA-DC-13294; CONF-11125, PP.291-298;
ORNL-RSIC-33, PP.291-298
AVAILABILITY-DEP., NTIS
Los Alamos Scientific Lab

CATEGORY NUMBER 795195

4264. Date 710000
111130 111400 32A000 551110 795195 830000
Two Dimensional Air Transport From a Point
Anisotropic Source
Lathrop, K. D.
LA-DC-13268; CONF-711125-4;
ORNL-RSIC-33, PP.401-408
AVAILABILITY-DEP., NTIS
Los Alamos Scientific Lab

4560. Date 730900
111110 32A000 551110 713000 795195 810000
Fast Burst Reactor Neutron Transport Calculations
Schmidt, T. R.
SLA-73-140
AVAILABILITY-DEP., NTIS \$5.50
Sandia Corporation

4865. Date 751000
111110 32A000 551110 795195 870092
Effects of Neutron Streaming and Geometric Models on
Molten Fuel Recriticality Accidents
McLaughlin, T. P.
LA-6127-MS
AVAILABILITY-NTIS \$4.00
Los Alamos Scientific Lab

CATEGORY NUMBER 795199
RSIC-CCC-199, CODE MCNA

4259. Date 710000
111500 112B00 329000 511110 512110 521120 522120
795199 795200 830000 861000
The Simulation of Low Energy Photon Transport and
the Simulation of The Adjoint Neutron Transport
Equation With Monte Carlo
Carter, L. L.; Cashwell, E. D.; Schrandt, R. G.
LA-DC-13275; CONF-711125-1;
ORNL-RSIC-33, PP.197-207
AVAILABILITY-DEP., NTIS
Los Alamos Scientific Lab

CATEGORY NUMBER 795200
RSIC-CCC-200, CODE MCP

3530. Date 730500
113100 121200 795200
Mcp Code Fluorescence-Routine Revision
Everett, C.J.; Cashwell, E. D.
LA-5240-MS
AVAILABILITY-NTIS
Los Alamos Scientific Lab

CATEGORY NUMBER 795200

3908. Date 721000
 329000 715000 795200
 Monte Carlo Development and Applications in the Los
 Alamos Nuclear Rocket Program
 Watson, C. W.; Cashwell, E. D.
 LA-DC-72-1078; CONF-721018-6;
 CONF-721018, PP.166-184
 AVAILABILITY-NTIS
 Los Alamos Scientific Lab

4259. Date 710000
 111500 112B00 329000 511110 512110 521120 522120
 795199 795200 830000 861000
 The Simulation of Low Energy Photon Transport and
 the Simulation of The Adjoint Neutron Transport
 Equation With Monte Carlo
 Carter, L. L.; Cashwell, E. D.; Schrandt, R. G.
 LA-DC-13275; CONF-711125-1;
 ORNL-RSIC-33, PP.197-207
 AVAILABILITY-DEP., NTIS
 Los Alamos Scientific Lab

CATEGORY NUMBER 795203
RSIC-CCC-203, CODE MORSE-CG

3931. Date 721000
 32A000 325000 329000 713000 795203 795209
 Lmfbr Radiation Transport Methods Development
 Mynatt, F. R.; Gritzner, M. L.; Williams, L. R.;
 Clifford, C. E. (Usa)
 CONF-721018-4; CONF-721018, PP.788-806
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4615. Date 740000
 122110 122200 329000 795127 795203
 The Morse Monte Carlo Radiation Transport Code
 System
 Emmett, M. B.
 ORNL-4972
 AVAILABILITY-NTIS \$10.60
 Oak Ridge National Lab.

4832. Date 750900
 111220 112400 112500 112600 329000 510000 512220
 793000 794000 795203 870006
 Analysis of Neutron Scattering and Gamma-Ray
 Production Integral Experiments On Carbon for
 Neutron Energies From 1 to 15 Mev
 Cramer, S. N.; Oblow, E. M.
 NUCL. SCI. ENG., 58(1), 33-53; ORNL-TM-4494
 Oak Ridge National Lab.

CATEGORY NUMBER 795203

4894. Date 760300
 111220 329000 511120 512210 794000 795203 870007
 Analysis of Neutron Scattering and Gamma-Ray
 Production Integral Experiments On Nitrogen for
 Neutron Energies From 1 to 15 Mev
 Cramer, S. N.; Oblow, E. M.
 ORNL/TM-5220
 AVAILABILITY-NTIS \$4.50
 Oak Ridge National Lab.

4921. Date 751000
 111110 111210 329000 521120 522120 795203
 A Comparison of Air-Over-Ground Transport
 Calculations Using Different Cross Sections
 Saccenti, J. C.; Woolson, W. A.
 NBS SPEC.PUB.-425, PP.431-435;
 CONF-750303, PP.431-435
 AVAILABILITY-GOP \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Army Installations

CATEGORY NUMBER 795204
RSIC-CCC-204, CODE SWANLAKE

3726. Date 731200
 111400 122310 795082 795204 830000
 Radiation Transport Cross-Section Sensitivity Analysis -
 a General Approach Illustrated for a Thermonuclear
 Source in Air
 Bartine, D. E.; Oblow, E. M.; Mynatt, F. R.
 ORNL-TM-4335
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4120. Date 740300
 111210 122310 32A000 521130 717000 795082 795204
 870003 870006 870041
 Cross-Section Sensitivity of Breeding Ratio in a
 Fusion-Reactor Blanket
 Bartine, D. E.; Alsmiller, R. G., Jr.; Oblow, E. M.;
 Mynatt, F. R.
 NUCL. SCI. ENG., 53(3), 304-318; ORNL-TM-4208
 Oak Ridge National Lab.

CATEGORY NUMBER 795209
RSIC-CCC-209, CODE DOT III

3931. Date 721000
 32A000 325000 329000 713000 795203 795209
 Lmfbr Radiation Transport Methods Development
 Mynatt, F. R.; Gritzner, M. L.; Williams, L. R.;
 Clifford, C. E. (Usa)
 CONF-721018-4; CONF-721018, PP.788-806
 AVAILABILITY-NTIS

CATEGORY NUMBER 795209

Oak Ridge National Lab.

**CATEGORY NUMBER 795210
RSIC-CCC-210, CODE NUGAM 2 AND
3**

3640. Date 730300
112B00 329000 421200 430000 795210
Monte Carlo Calculation of Clad Nai(Tl) Scintillation
Crystal Response To Gamma Photons
Steyn, J. J.; Huang, R.; Harris, D. W.
NUCL. INSTR. METHODS, 107(3), 465-475
Nucl. Utilities Service

**CATEGORY NUMBER 795217
RSIC-CCC-217, CODE ORIGEN**

4325. Date 740400
111110 112710 610000 713000 719A00 795217 870092
870094
Calculation and Compilations of Composition,
Radioactivity, Thermal Power, Gamma and Neutron
Release Rates of Fission Products and Actinides of
Spent Power Reactor Fuels and Their Reprocessing
Wastes
Haug, H. O.
KFK-1945
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Germany (West)

4556. Date 750100
112710 222000 230000 795217
Effect of Actinide Removal on the Long-Term Hazard of
High-Level Waste
Claiborne, H. C.
ORNL-TM-4724
AVAILABILITY-NTIS
Oak Ridge National Lab.

**CATEGORY NUMBER 795221
RSIC-CCC-221, CODE SLDN**

3921. Date 721000
32E000 795221
Application of the Invariant Imbedding Method to the
Penetration Problems Of Neutrons
Nakai, M.; Komatsu, I.; Sato, Y.; Noguchi, F.;
Shimizu, A.; Hada, M.
CONF-721018, PP.579-595
AVAILABILITY-OECD
Japan

**CATEGORY NUMBER 795222
RSIC-CCC-222, CODE TWOTRAN II**

4838. Date 751000
111110 330000 511110 551110 795082 795222
A Numerical Method for Solving Integral Equations of
Neutron Transport - II.
Loyalka, S. K.; Tsai, R. W.
NUCL. SCI. ENG., 58(2), 193-202
Missouri Schools

**CATEGORY NUMBER 795232
RSIC-CCC-232, CODE CYGNUS-C
SPHERE**

4481. Date 720400
111500 329000 511110 521130 795017 795232 820000
861000 870006
Monte Carlo Calculation of Neutrons Transmitted
Through Matter
Hirayama, H.; Nakamura, T.
MEM. FAC. ENG. (KYOTO UNIV.), 34(2), 187-200
Japan

**CATEGORY NUMBER 795238
RSIC-ORNL-238, CODE CARNAC**

4456. Date 730000
111110 324000 521110 632110 795238 853100
Rapid Method of Calculating the Flux and Neutron
Spectra in the Case of A Criticality Accident (Carnac
Program)
Bessis, J.
ORNL-TR-2825; CEA-N-1612 (IN FRENCH)
AVAILABILITY-DEP., NTIS
France

**CATEGORY NUMBER 795248
RSIC-CCC-248, CODE SWAN**

4441. Date 740000
111210 122310 311000 32A000 521130 717000 793000
794000 795082 795248 810000
Tritium Breeding Potential of the Princeton Reference
Fusion Power Plant
Greenspan, E.; Price, W. G., Jr.
CONF-740402-P2,145-154
AVAILABILITY-NTIS
New Jersey Schools

CATEGORY NUMBER 795254
RSIC-CCC-254, CODE ANISN-ORNL

4873. Date 740900
 111210 511110 717000 795127 795254
 Comparison of Different Anisotropic Scattering
 Techniques in Neutron Transport Codes
 Brockmann, H.
 EUR-5182E, PP.949-964; CONF-740630, PP.949-964
 AVAILABILITY-EUROPEAN COMMUNITY
 INFORMATION SERVICE, 2100 M ST., N.W.,
 SUITE 707, WASHINGTON, D.C. 20037 (U.S.
 SALES ONLY)
 Germany (West)

CATEGORY NUMBER 795270
RSIC-CCC-270, CODE SUBDOSA

4851. Date 750600
 112930 220000 221000 222000 632110 632120 795270
 845000
 Subdosa - a Computer Program for Calculating External
 Doses From Accidental Atmospheric Releases of
 Radionuclides
 Strenge, D. L.; Watson, E. C.; Houston, J. R.
 BNWL-B-351
 AVAILABILITY-NTIS \$7.60 MF \$2.25
 Battelle-Northwest

CATEGORY NUMBER 810000
**GENERAL SURVEYS OF SHIELDING
 MATERIALS**

3504. Date 710400
 111500 220000 793000 794000 810000
 Heat Generation By Neutrons in Some Moderating and
 Shielding Shielding Materials
 Claiborne, H. C.; Solomito, M.; Ritts, J. J.
 NUCL. ENG. DESIGN, 15(3), 232-236; ORNL-TM-3157
 Oak Ridge National Lab.

3532. Date 730700
 000000 111130 111400 112110 112120 112800 610000
 721100 722100 731100 731200 731300 810000
 Shielding Against Initial Radiation From Nuclear
 Weapons
 Abbott, L. S.
 ORNL-RSIC-36
 AVAILABILITY-RSIC
 Oak Ridge National Lab.

CATEGORY NUMBER 810000

3536. Date 710000
 111110 112110 32A000 32F000 521130 522130 710000
 810000
 Calculations of the Shielding of Reactor Zrr
 Stoces, B.; Burian, J.; Rataj, J.
 ORNL-TR-2654; UJV-2649-R (IN RUSSIAN)
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 Czechoslovakia

3548. Date 730531
 111110 122110 810000
 Selected Computer Codes and Libraries. Volume Iv - a
 28-Group Cross Section Library for Snap Reactor
 Analysis
 Otter, J. M.
 AI-AEC-13076, VOL.IV; N73-33605
 AVAILABILITY-ATOMIC INTERNATIONAL DIV.,
 ROCKWELL INTERNATIONAL, P.O. BOX 309,
 CANOGA PARK, CALIF. 91304
 Atomics International

3568. Date 721100
 121100 810000
 The 1971 Atomic Mass Evaluation in Five Parts. Part V.
 Nuclear Reaction Q-Values
 Gove, N. B.; Wapstra, A. H.
 AT.DATA + NUCL. DATA TABLES, 11, 127-280
 Oak Ridge National Lab.

3575. Date 730800
 111210 122110 122210 717000 810000
 Coupled Neutron and Gamma-Ray Cross Section Sets
 for Fusion Reactor Calculations
 Kriesse, J. T.
 ORNL-TM-4277
 AVAILABILITY-DEP., NTIS \$3.00
 Oak Ridge National Lab.

3612. Date 730700
 122100 810000
 Neutron Activation Cross Sections - Measured and
 Semiempirical
 Alley, W. E.; Lessler, R. M.
 AT.DATA + NUCL. DATA TABLES, 11(8-9), 621-826
 Lawrence Livermore Lab

3617. Date 730800
 122200 122310 810000
 Fast Neutron Capture Cross Sections for Fission
 Product Isotopes
 Schmittroth, F.; Schenter, R. E.
 HEDL-TME-73-63; ENDF-194
 AVAILABILITY-NTIS \$5.45 MF \$0.95
 Hanford Eng Dev Lab.

CATEGORY NUMBER 810000

3618. Date 730700
 111110 421130 521230 713000 810000
 Measurements of Neutron Spectrum and Reaction Rates
 in a Gas Cooled Fast Reactor Lattice
 Richmond, R.; Heer, W.; Ruegger, B.; Seth, S.;
 Steiner, W.; Wydler, P.; Surcher, W.
 EIR-239
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 \$5.25
 Germany (West)

3625. Date 700000
 111110 421130 511120 810000
 Fast-Neutron Spectra Behind Materials and
 Compositions Used In Nuclear-Reactor Shielding.
 An Atlas
 Veselkin, A. P.; Yegorov, Yu. A.
 FTD-HT-23-1840-72; AD-758324
 AVAILABILITY-NTIS HC \$9.25, MF \$0.95
 Russia

3628. Date 730300
 122110 810000
 Multigroup Cross Sections for Reactor Physics
 Calculations, Generated on The Basis of
 Fundamental Nuclear Data.
 Hvidtfeldt Larsen, A. M.
 RISO-286
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 \$5.25
 Denmark

3647. Date 700000
 111110 511120 810000
 Fast Neutron Spectra Penetration in Various Materials
 of Nuclear Reactor Shielding
 Veselkin, A. P.; Egorov, Yu. A.; Emel'yanov, I. Ya.
 MOSCOW, ATOMIZDAT
 Russia

3649. Date 720300
 111110 329000 521130 713000 810000
 Results of Monte Carlo Calculation for Zppr Assembly 2
 Fillmore, F. L.
 ANL-7928
 AVAILABILITY-NTIS
 Argonne National Lab.

CATEGORY NUMBER 810000

3656. Date 720926
 122110 810000
 Bringing Up to Date, Using, and Controlling the
 Multigroup Cross Section Library for Fast Reactor
 Calculations
 Cosimi, M.; Salvatores, M.
 RT/FI-(72)44 (IN ITALIAN)
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 \$6.00
 Italy

3658. Date 721100
 111110 310000 32A000 511110 521130 810000
 Incorporation of Outer Iteration Techniques Into Task
 Algorithm
 Lillie, R. A.
 ORNL-TM-3958
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

3681. Date 730300
 111110 112110 325000 422110 551110 710000 713000
 810000
 Analysis of the Ftr/emc Neutron Shielding Experiment
 Boulette, E.; Marr, D.; Bunch, W.
 HEDL-TME-73-27
 AVAILABILITY-AT (TIC) AEC
 Westinghouse (Except Bettis)

3684. Date 730500
 122100 810000
 Endf/b Summary Documentation
 NNCSC
 BNL-17541; ENDF-201
 AVAILABILITY-DEP., NTIS \$18.50
 Brookhaven Natl. Lab.

3685. Date 730500
 112500 122100 810000
 Compilation of Kev-Neutron-Capture Gamma-Ray
 Spectra
 Bird, J. R.; Allen, B. J.; Bergqvist, I.;
 Biggerstaff, J. A.
 NUCL. DATA TABLES - A (OBSOLETE AFTER
 VOL. 11, SEE 167), 11(6), 433-529
 Australia

3742. Date 721100
 111110 712000 713000 810000
 Specialists' Meeting on Handling and Transportation of
 Spent Fuel Elements For Lmfbr's, Rome, 26-28
 April 1972
 IAEA
 CONF-720445

CATEGORY NUMBER 810000

AVAILABILITY-DEP., NTIS
Iaea

3744. Date 720800
111210 210000 329000 521130 531000 717000 810000
Shielding of Superconducting Magnets in a Fusion
Reactor
McCracken, G. M.; Blow, S.
CLM-R-120
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
UK 50 PENCE
England

3747. Date 720800
111110 121100 210000 810000
Proposed Standard for Calculating Displacement Dose
Rates
Norgett, M. J.; Robinson, M. T.; Torrens, I. M.
CONF-721037-1
AVAILABILITY-DEP., NTIS
Oak Ridge National Lab.

3755. Date 730200
111110 32C000 551110 810000
Finite Element Method Applied to Neutron Diffusion
Problems
Deppe, L. O.; Hansen, K. F.
COO-2262-1; MITNE-145
AVAILABILITY-DEP., NTIS \$8.25
Massachusetts Schools

3771. Date 730600
122100 810000
Neutron Cross Sections. Volume 1, Resonance
Parameters
Mughabghab, S. F.; Garber, D. I.
BNL-325, THIRD ED. VOL. 1
AVAILABILITY-NTIS \$13.60; MF \$1.45
Brookhaven Natl. Lab.

3790. Date 731000
122200 329000 510000 511110 810000
Lawrence Livermore Laboratory Evaluated Nuclear
Data Library (Endl) Translated Into the Endf/b
Format
Howerton, R. J.
UCID-16376
AVAILABILITY-DEP., NTIS \$4.50
Lawrence Livermore Lab

CATEGORY NUMBER 810000

3823. Date 730500
112B00 121200 329000 512110 522110 632300 810000
Low Energy Components of Scattered Gamma
Radiation
Minato, S.
NUCL. SCI. ENG., 51(1), 32-40
Japan

3840. Date 731100
111110 421160 430000 521230 810000
Comparison of Proton-Recoil and Time-Of-Flight
Neutron Spectral Measurements With Transport
Calculations in Two Uranium-235-Fueled Fast
Subcritical Reactors
Verbinski, V. V.; Young, J. C.; Neill, J. M.
NUCL. SCI. ENG., 52(3), 330-342
Gulf General Atomic

3852. Date 681200
112300 522110 810000
Energy and Space Distribution of Backscattered
Gamma-Radiation. (Abstract)
Zol'nikov, P. P.; Sukhanova, K. A.;
Dvinyaninov, B. L.
SOVIET J. AT. ENERGY (ENGLISH TRANSL.),
25(6), 1350
Russia

3929. Date 721000
511120 631000 810000
Reactor Shielding As a Source of Radiation
Bolshakov, A. V.; Madeev, V. G.; Rudakov, An. N.;
Uksusov, E. I.
CONF-721018, PP. 757-770
AVAILABILITY-OECD
Russia

4014. Date 700400
810000
Monalite Shielding Materials on a Ceramic Basis
Schumann, H.
KERNTECHNIK, 12, 165-170
Germany (West)

4072. Date 720300
111110 32A000 32F000 551110 552210 713000 795125
810000
Evaluation of the Two-Dimensional Shielding Code for a
Fast Reactor Shield Design and Its Application
Tanaka, Y.; Suzuki, I.; Otani, M.
JAPFNR-68; PNC-J-213-72-3-1
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Japan

CATEGORY NUMBER 810000

4074. Date 720800
 112110 112130 112400 112500 32A000 325000 423250
 532000 551110 552110 552220 713000 810000
 Analysis of Joyo Mock-Up Experimental Data By
 Two-Dimensional Gamma-Ray Heating Distribution
 Calculation Code 2d-Gamm

Iwaki, T.; Seki, Y.; Osada, H.
 JAPFNR-105; PNC-J-72-18
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.00
 Japan

4075. Date 720900
 112710 421200 430000 810000
 Compilation of Gamma-Ray Spectra With a Ge(Li)
 Detector (Revised)

Tojo, T.; Kondo, M.; Hieta, M.; Shiraishi, T.
 JAERI-M-4968 (IN JAPANESE)
 AVAILABILITY-NTIS (U.S. SALES ONLY)
 Japan

4112. Date 740600
 113100 121200 122210 32A000 513110 810000
 Relativistic Compton Scattering By the Discrete
 Ordinates Method
 Stephan, B. G.; Bridgman, C. J.
 NUCL. SCI. ENG., 54(2), 101-115
 Air Corps Installations

4158. Date 730100
 111500 121100 122100 810000
 Neutron Resonance Spacings for Spherical Nuclei
 Schmittroth, F.
 HEDL-TME-73-30; ENDF-171
 AVAILABILITY-DEP., NTIS \$5.45
 Westinghouse

4162. Date 730000
 010000 111110 122200 810000
 The Evaluation of Neutron Nuclear Data - Proceedings
 of a Panel on Neutron Nuclear Data Evaluation Held
 in Vienna, 30 Aug-3 Sept, 1971
 IAEA,
 IAEA-153; CONF-710855
 AVAILABILITY-IAEA, VIENNA
 Iaea

4171. Date 740800
 111210 121100 210000 220000 717000 793000 794000
 810000
 Macklib - 100-Group Neutron Fluence-To-Kerma
 Factors and Reaction Cross Sections Generated By
 the Mack Computer Program From Data in Endf
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CATEGORY NUMBER 810000

Abdou, M. A.; Roussin, R. W.
 ORNL-TM-3995
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4172. Date 740200
 111130 111400 122110 122210 810000
 Coupled Neutron-Gamma Multigroup-Multitable Cross
 Sections for 29 Materials Pertinent to Nuclear
 Weapons Effect Calculations Generated By Lasl/td
 Division
 Sandmeier, H. A.; Hansen, G. E.; Seamon, R. E.;
 Hiron, T. J.; Marshall, A. H.
 LA-5137
 AVAILABILITY-DEP., NTIS \$7.60
 Los Alamos Scientific Lab

4175. Date 740800
 111110 112110 121100 121200 422110 422200 430000
 810000
 Neutron and Gamma-Ray Effects on Self-Powered
 In-Core Radiation Detectors
 Warren, H. D.; Shah, N. H.
 NUCL. SCI. ENG., 54(4), 395-415
 Babcock and Wilcox Co.

4182. Date 740800
 111210 32A000 521130 522130 531000 532000 551110
 552210 620000 717000 795082 795089 795126 810000
 Shielding Design Calculations for Ormak - F/bx
 Gabriel, T. A.; Santoro, R. T.; Engle, W. W., Jr.
 ORNL-TM-4619
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4195. Date 730800
 111110 112110 112120 112760 423250 532000 810000
 Reactor Gamma Heat Measurements With Calorimeters
 and Thermoluminescence Dosimeters
 Haack, K.; Majborn, B.
 NUCL. INSTR. METHODS, 111(2), 283-286
 Denmark

4209. Date 690800
 112500 121100 810000
 State-Of-The-Art in Thermal Neutron Capture Gamma
 Rays
 Bartholomew, G. A.
 ANS-SD-7, PP.1-13; CONF-671140, PP.1-13
 AVAILABILITY-DEP., NTIS \$3.00
 Canada

CATEGORY NUMBER 810000

4210. Date 690800
 112500 121100 420000 421200 810000
 Radiative Capture of Neutrons in and Between
 Resonances
 Chrien, R. E.
 ANS-SD-7, PP.15-38; CONF-671140, PP.15-38
 AVAILABILITY-DEP., NTIS \$3.00
 Brookhaven Natl. Lab.

4211. Date 690800
 112500 121100 810000
 The Calculation of Neutron Capture Gamma-Ray
 Spectra
 Yost, K. J.
 ANS-SD-7, PP.39-52; CONF-671140, PP.39-52
 AVAILABILITY-DEP., NTIS \$3.00
 Oak Ridge National Lab.

4212. Date 690800
 112B00 121200 810000
 Theory of Gamma-Ray Cross Sections
 Pratt, R. H.
 ANS-SD-7, PP.53-70; CONF-671140, PP.53-70
 AVAILABILITY-DEP., NTIS \$3.00
 Pennsylvania Schools

4213. Date 690800
 112B00 121200 122200 810000
 Gamma-Ray Cross-Section Evaluation and Compilation
 Hubbell, J. H.
 ANS-SD-7, PP.71-100; CONF-671140, PP.71-100
 AVAILABILITY-DEP., NTIS \$3.00
 National Bureau of Standards

4214. Date 690800
 111110 112400 112500 32F000 521130 522130 795022
 810000
 Application of Spinney's Method to Secondary
 Gamma-Ray Calculations
 Greenborg, J.
 ANS-SD-7, PP.101-111; CONF-671140, PP.101-111
 AVAILABILITY-DEP., NTIS \$3.00
 Douglas United Nuclear Corp.

4215. Date 690800
 111110 112400 112500 112600 32A000 511110 512110
 512210 522130 552110 552220 716000 795089 810000
 Some Characteristics of Secondary Gamma Ray
 Transport in Asymmetric Snap Shields
 Mynatt, F. R.; Williams, L. R.
 ANS-SD-7, PP.113-135; CONF-671140, PP.113-135
 AVAILABILITY-DEP., NTIS \$3.00
 Oak Ridge National Lab.

CATEGORY NUMBER 810000

4221. Date 731000
 111210 111220 121100 717000 810000
 Problems of Measuring Nuclear Constants for
 Thermonuclear Reactors
 Kuz'min, E. A.; Ogloblin, A. A.; Sidorov, N. I.;
 Faiziev, A. R.; Chulkov, L. V.; Yan'kov, G. B.
 STI/PUB-343,V.2,PP3-19; CONF-730302,V.2,PP3-19;
 LA-TR-73-32
 AVAILABILITY-IAEA
 Russia

4234. Date 731000
 112500 810000
 Neutron-Capture Gamma-Ray Compilations
 Bartholomew, G. A.
 STI/PUB-343,V.2,PP.343-352;
 CONF-730302,V.2,PP343-352; IAEA-SM-170/37
 AVAILABILITY-IAEA
 Canada

4251. Date 711021
 111110 112110 112120 112400 112500 112600 122100
 32A000 329000 710000 713000 810000
 Projected Lmfbr Shielding Needs and Acc/rdt Programs
 Lewellen, J. W.; Hannum, W. H.; Hemmig, P. B.
 ANS-SD-13, ARTICLE 1
 AVAILABILITY-ANS
 Atomic Energy Commission (U.S.)

4253. Date 711021
 111110 32A000 421130 421140 521130 551110 710000
 713000 795082 795089 810000 861000 870011
 Fttf Related Studies in the Ornl-Lmfbr Shielding
 Program
 Mynatt, F. R.; Clifford, C. E. (Usa);
 Muckenthaler, F. J.; Maerker, R. E.;
 Gritzner, M. L.; Williams, L. R.; Rathbun, J. L.
 ANS-SD-13, ARTICLE 3
 AVAILABILITY-ANS
 Oak Ridge National Lab.

4266. Date 740401
 122110 810000
 An Integrated System for Production of Neutronics and
 Photonics Calculational Constants. Volume 7 Part a
 - Graphical, Experimental Data For Major
 Neutron-Induced Interactions (Z Through 55)
 Cullen, D. E.; Haight, R. C.; Howerton, R. J.;
 Macgregor, M. H.; Perkins, S. T.
 UCRL-50400, VOL.7,PART A
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

CATEGORY NUMBER 810000

4267..... Date 740401
 122110 810000
 An Integrated System for Production of Neutronics and
 Photonics Calculational Constants. Volume 7 Part B
 - Graphical, Experimental Data For Major
 Neutron-Induced Interactions ($Z > 55$)
 Cullen, D. E.; Haight, R. C.; Howerton, R. J.;
 Macgregor, M. H.; Perkins, S. T.
 UCRL-50400, VOL.7, PART B
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4268..... Date 720500
 111110 122310 422110 713000 810000
 Evaluation of Microscopic Integral Cross-Sections
 Averaged in The Uranium-235 Thermal Fission
 Neutron Spectrum (for 29 Nuclear Reactions
 Relevant To Neutron Dosimetry and Fast Reactor
 Technology)
 Fabry, A.
 BLG-465
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Belgium

4273..... Date 730000
 112500 421200 424000 810000
 Evaluation of Thermal Neutron Gamma-Ray Techniques
 for Nondestructive Analysis of Geological Samples
 (I)
 El Kady, A. A.; Hamouda, I.
 AREAEE-187
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.50
 Egypt

4282..... Date 740600
 010000 111210 32A000 329000 717000 810000
 Fusion Reactor Nuclear Analysis Methods and
 Applications
 Dudziak, D. J.
 LA-UR-883
 AVAILABILITY-NTIS
 Los Alamos Scientific Lab

4300..... Date 740800
 010000 122200 717000 810000
 The Status of Neutron-Induced Nuclear Data for
 Controlled Thermonuclear Research Applications:
 Critical Reviews of Current Evaluations
 Steiner, D. (Comp.)
 USNDC-CTR-1
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

CATEGORY NUMBER 810000

4303..... Date 730900
 111110 122110 122310 810000
 Error Analysis of Neutron Capture Group Cross
 Sections for Fast Reactors, Applied to Fission
 Products
 Dragt, J. B.; Gruppelaar, H.
 RCN-192
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$5.00
 Netherlands (Holland)

4304..... Date 731000
 111110 122100 122110 810000
 Compilation of Evaluated Cross Section Data Used in
 Fast Neutron Metrology
 Ziep, W. L.; Voorbraak, W. P.; Nolthenius, H. J.
 RCN-196
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$10.25
 Netherlands (Holland)

4307..... Date 730700
 111110 112120 532000 810000
 Current Status of Fission Product Data
 Davies, B. S.; Tobias, A.
 RD/B/M-2747
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$3.00
 England

4310..... Date 730809
 111110 122100 122310 810000
 The Role of Integral Data
 Farinelli, U.
 RT/FI-(73)28
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.50
 Italy

4311..... Date 660700
 111110 329000 710000 715000 810000
 Neutron Monte Carlo Calculation for a 1000-Mw
 Propulsion Reactor
 Watson, C. W.; Graves, G. A.; Streetman, J. R.
 LA-3635
 AVAILABILITY-DEP., NTIS \$5.25
 Los Alamos Scientific Lab

CATEGORY NUMBER 810000

4316..... Date 720000
112710 424000 810000
Role of Nuclear Data in the Practical Application of
Nondestructive Nuclear Assay Methods
Thorpe, M. M.
LA-UR-73-226; CONF-730302-9; SM-170/54
AVAILABILITY-DEP., NTIS \$3.25
Los Alamos Scientific Lab

4322..... Date 670201
111110 112110 715000 810000
Radiation Analysis for Non-Nuclear Components of the
Nerva Development Engine Nrx-A6 Reactor Test
Garrington, G.; Warman, E. A.
RN-TM-365
AVAILABILITY-DEP., NTIS \$6.00
Aerojet-General

4323..... Date 720222
121100 122100 123000 810000
Fast Neutron Radiative Capture Cross Sections of Stable
Nuclei With Z Range Between 29 and 79
Benzi, V.; D'orazi, R.; Reffo, G.; Vaccari, M.
RT/FI-(72)6
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Italy

4331..... Date 740600
111110 122110 810000

Evxs:a Code to Generate Multigroup Cross Sections
From the Los Alamos Master Data File
Asprey, M. W.; Lazarus, R. B.; Seamon, R. E.
LA-4855
AVAILABILITY-NTIS \$5.45
Los Alamos Scientific Lab

4334..... Date 720500
112B00 122200 610000 810000
Mass Absorption Coefficient for X-Rays. a Tabular
Comparison of the Values According to the Formula
of Kelly and Heinrich
Preuss, E.
JUL-856-TP(IN GERMAN)
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Germany (West)

4335..... Date 730300
111210 121100 32A000 521130 717000 810000
Neutronic Studies of D-T Fusion Reactor Blankets
Brockmann, H.
JUL-931-RG (IN GERMAN); JUL-931-RG(IN
GERMAN)
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)

CATEGORY NUMBER 810000

\$5.50
Germany (West)

4345..... Date 740900
020000 111110 32A000 521130 710000 713000 810000
Calculations of a Fast-Neutron Shielding Experiment for
Evaluating Approximate Shielding Design Methods
(Tech. Note)
Adkins, C. R.
NUCL. SCI. ENG., 55(1), 89-96
Pennsylvania Schools

4352..... Date 720700
122100 810000
Endf/b-III Cross Section Measurement Standards
Drake, M. K.
BNL-17188; ENDF-179
AVAILABILITY-BROOKHAVEN NATIONAL
LABORATORY, ASSOCIATED UNIVERSITIES,
INC., UPTON, NEW YORK 11973
Brookhaven Natl. Lab.

4359..... Date 740600
122100 122200 810000
Defense Nuclear Agency Working Cross Section Library:
Description And Contents
Roussin, R. W.; Wright, J. B.
ORNL-RSIC-34(VOL.1)(REV.)
AVAILABILITY-DEP., NTIS \$14.00
Oak Ridge National Lab.

4384..... Date 740000
111210 710000 717000 810000
Preliminary Design of a Minimum Size Technical
Feasibility Tokamak Fusion Reactor
Bertolini, E.; Brunelli, B.; Engelmann, F.;
Gasparotto, M.; Hoffman, M. A.; Merzagora, N.;
Biggio, M.; Casini, G.; Cuniberti, R.; Farfaletti
Casali, F.; Peter, F.; Bobbio, S.; Coccoresse, E.;
Greco, O.; Sacerdoti, G.; Ricci, M. V.;
Spadoni, M.; Pasotti, G.; Sacchetti, N.
CONF-740402-P1,21-37
AVAILABILITY-NTIS
Italy

4385..... Date 740000
111210 710000 717000 810000
The Conceptual Design of a Tokamak Fusion Power
Reactor, Uwmak-I
Kulcinski, G. L.; Conn, R. W.
CONF-740402-P1,38-55
AVAILABILITY-NTIS
Wisconsin Schools

CATEGORY NUMBER 810000

4386..... Date 740000
 111210 710000 717000 810000
 Technological Implications for Tokamak Fusion
 Reactors of the Uwmak-I Conceptual Design
 Conn, R. W.; Kulcinski, G. L.
 CONF-740402-P1,56-69
 AVAILABILITY-NTIS
 Wisconsin Schools

4387..... Date 740000
 111210 710000 717000 810000
 A Conceptual Laser Controlled Thermonuclear Reactor
 Power Plant
 Williams, J.; Merson, T.; Finch, F.; Schilling, F.;
 Frank, T.
 CONF-740402-P1,70-82
 AVAILABILITY-NTIS
 Los Alamos Scientific Lab

4388..... Date 740000
 111210 710000 717000 810000
 A Laser Fusion Reactor Concept Utilizing Magnetic
 Fields for Cavity Wall Protection
 Frank, T.; Freiwald, D.; Merson, T.; Devaney, J.
 CONF-740402-P1,83-95
 AVAILABILITY-NTIS
 Los Alamos Scientific Lab

4389..... Date 740000
 111210 710000 717000 810000
 The Preliminary Design of a Suppressed Ablation
 Laser-Induced Fusion Reactor
 Hovingh, J.; Maniscalco, J.; Peterson, M.;
 Werner, R. W.
 CONF-740402-P1,96-111
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4390..... Date 740000
 111110 111210 717000 810000 870092 870094
 Geometry and Performance of a Theta Pinch Power
 Breeder
 Braun, G. W.; Lidsky, L. M.
 CONF-740402-P1,199-210
 AVAILABILITY-NTIS
 Massachusetts Schools

4391..... Date 740000
 111110 111210 521130 710000 717000 795082 810000
 870092 870094
 A Modular Fission-Fusion Hybrid Blanket
 Hansborough, L. D.; Werner, R. W.
 CONF-740402-P1,211-222
 AVAILABILITY-NTIS

CATEGORY NUMBER 810000

Lawrence Livermore Lab

4392..... Date 740000
 111110 111210 329000 521130 717000 810000 870092
 870094
 Neutronics Analysis of a 2500 Mwth Fast Fission
 Natural Uranium Blanket For A Dt Fusion Reactor
 Lee, J. D.
 CONF-740402-P1,223-237
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4393..... Date 740000
 111110 111210 710000 717000 810000 870092 870094
 Conceptual Design of a Fusion-Fission Hybrid Reactor
 Based on a Mirror Fusion Reactor With a
 Subcritical Gas Cooled Fission Blanket
 Wolkenhauer, W. C.; Leonard, B. R., Jr.;
 Sutey, A. M.; Moir, R. W.
 BNWL-SA-4865; CONF-740402-43;
 CONF-740402-P1,238-255
 AVAILABILITY-NTIS
 Pacific Northwest Lab

4394..... Date 740000
 111110 111210 521130 522130 710000 717000 793000
 794000 795082 810000 870092 870094
 Neutronic and Photonic Analyses of Fusion Reactor
 Blankets Containing Natural Uranium
 Parish, T. A.; Draper, E. L., Jr.
 CONF-740402-P1,256-270
 AVAILABILITY-NTIS
 Texas Schools

4395..... Date 740000
 111110 111210 329000 521130 710000 717000 810000
 870092 870094
 Calculations of a Fast Fission Blanket for Dt Fusion
 Reactors With Two Evaluated Data Libraries
 Haight, R. C.; Lee, J. D.
 CONF-740402-P1,271-280
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4396..... Date 740000
 111110 111210 410000 717000 810000
 Study of the Development of Neutron and Plasma
 Radiation Test Facilities For The Ctr Materials
 Program
 Persiani, P. J.
 CONF-740402-P1,283-293
 AVAILABILITY-NTIS
 Argonne National Lab.

CATEGORY NUMBER 810000

4397..... Date 740000
 111210 410000 710000 717000 810000
 Summary of a Conceptual Design of a Mirror Reactor
 for a Fusion Engineering Research Facility (Ferf)
 Taylor, C. E.
 CONF-740402-P1,294-305
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4401..... Date 740000
 111210 121100 710000 717000 810000 870006 870013
 Minimum Activity Blankets Using Aluminum Structure
 Powell, J.; Aronson, A.; Bezler, P.; Miles, F.;
 Winsche, W.
 CONF-740402-P1,533-547
 AVAILABILITY-NTIS
 Brookhaven Natl. Lab.

4402..... Date 740000
 111210 112710 121100 220000 710000 717000 810000
 870023 870041
 A Comparative Analysis of D-T Fusion Reactor
 Radioactivity and Afterheat
 Dudziak, D. J.; Krakowski, R. A.
 LA-UR-74-629; CONF-740402-18;
 CONF-740402-P1,548-564
 AVAILABILITY-NTIS
 Los Alamos Scientific Lab

4404..... Date 740000
 111210 112710 793000 795042 810000 861000
 The Induced Activity and Decay Power of the Structure
 of a Stainless Steel Fusion Reactor Blanket
 Nigg, D. W.; Davidson, J. N.
 CONF-740402-P1,578-587
 AVAILABILITY-NTIS
 Texas Schools

4405..... Date 740000
 111210 112710 717000 810000 870092
 Some Safety Considerations of Hybrid Reactors in
 Comparison With Fission And Fusion Reactors
 Wolkenhauer, W. C.; Stewart, C. W.; Werner, R. W.;
 Lee, J. D.
 BNWL-SA-4988; CONF-740402-P1,588-598
 AVAILABILITY-NTIS
 Pacific Northwest Lab

CATEGORY NUMBER 810000

4406..... Date 740000
 111210 531000 532000 793000 794000 795082 810000
 On the Thermal State of the Fusion Blanket
 Nishikawa, M.; Ioki, K.; Naito, T.; Asami, N.
 CONF-740402-P1,634-641
 AVAILABILITY-NTIS
 Japan

4407..... Date 740000
 111210 220000 710000 717000 810000
 Nuclear Design of the Magnet Shield for Fusion
 Reactors
 Abdou, M. A.; Maynard, C. W.
 CONF-740402-P1,685-698
 AVAILABILITY-NTIS
 Wisconsin Schools

4412..... Date 730000
 010000 111600 810000
 Photonuclear Reactions in Reactors
 Francis, N. C.; Lubert, M.; Mendelson, M. R.;
 Block, R. C.
 CONF-730301,1095-1104
 AVAILABILITY-TIC
 Lawrence Livermore Lab

4418..... Date 741100
 111210 32A000 521130 717000 793000 794000 795082
 810000
 A Comparative Study of Several Fusion Reactor Blanket
 Designs
 Abdou, M. A.; Conn, R. W.
 NUCL. SCI. ENG., 55(3), 256-266
 Wisconsin Schools

4419..... Date 741100
 111500 122310 810000
 The Role of Integral Data in Neutron Cross-Section
 Evaluation
 Pazy, A.; Rakavy, G.; Reiss, I.; Wagschal, J. J.; Atara
 Ya'ari, Y.; Yeivin, Y.
 NUCL. SCI. ENG., 55(3), 280-295
 Israel

4425..... Date 740619
 111110 325000 551110 713000 719B00 810000
 Neutronics Analysis of the 300 Mw(E) Gas Cooled Fast
 Reactor Demonstration Plant
 Bhattacharyya, S. K.; Bohn, E. M.
 ZPR-TM-169
 AVAILABILITY-AUTHORS, ARGONNE
 NATIONAL LAB., APPLIED PHYSICS DIV.,
 9700 SOUTH CASS AVENUE, ARGONNE,
 ILLINOIS 60439

CATEGORY NUMBER 810000

Argonne National Lab.

4427..... Date 741000
 111210 122310 32A000 521130 717000 795082 810000
 Comparison of the Cross-Section Sensitivity of the
 Tritium Breeding Ratio In Various Fusion-Reactor
 Blankets
 Alsmiller, R. G., Jr.; Santoro, R. T.; Barish, J.;
 Gabriel, T. A.
 ORNL-TM-4696
 AVAILABILITY-DEP., NTIS \$4.75
 Oak Ridge National Lab.

4429..... Date 740300
 111110 551110 795089 795123 810000
 Calculation of the Hpr Neutron Spectrum for Simulated
 Nuclear Accident Conditions
 Poston, J. W.; Knight, J. R.; Whitesides, G. E.
 HEALTH PHYS., 26(3), 217-221
 Oak Ridge National Lab.

4436..... Date 740000
 111210 122310 521130 717000 795082 810000 870003
 Tritium Breeding in Ceramic Lithium-Compound
 Blanket
 Seki, Y.; Sako, K.; Tanaka, K.; Hiraoka, T.
 CONF-740402-P2,77-86
 AVAILABILITY-NTIS
 Japan

4437..... Date 740000
 111210 220000 521130 522130 717000 793000 794000
 795082 810000 870003
 Neutronics and Photonics Study of Fusion Reactor
 Blankets
 Abdou, M. A.; Maynard, C. W.
 CONF-740402-P2,87-100
 AVAILABILITY-NTIS
 Wisconsin Schools

4440..... Date 740000
 111210 122310 311000 32A000 521130 717000 810000
 Blanket Design and Cross-Section Sensitivity
 Calculations Based On Perturbation Methods
 Gerstl, S. A. W.
 CONF-740402-P2,136-144
 AVAILABILITY-NTIS
 Argonne National Lab.

CATEGORY NUMBER 810000

4441..... Date 740000
 111210 122310 311000 32A000 521130 717000 793000
 794000 795082 795248 810000
 Tritium Breeding Potential of the Princeton Reference
 Fusion Power Plant
 Greenspan, E.; Price, W. G., Jr.
 CONF-740402-P2,145-154
 AVAILABILITY-NTIS
 New Jersey Schools

4449..... Date 740000
 111210 32F000 511120 710000 717000 793000 794000
 795121 810000
 Nuclear Blanket and Shielding Problems in
 Demonstration Fusion Reactors
 Casini, G.; Cuniberti, R.
 CONF-740402-P2,238-249
 AVAILABILITY-NTIS
 Italy

4451..... Date 740600
 112B00 121200 632110 632120 810000
 Gamma-Ray Dose and Energy Absorption Build-Up
 Factor Data for Use in Reactor Shield Calculations
 Wallace, O. J.
 WAPD-TM-1012
 AVAILABILITY-DEP. NTIS \$6.00
 Bettis Atomic Power Lab.

4452..... Date 740822
 111220 329000 511120 810000 870004 870095
 Calculated Neutron Emission Spectra From Spherical
 Shells Surrounding a 0- To 11-Mev Neutron Source:
 Tests of the LII Evaluated Nuclear Data Library
 (Endl)
 Haight, R. C.; Howerton, R. J.
 UCRL-51,637
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4458..... Date 690114
 112120 112710 123000 421200 424000 810000
 Gamma-Ray Energies and Intensities
 Gunnink, R.; Niday, J. B.; Anderson, R. P.;
 Meyer, R. A.
 UCID-15439
 AVAILABILITY-DEP., NTIS \$7.25
 Lawrence Livermore Lab

CATEGORY NUMBER 810000

4461. Date 740800
113100 122200 810000
Experimental K and L Relative X-Ray Emission Rates
Salem, S. I.; Panossian, S. L.; Krause, R. A.
AT.DATA + NUCL. DATA TABLES, 14(2), 91-109
California Schools

4462. Date 740800
113100 122200 810000
X-Ray Emission Rates in the Hartree-Slater
Approximation
Manson, S. T.; Kennedy, D. J.
AT.DATA + NUCL. DATA TABLES, 14(2), 111-120
Georgia Schools

4463. Date 740800
113100 122200 810000
Relativistic Hartree-Slater Values for K and L X-Ray
Emission Rates
Scofield, J. H.
AT.DATA + NUCL. DATA TABLES, 14(2), 121-137
Lawrence Livermore Lab

4464. Date 740800
113100 122200 810000
Total and Partial Atomic-Level Widths
Keski-Rohkonen, O.; Krause, M. O.
AT.DATA + NUCL. DATA TABLES, 14(2), 139-146
Oak Ridge National Lab.

4466. Date 740900
111210 511120 632110 632120 717000 810000
Observed Penetration of 14-Mev Neutrons in Various
Materials
Logan, C. M.; Komoto, T. T.
UCRL-51663
AVAILABILITY-NTIS
Lawrence Livermore Lab

4487. Date 741200
111210 121100 810000
Semiclassical Description of Fast-Neutron Cross
Sections
Angeli, I.; Csikai, J.; Nagy, P.
NUCL. SCI. ENG., 55(4), 418-426
Hungary

4489. Date 741200
111110 121100 122110 324000 511110 713000 810000
Neutron Moderation in Fast Reactors in the Presence of
Wide Scattering Resonances: Analysis of Methods.
(Tech. Note)
Palmiotti, G.; Salvatores, M.
NUCL. SCI. ENG., 55(4), 476-480

CATEGORY NUMBER 810000

Italy

4491. Date 750200
111110 122110 32A000 511110 713000 810000
Practical Preprocessed Nuclear Data Files for Fast
Reactor Calculations. (Tech. Note)
Gur, Y.; Yiftah, S.
NUCL. SCI. ENG., 56(2), 202-210
Israel

4495. Date 750100
111110 111210 121100 122110 810000
A Theory of Resonance-Group Self-Shielding
Segev, M.
NUCL. SCI. ENG., 56(1), 72-82
Israel

4496. Date 750100
112B00 121200 610000 632110 632120 632200 810000
Compact Tables of Functions for Use in Shielding
Calculations. (Tech. Note)
Shure, K.; Wallace, O. J.
NUCL. SCI. ENG., 56(1), 84-94
Bettis Atomic Power Lab.

4500. Date 750100
111210 32A000 521130 522130 531000 532000 717000
794000 795046 810000
Radioactivity Induced in a Theta-Pinch Fusion Reactor
Dudziak, D. J.; Krakowski, R. A.
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4000. Date 701000
 111210 423110 511120 820000
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 Marshall, T. O.
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4024. Date 711200
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4043. Date 720000
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4076. Date 721100
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4080. Date 730000
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4124. Date 740700
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 Utilizing The Equilibrium Angular Distribution
 Johnson, D. M.
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4161. Date 730300
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4280. Date 700300
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4416. Date 741000
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4481. Date 720400
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861000 882000
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112760 32A000 329000 512110 522110 795046 795082
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ASSOCIATES, INC., 3550 HULEN STREET,
FORT WORTH, TEXAS 76107
Radiation Research Assoc.

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 Coupling of Forward and Adjoint Calculations to Solve
 Three Dimensional Deep Penetration Problems
 Slater, C. O.; Robinson, J. C.
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3726. Date 731200
 111400 122310 795082 795204 830000
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3792. Date 731200
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4013. Date 700700
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4018. Date 670600
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CATEGORY NUMBER 830000

4123. Date 740300
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4155. Date 730300
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 Tennessee Schools

4189. Date 731200
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4259. Date 710000
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 795199 795200 830000 861000
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 the Simulation of The Adjoint Neutron Transport
 Equation With Monte Carlo
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 LA-DC-13275; CONF-711125-1;
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4260. Date 710000
 111210 32A000 329000 510000 511110 795129 795154
 795172 795180 830000 870007 870008
 Multigroup Monte Carlo and Sn Methods for Air
 Transport
 Harris, D. R.; Koenig, D. R.; Preeg, W.
 LA-DC-13269; CONF-711125, PP.209-227;
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CATEGORY NUMBER 830000

4261. Date 711025
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 An Automated Method to Calculate Non-Fission
 Neutron and Neutron Induced Gamma Heating in
 Air and Other Materials From Basic Multigroup
 Cross Section Data
 Sandmeier, H. A.; Hansen, G. E.; Asprey, M. E.
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4262. Date 711100
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 Two-Dimensional Coupled Neutron-Gamma Sn
 Transport From a 14.1 Mev Neutron Source in Air
 Over Ground Using the Lasl Twotran-Fc Program
 Sandmeier, H. A.; Lathrop, K. D.; Brinkley, F. W.;
 Hansen, G. E.; Campbell, J. E.
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 ORNL-RSIC-33, PP.291-298
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4263. Date 710000
 111130 111400 32A000 510000 511110 795082 795089
 830000
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 Infinite Air
 McGregor, B. J.
 ORNL-RSIC-33, PP.341-359; CONF-711125-5
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 Oak Ridge National Lab.

4264. Date 710000
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 Anisotropic Source
 Lathrop, K. D.
 LA-DC-13268; CONF-711125-4;
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4265. Date 711115
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 Woolson, W. A.; Huszar, L.; Harris, R. J., Jr.
 DNA-3279T
 AVAILABILITY-SCIENCE APPLICATIONS, INC.,
 1200 PROSPECT STREET, P.O. BOX 2351, LA
 JOLLA, CALIF. 92037
 Science Applications, Inc.

4336. Date 720400
 112B00 329000 512110 513110 830000
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 Band Structure From 300 Kev to 2 Kev
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 BRL-R-1577
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4337. Date 720400
 112B00 329000 512110 513110 830000
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 Band Structure from 300 Kev to 2 Kev. Appendix B -
 Data for Source Energies 190 160, 160-140, And
 140-120 Kev
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 BRL-R-1577, APPENDIX B
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 CENTER, CAMERON STATION,
 ALEXANDRIA, VIRGINIA 22314
 Army Installations

4338. Date 720400
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 Transport of Photons Through Air Using Source-Energy
 Band Structure from 300 Kev to 2 Kev. Appendix C -
 Data for Source Energies 120 105, 105-90, and 90-75
 Kev
 Banks, N. E.; Coleman, W. A.
 BRL-R-1577, APPENDIX C
 AVAILABILITY-DEFENSE DOCUMENTATION
 CENTER, CAMERON STATION,
 ALEXANDRIA, VIRGINIA 22314
 Army Installations

4339. Date 720400
 112B00 329000 512110 513110 830000
 Transport of Photons Through Air Using Source-Energy
 Band Structure From 300 Kev to 2 Kev. Appendix D
 - Data for Source Energies 75-65, 65-55, and 55-45
 Kev
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 Army Installations

4340..... Date 720400
 112B00 329000 512110 513110 830000

Transport of Photons Through Air Using Source-Energy
 Band Structure From 300 Kev to 2 Kev. Appendix E
 - Data for Source Energies 45-35, 35-30, and 30-25
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 AVAILABILITY-DEFENSE DOCUMENTATION
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 Army Installations

4341..... Date 720400
 112B00 329000 512110 513110 830000

Transport of Photons Through Air Using Source-Energy
 Band Structure From 300 Kev to 2 Kev. Appendix F
 - Data for Source Energies 25-20, 20-15, 15-10, 10-8,
 8-6, 6-4, and 4-2 Kev

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4554..... Date 730000
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 LA-UR-73-1578; CONF-730935-2
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 Los Alamos Scientific Lab

4563..... Date 730800
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Bonzon, L. L.
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4575..... Date 721123
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Fritelli, L.
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4631..... Date 740200
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4674..... Date 710500
 111210 329000 511110 830000

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Plechaty, E. F.
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 Lawrence Livermore Lab

4689..... Date 711100
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4729..... Date 741200
 112760 512120 830000

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 Environmental Protection Agency

4801..... Date 741100
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4820. Date 750900
 112B00 328000 632300 731200 830000 853100
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 Borak, T. B.
 HEALTH PHYS., 29(3), 423-425
 Argonne National Lab.

4828. Date 750600
 112120 112500 112600 327000 512110 610000 632500
 731200 830000 853100
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 Nuclear Explosions. I. Attenuation of Air Secondary
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 Spencer, L. V.
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4840. Date 751000
 111210 112500 112600 421130 511120 512220 830000
 870007
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 Brocker, B.; Clausen, K.; Schneider-Kuhnle, P.;
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4922. Date 751000
 111210 122310 511110 795192 830000 870007
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 NBS SPEC.PUB.-425, PP.436-439;
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CATEGORY NUMBER 841000
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 HYDROCARBON

3687. Date 730115
 112720 112730 112760 121200 422200 512120 841000
 842000 844000
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 of Organic Scintillators
 Goswami, B.; Chaudhuri, N.
 NUCL. INSTR. METHODS, 106(2), 317-318
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CATEGORY NUMBER 841000

3717. Date 720000
 111220 511120 632400 841000 842000 861000 870006
 882000
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 Gujrathi, S. C.; D'auria, J. M.
 NUCL. INSTR. METHODS, 100(3), 445-452
 British Columbia

3978. Date 700331
 111110 122310 422140 511110 820000 841000 853100
 861000
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 Measurements
 Makra, S.
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 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Hungary

4133. Date 731100
 111110 112110 32A000 511110 512110 512210 793000
 795082 841000 870098 882000 883000
 252-Cf Shielding With Water-Extended Polyester
 Stoddard, D. H.
 DP-1339
 AVAILABILITY-DEP., NTIS \$4.00
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4281. Date 700300
 010000 511110 512110 521130 522110 710000 713000
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 Hyodo, T.; Miyasaka, S.; Nakata, M.
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4372. Date 730000
 111210 111500 421130 430000 841000
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 An Organic Liquid Scintillator in the Energy Range
 From 0.6 to 12.4 Mev
 Schanzler, L.; Stuker, S.
 STI/PUB/318, V.1, 87-95; CONF-721203, V.1, 87-95;
 IAEA-SM-167/54
 AVAILABILITY-IAEA
 Germany (West)

4650. Date 750200
 111210 422110 511120 632400 841000 853100
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 Bozyap, O.; Day, L. R.
 HEALTH PHYS., 28(2), 101-109
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CATEGORY NUMBER 841000

4669..... Date 700225
 329000 511110 795145 841000 842000 882000
 Monte Carlo Calculations of Neutron Attenuation
 Czirr, J. B.; Van Hemert, R. L.
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4920..... Date 751000
 111210 329000 521130 841000 853100
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 Neutrons Leaked Through A Concrete-Paraffin
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 Chuang, L. S.; Wong, K. C.
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CATEGORY NUMBER 842000
 ORGANIC MATERIAL - PLASTIC

3605..... Date 700000
 111500 423300 513120 760000 842000 843000
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 Locally Available Materials
 Lee, H.; Terrado, J.; Petel, R.; Bustamante, N.
 PHILIPPINES NUCL. J., 2(2), 215-222
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 842000 844000
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 Gujrathi, S. C.; D'auria, J. M.
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3803..... Date 730600
 111220 329000 421120 521210 842000 861000 870013
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 Scatterers
 Segal, Y.; German, U.; Notea, A.
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 Israel

3829..... Date 740100
 111500 511110 820000 842000 853100 861000 882000
 Spectra and Dose Fractions of Monoenergetic Neutrons
 Passed Through Different Shields and Their
 Application for Dose-Meter Evaluation
 Makra, S.; Palfalvi, J.; Vertes, P.
 HEALTH PHYS., 26(1), 29-39
 Hungary

3858..... Date 690400
 111210 111500 329000 551110 842000
 Monte-Carlo Calculation of Neutron Penetration
 Through Cylindrical Polyethylene Layers
 Miroshnikov, G. V.; Solodukhin, G. V.;
 Miroshnikova, A. I.
 SOVIET J. AT. ENERGY (ENGLISH TRANSL.),
 26(4), 422-423
 Russia

4094..... Date 740300
 122310 32A000 795042 842000 870041 870042 870073
 870082
 Transport Analysis of Measured Neutron Leakage
 Spectra From Spheres As Tests Of Evaluated
 High-Energy Cross Sections
 Bogart, D.; Shook, D. F.; Fieno, D.
 NUCL. SCI. ENG., 53(3), 285-303
 National Aeronautics Support Agencies

4160..... Date 720000
 111110 220000 421140 511120 551120 820000 842000
 Neutron Spectral Measurements in a Neck Tissue
 Phantom
 Filipiak, B.
 INR-1443
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$3.00
 Poland

CATEGORY NUMBER 842000

4306. Date 730400
 112720 112730 220000 522130 842000 845000
 Use of Lead Loaded Rubber Gauntlets in Mixed
 Beta-Gamma Radiation Fields
 Charles, M. W.
 RD/B/N-2647
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$3.00
 England

4369. Date 730000
 111110 111500 511110 794000 795171 820000 842000
 861000 882000
 Calculation and Comparison of Leakage Neutron
 Spectra
 Makra, S.; Palfalvi, J.; Zarand, P.
 KFKI-72-67; STI/PUB/318,V.1,47-57; CONF-721203-11
 AVAILABILITY-IAEA
 Hungary

4378. Date 730000
 111500 32A000 422140 430000 842000
 Influence of Detector Type and Equipment on the
 Sensitivity of Bonner Spheres
 Rohloff, F.; Heinzelmann, M.
 STI/PUB/318,V.1,269-277; CONF-721203,V.1,269-277;
 IAEA-SM-167/3
 AVAILABILITY-IAEA
 Germany (West)

4411. Date 740700
 020000 111110 32A000 329000 421130 422140 511110
 511120 512210 713000 793000 795017 795046 795082
 795089 795127 842000 870011
 Shielding Benchmark Problems
 Simmons, G. L.(Ed.)
 ORNL-RSIC-25(SUPPL.2); ANS-SD-9(SUPPL.2)
 AVAILABILITY-DEP., NTIS \$5.45
 Oak Ridge National Lab.

4424. Date 740800
 111500 422140 842000
 A Method for Establishing Effective Neutron Energy and
 Fluence in Mixed Radiation Fields
 Engelke, M. J.; Israel, H. I.
 HEALTH PHYS., 27(2), 173-179
 Los Alamos Scientific Lab

CATEGORY NUMBER 842000

4484. Date 731000
 111210 329000 511110 632110 820000 842000
 Build-Up Factors for 14.1-Mev Neutrons in Different
 Materials
 Deimel, E.; Deimel, P.
 KERNTECHNIK, 15(10), 464-467
 Germany (West)

4565. Date 730300
 111500 32A000 511110 795130 842000 861000 863000
 870014
 Reduction of Neutron Damage in Silicon By Thick
 Shields of Iron, Tungsten, And Polyethylene
 Ewing, R. I.; Renken, J. H.; Adams, K. G.
 SLA-73-184
 AVAILABILITY-DEP., NTIS \$3.00
 Sandia Corporation

4608. Date 730800
 111500 423120 423140 511120 820000 842000 853100
 861000 882000
 Spectra and Dose Fractions of Monenergetic Neutrons
 Passed Through Different Shields and Their
 Application for Dose-Meter Evaluation
 Makra, S.; Palfalvi, J.; Vertes, P.
 SZS-153, PP.117-136
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Hungary

4656. Date 720500
 111210 423110 521230 842000 861000 882000
 Attenuation of 15 Mev Neutrons in Multilayer Shields
 Composed of Steel, Polyethylene, and Borated
 Materials
 Maruyama, T.; Bouts, C. J.
 PHYS. MED. BIOL., 17(3), 420-424
 Netherlands (Holland)

4669. Date 700225
 329000 511110 795145 841000 842000 882000
 Monte Carlo Calculations of Neutron Attenuation
 Czirr, J. B.; Van Hemert, R. L.
 UCID-15604
 AVAILABILITY-DEP., NTIS \$4.00
 Lawrence Livermore Lab

4803. Date 740300
 112B00 112720 112730 220000 512110 632200 842000
 A Theoretical Evaluation of Plastic Dosimetry Phantoms
 Peschel, R. E.; Schultz, R. J.
 PHYS. MED. BIOL., 19(2), 171-185
 Connecticut Schools

CATEGORY NUMBER 842000

4817..... Date 750515
 111220 421130 511120 512220 760000 842000 861000
 870082 882000
 Intensity Measurements and Shielding of a Fast-Neutron
 Beam for Biological And Medical Applications
 Meulders, J. P.; Leleux, P.; Macq, P. C.; Pirart, C.;
 Valenduc, G.
 NUCL. INSTR. METHODS, 126(1), 81-85
 Belgium

4910..... Date 751000
 111110 111210 32A000 421130 511120 795082 842000
 861000 870004 870041
 Integral Test of Cross Sections Using Neutron Leakage
 Spectra From Spheres Of Iron, Niobium, Beryllium,
 and Polyethylene
 Johnson, R. H.; Dorning, J. J.; Wehring, B. W.
 NDS SPEC.PUB.-425,PP.169-172;
 CONF-750303,PP.169-172
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Illinois Schools

CATEGORY NUMBER 843000
 ORGANIC MATERIAL - WOOD

3605..... Date 700000
 111500 423300 513120 760000 842000 843000
 Transmission of Low-Energy X-Ray Through Various
 Locally Available Materials
 Lee, H.; Terrado, J.; Petel, R.; Bustamante, N.
 PHILIPPINES NUCL. J., 2(2), 215-222
 Philippines

4296..... Date 740700
 112B00 121200 122200 843000
 Gamma-Ray Attenuation Coefficients for Higher Green
 Plants. (Note)
 Tsoulfanidis, N.
 HEALTH PHYS., 27(1), 145-147
 Missouri Schools

CATEGORY NUMBER 844000
 ORGANIC MATERIAL - OTHER

3541..... Date 720000
 112B00 220000 329000 795170 820000 844000
 Effect of Differences in the Elemental Composition of
 Human Phantoms on The Absorbed Energy
 Fraction of External Photon Radiation (Short
 Communication)
 Koblinger, L.
 ACTA BIOCHEM. BIOPHYS., 7(2), 189-192
 Hungary

CATEGORY NUMBER 844000

3542..... Date 720800
 111210 220000 329000 511110 795178 844000
 Radiation Transport Codes for Potential Applications
 Related to Radiobiology And Radiotherapy Using
 Protons, Neutrons, and Negatively Charged Pions
 Armstrong, T. W.
 ORNL-TM-3816
 AVAILABILITY-DEP., NTIS
 Oak Ridge National Lab.

3603..... Date 720400
 111110 220000 32A000 511110 512110 512210 760000
 795082 844000 870098
 Calculated Dose Rate From 252-Cf Radiotherapy Source
 Stoddard, D. H.
 RADIOLOGY, 103(1), 187-190
 E. I. Dupont Denemours

3639..... Date 730200
 112B00 220000 329000 844000
 Dose to Standard Reference Man From External
 Sources of Monoenergetic Photons
 Jones, T. D.; Auxier, J. A.; Snyder, W. S.;
 Warner, G. G.
 HEALTH PHYS., 24(2), 241-255
 Oak Ridge National Lab.

3687..... Date 730115
 112720 112730 112760 121200 422200 512120 841000
 842000 844000
 Measurements of Gamma-Ray Attenuation Coefficients
 of Organic Scintillators
 Goswami, B.; Chaudhuri, N.
 NUCL. INSTR. METHODS, 106(2), 317-318
 India

3886..... Date 720100
 113100 220000 423300 613000 820000 844000
 Depth Dose and Scatter Analysis of 10 Mv X-Rays
 Khan, F. M.; Moore, V. C.; Sato, S.
 RADIOLOGY, 102(1), 165-169
 Hospitals

CATEGORY NUMBER 845000
 ORGANIC MATERIAL - BIOLOGICAL
 TISSUE

3587..... Date 720500
 111110 220000 845000 870098
 Radiation Quality of Californium-252
 Dicello, J. F.; Gross, W.; Kraljevic, U.
 PHYS. MED. BIOL., 17(3), 345-355
 New York Schools

CATEGORY NUMBER 845000

3588. Date 720500
111110 112110 220000 423110 511120 512120 845000
870098

Dose Distributions Around a 252-Cf Needle
Colvett, R. D.; Rossi, H. H.; Krishnaswamy, V.
PHYS. MED. BIOL., 17(3), 356-364
New York Schools

3595. Date 720700
111110 220000 32A000 511110 795042 845000 870098
Calculated Neutron Dose Rates for Implantable 252-Cf
Sources

Windham, J. P.; Shapiro, A.; Kereiakes, J. G.
PHYS. MED. BIOL., 17(4), 493-502
Ohio Schools

3634. Date 730000
113100 220000 329000 523100 760000 845000
Monte Carlo Calculations on Chest X-Ray
Examinations. Results For Monoenergetic Beams
Koblinger, L.
KFKI-73-19
AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
\$3.00
Hungary

3745. Date 720000
113100 220000 329000 760000 845000
Calculation of Dose to Selected Organs From
Monoenergetic X-Ray Beams Incident on a
Heterogeneous and Anthropomorphic Phantom
Poston, J. W.; Warner, G. G.
CONF-721204-1
AVAILABILITY-DEP., NTIS
Oak Ridge National Lab.

3746. Date 720000
010000 111110 112110 220000 329000 420000 511110
845000
Developments in Neutron Dosimetry for Radiation
Protection
Auxier, J. A.
CONF-721203-3
AVAILABILITY-DEP., NTIS
Oak Ridge National Lab.

3748. Date 730000
112930 220000 329000 845000
Model for Exposure to a Semi-Infinite Cloud of a
Photon Emitter
Poston, J. W.; Snyder, W. S.
CONF-730603-1
AVAILABILITY-DEP. NTIS \$3.00
Oak Ridge National Lab.

CATEGORY NUMBER 845000

3752. Date 730400
111110 220000 421110 430000 845000
Neutron Spectrometry Using the Li-6(N, Alpha) H-3
Reaction and Surface Barrier Detectors (Kerma
Computations in Neutron Irradiated Tissues)
Laguerre, R.
CEA-R-4393 (IN FRENCH); CEA-R-4393 (IN
FRENCH)
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$8.00
France

3754. Date 710000
111220 220000 329000 551110 552210 845000
Evaluation of the Components of the Absorbed Dose in
the Interior Of Organisms Exposed to Neutrons
Dousset, M.; Ricourt, A.; Lemaire, G.
CEA-CONF-1976; CONF-721203-2
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
France

3834. Date 740100
111110 112110 220000 423140 423240 511120 512120
845000
Results of Measurements During the Third Iaea
Intercomparison Study
Dickson, H. W.; Haywood, F. F.
ORNL-TM-4418
AVAILABILITY-NTIS
Oak Ridge National Lab.

3865. Date 721100
112B00 121200 122200 845000
Evaluation of Mass Energy-Absorption Coefficients of
Bone and Muscle
Atwater, H. F.
HEALTH PHYS., 23(5), 739-740
Los Alamos Scientific Lab

3866. Date 721100
121100 121200 220000 845000
Irradiation Equivalence
Katz, R.; Sharma, S. C.; Homayoonfar, M.
HEALTH PHYS., 23(5), 740-742
Nebraska Schools

3867. Date 720400
112720 220000 423250 512120 845000
Depth Dose in Skin for Obliquely Incident 60-Co
Radiation
Orton, C. G.; Seibert, J. B.
BRIT. J. RADIOL., 45(532), 271-275
New York Schools

CATEGORY NUMBER 845000

4035..... Date 720100
 111110 220000 423140 423240 845000
 Nuclear Accident Dosimetry Systems: U. K.
 Measurements at the Second I.A.E.A.
 Intercomparison at O.R.N.L., May, 1971
 Delafield, H. J.; Boot, S. J.
 AERE-R-7008
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$3.75
 England

4036..... Date 730400
 112200 220000 512220 845000
 Rbe of High-Energy Bremsstrahlung
 Kovalev, V. P.; Kapchigashev, S. P.; Tsuladze, N. G.
 AEC-TR-7421, FP.190-193
 AVAILABILITY-DEP., NTIS
 Russia

4109..... Date 740500
 112760 220000 845000
 Dose to the Urinary Bladder From Radionuclides in
 Urine
 Unnikrishnan, K.
 PHYS. MED. BIOL., 19(3), 329-340
 India

4146..... Date 730000
 112B00 220000 310000 631000 845000
 Internal Dose Calculation According to the Extended
 Concept of Absorbed Fractions Exact and
 Approximate Solution
 Roedler, H. D.; Kaul, A.
 ANN. OCCUP. HYG., 21(4), 249-253
 Germany (West)

4198..... Date 730900
 112B00 220000 423230 760000 845000
 Method of Measuring Gamma or X-Ray Attenuation
 Due to Overlying Tissues In Radiotherapy
 Rice, F. G.; Cowper, D. R.
 BRIT. J. RADIOLOG., 46(549), 715-718
 Canada

4217..... Date 690800
 111220 112720 112920 220000 423210 423240 511120
 512120 521210 845000 853100
 Radiation Shielding Studies at the Canadian Defence
 Research Board
 Clifford, C. E. (Can)
 ANS-SD-7, PP.157-168; CONF-671140, PP.157-168
 AVAILABILITY-DEP., NTIS \$3.00
 Canada

CATEGORY NUMBER 845000

4294..... Date 740700
 111110 220000 845000
 Estimation of Quality Factor and Rbe for Degraded
 Fission Neutron Spectra
 Murthy, M. S.; Bhatt, R. C.; Shinde, S. S.
 HEALTH PHYS., 27(1), 9-17
 India

4295..... Date 740700
 111110 111210 220000 329000 511110 512210 551110
 552210 845000
 Distributions for the Design of Dosimetric Experiments
 in a Tissue Equivalent Medium
 Jones, T. D.
 HEALTH PHYS., 27(1), 87-96
 Oak Ridge National Lab.

4306..... Date 730400
 112720 112730 220000 522130 842000 845000
 Use of Lead Loaded Rubber Gauntlets in Mixed
 Beta-Gamma Radiation Fields
 Charles, M. W.
 RD/B/N-2647
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$3.00
 England

4374..... Date 730000
 111500 220000 845000
 Neutron Dose Distribution in Tissue-Equivalent
 Phantoms
 Obaturov, G. M.; Shalin, V. A.;
 Keirim-Markus, I. B.; Kochetkov, O. A.
 STI/PUB/318,V.1,141-176; CONF-721203,V.1,141-176;
 IAEA-SM-167/79
 AVAILABILITY-IAEA
 Russia

4375..... Date 730000
 111500 220000 845000
 Standardizing the Fluence-To-Dose-Equivalent
 Conversion Factors For Whole-Body Neutron
 Exposures
 Stevenson, G. R.; Hofert, M.; Neufeld, J.; Rindi, A.;
 Routti, J. T.; Pretre, S.
 STI/PUB/318,V.1,177-191; CONF-721203,V.1,177-191;
 IAEA-SM-167/21
 AVAILABILITY-IAEA
 Cern

CATEGORY NUMBER 845000

4376. Date 730000
 111110 220000 423110 511120 845000
 Experimental Determination of Dose-Equivalent and
 Quality Factor in A Cylindrical Phantom Irradiated
 With Reactor Neutrons
 Pszona, S.
 STI/PUB/318,V.1,193-199; CONF-721203,V.1,193-199;
 IAEA-SM-167/33
 AVAILABILITY-IAEA
 Poland

4377. Date 730000
 111210 220000 511120 512220 845000
 Depth-Dose Measurements of D-T Neutrons in
 Tissue-Equivalent Phantoms
 Broers-Challiss, J. E.; Engels, A. C.; Bouts, C. J.;
 Broerse, J. J.
 STI/PUB/318,V.1,201-210; CONF-721203,V.1,201-210;
 IAEA-SM-167/72
 AVAILABILITY-IAEA
 Netherlands (Holland)

4431. Date 740300
 111500 112B00 220000 329000 845000
 Comments on the Theory of Radiation Risk, Parts 1 and
 2
 Neufeld, J.
 HEALTH PHYS., 26(3), 229-243
 Oak Ridge National Lab.

4432. Date 740400
 112B00 220000 329000 845000
 A Model for Exposure to a Semi-Infinite Cloud of a
 Photon Emitter
 Poston, J. W.; Snyder, W. S.
 HEALTH PHYS., 26(4), 287-293
 Oak Ridge National Lab.

4468. Date 740500
 113100 220000 423250 513120 845000
 Energy Dependence of Thermoluminescent Dosimeters
 for X-Ray Dose and Dose Distribution
 Measurements in a Mouse Phantom
 Puite, K. J.; Crebolder, D. L.
 PHYS. MED. BIOL., 19(3), 341-347
 Netherlands (Holland)

4469. Date 730100
 111110 220000 760000 845000 870098
 Experience With Californium-252 in Clinical
 Radiotherapy
 Castro, J. R.; Oliver, G. D.; Withers, H. R.;
 Almond, P. R.
 AM. J. ROENTGENOL, 117(1), 182-194

CATEGORY NUMBER 845000

California Schools

4477. Date 730100
 112720 113100 220000 760000 845000
 A Method for the Calculation of Dose in the Radiation
 Treatment of Hodgkin's Disease
 Cundiff, J. H.; Cunningham, J. R.; Golden, R.;
 Lanzl, L. H.; Meurk, M. L.; Ovidia, J.; Page
 Last, V.; Pope, R. A.; Sampiere, V. A.;
 Saylor, W. L.; Shalek, R. J.; Suntharalingham, N.
 AM. J. ROENTGENOL, 117(1), 30-44
 Texas Schools

4514. Date 740900
 112760 220000 222000 632110 795048 845000 870094
 Dose-To-The-Population Estimates for Use of
 Radioisotope Powered Cardiac Pacemakers
 McKee, R. W.; Clark, L. L.; Cole, B. M.;
 Libby, R. A.
 BNWL-1858
 AVAILABILITY-DEP., NTIS \$5.45
 Battelle-Northwest

4567. Date 720000
 112120 220000 221000 423250 845000
 Evaluation of Personnel Exposures in a High-Energy,
 High-Intensity Beta-Gamma Field
 O'neal, B.
 SLA-73-5371; CONF-730603-4; CONF-730907-1
 AVAILABILITY-DEP., NTIS \$3.00
 Sandia Corporation

4579. Date 741100
 112710 220000 329000 610000 632200 845000
 A Tabulation of Dose Equivalent Per Microcurie-Day
 for Source and Target Organs of An Adult for
 Various Radionuclides
 Snyder, W. S.; Ford, M. R.; Warner, G. G.;
 Watson, S. B.
 ORNL-5000
 AVAILABILITY-NTIS \$10.60
 Oak Ridge National Lab.

4609. Date 730800
 111500 329000 551110 845000
 Spectrum of Neutrons Backscattering From a Finite
 Phantom
 Noack, K.; Heinzelmann, B.; Wand, H.; Giessing, R.;
 Linemann, H.
 SZS-153,PP.137-142(IN GERMAN
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Germany (West)

CATEGORY NUMBER 845000

4621. Date 750400
 111130 112120 112130 220000 329000 845000
 In Vivo Dose Estimates for A-Bomb Survivors Shielded
 By Typical Japanese Houses
 Jones, T. D.; Auxier, J. A.; Cheka, J. A.;
 Kerr, G. D.
 HEALTH PHYS., 28(4), 367-381
 Oak Ridge National Lab.

4643. Date 730000
 112B00 220000 329000 845000
 A Tabulation of Specific Effective Energies for Dose
 Calculations
 Ford, M. R.; Snyder, W. S.
 CONF-730907-2; CONF-730907-P1, PP.619-624
 AVAILABILITY-DEP., NTIS
 Oak Ridge National Lab.

4644. Date 730000
 112760 220000 329000 845000
 Dose From Photon Emitters Distributed Uniformly in
 the Total Body As A Function of Age
 Hilyer, M. J.; Hill, G. S.; Warner, G. G.
 CONF-730907-3; CONF-730907-P1, PP.694-699
 AVAILABILITY-DEP., NTIS
 Oak Ridge National Lab.

4649. Date 741100
 112B00 220000 32A000 511110 512210 845000
 Neutron and Capture Gamma Spectra in a
 Tissue-Equivalent Slab for Isotropic Irradiation
 Abagyan, A. A.; Dubinin, A. A.; Obaturov, G. M.;
 Shalin, V. A.; Zhuravlev, V. I.; Vrazhnov, Yu. N.;
 Kostin, E. I.
 HEALTH PHYS., 27(5), 481-489
 Russia

4654. Date 720100
 112720 220000 610000 760000 820000 845000
 Scatter-Air Ratios
 Cunningham, J. R.
 PHYS. MED. BIOL., 17(1), 42-51
 Canada

4655. Date 720300
 111110 112110 220000 329000 760000 845000 870098
 Absorbed Dose and Linear Energy Transfer Distribution
 From Therapeutic Sources 252-Cf
 Jones, T. D.; Auxier, J. A.
 PHYS. MED. BIOL., 17(2), 206-217
 Oak Ridge National Lab.

CATEGORY NUMBER 845000

4662. Date 730500
 112B00 220000 329000 552110 760000 845000
 Photon Fluence Calculations for Estimating Dose
 Distribution in the Thorax
 Sidwell, J. M.; Burlin, T. E.
 BRIT. J. RADIOL., 46(545), 360-364
 England

4736. Date 740000
 112B00 122200 220000 845000
 Human Tissues: Chemical Composition and Photon
 Dosimetry Data
 Kim, Y. S.
 RADIATION RES., 57(1), 38-45
 Ohio Schools

4745. Date 721100
 112B00 220000 632200 845000
 Average Geometrical Factor in Absorbed Dose
 Calculation
 Lane, R. G.; Greenfield, M. A.
 J. NUCL. MED., MIRD, 13(11), 858-859
 Wisconsin Schools

47j62. Date 741200
 111210 111220 112720 220000 329000 511110 512110
 795178 845000
 Calculations Related to the Possible Use of Photons,
 Neutrons, Negatively Charged Pions, Protons, and
 Alpha Particles in Radiotherapy
 Alsmiller, R. G., Jr.; Santoro, R. T.;
 Armstrong, T. W.; Barish, J.; Chandler, K. C.;
 Chapman, G. T.
 RADIATION RES., 60(3), 369-387; ORNL-TM-4369
 Oak Ridge National Lab.

4799. Date 740900
 111110 111210 220000 329000 423120 423220 511120
 512220 845000
 Measured and Calculated Dose Distributions From
 Neutrons Incident on A Tissue-Equivalent Phantom
 Hubbell, H. H., Jr.; Chen, W. L.; Shinpaugh, W. H.;
 Jones, T. D.
 HEALTH PHYS., 27(3), 289-297
 Oak Ridge National Lab.

4802. Date 741100
 111110 112110 511110 512110 512210 610000 845000
 870090
 Calculated Depth Dose Tables for Californium-252 Seed
 Sources in Tissue
 Krishnaswamy, V.
 PHYS. MED. BIOL., 19(6), 886-888
 New York Schools

CATEGORY NUMBER 845000

4804. Date 740300
 112B00 328000 329000 512110 845000
 Multiple Scatter Corrections Below 0.1 Mev
 Hubbard, L. B.
 PHYS. MED. BIOL., 19(2), 221-223
 South Carolina Schools

4807. Date 750500
 112B00 112720 112730 220000 329000 845000
 Measurements of Absorbed Fractions for Photon
 Sources Distributed Uniformly In Various Organs of
 a Heterogeneous Phantom
 Garry, S. M.; Stansbury, P. S.; Poston, J. W.
 HEALTH PHYS., 28(5), 591-597
 Oak Ridge National Lab.

4808. Date 750500
 112B00 220000 329000 845000
 Absorbed Dose in Phantoms Which Represent Various
 Aged Male Humans From External Sources of
 Photons As a Function of Age
 Warner, G. G.; Poston, J. W.; Snyder, W. S.
 HEALTH PHYS., 28(5), 599-603
 Oak Ridge National Lab.

4851. Date 750600
 112930 220000 221000 222000 632110 632120 795270
 845000
 Subdosa - a Computer Program for Calculating External
 Doses From Accidental Atmospheric Releases of
 Radionuclides
 Streng, D. L.; Watson, E. C.; Houston, J. R.
 BNWL-B-351
 AVAILABILITY-NTIS \$7.60 MF \$2.25
 Battelle-Northwest

4855. Date 741200
 112930 220000 221000 222000 845000
 Dacrin - a Computer Program for Calculating Organ
 Dose From Acute or Chronic Radionuclide
 Inhalations
 Houston, J. R.; Streng, D. L.; Watson, E. C.
 BNWL-B-389
 AVAILABILITY-NTIS \$7.60
 Battelle-Northwest

4856. Date 740200
 112930 220000 221000 222000 845000
 Dacrin - a Computer Program for Calculating Organ
 Dose From Acute or Chronic Radionuclide
 Inhalation: Modification for Gastrointestinal Tract
 Dose
 Streng, D. L.
 BNWL-B-389(SUPP.)

CATEGORY NUMBER 845000

AVAILABILITY-DEP., NTIS \$5.45
 Battelle-Northwest

4857. Date 751000
 220000 329000 760000 845000
 Effects of Tissue Inhomogeneities on Dose Patterns in
 Cylinders Irradiated By Negative Pion Beams
 Hamm, R. N.; Wright, H. A.; Turner, J. E.
 ORNL-TM-5088
 AVAILABILITY-NTIS \$4.00
 Oak Ridge National Lab.

4862. Date 751100
 112710 220000 329000 610000 632200 845000
 A Tabulation of Dose Equivalent Per Microcurie-Day
 for Source and TKARGET Organs of An Adult for
 Various Radionuclides
 Snyder, W. S.; Ford, M. R.; Warner, G. G.;
 Watson, S. B.
 ORNL-5000, PART 2
 AVAILABILITY-NTIS \$10.60
 Oak Ridge National Lab.

4866. Date 720100
 111110 111220 220000 423135 423250 521210 845000
 Personnel Albedo Neutron Dosimeter With
 Thermoluminescent 6-LiF and 7-LiF
 Hoy, J. E.
 DP-1277
 AVAILABILITY-NTIS
 E. I. Dupont Denemours

CATEGORY NUMBER 851000
SILICEOUS MATERIAL - EARTH AND
SAND

3577. Date 730300
 122100 122200 851000
 Neutron and Gamma Ray Production Cross Sections for
 Silicon
 Bhat, M. R.; Goldberg, M. D.; Kinsey, R. R.;
 Prince, A.; Takahashi, H.
 BNL-50379; ENDF-186
 AVAILABILITY-NTIS
 Brookhaven Natl. Lab.

3855. Date 730800
 511120 632400 851000
 Neutron Cross Sections for the Egyptian Marble
 Gomaa, M. A.; El-Shinawy, R. M.; Mohamed, H. O.
 HEALTH PHYS., 25(2), 175-176
 Egypt

CATEGORY NUMBER 851000

3992. Date 711200
121100 210000 851000
Considerations in Establishing a Standard for Neutron
Displacement Energy Effects in Semiconductors
Conrad, E. E.
IEEE TRANS. NUCL. SCI., 18(6), 200-205
Harry Diamond Laboratories

4005. Date 700600
112730 424000 851000
Measurement of Soil Moisture With a Portable Gamma
Ray Scintillation Spectrometer
Mchenry, J. R.; Gill, A. C.
WATER RESOURCES RES., 6(3), 989-992
Usda Sedimentation Lab

4554. Date 730000
122100 830000 851000
Review of Evaluated Cross Section Data for Air and
Ground Constituents
Young, P. G.
LA-UR-73-1578; CONF-730935-2
AVAILABILITY-DEP., NTIS \$3.00
Los Alamos Scientific Lab

4617. Date 740900
112760 326000 522130 820000 851000
Computer Modeling of Terrestrial Gamma-Radiation
Fields
Kirkegaard, P.; Lovborg, L.
RISO-303
AVAILABILITY-LIBRARY, DANISH ATOMIC
ENERGY COMMISSION, RISO, DK-4000
ROSKILDE, DENMARK
Denmark

4667. Date 730000
111220 325000 424000 540000 551110 851000
Calibration of Neutron Gauges for Measuring of the Soil
Moisture Content in The 4 Pi Geometry. I. Two
Group Diffusion Theory, Case of An Empty Hole
Wozniak, J.
ITJ-27
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$4.50
Poland

4928. Date 751000
111220 424000 851000
The Measurement of Thermal Neutron Constants of the
Soil; Application to The Calibration of Neutron
Moisture Gauges and to the Pedological Study of
Soil
Couchat, P.; Carre, C.; Marcesse, J.; Ho, J. L.

CATEGORY NUMBER 851000

NBS SPEC.PUB.-425, PP.516-519;
CONF-750303, PP.516-519
AVAILABILITY-GOP \$19.45 PER 2 VOL. SET -
SOLD IN SETS ONLY
France

CATEGORY NUMBER 853100
SILICEOUS MATERIAL - ORDINARY
CONCRETE

3505. Date 710400
111500 112B00 311000 32A000 511110 512210 610000
795082 853100
Adjoint Sn Calculations of Coupled Neutron and
Gamma-Ray Transport Through Concrete Slabs
Roussin, R. W.; Schmidt, F. A. R.
NUCL. ENG. DESIGN, 15(3), 319-343
Oak Ridge National Lab.

3506. Date 721100
112760 32A000 329000 512110 522110 795046 795082
830000 853100
Boundary Dose Rates Due to Gamma Rays at Power
Reactor Sites
Wells, M. B.; Collins, D. G.; Neuendorf, W. P.
RRA-M7202
AVAILABILITY-RADIATION RESEARCH
ASSOCIATES, INC., 3550 HULEN STREET,
FORT WORTH, TEXAS 76107
Radiation Research Assoc.

3539. Date 730300
112B00 512110 522110 632120 853100
An Approximation of Dose Transmission and Reflection
Probabilities For Gamma-Rays Obliquely Incident
and for a Plane Isotropic Source on Finite Concrete
Barriers
Harima, Y.
BULL. TOKYO INSTITUTE OF TECH., 116, 97-113
Japan

3543. Date 700600
112710 220000 423230 522230 760000 853100 861000
Comparison of the Background Spectra in Eight German
Whole-Body Counters And A Model Structure With
Layered Shield
Futtermenger, W.
ORNL-TR-2532; ABS-TUH-1065(IN GERMAN)
AVAILABILITY-DEP., NTIS
Germany (West)

CATEGORY NUMBER 853100

3550. Date 690400
620000 722100 853100
Gaps in Concrete Shields
Lettnin, H.; Sebok, F.
ORNL-TR-2162; ATOMKERNENERGIE, 14, 125-128
AVAILABILITY-RSIC
Germany (West)

3731. Date 730900
111110 329000 510000 511110 512210 795187 853100
Additional Analysis of Neutron and Secondary Gamma
Ray Transport in Concrete Using the Sam-Ce Monte
Carlo Code
Cohen, M. A.; Beer, M.
DNA-3182T; MR-7035
AVAILABILITY-MATHEMATICAL
APPLICATIONS GROUP, INC., 3
WESTCHESTER PLAZA, ELMSFORD, NEW
YORK 10523
Mathematical Appl. Group, Inc.

3751. Date 721100
111210 421130 422120 422130 423120 721200 750000
853100
Shield Studies: Propagation of 14 Mev Neutrons in
Access Baffles And Circular Channels
Logre, P.; Bory, P.; Couvert, D.; Drouvin, G.
CEA-R-4376 (IN FRENCH)
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
France

3762. Date 730500
112730 421200 430000 522210 853100 861000 870013
Backscattering of 137-Cs Gamma Rays By Finite
Barriers
Elias, E.; Segal, Y.; Notea, A.
J. NUCL. ENERGY, 27(5), 351-362
Israel

3778. Date 740100
111110 112110 112120 32A000 521130 522130 620000
710000 795082 853100 861000 870013 870082
Calculation of Energy Depositions and Dose Rates in
Proposed Shielding Surrounding the Tsr-II Reactor
Uchida, S.; Lewin, J.; Maerker, R. E.
ORNL-TM-4450
AVAILABILITY-NTIS \$4.00
Oak Ridge National Lab.

CATEGORY NUMBER 853100

3829. Date 740100
111500 511110 820000 842000 853100 861000 882000
Spectra and Dose Fractions of Monoenergetic Neutrons
Passed Through Different Shields and Their
Application for Dose-Meter Evaluation
Makra, S.; Palfalvi, J.; Vertes, P.
HEALTH PHYS., 26(1), 29-39
Hungary

3870. Date 730000
112720 423250 512120 632120 853100
Thermoluminescence in Concrete Measurements for
Determining Gamma-Ray Transmission Curve and
Build-Up Factors
Franceschi, L. D.; Gentili, A.; Sabbatini, V.
NUCL. INSTR. METHODS, 109(1), 25-27
Italy

3906. Date 721000
710000 853100
An Engineering Approach to Shield Design
Van Halem, H.; Kuiken, R.
CONF-721018, PP.136-148
AVAILABILITY-OECD
Netherlands (Holland)

3913. Date 721000
327000 511110 512110 853100
Moments Method Calculations of Neutron and
Gamma-Ray Penetration in Bulk Media
Simmons, G. L.; Eisenhauer, C.; Spencer, L. V.
CONF-721018, PP.268-283
AVAILABILITY-OECD
National Bureau of Standards

3922. Date 721000
32F000 531000 532000 719A00 795048 795054 853100
Practical Analysis of Primary Concrete Shield for a Pwr
Su, S. D.; Patti, F.
CONF-721018, PP.628-646
AVAILABILITY-OECD
Burns and Roe

3925. Date 721000
853100 853300 853400 853600 853800
Special Properties of Concretes Affecting Neutron
Transport
Dubois, F.
CONF-721018, PP.682-701
AVAILABILITY-OECD
France

CATEGORY NUMBER 853100

3926. Date 721000
32F000 511110 795022 853100 853200 853400 853600
853800

Choice of Characteristic Element Components in
Concrete for Shielding Calculations on Biological
Shields for Power Reactors

Schultz, H.; Vogt, H. G.

CONF-721018, PP. 702-716

AVAILABILITY-OECD

Germany (West)

3942. Date 721000
111110 32F000 511110 853100

Comparison of Dine Neutron Attenuation Calculations
With Experimental Results for a Wide Variety of
Simulated Concrete Configurations for a Fast and
Thermal Reactor Spectrum

Verschuur, K. A.

CONF-721018, PP. 996-1008

AVAILABILITY-OECD

Netherlands (Holland)

3944. Date 721000
511120 719A00 853100

Control of Shield Calculation By Test Measurements in
the Biological Concrete Shield of Three German
Power Reactors

Futtermenger, W. H.; Schultz, H. G.; Hecht, G.;
Weber, H.; Hock, R.

CONF-721018, PP. 1026-1046

AVAILABILITY-OECD

Germany (West)

3963. Date 721000
421200 512120 522210 853100 861000 870082

Gamma-Ray Transport at 6 and 8 Mev

Johnson, W. R.; Thompson, W. L.; Risher, D. H.;

Hassler, L. A.; Rogers, J. E.

CONF-721018, PP. 1493-1508

AVAILABILITY-OECD

Virginia Schools

3966. Date 720000
111110 112110 112120 32F000 521130 522130 620000
710000 713000 853100 861000 870006

Optimization of Shielding for the "Zrr" Fast Testing
Reactor

Fritz, Z.; Jechort, P.; Valenta, V.; Vlachovsky, K.

ZJE-129

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)

\$9.50

Czechoslovakia

CATEGORY NUMBER 853100

3967. Date 701000
210000 853100 853900

Effect of Radiation on the Mechanical Properties of
Concrete

Stoces, B.; Otopal, P.; Juricka, V.; Gabriel, J.

ORNL-TR-2470

AVAILABILITY-DEP., NTIS

Czechoslovakia

3977. Date 700331
220000 410000 421140 422110 721200 820000 853100

A Biological Irradiating Facility at the Hungarian
Wwr-Sm Reactor

Makra, S.; Zarand, P.; Sztanyik, L.; Muzsnay, L.

KFKI-70-5-HP

AVAILABILITY-DEP., NTIS

Hungary

3978. Date 700331
111110 122310 422140 511110 820000 841000 853100
861000

Neutron Average Energies: Calculations and Theory of
Measurements

Makra, S.

KFKI-70-6-HP

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)

Hungary

3999. Date 700000
112720 112730 522210 853100 853200 861000 870082

Investigation of the Energy Distribution of Singly
Scattered and Multiply Scattered Gamma Radiation.

I. Backscattered and Attenuated Radiation

Wechselberger, E.

ATOMKERNENERGIE, 16, 64-70

Germany (West)

4006. Date 720000
710000 740000 853100

Concrete Shields in Rheinsberg Nuclear Power Plant

Gerullis, W.; Michaelis, U. E.

KERNENERGIE, 15(1), 9-22

Germany (West)

4025. Date 661100
112500 423230 512120 853100

Attenuation of Nitrogen-Capture Gamma Rays in
Concrete

Johnson, W. R.

NDL-TR-82; AD-643754

AVAILABILITY-NTIS

Virginia Schools

CATEGORY NUMBER 853100

4092..... Date 720900
522210 853100 861000 870082
Experimentally Measured Dose Albedos of Intermediate
Energy Bremsstrahlung
Crites, T. R.
NUCL. SCI. ENG., 49(1), 103-106
Sandia Corporation

4125..... Date 740700
112720 421200 512120 522230 853100 861000
Experimental Evidence of An Equilibrium Property in
Gamma-Ray Angular Spectra Penetrating Bulk
Shields
Johnson, D. M.; Woollam, P. B.
NUCL. SCI. ENG., 54(3), 254-262
England

4156..... Date 730400
111110 32A000 421130 422140 721200 853100 861000
870011
Ornl Tsf Pipe Chase Neutron Streaming Experiment -
Phase One
Mcgregor, B. J.; Mynatt, F. R.; Muckenthaler, F. J.;
Clifford, C. E. (Usa)
ORNL-TM-4176
AVAILABILITY-AT (TIC) USAEC
Oak Ridge National Lab.

4157..... Date 721221
111220 112500 122310 122350 329000 421160 421200
511120 512220 853100
Time-Dependent Fast-Neutron and Secondary
Gamma-Ray Spectrum Measurements In Concrete -
Vol. 3
Harris, L., Jr.; Kendrick, H.
GULF-RT-A12456; DNA-2401-3; AD-760035
AVAILABILITY-NTIS
Gulf General Atomic

4159..... Date 731000
112720 112920 610000 632500 731200 853100
Effects of Building Eccentricity Upon the Basement
Ceiling Attenuation Factor, Bc(Xc, Omega)
Schmoke, M. A.; Zink, J.
BRL-R-1679
AVAILABILITY-NTIS
Army Installations

CATEGORY NUMBER 853100

4184..... Date 731000
111210 112A00 421140 423250 731200 853100
Experimental Studies of the Neutron and Gamma
Shielding Provided By Field Fortifications From a
14-Mev Neutron Source
Rexroad, R. E.; Jacobson, J. R.
BRL-R-1681; AD-771126
AVAILABILITY-NTIS
Army Installations

4216..... Date 690800
112720 112920 632500 731200 795139 853100 861000
Some Current Problems in Ocd Fallout Shielding
Calculations
Eisenhauer, C.
ANS-SD-7, PP.143-156; CONF-671140, PP.143-156
AVAILABILITY-DEP., NTIS \$3.00
National Bureau of Standards

4217..... Date 690800
111220 112720 112920 220000 423210 423240 511120
512120 521210 845000 853100
Radiation Shielding Studies at the Canadian Defence
Research Board
Clifford, C. E. (Can)
ANS-SD-7, PP.157-168; CONF-671140, PP.157-168
AVAILABILITY-DEP., NTIS \$3.00
Canada

4219..... Date 690800
111500 329000 521210 632110 632120 721100 853100
861000 870006
On Neutron Penetration in Duct Systems With Large
Cross Section
Spencer, L. V.; Woolf, S.
ANS-SD-7, PP.199-221; CONF-671140, PP.199-221
AVAILABILITY-DEP., NTIS \$3.00
National Bureau of Standards

4256..... Date 711021
111500 311000 32A000 511110 512110 512210 610000
853100
Effect of Material Composition, Especially Water
Content, on Neutron Penetration of Concrete Slabs
Chilton, A. B.
ANS-SD-13, ARTICLE 6
AVAILABILITY-ANS
Illinois Schools

CATEGORY NUMBER 853100

4276. Date 700300
 424000 853100
 Ultrasonic and Radiometric Measurement of
 Homogeneity and Density Of Concrete in Biological
 Shields of Nuclear Reactors
 Honig, A.; Pospisilova, L.; Zapletal, V.
 ANS-SD-8, PP.48-59; AD-712532, PP.48-59
 AVAILABILITY-NTIS
 Czechoslovakia

4280. Date 700300
 010000 32A000 32F000 511110 521130 632120 721100
 795040 795042 795066 795072 795121 820000 853100
 861000 870006
 Today's Approaches to Reactor Shielding Problems
 Nicks, R.; Penkuhn, H.; Ponti, C.
 ANS-SD-8, PP.113-138; AD-712532, PP.113-138
 AVAILABILITY-NTIS
 Italy

4290. Date 740800
 112760 112920 423210 632500 731200 853100
 Experimental Evaluation of Dcpa Standard Method
 Calculations for Basement Core Structures
 Schmoke, M. A.; Post, W. J.
 BRL-R-1736; AD-784599
 AVAILABILITY-NTIS
 Army Installations

4342. Date 691117
 111210 421130 421200 430000 510000 511120 853100
 Time-Dependent Fast Neutron and Secondary Gamma
 Ray Spectrum Measurements In Concrete. Vol.I
 Harris, L., Jr.; Kendrick, H.; Naliboff, Y. D.;
 Sperling, S. M.
 GA-9751, VOL.I; DASA-2401-I; AD-711839
 AVAILABILITY-NTIS
 Gulf General Atomic

4368. Date 730000
 111210 421130 511120 750000 853100 853200
 Spectral Distribution of Neutrons Outside the Shielding
 of Neutron Generators
 Sauermann, P. F.; Schafer, W.
 STI/PUB/318, V.1, 23-29; CONF-721203, VOL.1, 23-29;
 IAEA-SM-167/13
 AVAILABILITY-IAEA
 Germany (West)

CATEGORY NUMBER 853100

4422. Date 741100
 111210 122310 329000 510000 511120 853100 870008
 Measurements and Calculations of the Neutron Spectra
 Emitted From Concrete Spheres Bombarded With
 14-Mev Neutrons. (Tech. Note)
 Hansen, L. F.; Anderson, J. D.; Doyas, R. J.;
 Howerton, R. J.; Komoto, T.; Logan, C. M.;
 Wong, C.; Kammerdiener, J. L.
 NUCL. SCI. ENG., 55(3), 345-348
 Lawrence Livermore Lab

4456. Date 730000
 111110 324000 521110 632110 795238 853100
 Rapid Method of Calculating the Flux and Neutron
 Spectra in the Case of A Criticality Accident (Carnac
 Program)
 Bessis, J.
 ORNL-TR-2825; CEA-N-1612 (IN FRENCH)
 AVAILABILITY-DEP., NTIS
 France

4490. Date 750200
 112B00 327000 512110 632110 632120 820000 853100
 870013
 Tabulation and Empirical Representation of
 Infinite-Medium Gamma-Ray Buildup Factors for
 Monoenergetic, Point Isotropic Sources in Water,
 Aluminum, And Concrete
 Morris, E. E.; Chilton, A. B.; Vetter, A. F.
 NUCL. SCI. ENG., 56(2), 171-178
 Illinois Schools

4530. Date 730000
 111220 511120 853100
 Half-Value Thickness Measurements of Ordinary
 Concrete for Neutrons From Cyclotron Targets
 Butler, H. M.; Wallace, K. M.; Fulmer, C. B.
 CONF-730518-5
 AVAILABILITY-DEP., NTIS \$3.00
 Oak Ridge National Lab.

4577. Date 721123
 112710 230000 620000 712000 853100
 Handmade Concrete Containers for Radioactive Waste.
 Rel. Between Intensity Of Exposure at Contact,
 Contained Activity, and Characteristic Geom. in The
 Case of Low and Intermediate Lev. of Activity
 Moccaldi, A.; Rossi, M.
 RT/PROT-72-38 (IN ITALIAN)
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$3.25
 Italy

CATEGORY NUMBER 853100

4583. Date 730000
010000 853100 853200 853300 853400 853500 853600
853700 853800 853900

Properties of Concrete. (2nd (Metric) Edition)
Neville, A. M.
PITMAN PUB., LONDON
England

4608. Date 730800
111500 423120 423140 511120 820000 842000 853100
861000 882000

Spectra and Dose Fractions of Monenergetic Neutrons
Passed Through Different Shields and Their
Application for Dose-Meter Evaluation
Makra, S.; Palfalvi, J.; Vertes, P.
SZS-153, PP.117-136
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Hungary

4631. Date 740200
111500 327000 511110 830000 853100

Moments Method Calculations of Neutron Distributions
in Concrete
Simmons, G. L.; Eisenhauer, C.
NUCL. SCI. ENG., 53(2), 197-219
National Bureau of Standards

4645. Date 730000
111110 111220 511110 610000 632110 853100

Dose Due to Practical Neutron Energy Distributions
Incident on Concrete Shielding Walls
Wyckoff, J. M.; Chilton, A. B.
CONF-730907-P1, PP.694-699
AVAILABILITY-DEP., NTIS
National Bureau of Standards

4648. Date 750400
853100

High-Temperature Creep of Concrete
Gross, H.
NUCL. ENG. DESIGN, 32(1), 129-147
England

4650. Date 750200
111210 422110 511120 632400 841000 853100

Attenuation of 14 Mev Neutrons in Shields of Concrete
and Paraffin Wax
Bozyap, O.; Day, L. R.
HEALTH PHYS., 28(2), 101-109
England

CATEGORY NUMBER 853100

4663. Date 740000
112200 322000 513200 632120 853100 853700 861000
870082

Transmission of Betatron Bremsstrahlung Through
Materials
Hyodo, T.
BULL. INST. CHEM. RES., 52(1), 1-7
Japan

4757. Date 690000
32F000 632110 632300 853100

Analytical Radiation Shielding Calculations for Concrete
- Formulas And Parameters
Schmidt, F. A.
NUCL. ENG. DESIGN, 10(3), 308-324
Oak Ridge National Lab.

4795. Date 730000
111220 511120 853100

Half-Value Thickness Measurements of Ordinary
Concrete for Neutrons From Cyclotron Targets
Butler, H. M.; Wallace, K. M.; Fulmer, C. B.
CONF-730518-1
AVAILABILITY-DEP., NTIS \$3.00
Oak Ridge National Lab.

4820. Date 750900
112B00 328000 632300 731200 830000 853100

A Simple Approach to Calculating Gamma Ray
Skyshine for Reduced Shielding Applications
Borak, T. B.
HEALTH PHYS., 29(3), 423-425
Argonne National Lab.

4828. Date 750600
112120 112500 112600 327000 512110 610000 632500
731200 830000 853100

Structure Shielding Against Initial Radiations From
Nuclear Explosions. I. Attenuation of Air Secondary
and Fission Product Gamma Rays
Spencer, L. V.
NUCL. SCI. ENG., 57(2), 129-154
National Bureau of Standards

4848. Date 750600
113100 423110 513120 523200 853100

Transmission in Concrete and Scatter Angular
Distribution of 25-Mv X-Rays From a Betatron and
a Linear Accelerator
De Almeida, C. E.; Rosanky, S. L.; Marbach, J. R.;
Almond, P. R.
HEALTH PHYS., 28(6), 771-775
Texas Schools

CATEGORY NUMBER 853100

4918..... Date 751000
 111220 329000 421160 511120 853100 853500
 Neutron Attenuation in Normal and Ilmenite Concretes
 Adams, R. J.; Lokan, K. H.
 NBS SPEC.PUB.-425,PP.409-414;
 CONF-750303,PP.409-414
 AVAILABILITY-GOP \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Canada

4920..... Date 751000
 111210 329000 521130 841000 853100
 Use of Monte Carlo Method in the Estimation of Fast
 Neutrons Leaked Through A Concrete-Paraffin
 Shielding
 Chuang, L. S.; Wong, K. C.
 NBS SPEC.PUB.-425,PP.426-430;
 CONF-750303,PP.426-430
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Hongkong

4925..... Date 751000
 122310 311000 32A000 551110 853100 861000
 A Two Dimensional Cross Section Sensitivity Analysis
 of Iron in a Concrete Shield
 Albert, T. E.; Simmons, G. L.
 NBS SPEC.PUB.-425,PP.459-463;
 CONF-750303,PP.459-463
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Science Applications, Inc.

4926..... Date 751000
 111110 111220 421200 424000 853100 870098
 Feasibility of Neutron-Gamma Techniques for Field
 Analysis of Fresh Concrete
 Taylor, M. C.; Rhodes, J. R.; Bernard, D. L.
 NBS SPEC.PUB.-425,PP.496-499;
 CONF-750303,PP.496-499
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Columbia Scientific Ind

4946..... Date 750312
 111110 122110 122210 511110 512210 532000 719B00
 794000 795082 853100 861000 870006
 Neutron-Coupled Gamma-Ray Cross-Section
 Requirements for Gas-Cooled Fast Breeder Reactors
 Nagel, M.; Cerbone, R. J.
 GA-A-13329; NBS SPEC.PUB.-425,PP.444-446;
 CONF-750303-66
 AVAILABILITY-DEP., NTIS \$4.00
 Gulf General Atomic

CATEGORY NUMBER 853200
SILICEOUS MATERIAL - BARYTES
CONCRETE

3926..... Date 721000
 32F000 511110 795022 853100 853200 853400 853600
 853800
 Choice of Characteristic Element Components in
 Concrete for Shielding Calculations on Biological
 Shields for Power Reactors
 Schultz, H.; Vogt, H. G.
 CONF-721018,PP.702-716
 AVAILABILITY-OECD
 Germany (West)

3998..... Date 700000
 112B00 512110 632120 853200 853700
 Gamma-Ray Shielding By High-Density Concretes With
 Densities From 3.2 Up To 3.8 G/cc
 Krueger, F. W.
 ORNL-TR-2424
 AVAILABILITY-DEP., NTIS
 Germany (West)

3999..... Date 700000
 112720 112730 522210 853100 853200 861000 870082
 Investigation of the Energy Distribution of Singly
 Scattered and Multiply Scattered Gamma Radiation.
 I. Backscattered and Attenuated Radiation
 Wechselberger, E.
 ATOMKERNENERGIE, 16, 64-70
 Germany (West)

4076..... Date 721100
 112B00 329000 512110 760000 820000 853200 861000
 882000
 Absorption of the Gamma Radiation in Inhomogeneous
 Media
 Gyurcsak, J.; Umiastowski, K.
 ITJ-30
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$5.50
 Poland

4368..... Date 730000
 111210 421130 511120 750000 853100 853200
 Spectral Distribution of Neutrons Outside the Shielding
 of Neutron Generators
 Sauermann, P. F.; Schafer, W.
 STI/PUB/318,V.1,23-29; CONF-721203,VOL.1,23-29;
 IAEA-SM-167/13
 AVAILABILITY-IAEA
 Germany (West)

CATEGORY NUMBER 853200

4583. Date 730000
 010000 853100 853200 853300 853400 853500 853600
 853700 853800 853900
 Properties of Concrete. (2nd (Metric) Edition)
 Neville, A. M.
 PITMAN PUB.,LONDON
 England

CATEGORY NUMBER 853300
SILICEOUS MATERIAL - FERROPHOSPHORUS
CONCRETE

3925. Date 721000
 853100 853300 853400 853600 853800
 Special Properties of Concretes Affecting Neutron
 Transport
 Dubois, F.
 CONF-721018,PP.682-701
 AVAILABILITY-OECD
 France

4583. Date 730000
 010000 853100 853200 853300 853400 853500 853600
 853700 853800 853900
 Properties of Concrete. (2nd (Metric) Edition)
 Neville, A. M.
 PITMAN PUB.,LONDON
 England

CATEGORY NUMBER 853400
SILICEOUS MATERIAL - MAGNETITE
CONCRETE

3925. Date 721000
 853100 853300 853400 853600 853800
 Special Properties of Concretes Affecting Neutron
 Transport
 Dubois, F.
 CONF-721018,PP.682-701
 AVAILABILITY-OECD
 France

3926. Date 721000
 32F000 511110 795022 853100 853200 853400 853600
 853800
 Choice of Characteristic Element Components in
 Concrete for Shielding Calculations on Biological
 Shields for Power Reactors
 Schultz, H.; Vogt, H. G.
 CONF-721018,PP.702-716
 AVAILABILITY-OECD
 Germany (West)

CATEGORY NUMBER 853400

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 010000 853100 853200 853300 853400 853500 853600
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 Properties of Concrete. (2nd (Metric) Edition)
 Neville, A. M.
 PITMAN PUB.,LONDON
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CATEGORY NUMBER 853500
SILICEOUS MATERIAL - ILMENITE
CONCRETE

4583. Date 730000
 010000 853100 853200 853300 853400 853500 853600
 853700 853800 853900
 Properties of Concrete. (2nd (Metric) Edition)
 Neville, A. M.
 PITMAN PUB.,LONDON
 England

4918. Date 751000
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 Neutron Attenuation in Normal and Ilmenite Concretes
 Adams, R. J.; Lokan, K. H.
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 AVAILABILITY-GOP \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Canada

CATEGORY NUMBER 853600
SILICEOUS MATERIAL - LIMONITE
CONCRETE

3925. Date 721000
 853100 853300 853400 853600 853800
 Special Properties of Concretes Affecting Neutron
 Transport
 Dubois, F.
 CONF-721018,PP.682-701
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 853800
 Choice of Characteristic Element Components in
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 Shields for Power Reactors
 Schultz, H.; Vogt, H. G.
 CONF-721018,PP.702-716
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CATEGORY NUMBER 853600

4583..... Date 730000
 010000 853100 853200 853300 853400 853500 853600
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 Properties of Concrete. (2nd (Metric) Edition)
 Neville, A. M.
 PITMAN PUB., LONDON
 England

CATEGORY NUMBER 853700
SILICEOUS MATERIAL - HEAVY-ADDITIVE
CONCRETE

3998..... Date 700000
 112B00 512110 632120 853200 853700
 Gamma-Ray Shielding By High-Density Concretes With
 Densities From 3.2 Up To 3.8 G/cm Super 3
 Krueger, F. W.
 ORNL-TR-2424
 AVAILABILITY-DEP., NTIS
 Germany (West)

4583..... Date 730000
 010000 853100 853200 853300 853400 853500 853600
 853700 853800 853900
 Properties of Concrete. (2nd (Metric) Edition)
 Neville, A. M.
 PITMAN PUB., LONDON
 England

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 Transmission of Betatron Bremsstrahlung Through
 Materials
 Hyodo, T.
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CATEGORY NUMBER 853800
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CONCRETE

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 210000 853800
 Radiation Stability of Serpentine Concrete
 Dubrovskii, V. B.; Ibragimov, Sh. Sh.;
 Ladygin, A. Ya.; Kulakovskii, M. Ya.;
 Pergamenschchik, B. K.
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CATEGORY NUMBER 853800

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 853100 853300 853400 853600 853800
 Special Properties of Concretes Affecting Neutron
 Transport
 Dubois, F.
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 AVAILABILITY-OECD
 France

3926..... Date 721000
 32F000 511110 795022 853100 853200 853400 853600
 853800
 Choice of Characteristic Element Components in
 Concrete for Shielding Calculations on Biological
 Shields for Power Reactors
 Schultz, H.; Vogt, H. G.
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 AVAILABILITY-OECD
 Germany (West)

4583..... Date 730000
 010000 853100 853200 853300 853400 853500 853600
 853700 853800 853900
 Properties of Concrete. (2nd (Metric) Edition)
 Neville, A. M.
 PITMAN PUB., LONDON
 England

CATEGORY NUMBER 853900
SILICEOUS MATERIAL - SPECIAL OR
LOCAL AGGREGATE
CONCRETE

3863..... Date 700300
 210000 853900
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 Korenevskii, V. V.; Ladygin, A. Ya.;
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 Czechoslovakia

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 853700 853800 853900
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 Neville, A. M.
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 England

CATEGORY NUMBER 861000
IRON AND IRON ALLOYS

3501. Date 680000
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 Germogenova, T. A.; Kobozev, M. G.; Suvorov, A. P.
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 Measurements on Carbon, Iron, And Concrete
 Wong, C.; Anderson, J. D.; Brown, P.;
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 Pohl, B.
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 Lawrence Livermore Lab

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 The Removal P1 Method for Calculation of Radiation
 Distribution in Shielding
 Valenta, V.
 ZJE-131
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 Czechoslovakia

3519. Date 730300
 111110 311000 329000 731100 731200 795082 795089
 795127 820000 830000 861000
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 Three Dimensional Deep Penetration Problems
 Slater, C. O.; Robinson, J. C.
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CATEGORY NUMBER 861000

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 Comparison of the Background Spectra in Eight German
 Whole-Body Counters And A Model Structure With
 Layered Shield
 Futtermenger, W.
 ORNL-TR-2532; ABS-TUH-1065 (IN GERMAN)
 AVAILABILITY-DEP., NTIS
 Germany (West)

3547. Date 730600
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 Magnet Shield Design for Fusion Reactors
 Kriese, J. T.; Steiner, D.
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 Oak Ridge National Lab.

3551. Date 690400
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 Study of the Compatibility of the Brinkman-Seeger
 Model of Damage With The Results of Irradiation of
 Steel
 Jiménez, J. L.
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 France

3553. Date 680500
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 Use of a Monte Carlo Method for the Calculation of
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 Lanore, J. M.
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 AVAILABILITY-COMMISSARIAT A L'ENERGIE
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 ROSES (FRANCE). CENTRE D'ETUDES
 NUCLEAIRES
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 Huebotter, P. R.
 REACTOR TECH., 15(2), 156-183
 Argonne National Lab.

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3558..... Date 730300
111110 111120 111220 32A000 521130 712000 795082
861000 870082

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Burnup Thermal Reactor Fuel

Bailey, H. S.; Evatt, R. N.; Gyorey, G. L.;
Ruiz, C. F.

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General Electric Co.

3562..... Date 710000
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Whole Body Counting of Radiation Workers

Hukkoo, R. K.; Katoch, D. S.

BARC-548

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)

India

3564..... Date 730100
111110 210000 861000 870022

Postirradiation Mechanical Properties of Types 304 and
304 Plus 0.15% Titanium Stainless Steel

Bloom, E. E.; Stiegler, J. O.

NUCL. TECH., 17(1), 24-37

Oak Ridge National Lab.

3565..... Date 730100
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Estimation of Errors Caused By Radiation and
Temperature on Coaxial Signal Cables

Stringer, J. L.; Bourassa, R. R.; Dau, G. J.

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Battelle Memorial Inst.

3590..... Date 720600
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Nikolaishvili, Sh. S.; Gabrashvili, A. I.;
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Russia

3619..... Date 731000
210000 861000

Effect of Neutron Irradiation on the Elastic Constants of
Type-304 Stainless Steel

Straalsund, J. L.; Day, C. K.

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Wadco

CATEGORY NUMBER 861000

3629..... Date 730400
111110 122110 32A000 325000 521130 713000 861000
862000 870011 870092 870094 882000

One-Dimensional Calculations in Support of the
Reactivity Surveillance Procedures for the Fast Test
Reactor

Flanagan, G. F.; Simpson, D. B.; Buhl, A. R.

ORNL-TM-4014

AVAILABILITY-AT (TECHNICAL INFORMATION
CENTER, OAK RIDGE, TENN. 37830) \$5.45

Oak Ridge National Lab.

3630..... Date 730500
111110 32A000 329000 421130 422120 422140 511120
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General Electric Co.

3632..... Date 730800
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Discussion of the Possible Dose-Rate Effect in
Irradiation of Pressure Vessel Steel

Serpan, C. Z., Jr.

NRL-MR-2627

AVAILABILITY-NAVAL RESEARCH

LABORATORY, WASHINGTON, D.C. 20375

Naval Installations

3648..... Date 720000
111110 121100 210000 713000 861000

Fast Neutron Damage in Stainless Steels

Agarwala, R. P.; Pande, B. M.; Anand, M. S.

BARC-661

AVAILABILITY-BHABHA ATOMIC RESEARCH
CENTRE, BOMBAY, INDIA

India

3651..... Date 710600
111110 328000 521110 861000

Orders-Of-Scattering Calculation for the Reflection of
Collimated, Polyenergetic Fast Neutrons From a
Six-Inch-Thick Steel Slab

Thiesing, J. W.; Meyer, W.

COO-2049-8

AVAILABILITY-DEP., NTIS

Kansas Schools

CATEGORY NUMBER 861000

3652. Date 710825
111110 328000 421130 430000 511110 511120 521110
521210 820000 861000

Orders-Of-Scattering Method for Fast-Neutron
Transport

Thiesing, J. W.; Meyer, W.

COO-2049-9

AVAILABILITY-DEP., NTIS

Kansas Schools

3676. Date 720800
111110 122100 122310 713000 861000 862000 870011

Status of Neutron Nuclear Data for Important Fast
Reactor Structural And Coolant Materials

Schatz, B.

KFK-1668

AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)

Germany (West)

3677. Date 730300
111110 422110 521230 551120 820000 861000

Neutron Propagation in Laminated Iron-Water Shields
Nicks, R.; Perlini, G.

ISP-1973/03

AVAILABILITY-EURATOM, JOINT NUCLEAR
RESEARCH CENTRE, ISPRA

ESTABLISHMENT, 21020 ISPRA (VA), ITALY
Italy

3717. Date 720000
111220 511120 632400 841000 842000 861000 870006
882000

The Attenuation of Fast-Neutrons in Shielding Materials
Gujrathi, S. C.; D'auria, J. M.

NUCL. INSTR. METHODS, 100(3), 445-452

British Columbia

3741. Date 730300
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A Ukaea Evaluation of Displacement Damage Models
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Etherington, E. W.; Bramman, J. I.; Nelson, R. S.;
Norgett, M. I.

AERE-R-7374

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England

3743. Date 720000
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Iron-Filtered Neutron Beams: a New Approach to
Precision Time-of Flight Cross Section
Measurements

Block, R. C.; Kaushal, N. N.; Hockenbury, R. W.

COO-3058-20; CONF-720901-10

CATEGORY NUMBER 861000

AVAILABILITY-DEP., NTIS

New York Schools

3762. Date 730500

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Backscattering of 137-Cs Gamma Rays By Finite
Barriers

Elias, E.; Segal, Y.; Notea, A.

J. NUCL. ENERGY, 27(5), 351-362

Israel

3763. Date 730600

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Direct Solutions of Time-Dependent Neutron Slowing
Down Problems Using Numerical Laplace

Transforms-I. Infinite Media

Beynon, T. D.; Coleman, M.

J. NUCL. ENERGY, 27(6), 425-433

England

3778. Date 740100

111110 112110 112120 32A000 521130 522130 620000

710000 795082 853100 861000 870013 870082

Calculation of Energy Depositions and Dose Rates in
Proposed Shielding Surrounding the Tsr-II Reactor

Uchida, S.; Lewin, J.; Maerker, R. E.

ORNL-TM-4450

AVAILABILITY-NTIS \$4.00

Oak Ridge National Lab.

3789. Date 730516

111110 122310 32A000 421140 422130 511120 795042

861000

Benchmark Experiment of Neutron Propagation in Iron
Martini, M.; Bozzi, L.

RT/FI(73)19

AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)

\$3.00

Italy

3803. Date 730600

111220 329000 421120 521210 842000 861000 870013

870082

Experimental Fast-Neutron Albedo From Plane
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Segal, Y.; German, U.; Notea, A.

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Israel

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 From Iron Bombarded With 14-Mev Neutrons
 Hansen, L. F.; Anderson, J. D.; Brown, P. S.;
 Howerton, R. J.; Kammerdiener, J. L.;
 Logan, C. M.; Plechaty, E. F.; Wong, C.
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 Lawrence Livermore Lab

3811. Date 730800
 112500 861000
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 White, J. E.; Fu, C. Y.; Yost, K. J.
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 Oak Ridge National Lab.

3822. Date 730500
 111220 122100 421160 511120 861000
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 Cross-Section Minima In Elemental Iron From 24 to
 750 Kev
 Alfieri, K. A.; Block, R. C.; Turinsky, P. J.
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 New York Schools

3829. Date 740100
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 Makra, S.; Palfalvi, J.; Vertes, P.
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 Hungary

3839. Date 731100
 210000 861000
 Damage Function Analysis of Neutron Induced
 Mechanical Property Change Data In Type 304
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 Simons, R. L.; McElroy, W. N.; Blackburn, L. D.
 HEDL-TME-73-85
 AVAILABILITY-AT
 Hanford Eng Dev Lab.

3842. Date 731100
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 Displacement Cross Sections for Iron, Chromium,
 Nickel, Stainless Steel, And Tantalum
 Doran, D. G.
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 Hanford Eng Dev Lab.

CATEGORY NUMBER 861000

3845. Date 680900
 112B00 329000 632300 861000
 Differential Albedo of a Thin Beam of Fast Neutrons for
 a Semiinfinite Scatterer Consisting of Iron (Abstract)
 Gudkova, L. Ya.; Zolotukhin, V. G.;
 Mashkovich, V. P.; Mis'kevich, A. I.
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 Russia

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 Scattered Gamma-Ray Buildup Factors for Oblique
 Incidence
 Goryachev, I. V.; Kuznetsov, V. G.;
 Manchevskii, V. I.; Sakovich, V. A.;
 Shcherbakov, V. I.; Yakubovich, M. M.
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 Russia

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 Comparison of Transport and Diffusion Theory for Fast
 Reactor Shielding Calculations
 Sahin, S.
 ATOMKERNENERGIE, 22(1), 24-25
 Oak Ridge National Lab.

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 Passage of Gamma-Rays Through Heterogeneous Media
 Broder, D. L.; Gureev, V. I.; Kozlovskii, S. A.
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3951. Date 721000
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 Transport in Iron to Cross Section Properties
 Goldstein, H.; Lidofsky, L. J.; Preeg, W.;
 Troubetzkoy, E.; Oblow, E.; Ching, J.
 CONF-721018, PP.1202-1219
 AVAILABILITY-OECD
 New York Schools

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 Williams, J. G.; Goddard, A. J. H.
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CATEGORY NUMBER 861000

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122350 421160 861000
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Malaviya, B. K.; Kaushal, N. N.; Becker, M.;
Ginsberg, A.; Burns, E.; Gaerttner, E. R.
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AVAILABILITY-OECD
New York Schools

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Bishop, G. B.; Smitton, C.; Packwood, A.
CONF-721018, PP.1472-1492
AVAILABILITY-OECD
England

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421200 512120 522210 853100 861000 870082
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Johnson, W. R.; Thompson, W. L.; Risher, D. H.;
Hassler, L. A.; Rogers, J. E.
CONF-721018, PP.1493-1508
AVAILABILITY-OECD
Virginia Schools

3966. Date 720000
111110 112110 112120 32F000 521130 522130 620000
710000 713000 853100 861000 870006
Optimization of Shielding for the "Zrr" Fast Testing
Reactor
Fritz, Z.; Jechort, P.; Valenta, V.; Vlachovsky, K.
ZJE-129
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$9.50
Czechoslovakia

3969. Date 660000
32A000 511110 521130 820000 861000 870001
Transmission of Neutrons Through Plane Parallel,
Multi-Layer
Germogenova, T. A.; Suvorov, A. P.; Utkin, V. A.
ORNL-TR-2021(REV.)
AVAILABILITY-DEP., NTIS
Russia

3971. Date 710000
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Influence of Some Metallurgical Variables on the
Radiation Damage Sensitivity of Pressure Vessel
Steels
Brumovsky, M.
ZJE-99; CONF-700630-2

CATEGORY NUMBER 861000

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Czechoslovakia

3978. Date 700331
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861000
Neutron Average Energies: Calculations and Theory of
Measurements
Makra, S.
KFKI-70-6-HP
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Hungary

3989. Date 691000
112200 121200 512110 512210 610000 794000 861000
870082
The Importance of Bremsstrahlung in the Shielding of
Gamma Rays Having Energies Less Than 10 Mev
Dutton, L. M.
AEEW-R-675
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY),
UK 9S .6D.
England

3999. Date 700000
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Scattered and Multiply Scattered Gamma Radiation.
I. Backscattered and Attenuated Radiation
Wechselberger, E.
ATOMKERNENERGIE, 16, 64-70
Germany (West)

4004. Date 711200
111110 122110 861000 862000
Shielding Factors of Capture Cross-Sections With
Temperature Dependence For Cr, Fe and Ni
Ishiguro, Y.
JAERI-M-4660
AVAILABILITY-NTIS (U.S. SALES ONLY)
Japan

4008. Date 690000
111110 511120 861000
Spectra and Doses of Neutrons From the Reactors
During Their Passage Through Iron Filters
Stanolov, A.; Kristov, V.
IZV. FIZ. INST. ANEB, BULG. AKAD. NAUK., 18,
99-104
Russia

CATEGORY NUMBER 861000

4024..... Date 711200
112B00 329000 512110 610000 820000 861000 870050
870082

Tabulated Values of Spatial, Directional, and Energy
Distributions Of Multiple Scattered Gamma
Radiation

Stehfest, H.

BMBW-FBK-71-2(SUPPL.)

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)

Germany (West)

4026..... Date 670901
329000 511110 521110 795044 861000

Monte Carlo Calculations of Fast-Neutron Transmission
and Reflection By Iron Slabs

Long, J. J.; Wells, M. B.

RRA-T75

AVAILABILITY-RADIATION RESEARCH
ASSOCIATES, INC., 3550 HULEN ST., FORT
WORTH, TEXAS 76107

Radiation Research Assoc.

4046..... Date 720600
111110 210000 861000

Effects of Radiation on Structural Materials. Ductility
Limitations Of Irradiated Type 316 Stainless Steel

Holmes, J. J.; Lovell, A. J.; Fish, R. L.

HEDL-SA-310; CONF-720604-5

AVAILABILITY-DEP., NTIS

Hanford Eng Dev Lab.

4048..... Date 720800
111110 121100 210000 861000

Definition of Damage Functions From Irradiation Test
Data

Yoshikawa, H. H.; Mcelroy, W. N.; Simons, R. L.

HEDL-SA-479; CONF-721037-4

AVAILABILITY-DEP., NTIS

Hanford Eng Dev Lab.

4049..... Date 720800
111110 121100 210000 861000

Calculation of Displacement Rates in Stainless Steel
Under Neutron And Electron Irradiations

Doran, D. G.

HEDL-SA-482; CONF-721037-2

AVAILABILITY-DEP., NTIS

Hanford Eng Dev Lab.

CATEGORY NUMBER 861000

4061..... Date 711200
210000 861000 862000

Fast Neutron Damage in Type-304 Stainless Steel and
High-Nickel Alloys

Sandusky, D. W.; Ring, P. J.; Penrose, R. T.

GEAP-13738

AVAILABILITY-DEP., NTIS

General Electric Co.

4064..... Date 710000
210000 861000

Effect of Neutron Irradiation on the Ductility of
Austenitic Stainless Steel

Bloom, E. E.; Weir, J. R., Jr.

CONF-720420-4

AVAILABILITY-DEP., NTIS

Oak Ridge National Lab.

4076..... Date 721100
112B00 329000 512110 760000 820000 853200 861000
882000

Absorption of the Gamma Radiation in Inhomogeneous
Media

Gyurcsak, J.; Umiastowski, K.

ITJ-30

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)

\$5.50

Poland

4084..... Date 730700
111500 121100 210000 861000 862000 870023 870041
870042 870073

Displacement Cross Sections for Fe, Cr, Ni, 18/10 Ss,
Mo, V, Nb, and Ta

Doran, D. G.; Graves, N. J.

HEDL-TME-73-59

AVAILABILITY-DEP., NTIS \$4.00

Westinghouse

4088..... Date 740100
111110 210000 861000

The Effects of Neutron Irradiation on the Fracture
Properties of A508 Class 2 Steel

Hall, J. F.; Seman, D. J.

WAPD-TM-1078

AVAILABILITY-DEP., NTIS \$5.00

Bettis Atomic Power Lab.

CATEGORY NUMBER 861000

4091..... Date 720900
220000 861000
The Yield Stress Radiation Damage Function of Iron
Odette, G. R.; Ziebold, T. O.
NUCL. SCI. ENG., 49(1), 72-81
California Schools

4092..... Date 720900
522210 853100 861000 870082
Experimentally Measured Dose Albedos of Intermediate
Energy Bremsstrahlung
Crites, T. R.
NUCL. SCI. ENG., 49(1), 103-106
Sandia Corporation

4100..... Date 731200
111500 121100 210000 861000
Report of the Working Group on Displacement Models
and Procedures for Damage Calculations
Doran, D. G.; Beeler, J. R., Jr.; Dudey, N. D.;
Fluss, M. J.
HEDL-TME-73-76
AVAILABILITY-DEP., NTIS \$5.45
Westinghouse

4116..... Date 740600
111500 325000 510000 511110 861000 870092
Functionals to Represent the Neutron Flux in Fast
Pulsed Assemblies
Knickle, H. N.; Daitch, P. B.
NUCL. SCI. ENG., 54(2), 196-200
Rhode Island Schools

4125..... Date 740700
112720 421200 512120 522230 853100 861000
Experimental Evidence of An Equilibrium Property in
Gamma-Ray Angular Spectra Penetrating Bulk
Shields
Johnson, D. M.; Woollam, P. B.
NUCL. SCI. ENG., 54(3), 254-262
England

4138..... Date 731100
111220 421120 511120 861000 870082
Energy Spectra and Thickness Dependence of Fast
Neutrons Transmitted Through Plane Scatterers
German, U.; Segal, Y.; Notea, A.
J. NUCL. ENERGY, 27(11), 787-796
Israel

CATEGORY NUMBER 861000

4155..... Date 730300
111130 311000 32A000 511110 521120 551110 731200
830000 861000
Application of Adjoint Difference and Surface Integral
Methods to Selected Deep-Penetration Radiation
Transport Problems
Robinson, J. C.; Stevens, P. N.; Hoffman, T. J.
BRL-CR-98; NEUT-0150-3; AD-765487
AVAILABILITY-NTIS
Tennessee Schools

4156..... Date 730400
111110 32A000 421130 422140 721200 853100 861000
870011
Ornl Tsf Pipe Chase Neutron Streaming Experiment -
Phase One
Mcgregor, B. J.; Mynatt, F. R.; Muckenthaler, F. J.;
Clifford, C. E. (Usa)
ORNL-TM-4176
AVAILABILITY-AT (TIC) USAEC
Oak Ridge National Lab.

4161..... Date 730300
111210 122310 329000 510000 511110 795128 820000
861000 870003 870007 870008
Monte Carlo Calculations and Sensitivity Studies of the
Time-Dependent Neutron Spectra Measured in the
Lil Pulsed Sphere Program
Cramer, S. N.; Roussin, R. W.; Oblow, E. M.
ORNL-TM-4072
AVAILABILITY-DEP., NTIS \$14.00
Oak Ridge National Lab.

4183..... Date 730928
112720 112920 632300 731100 861000
Computation of the Residual Radiation Transmission
Factor for the Marine Corps Lvtp7
Cawley, R. G.
NOLTR-73-137; AD-780428
AVAILABILITY-NTIS-\$3.50
Naval Installations

4216..... Date 690800
112720 112920 632500 731200 795139 853100 861000
Some Current Problems in Ocd Fallout Shielding
Calculations
Eisenhauer, C.
ANS-SD-7, PP.143-156; CONF-671140, PP.143-156
AVAILABILITY-DEP., NTIS \$3.00
National Bureau of Standards

CATEGORY NUMBER 861000

4219..... Date 690800
111500 329000 521210 632110 632120 721100 853100
861000 870006

On Neutron Penetration in Duct Systems With Large
Cross Section

Spencer, L. V.; Woolf, S.
ANS-SD-7, PP.199-221; CONF-671140, PP.199-221
AVAILABILITY-DEP., NTIS \$3.00
National Bureau of Standards

4253..... Date 711021
111110 32A000 421130 421140 521130 551110 710000
713000 795082 795089 810000 861000 870011

Ftff Related Studies in the Ornl-Lmfbr Shielding
Program

Mynatt, F. R.; Clifford, C. E. (Usa);
Muckenthaler, F. J.; Maerker, R. E.;
Gritzner, M. L.; Williams, L. R.; Rathbun, J. L.
ANS-SD-13, ARTICLE 3
AVAILABILITY-ANS
Oak Ridge National Lab.

4254..... Date 711021
111110 329000 713000 861000 870011

Monte Carlo Calculation of the Secondary Sodium
Activation in the Phenix Reactor

Devillers, C.; Nimal, J. C.; Vergnaud, T.
ANS-SD-13, ARTICLE 4
AVAILABILITY-ANS
France

4259..... Date 710000
111500 112B00 329000 511110 512110 521120 522120
795199 795200 830000 861000

The Simulation of Low Energy Photon Transport and
the Simulation of The Adjoint Neutron Transport
Equation With Monte Carlo

Carter, L. L.; Cashwell, E. D.; Schrandt, R. G.
LA-DC-13275; CONF-711125-1;
ORNL-RSIC-33, PP.197-207
AVAILABILITY-DEP., NTIS
Los Alamos Scientific Lab

4272..... Date 721000
210000 861000

Effect of Irradiation on the Strain Rate Dependence of
Type 304 Stainless-Steel Mechanical Properties

Steichen, J. M.
NUCL. TECH., 16(1), 308-315
Westinghouse

CATEGORY NUMBER 861000

4277..... Date 700300
010000 210000 32A000 329000 521110 521130 531000
710000 861000 870011

Recent Advances in Reactor Shielding in France
Rastoin, J.

ANS-SD-8, PP.60-81; AD-712532, PP.60-81
AVAILABILITY-NTIS
France

4278..... Date 700300
010000 32A000 32E000 32F000 326000 329000 511110
620000 710000 722100 795022 795081 795121 820000
861000 870092

Key Problems in Radiation Shielding in the Federal
Republic of Germany

Bunemann, D.
ANS-SD-8, PP.82-108; AD-712532, PP.82-108
AVAILABILITY-NTIS
Germany (West)

4280..... Date 700300
010000 32A000 32F000 511110 521130 632120 721100
795040 795042 795066 795072 795121 820000 853100
861000 870006

Today's Approaches to Reactor Shielding Problems

Nicks, R.; Penkuhn, H.; Ponti, C.
ANS-SD-8, PP.113-138; AD-712532, PP.113-138
AVAILABILITY-NTIS
Italy

4281..... Date 700300
010000 511110 512110 521130 522110 710000 713000
721100 722100 820000 841000 861000 870013 870050

Latest Research on Reactor Shielding in Japan

Hyodo, T.; Miyasaka, S.; Nakata, M.
ANS-SD-8, PP.139-155; AD-712532, PP.139-155
AVAILABILITY-NTIS
Japan

4287..... Date 740900
020000 111110 421110 421130 422140 511110 551110
713000 861000

Sdt 11. the Ornl Benchmark Experiment for Neutron
Transport Through Iron And Stainless Steel, Part I

Maerker, R. E.
ORNL-TM-4222; ENDF-I88
AVAILABILITY-NTIS
Oak Ridge National Lab.

CATEGORY NUMBER 861000

4349..... Date 740600
 111210 122310 329000 512120 512220 861000 863000
 Measurements of Neutron and Gamma-Ray Spectra
 From Iron and Tungsten Spheres Bombarded With
 Neutrons From the 2-H(T,n) 4-He Reaction
 Arthur, E. D.; Auchampaugh, G. F.; Drake, D. M.
 LA-5563
 AVAILABILITY-DEP., NTIS \$4.00
 Los Alamos Scientific Lab

4369..... Date 730000
 111110 111500 511110 794000 795171 820000 842000
 861000 882000
 Calculation and Comparison of Leakage Neutron
 Spectra
 Makra, S.; Palfalvi, J.; Zarand, P.
 KFKI-72-67; STI/PUB/318,V.1,47-57; CONF-721203-11
 AVAILABILITY-IAEA
 Hungary

4383..... Date 731009
 111110 321000 421130 551120 861000 870003 870013
 870082 882000
 Fast-Neutron Transport in Shields Having Limited
 Transverse Dimensions
 Bass, L. P.; Bozin, G. M.; Germogenova, T. A.;
 Degtyarev, S. G.; Suvorov, A. P.;
 Tikhonov, V. K.; Tsylin, S. G.; Shul'gin, A. I.
 FTD-HT-23-854-73; AD-768493
 AVAILABILITY-NTIS
 Russia

4404..... Date 740000
 111210 112710 793000 795042 810000 861000
 The Induced Activity and Decay Power of the Structure
 of a Stainless Steel Fusion Reactor Blanket
 Nigg, D. W.; Davidson, J. N.
 CONF-740402-P1,578-587
 AVAILABILITY-NTIS
 Texas Schools

4417..... Date 741000
 111110 122310 861000 870013 870098
 Cross-Sections of Aluminum and Iron Averaged Over
 the Californium 252 Fission Neutron Spectrum.
 (Tech. Note)
 Alberts, W. G.; Matzke, M.
 NUCL. SCI. ENG., 55(2), 243-244
 Germany (West)

CATEGORY NUMBER 861000

4481..... Date 720400
 111500 329000 511110 521130 795017 795232 820000
 861000 870006
 Monte Carlo Calculation of Neutrons Transmitted
 Through Matter
 Hirayama, H.; Nakamura, T.
 MEM. FAC. ENG. (KYOTO UNIV.), 34(2), 187-200
 Japan

4493..... Date 750200
 111110 122110 32A000 521130 719A00 820000 861000
 Additional Few-Group and Multigroup Calculations of
 Neutron Penetration. (Tech. Note)
 Shure, K.
 NUCL. SCI. ENG., 56(2), 219-224
 Bettis Atomic Power Lab.

4499..... Date 741200
 111500 122110 310000 32A000 511110 795082 861000
 Application of a Discrete-Energy, Discrete-Ordinates
 Technique to the Study Of Neutron Transport in
 Iron
 Ching, J.; Goldstein, H.; Oblow, E. M.
 ORNL-TM-4235
 AVAILABILITY-DEP., NTIS \$5.45
 Oak Ridge National Lab.

4510..... Date 740400
 111210 122110 32A000 421130 421160 521230 861000
 870011
 Measurement and Calculation of Neutron Spectra at a
 Sodium-Iron Interface
 Kappler, F.
 KFK-1959(IN GERMAN)
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$7.50
 Germany (West)

4565..... Date 730300
 111500 32A000 511110 795130 842000 861000 863000
 870014
 Reduction of Neutron Damage in Silicon By Thick
 Shields of Iron, Tungsten, And Polyethylene
 Ewing, R. I.; Renken, J. H.; Adams, K. G.
 SLA-73-184
 AVAILABILITY-DEP., NTIS \$3.00
 Sandia Corporation

CATEGORY NUMBER 861000

4569. Date 720000
 111110 112110 620000 710000 861000 870006
 Optimization of Shielding for the Zrr Fast Testing
 Reactor
 Fritz, Z.; Jechort, P.; Valenta, V.; Vlachovsky, K.
 SJE-129
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Czechoslovakia

4582. Date 741209
 111110 210000 861000
 Microstructure and Swelling of Fast Neutron Irradiated
 Type 304 Stainless Steel
 Michel, D. J.; Smith, H.H.; Atwell, J. T.
 NRL-REPORT-7820
 AVAILABILITY-NAVAL RESEARCH
 LABORATORY, WASHINGTON, D.C. 20375
 Naval Installations

4600. Date 730000
 111110 112110 112500 32A000 521230 532000 713000
 795082 861000 870011
 Use of Integral Experiments to Improve Neutron
 Propagation and Gamma Heating Calculations
 Oceraires, Y.; Caumette, P.; Devillers, C.; Bussac, J.
 CONF-731015, PP.486-505
 AVAILABILITY-IAEA
 France

4605. Date 731000
 111500 121100 210000 810000 861000
 Cross-Sections for the Creation of Damage
 Lott, M.; Genthon, J. P.; Gervaise, F.; Mas, P.;
 Mougnot, J. C.; N'guyen VAN DOAN,
 STI/PUB-343, V.1, 89-126; CONF-730302, V.1, 89-126;
 IAEA-SM-170/58
 AVAILABILITY-IAEA, VIENNA
 France

4606. Date 731000
 111110 122310 210000 311000 861000 870092 870094
 Cross-Section Uncertainty Effects on the Ratio of the
 High-Energy Neutron Flux to the Power and
 Resulting Estimation of the Irradiation Limit Errors
 in A Fast Power Reactor
 Boioli, A.; Cecchini, G. P.; Cosimi, M.; Salvatores, M.
 STI/PUB-343, V.1, 155-162; CONF-730302, V.1, 155-162;
 IAEA-SM-170/7
 AVAILABILITY-IAEA, VIENNA
 Italy

CATEGORY NUMBER 861000

4608. Date 730800
 111500 423120 423140 511120 820000 842000 853100
 861000 882000
 Spectra and Dose Fractions of Monenergetic Neutrons
 Passed Through Different Shields and Their
 Application for Dose-Meter Evaluation
 Makra, S.; Palfalvi, J.; Vertes, P.
 SZS-153, PP.117-136
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Hungary

4640. Date 750400
 111110 122310 422110 511120 795082 861000
 A Benchmark Experiment of Neutron Propagation in
 Iron Used to Test Endf/b Cross-Section Data. (Tech.
 Note)
 Martini, M.; Palmiotti, G.; Salvatores, M.
 NUCL. SCI. ENG., 56(4), 427-431
 Italy

4656. Date 720500
 111210 423110 521230 842000 861000 882000
 Attenuation of 15 Mev Neutrons in Multilayer Shields
 Composed of Steel, Polyethylene, and Borated
 Materials
 Maruyama, T.; Bouts, C. J.
 PHYS. MED. BIOL., 17(3), 420-424
 Netherlands (Holland)

4663. Date 740000
 112200 322000 513200 632120 853100 853700 861000
 870082
 Transmission of Betatron Bremsstrahlung Through
 Materials
 Hyodo, T.
 BULL. INST. CHEM. RES., 52(1), 1-7
 Japan

4760. Date 720900
 111110 112110 112120 531000 532000 820000 861000
 Measurements of Gamma Heating in the 'Epsilon' Reactor
 Guardini, S.
 ENERGA NUCL. MILAN, 19(8-9), 515-521
 Italy

4817. Date 750515
 111220 421130 511120 512220 760000 842000 861000
 870082 882000
 Intensity Measurements and Shielding of a Fast-Neutron
 Beam for Biological And Medical Applications
 Meulders, J. P.; Leleux, P.; Macq, P. C.; Pirart, C.;
 Valenduc, G.
 NUCL. INSTR. METHODS, 126(1), 81-85
 Belgium

CATEGORY NUMBER 861000

4823..... Date 750500
 111110 122110 810000 861000
 Influence of Deep Minima on Multigroup Cross-Section
 Generation
 Becker, M.
 NUCL. SCI. ENG., 57(1), 75-77
 New York Schools

4824..... Date 750500
 111110 111500 324000 511110 861000
 On the Treatment of First- and Last-Collision Effects in
 Neutron Age Theory
 Epstein, G.; Becker, M.
 NUCL. SCI. ENG., 57(1), 81-84
 New York Schools

4830..... Date 750806
 111500 32A000 521230 717000 793000 794000 795082
 861000 870003 870006
 Uranium-238 to Uranium-235 Fission-Ratio Distribution
 in Spherical Lithium-Metal Assemblies With and
 Without a Graphite Reflector
 Maekawa, H.; Seki, Y.; Hiraoka, T.; Moriyama, M.
 NUCL. SCI. ENG., 57(4), 335-340
 Japan

4843..... Date 750700
 112720 112730 328000 632200 722100 861000 870082
 870092
 Radiation Leakage From Narrow Gaps in Shields
 Haworth, R.; Liquorish, R. A.; Taylor, C. B.
 NUCL. ENG. DESIGN, 32(3), 428-437
 England

4879..... Date 750500
 111110 122100 122310 861000 862000
 Neutron Capture in the Kev Energy Range in Structural
 Materials for Fast Reactors
 Schatz, B. (Ed.); Kusters, H. (Ed.)
 KFK-2046
 AVAILABILITY-GESELLSCHAFT FUR
 KERNFORSCHUNG MBH, KARLSRUHE
 Germany (West)

4880..... Date 750500
 122100 861000 862000
 Comparison of the Kev-Capture Cross Section for Cr,
 Fe, Ni on Endf/b, Ukndl And Kedak
 Schatz, B.
 KFK-2046, PP.222-250
 AVAILABILITY-GESELLSCHAFT FUR
 KERNFORSCHUNG MBG., KARLSRUHE
 Germany (West)

CATEGORY NUMBER 861000

4881..... Date 750500
 111110 122310 32A000 511110 861000
 Sensitivity Calculations in An Iron Shield With Capture
 Cross Sections Changed in the Kev Range
 Penkuhn, H.
 KFK-2046, PP.343-348
 AVAILABILITY-GESELLSCHAFT FUR
 KERNFORSCHUNG MGH., KARLSRUHE
 Germany (West)

4883..... Date 740200
 111110 210000 861000
 Neutron Embrittlement Surveillance of the Garigliano
 Reactor Vessel Steel
 Galliani, M.; Serpan, C. Z.
 NUCL. ENG. DESIGN, 26(2), 313-325
 Italy

4896..... Date 760300
 111210 122310 210000 32A000 521130 717000 793000
 794000 795082 861000 870006
 Uncertainties in Calculated Heating and Radiation
 Damage in the Toroidal Field Coil of a Tokamak
 Experimental Power Reactor Due to Neutron
 Cross-Section Errors
 Alsmiller, R. G., Jr.; Barish, J.; Weisbin, C. R.
 ORNL/TM-5198
 AVAILABILITY-NTIS \$6.00
 Oak Ridge National Lab.

4910..... Date 751000
 111110 111210 32A000 421130 511120 795082 842000
 861000 870004 870041
 Integral Test of Cross Sections Using Neutron Leakage
 Spectra From Spheres Of Iron, Niobium, Beryllium,
 and Polyethylene
 Johnson, R. H.; Dorning, J. J.; Wehring, B. W.
 NBS SPEC.PUB.-425, PP.169-172;
 CONF-750303, PP.169-172
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Illinois Schools

4911..... Date 751000
 010000 111110 122110 122310 511110 511120 521130
 521230 793000 794000 810000 861000
 Shielding Benchmark Experiments and Sensitivity
 Studies in Progress at Some European Laboratories
 Hehn, G.; Mattes, W.; Nicks, R.; Matthes, W.;
 Rief, H.
 NBS SPEC.PUB.-425, PP.177-183;
 CONF-750303, PP.177-183
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY

CATEGORY NUMBER 861000

Germany (West)

4912. Date 751000
 111220 122100 421130 511120 793000 795082 861000
 Assessment of Neutron Group Constants for Iron and
 Stainless Steel Through Measurements and Analyses
 of Energy and Space Distributions of Neutrons in
 Test Assemblies
 Kimura, I.; Kobayashi, K.; Hayashi, S. A.;
 Yamamoto, S.; Nishihara, H.; Ando, M.;
 Kanazawa, S.; Nakagawa, M.
 NBS SPEC.PUB.-425,PP.184-188;
 CONF-750303,PP.184-188
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Japan

4923. Date 751000
 111110 329000 511110 861000
 Monte Carlo Studies of the Effect of Cross Section
 Characteristics on Fast Neutron Penetration in Iron
 Ku, L. P.; Goldstein, H.
 NBS SPEC.PUB.-425,PP.440-443;
 CONF-750303,PP.440-443
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 New York Schools

4925. Date 751000
 122310 311000 32A000 551110 853100 861000
 A Two Dimensional Cross Section Sensitivity Analysis
 of Iron in a Concrete Shield
 Albert, T. E.; Simmons, G. L.
 NBS SPEC.PUB.-425,PP.459-463;
 CONF-750303,PP.459-463
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Science Applications, Inc.

4945. Date 750200
 111110 210000 861000
 Helium Production in Reactor Materials
 Lippincott, E. P.; McElroy, W. N.; Farrar, H., IV
 HEDL-SA-775; NBS SPEC.PUB.-425,PP.375-377;
 CONF-750303-67
 AVAILABILITY-NTIS
 Hanford Eng Dev Lab.

CATEGORY NUMBER 861000

4946. Date 750312
 111110 122110 122210 511110 512210 532000 719B00
 794000 795082 853100 861000 870006
 Neutron-Coupled Gamma-Ray Cross-Section
 Requirements for Gas-Cooled Fast Breeder Reactors
 Nagel, M.; Cerbone, R. J.
 GA-A-13329; NBS SPEC.PUB.-425,PP.444-446;
 CONF-750303-66
 AVAILABILITY-DEP., NTIS \$4.00
 Gulf General Atomic

CATEGORY NUMBER 862000
NICKEL AND NICKEL ALLOYS

3629. Date 730400
 111110 122110 32A000 325000 521130 713000 861000
 862000 870011 870092 870094 882000
 One-Dimensional Calculations in Support of the
 Reactivity Surveillance Procedures for the Fast Test
 Reactor
 Flanagan, G. F.; Simpson, D. B.; Buhl, A. R.
 ORNL-TM-4014
 AVAILABILITY-AT (TECHNICAL INFORMATION
 CENTER, OAK RIDGE, TENN. 37830) \$5.45
 Oak Ridge National Lab.

3676. Date 720800
 111110 122100 122310 713000 861000 862000 870011
 Status of Neutron Nuclear Data for Important Fast
 Reactor Structural And Coolant Materials
 Schatz, B.
 KFK-I668
 AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)
 Germany (West)

3842. Date 731100
 122310 210000 861000 862000 870073
 Displacement Cross Sections for Iron, Chromium,
 Nickel, Stainless Steel, And Tantalum
 Doran, D. G.
 NUCL. SCI. ENG., 52(3), 398-402
 Hanford Eng Dev Lab.

4004. Date 711200
 111110 122110 861000 862000
 Shielding Factors of Capture Cross-Sections With
 Temperature Dependence For Cr, Fe and Ni
 Ishiguro, Y.
 JAERI-M-4660
 AVAILABILITY-NTIS (U.S. SALES ONLY)
 Japan

CATEGORY NUMBER 862000

4061. Date 711200
210000 861000 862000
Fast Neutron Damage in Type-304 Stainless Steel and
High-Nickel Alloys
Sandusky, D. W.; Ring, P. J.; Penrose, R. T.
GEAP-13738
AVAILABILITY-DEP., NTIS
General Electric Co.

4084. Date 730700
111500 121100 210000 861000 862000 870023 870041
870042 870073
Displacement Cross Sections for Fe, Cr, Ni, 18/10 Ss,
Mo, V, Nb, and Ta
Doran, D. G.; Graves, N. J.
HEDL-TME-73-59
AVAILABILITY-DEP., NTIS \$4.00
Westinghouse

4448. Date 740000
111500 122200 862000 870027
Measured and Evaluated Fast Neutron Cross Sections of
Nickel and Cobalt
Smith, A.; Guenther, P.; Smith, D.; Whalen, J.
CONF-740402-P2,218-226
AVAILABILITY-NTIS
Argonne National Lab.

4652. Date 741074
111500 112B0C 122100 122200 862000
Neutron and Gamma-Ray Production Cross-Sections for
Nickel
Bhat, M. R.
BNL-50435; ENDF-207
AVAILABILITY-DEP., NTIS \$5.45
Brookhaven Natl. Lab.

4871. Date 740900
210000 717000 862000
A Model for Calculating the Damage Rate
Kaletta, D.; Ehrlich, K.
EUR-5182E, PP.833-840; CONF-740630, PP.833-840
AVAILABILITY-EUROPEAN COMMUNITY
INFORMATION SERVICE, 2100 M ST., N.W.,
SUITE 707, WASHINGTON, D.C. 20037 (U.S.
SALES ONLY)
Germany (West)

CATEGORY NUMBER 862000

4879. Date 750500
111110 122100 122310 861000 862000
Neutron Capture in the Kev Energy Range in Structural
Materials for Fast Reactors
Schatz, B. (Ed.); Kusters, H. (Ed.)
KFK-2046
AVAILABILITY-GESELLSCHAFT FUR
KERNFORSCHUNG MBH, KARLSRUHE
Germany (West)

4880. Date 750500
122100 861000 862000
Comparison of the Kev-Capture Cross Section for Cr,
Fe, Ni on Endf/b, Ukndl And Kedak
Schatz, B.
KFK-2046, PP.222-250
AVAILABILITY-GESELLSCHAFT FUR
KERNFORSCHUNG MBG., KARLSRUHE
Germany (West)

CATEGORY NUMBER 863000
TUNGSTEN AND TUNGSTEN ALLOYS

3526. Date 730500
122100 863000
An Evaluation of the Radiative-Capture Cross Section
for Tungsten
Devaney, J. J.
LA-5221
AVAILABILITY-NTIS
Los Alamos Scientific Lab

3570. Date 730600
111110 112110 311000 32A000 521130 522130 620000
795082 795126 863000 870003 870011 881000
The Development and Application of a Discrete
Ordinates Adjoint Difference Method for
One-Dimensional Shield Weight Optimization
Childs, R. L.; Engle, W. W., Jr.; Robinson, J. C.;
Mynatt, F. R.
ORNL-TM-4196
AVAILABILITY-DEP., NTIS \$5.25
Oak Ridge National Lab.

3635. Date 711000
32A000 551110 552210 716000 795089 863000 870003
870092 881000
Effect of Angular Quadrature on Results of
Two-Dimensional Space Power Reactor Shield
Calculations
Connolley, D. J.; Lahti, G. P.
NASA-TM-X-67937; N71-37066
AVAILABILITY-NTIS
National Aeronautics Support Agencies

CATEGORY NUMBER 863000

3737. Date 730718
 122100 863000
 Evaluation of 182-W, 183-W, 184-W, and 186-W Cross
 Sections for the Endf/b Data File
 Rose, P. F.; Otter, J. M.; Ottewitte, E.
 TI-707-130-026
 AVAILABILITY-DEP., NTIS \$10.50
 Atomics International

3787. Date 731100
 122310 421130 863000 870004 870006 870041 870042
 870073 870082
 Transport Analysis of Measured Neutron Leakage
 Spectra From Spheres As Tests Of Evaluated
 High-Energy Cross Sections
 Bogart, D.; Shook, D. F.; Fieno, D.
 NASA-TN-D-7485; N74-10630
 AVAILABILITY-NTIS
 National Aeronautics Support Agencies

3993. Date 720600
 113100 513200 863000
 Calculated Bremsstrahlung Spectra From Thick
 Tungsten Targets
 Storm, E.
 PHYS. REV. A, 5(6), 2328-2338
 Los Alamos Scientific Lab

4349. Date 740600
 111210 122310 329000 512120 512220 861000 863000
 Measurements of Neutron and Gamma-Ray Spectra
 From Iron and Tungsten Spheres Bombarded With
 Neutrons From the 2-H(T,n) 4-He Reaction
 Arthur, E. D.; Auchampaugh, G. F.; Drake, D. M.
 LA-5563
 AVAILABILITY-DEP., NTIS \$4.00
 Los Alamos Scientific Lab

4565. Date 730300
 111500 32A000 511110 795130 842000 861000 863000
 870014
 Reduction of Neutron Damage in Silicon By Thick
 Shields of Iron, Tungsten, And Polyethylene
 Ewing, R. I.; Renken, J. H.; Adams, K. G.
 SLA-73-184
 AVAILABILITY-DEP., NTIS \$3.00
 Sandia Corporation

**CATEGORY NUMBER 870001
HYDROGEN**

3645. Date 730900
 111220 421130 870001 870003 870004 870006
 Neutron Spectra From Deuteron Bombardment of D, Li,
 Be, and C
 Weaver, K. A.; Anderson, J. D.; Barschall, H. H.;
 Davis, J. C.
 NUCL. SCI. ENG., 52(1), 35-45
 Wisconsin Schools

3969. Date 660000
 32A000 511110 521130 820000 861000 870001
 Transmission of Neutrons Through Plane Parallel,
 Multi-Layer
 Germogenova, T. A.; Suvorov, A. P.; Utkin, V. A.
 ORNL-TR-2021(REV.)
 AVAILABILITY-DEP., NTIS
 Russia

4435. Date 740000
 111210 111220 870001
 Neutron Diagnostics for Laser-Induced Fusion
 Southworth, F. H.; Campbell, H. D.
 CONF-740402-P2,45-52
 AVAILABILITY-NTIS
 Florida Schools

4467. Date 750100
 111210 123000 870001 870002
 The T(D,n) 4-He and T(T,2n) Cross Sections at Low
 Energies
 Stewart, L.; Hale, G. M.
 LA-5828-MS; USNDC-CTR-2
 AVAILABILITY-NTIS \$4.00
 Los Alamos Scientific Lab

4475. Date 720200
 111110 324000 540000 870001
 Generalized Exact Solution of the Slowing Down
 Equation
 Dawn, T. Y.
 J. NUCL. SCI. TECHNOL. (TOKYO), 9(2), 93-96

4483. Date 741200
 112760 220000 870001
 Estimated Radiation Doses From Food Cooked With
 Natural Gas From Nuclearly Stimulated Wells
 Barton, C. J.
 ORNL-TM-4735
 Oak Ridge National Lab.

CATEGORY NUMBER 870001

4501. Date 741100
 111500 121100 220000 870001
 Energy Transfer to Hydrogen By Neutrons Up to 30 Mev
 Fleming, R. F.
 RADIATION RES., 60(2), 347-349
 Michigan Schools

CATEGORY NUMBER 870002
HYDROGEN

4467. Date 750100
 111210 123000 870001 870002
 The T(D,n) 4-He and T(T,2n) Cross Sections at Low
 Energies
 Stewart, L.; Hale, G. M.
 LA-5828-MS; USNDC-CTR-2
 AVAILABILITY-NTIS \$4.00
 Los Alamos Scientific Lab

4774. Date 721100
 020000 122100 870002 870003 882000
 The 3-He(N,p)t, 6-Li(N,alpha)t, and 10-B(N,alpha)
 Standard Cross Sections
 Stewart, L.
 LA-DC-72-1412; CONF-721127-2
 AVAILABILITY-DEP., NTIS
 Los Alamos Scientific Lab

CATEGORY NUMBER 870003
LITHIUM

3513. Date 730800
 111210 32A000 329000 521130 717000 794000 795042
 795082 795127 870003 870006
 Analysis of a Bench-Mark Calculation of Tritium
 Breeding in a Fusion Reactor Blanket: the United
 States Contribution
 Steiner, D.
 ORNL-TM-4177
 AVAILABILITY-DEP., NTIS \$4.00
 Oak Ridge National Lab.

3531. Date 730600
 111210 122110 32A000 717000 795123 870003
 Outline of Direct Methods Used in Computing the Cross
 Section Sensitivity Of Neutronic Parameters in a
 Fusion Reactor
 Tobias, M. L.; Steiner, D.
 ORNL-TM-4184
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

CATEGORY NUMBER 870003

3537. Date 730600
 111210 122310 32A000 521130 717000 795123 870003
 870006 870041
 Cross-Section Sensitivity of Tritium Breeding in a Fusion
 Reactor Blanket: Effects of Uncertainties in Cross
 Sections of 6-Li, 7-Li, and 93-Nb
 Tobias, M.; Steiner, D.
 ORNL-TM-4200
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

3547. Date 730600
 111210 210000 32A000 521130 531000 532000 717000
 795082 861000 870003 870006 870041 870082
 Magnet Shield Design for Fusion Reactors
 Kries, J. T.; Steiner, D.
 ORNL-TM-4256
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

3570. Date 730600
 111110 112110 311000 32A000 521130 522130 620000
 795082 795126 863000 870003 870011 881000
 The Development and Application of a Discrete
 Ordinates Adjoint Difference Method for
 One-Dimensional Shield Weight Optimization
 Childs, R. L.; Engle, W. W., Jr.; Robinson, J. C.;
 Mynatt, F. R.
 ORNL-TM-4196
 AVAILABILITY-DEP., NTIS \$5.25
 Oak Ridge National Lab.

3635. Date 711000
 32A000 551110 552210 716000 795089 863000 870003
 870092 881000
 Effect of Angular Quadrature on Results of
 Two-Dimensional Space Power Reactor Shield
 Calculations
 Connolly, D. J.; Lahti, G. P.
 NASA-TM-X-67937; N71-37066
 AVAILABILITY-NTIS
 National Aeronautics Support Agencies

3645. Date 730900
 111220 421130 870001 870003 870004 870006
 Neutron Spectra From Deuteron Bombardment of D, Li,
 Be, and C
 Weaver, K. A.; Anderson, J. D.; Barschall, H. H.;
 Davis, J. C.
 NUCL. SCI. ENG., 52(1), 35-45
 Wisconsin Schools

CATEGORY NUMBER 870003

3833. Date 740100
 111210 122310 511110 717000 870003 870041
 Additional Results Concerning Cross-Section Sensitivity
 of Tritium Breeding In a Fusion Reactor Blanket:
 Effects of Cross Sections of 6-Li, 7-Li, and 93-Nb
 Tobias, M.; Steiner, D.
 ORNL-TM-4201; NUCL. FUSION, 14(2), 153-163
 AVAILABILITY-DEP., NTIS \$3.00
 Oak Ridge National Lab.

3864. Date 680400
 111110 511120 870003
 Spatial, Energy, and Angular Distributions of Neutrons
 in Lithium
 Daruga, V. K.; Degtyarev, S. F.; Kukhtevich, V. I.;
 Nikolaev, A. N.; Polivanskii, V. P.;
 Sinitsyn, B. I.; Suvorov, A. P.; Tarasov, V. V.;
 Tikhonov, V. K.; Tsypin, S. G.
 SOVIET J. AT. ENERGY (ENGLISH TRANSL.),
 24(4), 458-459
 Russia

4120. Date 740300
 111210 122310 32A000 521130 717000 795082 795204
 870003 870006 870041
 Cross-Section Sensitivity of Breeding Ratio in a
 Fusion-Reactor Blanket
 Bartine, D. E.; Alsmiller, R. G., Jr.; Oblow, E. M.;
 Mynatt, F. R.
 NUCL. SCI. ENG., 53(3), 304-318; ORNL-TM-4208
 Oak Ridge National Lab.

4131. Date 740200
 620000 710000 870003 881000
 Lithium Hydride a Space Age Shielding Material
 Welch, F. H.
 NUCL. ENG. DESIGN, 26(3), 444-460
 Atomics International

4161. Date 730300
 111210 122310 329000 510000 511110 795128 820000
 861000 870003 870007 870008
 Monte Carlo Calculations and Sensitivity Studies of the
 Time-Dependent Neutron Spectra Measured in the
 LLL Pulsed Sphere Program
 Cramer, S. N.; Roussin, R. W.; Oblow, E. M.
 ORNL-TM-4072
 AVAILABILITY-DEP., NTIS \$14.00
 Oak Ridge National Lab.

CATEGORY NUMBER 870003

4222. Date 731000
 111210 121100 329000 521130 717000 870003 870006
 Influence of Nuclear Data on Tritium Breeding in a
 Thermonuclear Reactor
 Ogloblin, A. A.; Chulkov, L. V.; Yan'kov, G. B.
 STI/PUB-343,V.2,PP21-40; CONF-730302,V.2,PP21-40;
 IAEA-SM-170/21
 AVAILABILITY-IAEA
 Russia

4257. Date 710000
 122100 122200 870003
 Evaluation of the Neutron and Gamma-Ray Production
 Cross Sections For Nitrogen
 Young, P. G.; Foster, D. G., Jr.
 LA-DC-13270; CONF-711125-6;
 ORNL-RSIC-33,PP.7-48
 AVAILABILITY-DEP., NTIS
 Los Alamos Scientific Lab

4383. Date 731009
 111110 321000 421130 551120 861000 870003 870013
 870082 882000
 Fast-Neutron Transport in Shields Having Limited
 Transverse Dimensions
 Bass, L. P.; Bozin, G. M.; Germogenova, T. A.;
 Degtyarev, S. G.; Suvorov, A. P.;
 Tikhonov, V. K.; Tsypin, S. G.; Shul'gin, A. I.
 FTD-HT-23-854-73; AD-768493
 AVAILABILITY-NTIS
 Russia

4436. Date 740000
 111210 122310 521130 717000 795082 810000 870003
 Tritium Breeding in Ceramic Lithium-Compound
 Blanket
 Seki, Y.; Sako, K.; Tanaka, K.; Hiraoka, T.
 CONF-740402-P2,77-86
 AVAILABILITY-NTIS
 Japan

4445. Date 730000
 111210 122310 717000 795123 870003
 Cross-Section Sensitivity of Tritium Breeding in Fusion
 Reactor Blankets
 Tobias, M.; Steiner, D.
 CONF-740402-3; CONF-740402-P2,185-192
 AVAILABILITY-DEP., NTIS \$3.00
 Oak Ridge National Lab.

CATEGORY NUMBER 870003

4446. Date 740000
 111210 422130 511120 870003
 Integral Neutronics Experiments on a Lithium Metal
 Assembly
 Hiraoka, T.; Maekawa, H.; Seki, Y.; Hirota, J.
 CONF-740402-P2,193-201
 AVAILABILITY-NTIS
 Japan

4502. Date 720700
 122100 870003
 Neutron Cross-Sections for Li-7 in the Energy Range 10
 Kev to 15 Mev
 Conlon, T. W.
 AERE-R-7166
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$3.00
 England

4593. Date 750100
 111220 870003
 Neutron Production Cross Sections and Energies for the
 Reactions 7-Li(P,n) 7-Be and 7-Li(P,n) 7-Be
 Liskien, H.; Paulsen, A.
 AT.DATA + NUCL. DATA TABLES, 15(1), 54-84
 Belgium

4679. Date 730126
 111220 870003 870004 870006
 Spectra of Neutrons From Deuteron Bombardment of
 Light Nuclei
 Weaver, K. A.
 UCRL-51310(ADD.)
 AVAILABILITY-DEP., NTIS
 Lawrence Livermore Lab

4699. Date 721207
 111220 870003 870004 870006
 Neutrons From Deuteron Bombardment of Light Nuclei
 Weaver, K. A.
 UCRL-51310; UCRL-51310
 AVAILABILITY-DEP., NTIS
 Lawrence Livermore Lab

4774. Date 721100
 020000 122100 870002 870003 882000
 The 3-He(N,p)t , 6-Li(N,alpha)t , and 10-B(N,alpha)
 Standard Cross Sections
 Stewart, L.
 LA-DC-72-1412; CONF-721127-2
 AVAILABILITY-DEP., NTIS
 Los Alamos Scientific Lab

CATEGORY NUMBER 870003

4830. Date 750800
 111500 32A000 521230 717000 793000 794000 795082
 861000 870003 870006
 Uranium-238 to Uranium-235 Fission-Ratio Distribution
 in Spherical Lithium-Metal Assemblies With and
 Without a Graphite Reflector
 Maekawa, H.; Seki, Y.; Hiraoka, T.; Moriyama, M.
 NUCL. SCI. ENG., 57(4), 335-340
 Japan

4868. Date 740900
 111210 421130 421160 511120 870003
 Determination of Neutron Spectra in a Lithium Sphere
 Kappler, F.; Rusch, D.; Werle, H.; Wiese, H. W.
 EUR-5182, PP.763-775; CONF-740630, PP.763-775
 AVAILABILITY-EUROPEAN COMMUNITY
 INFORMATION SERVICE, 2100 M ST., N.W.,
 SUITE 707, WASHINGTON, D.C. 20037 (U.S.
 SALES ONLY)
 Germany (West)

CATEGORY NUMBER 870004
BERYLLIUM

3645. Date 730900
 111220 421130 870001 870003 870004 870006
 Neutron Spectra From Deuteron Bombardment of D, Li,
 Be, and C
 Weaver, K. A.; Anderson, J. D.; Barschall, H. H.;
 Davis, J. C.
 NUCL. SCI. ENG., 52(1), 35-45
 Wisconsin Schools

3787. Date 731100
 122310 421130 863000 870004 870006 870041 870042
 870073 870082
 Transport Analysis of Measured Neutron Leakage
 Spectra From Spheres As Tests Of Evaluated
 High-Energy Cross Sections
 Bogart, D.; Shook, D. F.; Fieno, D.
 NASA-TN-D-7485; N74-10630
 AVAILABILITY-NTIS
 National Aeronautics Support Agencies

3879. Date 730400
 111220 220000 421000 423110 760000 870004
 Dosimetric Properties of Neutron Beams Produced By
 16-60 Mev Deuterons On Beryllium
 Almond, P. R.; Smathers, J. B.; Oliver, G. D., Jr.;
 Hranitzky, E. B.; Routt, K.
 RADIATION RES., 54(1), 24-34
 Texas Schools

CATEGORY NUMBER 870004

3899. Date 710000
 111220 422110 820000 870004
 Production of An Sb-Be Neutron Source of Plane Type
 and Measurement of The Neutron Age in Water
 Kanda, K.; Hayashi, M.; Okumura, K.
 ANN. REPTS. RES. REACTOR INST. KYOTO
 UNIV., 4, 17-24
 Japan

4039. Date 720800
 111110 112500 32A000 423250 522230 632110 715000
 795048 870004 870013 885000 886000
 Gamma Heating in Reflector Heat Shield of Gas Core
 Reactor
 Lofthouse, J. H.; Kunze, J. F.; Young, T. E.;
 Young, R. C.
 ANCR-1077; NASA-CR-120903; N72-33651
 AVAILABILITY-DEP., NTIS
 Aerojet-General

4040. Date 731000
 111220 717000 870004
 Accelerator Be-Target Neutron Sources for the Ctr
 Materials Program
 Persiani, P. J.
 ANL/CTR-73-2
 AVAILABILITY-DEP., NTIS \$3.00
 Argonne National Lab.

4168. Date 740618
 122100 870004
 Evaluated Neutron-Interaction and
 Gamma-Ray-Production Cross Sections Of 9-Be for
 Endf/b-IV. Mat No. 1289
 Howerton, R. J.; Perkins, S. T.
 UCRL-51603
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4343. Date 740900
 113100 121200 310000 513110 523100 870004 870013
 870079
 Analytic X-Ray Transport Theory for Numerical
 Computation
 Cole, R. K., Jr.
 NUCL. SCI. ENG., 55(1), 76-84
 Sandia Corporation

CATEGORY NUMBER 870004

4367. Date 730000
 111110 111220 220000 421130 511120 870004 870092
 870094 870095 870098
 Measurement of Spectral Distributions of Neutrons
 From Radioactive Sources And Uranium-235
 Fission, and the Resulting Fluence-Dose Conversion
 Factors
 Kluge, H.; Weise, K.; Zill, H. W.
 STI/PUB/318, V.1, 13-22; CONF-721203, V.1, 13-22;
 IAEA-SM-167/7
 AVAILABILITY-IAEA
 Germany (West)

4399. Date 740000
 111220 410000 870004
 Neutron Spectral Measurements in Spallation Neutron
 Sources: Characterization of the Blip Neutron
 Facility
 Dudey, N. D.; Heinrich, R. R.; Parkin, D. M.;
 Fluss, M. J.
 CONF-740402-P1, 324-332
 AVAILABILITY-NTIS
 Argonne National Lab.

4444. Date 740000
 122310 717000 870004
 Effect of Be(N, 2n) Multigroup Treatment on
 Theta-Pinch Blankets Nucleonics
 Soran, P. D.; Dudziak, D. J.; Muir, D. W.
 LA-UR-74-608; CONF-740402-15;
 CONF-740402-P2, 172-184
 AVAILABILITY-DEP., NTIS \$4.00
 Los Alamos Scientific Lab

4452. Date 740822
 111220 329000 511120 810000 870004 870095
 Calculated Neutron Emission Spectra From Spherical
 Shells Surrounding a 0- To 11-Mev Neutron Source:
 Tests of the Lll Evaluated Nuclear Data Library
 (Endl)
 Haight, R. C.; Howerton, R. J.
 UCRL-51,637
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4679. Date 730126
 111220 870003 870004 870006
 Spectra of Neutrons From Deuteron Bombardment of
 Light Nuclei
 Weaver, K. A.
 UCRL-51310(ADD.)
 AVAILABILITY-DEP., NTIS
 Lawrence Livermore Lab

CATEGORY NUMBER 870004

4699. Date 721207
 111220 870003 870004 870006
 Neutrons From Deuteron Bombardment of Light Nuclei
 Weaver, K. A.
 UCRL-51310
 AVAILABILITY-DEP., NTIS
 Lawrence Livermore Lab

4910. Date 751000
 111110 111210 32A000 421130 511120 795082 842000
 861000 870004 870041
 Integral Test of Cross Sections Using Neutron Leakage
 Spectra From Spheres Of Iron, Niobium, Beryllium,
 and Polyethylene
 Johnson, R. H.; Dorning, J. J.; Wehring, B. W.
 NBS SPEC.PUB.425,PP.169-172;
 CONF-750303,PP.169-172
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Illinois Schools

CATEGORY NUMBER 870006
 CARBON

3508. Date 730117
 111210 421160 511120 540000 861000 870006
 Livermore Pulsed Sphere Program: Low-Energy
 Measurements on Carbon, Iron, And Concrete
 Wong, C.; Anderson, J. D.; Brown, P.;
 Hanson, L. F.; Kammerdiener, J. L.; Logan, C.;
 Pohl, B.
 UCRL-51144,ADDENDUM
 AVAILABILITY-DEP., NTIS \$6.00
 Lawrence Livermore Lab

3510. Date 720000
 111500 112B00 32A000 32F000 511110 512110 522130
 795022 795054 795066 820000 861000 870006
 The Removal P1 Method for Calculation of Radiation
 Distribution in Shielding
 Valenta, V.
 ZJE-131
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Czechoslovakia

3513. Date 730800
 111210 32A000 329000 521130 717000 794000 795042
 795082 795127 870003 870006
 Analysis of a Bench-Mark Calculation of Tritium
 Breeding in a Fusion Reactor Blanket: the United
 States Contribution
 Steiner, D.
 ORNL-TM-4177
 AVAILABILITY-DEP., NTIS \$4.00

CATEGORY NUMBER 870006

Oak Ridge National Lab.

3537. Date 730600
 111210 122310 32A000 521130 717000 795123 870003
 870006 870041
 Cross-Section Sensitivity of Tritium Breeding in a Fusion
 Reactor Blanket: Effects of Uncertainties in Cross
 Sections of 6-Li, 7-Li, and 93-Nb
 Tobias, M.; Steiner, D.
 ORNL-TM-4200
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

3547. Date 730600
 111210 210000 32A000 521130 531000 532000 717000
 795082 861000 870003 870006 870041 870082
 Magnet Shield Design for Fusion Reactors
 Kries, J. T.; Steiner, D.
 ORNL-TM-4256
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

3614. Date 730803
 111220 329000 511110 512210 795187 870006 870007
 Sam-Ce Monte Carlo Calculations of Nitrogen and
 Carbon Ball Integral Experiments
 Cohen, M. O.; Beer, M.
 DNA-3160Z; MR-7033
 AVAILABILITY-MATHEMATICAL
 APPLICATIONS GROUP, INC., 3
 WESTCHESTER PLAZA, ELMSFORD, NEW
 YORK 10523
 Mathematical Appl. Group, Inc.

3630. Date 730500
 111110 32A000 329000 421130 422120 422140 511120
 521230 795082 795089 795127 861000 870006 870011
 882000
 Comparison of Rod-Versus Slab-Type Core Neutron
 Shields for Fmfr Applications. Final Report, April,
 1973.
 Weiss, M. L.; Harless, W. H.
 GEAP-13822-5
 AVAILABILITY-DEP., NTIS \$5.00
 General Electric Co.

3645. Date 730900
 111220 421130 870001 870003 870004 870006
 Neutron Spectra From Deuteron Bombardment of D, Li,
 Be, and C
 Weaver, K. A.; Anderson, J. D.; Barschall, H. H.;
 Davis, J. C.
 NUCL. SCI. ENG., 52(1), 35-45
 Wisconsin Schools

CATEGORY NUMBER 870006

3717..... Date 720000
111220 511120 632400 841000 842000 861000 870006
882000

The Attenuation of Fast-Neutrons in Shielding Materials
Gujrathi, S. C.; D'auria, J. M.
NUCL. INSTR. METHODS, 100(3), 445-452
British Columbia

3730..... Date 720912
122310 122350 421160 870006 870007

Integral Experiment to Test Carbon and Nitrogen Cross
Sections
Harris, L., Jr.; Trimble, G. D.; Young, J. C.
DNA-2986F; GULF-RT-A12292
AVAILABILITY-INTELCOM RAD TECH, P.O. BOX
80817, SAN DIEGO, CALIFORNIA 92138
Intelcom Rad Tech

3787..... Date 731100
122310 421130 863000 870004 870006 870041 870042
870073 870082

Transport Analysis of Measured Neutron Leakage
Spectra From Spheres As Tests Of Evaluated
High-Energy Cross Sections
Bogart, D.; Shook, D. F.; Fieno, D.
NASA-TN-D-7485; N74-10630
AVAILABILITY-NTIS
National Aeronautics Support Agencies

3826..... Date 730500
111220 870006

Absolute Neutron Yields From Alpha-Particle
Interaction With Thick Targets Of Natural Carbon
Bair, J. K.
NUCL. SCI. ENG., 51(1), 83-84
Oak Ridge National Lab.

3847..... Date 680900
112730 522210 870006 870082

Back Scattering of Gamma-Radiation By Heterogeneous
Barriers
Pozdnev, D. B.
SOVIET J. AT. ENERGY (ENGLISH TRANSL.),
25(3), 1001-1002
Russia

3924..... Date 721000
111110 210000 870006 882000

Behavior of Shielding Materials Submitted to Neutrons
Yvars, M.; Degas, P.; Quetier, M.; Rousseau, G.
CONF-721018, PP.664-681
AVAILABILITY-OECD
France

CATEGORY NUMBER 870006

3966..... Date 720000
111110 112110 112120 32F000 521130 522130 620000
710000 713000 853100 861000 870006

Optimization of Shielding for the "Zrr" Fast Testing
Reactor

Fritz, Z.; Jechort, P.; Valenta, V.; Vlachovsky, K.
ZJE-129

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$9.50
Czechoslovakia

4120..... Date 740300
111210 122310 32A000 521130 717000 795082 795204
870003 870006 870041

Cross-Section Sensitivity of Breeding Ratio in a
Fusion-Reactor Blanket

Bartine, D. E.; Alsmiller, R. G., Jr.; Oblow, E. M.;
Mynatt, F. R.

NUCL. SCI. ENG., 53(3), 304-318; ORNL-TM-4208
Oak Ridge National Lab.

4124..... Date 740700
112B00 323000 328000 512110 820000 870006 870082

Prediction of Gamma-Ray Spectra at Deep Penetration
Utilizing The Equilibrium Angular Distribution

Johnson, D. M.
NUCL. SCI. ENG., 54(3), 235-253
England

4219..... Date 690800
111500 329000 521210 632110 632120 721100 853100
861000 870006

On Neutron Penetration in Duct Systems With Large
Cross Section

Spencer, L. V.; Woolf, S.
ANS-SD-7, PP.199-221; CONF-671140, PP.199-221

AVAILABILITY-DEP., NTIS \$3.00
National Bureau of Standards

4222..... Date 731000
111210 121100 329000 521130 717000 870003 870006

Influence of Nuclear Data on Tritium Breeding in a
Thermonuclear Reactor

Ogloblin, A. A.; Chulkov, L. V.; Yan'kov, G. B.
STI/PUB-343,V.2,PP21-40; CONF-730302,V.2,PP21-40;
IAEA-SM-170/21

AVAILABILITY-IAEA
Russia

CATEGORY NUMBER 870006

4227..... Date 731000
 11110 122110 32A000 325000 521130 795082 870006
 870092
 Effects of Different Nuclear Computer Codes and Data
 Libraries on The Evaluation of the Critical
 Htr-Experiment Cesar II
 Scherer, W.
 STI/PUB-343,V2,PP.135-145;
 CONF-730302,V2,PP.135-145; IAEA-SM-170/79
 AVAILABILITY-IAEA
 Germany (West)

4280..... Date 700300
 010000 32A000 32F000 511110 521130 632120 721100
 795040 795042 795066 795072 795121 820000 853100
 861000 870006
 Today's Approaches to Reactor Shielding Problems
 Nicks, R.; Penkuhn, H.; Ponti, C.
 ANS-SD-8,PP.113-138; AD-712532,PP.113-138
 AVAILABILITY-NTIS
 Italy

4363..... Date 740400
 111210 32A000 511110 717000 795082 870006
 Calculation of Fusion Spectrum in Graphite
 Freim, J. B.; Draper, E. L., Jr.
 CONF-721111,PP.944-963
 AVAILABILITY-NTIS
 Pacific Northwest Lab

4400..... Date 740000
 111220 410000 870006
 Neutrons From a High Energy Proton Beam Stop
 Perry, D. G.; Barr, D. W.; Gilmore, J. S.;
 Dudziak, D. J.; Simmons, M. L.; Russell, G. J.;
 Seeger, P. A.; Fluss, M. J.; Heinrich, R.;
 Ryan, V. A.
 CONF-740402-P1,333-338
 AVAILABILITY-NTIS
 Los Alamos Scientific Lab

4401..... Date 740000
 111210 121100 710000 717000 810000 870006 870013
 Minimum Activity Blankets Using Aluminum Structure
 Powell, J.; Aronson, A.; Bezler, P.; Miles, F.;
 Winsche, W.
 CONF-740402-P1,533-547
 AVAILABILITY-NTIS
 Brookhaven Natl. Lab.

CATEGORY NUMBER 870006

4408..... Date 740000
 111500 210000 870006 870013 870022 870023 870041
 Damage Energy Cross Section and Primary Recoil
 Spectra for Ctr-Related Neutron Sources
 Parkin, D. M.; Goland, A. N.; Berry, H. C.
 BNL-18792; CONF-740402-27;
 CONF-740402-P1,339-349
 AVAILABILITY-DEP., NTIS \$4.00
 Brookhaven Natl. Lab.

4447..... Date 740000
 111110 111210 422110 870006 870098
 Neutron Fermi Age in Graphite From Fission and
 Fusion Sources to Indium Resonance
 Etzion, M.; Draper, E. L., Jr.; Nichols, S. P.;
 Davey, W. G.
 CONF-740402-P2,202-217
 AVAILABILITY-NTIS
 Texas Schools

4481..... Date 720400
 111500 329000 511110 521130 795017 795232 820000
 861000 870006
 Monte Carlo Calculation of Neutrons Transmitted
 Through Matter
 Hirayama, H.; Nakamura, T.
 MEM. FAC. ENG. (KYOTO UNIV.), 34(2), 187-200
 Japan

4545..... Date 721100
 111210 511110 717000 795082 870006
 Neutronic Calculations in a Simulated Fusion Reactor
 Blanket
 Barbee, S. G.
 NP-19709; NP-19709
 AVAILABILITY-NTIS
 Texas Schools

4555..... Date 740902
 111210 210000 717000 870006
 Silicon Carbide and Graphite Materials for Fusion
 Reactors
 Hopkins, G. R.
 GA-A13150; CONF-741105-38
 AVAILABILITY-DEP., NTIS \$4.50
 Gulf General Atomic

4569..... Date 720000
 111110 112110 620000 710000 861000 870006
 Optimalization of Shielding for the Zrr Fast Testing
 Reactor
 Fritz, Z.; Jechort, P.; Valenta, V.; Vlachovsky, K.
 SJE-129
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)

CATEGORY NUMBER 870006

Czechoslovakia

4570..... Date 720000
 112720 112730 423210 870006
 Measurement and Reproduction of the Roentgen
 Exposure Unit at the German Measurement and
 Testing Agency. Part II. Cavity Ionization Chambers
 for 60-Co And 137-Cs Gamma Radiation.
 Hecker, O.; Rothe, H.
 SLAC-TRANS-156
 AVAILABILITY-DEP., NTIS \$3.25
 German Democratic Republic

4664..... Date 730000
 122330 870006
 Theoretical and Experimental Values of Mass
 Attenuation Coefficients Of Gamma-Rays for Coal
 Jarde, L.
 NEUKLEONIKA(POLAND), 18(4), 183-194
 Poland

4679..... Date 730126
 111220 870003 870004 870006
 Spectra of Neutrons From Deuteron Bombardment of
 Light Nuclei
 Weaver, K. A.
 UCRL-51310(ADD.)
 AVAILABILITY-DEP., NTIS
 Lawrence Livermore Lab

4699..... Date 721207
 111220 870003 870004 870006
 Neutrons From Deuteron Bombardment of Light Nuclei
 Weaver, K. A.
 UCRL-51310; UCRL-51310
 AVAILABILITY-DEP., NTIS
 Lawrence Livermore Lab

4830..... Date 750800
 111500 32A000 521230 717000 793000 794000 795082
 861000 870003 870006
 Uranium-238 to Uranium-235 Fission-Ratio Distribution
 in Spherical Lithium-Metal Assemblies With and
 Without a Graphite Reflector
 Maekawa, H.; Seki, Y.; Hiraoka, T.; Moriyama, M.
 NUCL. SCI. ENG., 57(4), 335-340
 Japan

4832..... Date 750900
 111220 112400 112500 112600 329000 510000 512220
 793000 794000 795203 870006
 Analysis of Neutron Scattering and Gamma-Ray
 Production Integral Experiments On Carbon for
 Neutron Energies From 1 to 15 Mev
 Cramer, S. N.; Oblow, E. M.

CATEGORY NUMBER 870006

NUCL. SCI. ENG., 58(1), 33-53; ORNL-TM-4494
 Oak Ridge National Lab.

4896..... Date 760300
 111210 122310 210000 32A000 521130 717000 793000
 794000 795082 861000 870006
 Uncertainties in Calculated Heating and Radiation
 Damage in the Toroidal Field Coil of a Tokamak
 Experimental Power Reactor Due to Neutron
 Cross-Section Errors
 Alsmiller, R. G., Jr.; Barish, J.; Weisbin, C. R.
 ORNL/TM-5198
 AVAILABILITY-NTIS \$6.00
 Oak Ridge National Lab.

4946..... Date 750312
 111110 122110 122210 511110 512210 532000 719B00
 794000 795082 853100 861000 870006
 Neutron-Coupled Gamma-Ray Cross-Section
 Requirements for Gas-Cooled Fast Breeder Reactors
 Nagel, M.; Cerbone, R. J.
 GA-A-13329; NBS SPEC.PUB.-425, PP.444-446;
 CONF-750303-66
 AVAILABILITY-DEP., NTIS \$4.00
 Gulf General Atomic

CATEGORY NUMBER 870007
NITROGEN

3540..... Date 720700
 210000 870007
 Hazards of Irradiated Liquid Nitrogen - a Brief
 Bibliography
 Perdue, P. T.
 HEALTH PHYS., 23(1), 116-117
 Oak Ridge National Lab.

3574..... Date 730500
 122310 870007
 Is There Still a Nitrogen Cross-Section Discrepancy?
 Perey, F. G.; Dickens, J. K.
 ORNL-TM-4216
 AVAILABILITY-DEP., NTIS \$3.00
 Oak Ridge National Lab.

3614..... Date 730803
 111220 329000 511110 512210 795187 870006 870007
 Sam-Ce Monte Carlo Calculations of Nitrogen and
 Carbon Ball Integral Experiments
 Cohen, M. O.; Beer, M.
 DNA-3160Z; MR-7033
 AVAILABILITY-MATHEMATICAL
 APPLICATIONS GROUP, INC., 3
 WESTCHESTER PLAZA, ELMSFORD, NEW

CATEGORY NUMBER 870007

YORK 10523
Mathematical Appl. Group, Inc.

3728..... Date 730900
111210 122310 329000 511110 795192 870007
Sensitivity of the Transport of 14-Mev Neutrons to the
Shape of the Nitrogen Elastic Angular Distribution
Beverly, W. B.
BRL-R-1666
AVAILABILITY-NTIS
Ballistic Research Lab.

3730..... Date 720912
122310 122350 421160 870006 870007
Integral Experiment to Test Carbon and Nitrogen Cross
Sections
Harris, L., Jr.; Trimble, G. D.; Young, J. C.
DNA-2986F; GULF-RT-A12292
AVAILABILITY-INTELCOM RAD TECH, P.O. BOX
80817, SAN DIEGO, CALIFORNIA 92138
Intelcom Rad Tech

4161..... Date 730300
111210 122310 329000 510000 511110 795128 820000
861000 870003 870007 870008
Monte Carlo Calculations and Sensitivity Studies of the
Time-Dependent Neutron Spectra Measured in the
LII Pulsed Sphere Program
Cramer, S. N.; Roussin, R. W.; Oblow, E. M.
ORNL-TM-4072
AVAILABILITY-DEP., NTIS \$14.00
Oak Ridge National Lab.

4244..... Date 711100
111210 112400 112500 112600 32A000 421200 512220
870007
Study of Secondary Gamma Rays in Liquid Nitrogen By
Unfolding Ge(Li) Spectra
Reynolds, G. M.; Sperling, S. M.
ANS-SD-12, ARTICLE 3
AVAILABILITY-ANS
Science Applications, Inc.

4260..... Date 710000
111210 32A000 329000 510000 511110 795129 795154
795172 795180 830000 870007 870008
Multigroup Monte Carlo and Sn Methods for Air
Transport
Harris, D. R.; Koenig, D. R.; Preeg, W.
LA-DC-13269; CONF-711125, PP.209-227;
ORNL-RSIC-33, PP.209-227
AVAILABILITY-DEP., NTIS
Los Alamos Scientific Lab

CATEGORY NUMBER 870007

4840..... Date 751000
111210 112500 112600 421130 511120 512220 830000
870007
Measurement of the Neutron and Gamma-Ray Spectra
Originating From a 14-Mev Neutron Source in
Liquid Nitrogen and Liquid Air
Brockner, B.; Clausen, K.; Schneider-Kuhnle, P.;
Weinert, M.
NUCL. SCI. ENG., 58(2), 226-238
Germany (West)

4894..... Date 760300
111220 329000 511120 512210 794000 795203 870007
Analysis of Neutron Scattering and Gamma-Ray
Production Integral Experiments On Nitrogen for
Neutron Energies From 1 to 15 Mev
Cramer, S. N.; Oblow, E. M.
ORNL/TM-5220
AVAILABILITY-NTIS \$4.50
Oak Ridge National Lab.

4922..... Date 751000
111210 122310 511110 795192 830000 870007
The Sensitivity of Neutron Air Transport to Nitrogen
Cross Section Uncertainties
Niiler, A.; Beverly, W. B.; Banks, N. E.
NBS SPEC.PUB.-425, PP.436-439;
CONF-750303, PP.436-439
AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
SOLD IN SETS ONLY
Army Installations

CATEGORY NUMBER 870008
OXYGEN

4161..... Date 730300
111210 122310 329000 510000 511110 795128 820000
861000 870003 870007 870008
Monte Carlo Calculations and Sensitivity Studies of the
Time-Dependent Neutron Spectra Measured in the
LII Pulsed Sphere Program
Cramer, S. N.; Roussin, R. W.; Oblow, E. M.
ORNL-TM-4072
AVAILABILITY-DEP., NTIS \$14.00
Oak Ridge National Lab.

4258..... Date 710000
122100 122200 870008
A Preliminary Evaluation of the Neutron and
Photon-Production Cross Sections Of Oxygen
Foster, D. G., Jr.; Young, P. G.
LA-DC-13271; CONF-711125-2;
ORNL-RSIC-33, PP.49-83
AVAILABILITY-DEP., NTIS

CATEGORY NUMBER 870008

Los Alamos Scientific Lab

4260. Date 710000
 111210 32A000 329000 510000 511110 795129 795154
 795172 795180 830000 870007 870008

Multigroup Monte Carlo and Sn Methods for Air
 Transport

Harris, D. R.; Koenig, D. R.; Preeg, W.
 LA-DC-1326; CONF-711125, PP.209-227;
 ORNL-RSIC-33, PP.209-227

AVAILABILITY-DEP., NTIS

Los Alamos Scientific Lab

4422. Date 741100
 111210 122310 329000 510000 511120 853100 870008

Measurements and Calculations of the Neutron Spectra
 Emitted From Concrete Spheres Bombarded With
 14-Mev Neutrons. (Tech. Note)

Hansen, L. F.; Anderson, J. D.; Doyas, R. J.;
 Howerton, R. J.; Komoto, T.; Logan, C. M.;
 Wong, C.; Kammerdiener, J. L.

NUCL. SCI. ENG., 55(3), 345-348

Lawrence Livermore Lab

CATEGORY NUMBER 870009
 FLUORINE

4625. Date 741015
 111220 870009 870094

The Neutron Spectrum of Plutonium Fluoride

Massand, O. P.; Venkataraman, G.

NUCL. INSTR. METHODS, 121(2), 405-406

India

CATEGORY NUMBER 870011
 SODIUM

3553. Date 680500
 329000 511110 521130 861000 870011

Use of a Monte Carlo Method for the Calculation of
 Propagation of Long Range Neutrons

Lanore, J. M.

CEA-N-934 (IN FRENCH)

AVAILABILITY-COMMISSARIAT A L'ENERGIE
 ATOMIQUE, FONTENAY-AUX
 ROSES(FRANCE). CENTRE D'ETUDES
 NUCLEAIRES

France

CATEGORY NUMBER 870011

3570. Date 730600
 111110 112110 311000 32A000 521130 522130 620000
 795082 795126 863000 870003 870011 881000

The Development and Application of a Discrete
 Ordinates Adjoint Difference Method for
 One-Dimensional Shield Weight Optimization

Childs, R. L.; Engle, W. W., Jr.; Robinson, J. C.;
 Mynatt, F. R.

ORNL-TM-4196

AVAILABILITY-DEP., NTIS \$5.25

Oak Ridge National Lab.

3629. Date 730400
 111110 122110 32A000 325000 521130 713000 861000
 862000 870011 870092 870094 882000

One-Dimensional Calculations in Support of the
 Reactivity Surveillance Procedures for the Fast Test
 Reactor

Flanagan, G. F.; Simpson, D. B.; Buhl, A. R.

ORNL-TM-4014

AVAILABILITY-AT (TECHNICAL INFORMATION
 CENTER, OAK RIDGE, TENN. 37830) \$5.45

Oak Ridge National Lab.

3630. Date 730500
 111110 32A000 329000 421130 422120 422140 511120
 521230 795082 795089 795127 861000 870006 870011
 882000

Comparison of Rod-Versus Slab-Type Core Neutron
 Shields for Fmfb Applications. Final Report, April,
 1973.

Weiss, M. L.; Harless, W. H.

GEAP-13822-5

AVAILABILITY-DEP., NTIS \$5.00

General Electric Co.

3676. Date 720800
 111110 122100 122310 713000 861000 862000 870011

Status of Neutron Nuclear Data for Important Fast
 Reactor Structural And Coolant Materials

Schatz, B.

KFK-1668

AVAILABILITY-DEP., NTIS (U.S.SALES ONLY)

Germany (West)

3827. Date 740100
 111110 122310 421120 421130 422120 511120 795082
 795089 795127 870011

Final Report on a Benchmark Experiment for Neutron
 Transport in Thick Sodium

Maerker, R. E.; Muckenthaler, F. J.; Childs, R. L.;
 Gritzner, M. L.

ORNL-4880

AVAILABILITY-DEP., NTIS \$5.45

CATEGORY NUMBER 870011

Oak Ridge National Lab.

3883. Date 730000
 111110 32A000 325000 511110 795082 861000 870011
 Comparison of Transport and Diffusion Theory for Fast
 Reactor Shielding Calculations
 Sahin, S.
 ATOMKERNENERGIE, 22(1), 24-25
 Oak Ridge National Lab.

3959. Date 721000
 721100 795081 795089 795127 795144 870011
 Intercomparison of Different Methods to Calculate
 Neutron Transport Along Sodium Ducts
 Amin, E.; Diettrich, O.; Futtermenger, W.;
 Gronefeld, G.; Hehn, G.; Herrnberger, V.;
 Schmidt, F.; Vogt, H.; Vossebrecker, H.
 CONF-721018, PP.1427-1443
 AVAILABILITY-OECD
 Germany (West)

3964. Date 710000
 111220 421160 511110 870011
 Measurement of Neutron Spectrum in An Anhydrous
 Sodium Carbonate Pile
 Kanda, K.; Nakagome, Y.; Kimura, I.
 ANN. REPTS. RES. REACTOR INST. KYOTO
 UNIV., 4, 25-33
 Japan

4020. Date 730200
 111110 112110 329000 521130 710000 870011
 Calculation of the Neutron Spectrum in the Lower Part
 of the Phenix Exchanger Using Tripoli
 Nimal, J. C.; Vergnaud, T.
 CEA-N-1579; ANL-TRANS-995
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.25
 France

4132. Date 740700
 111110 325000 551110 713000 870011 870092 885000
 Anisotropic Neutron Diffusion in Lattices of the
 Zero-Power Plutonium Reactor Experiments
 Gelbard, E. M.
 NUCL. SCI. ENG., 54(3), 327-340
 Argonne National Lab.

CATEGORY NUMBER 870011

4156. Date 730400
 111110 32A000 421130 422140 721200 853100 861000
 870011
 Ornl Tsf Pipe Chase Neutron Streaming Experiment -
 Phase One
 McGregor, B. J.; Mynatt, F. R.; Muckenthaler, F. J.;
 Clifford, C. E. (Usa)
 ORNL-TM-4176
 AVAILABILITY-AT (TIC) USAEC
 Oak Ridge National Lab.

4170. Date 740100
 111110 112750 532000 710000 713000 870011
 Fast Test Reactor Sodium Activity
 Kidman, R. B.; Marr, D. R.
 HEDL-TME-74-7
 AVAILABILITY-AT USAEC(TIC) \$4.00
 Westinghouse

4253. Date 711021
 111110 32A000 421130 421140 521130 551110 710000
 713000 795082 795089 810000 861000 870011
 Ftf Related Studies in the Ornl-Lmfbr Shielding
 Program
 Mynatt, F. R.; Clifford, C. E. (Usa);
 Muckenthaler, F. J.; Maerker, R. E.;
 Gritzner, M. L.; Williams, L. R.; Rathbun, J. L.
 ANS-SD-13, ARTICLE 3
 AVAILABILITY-ANS
 Oak Ridge National Lab.

4254. Date 711021
 111110 329000 713000 861000 870011
 Monte Carlo Calculation of the Secondary Sodium
 Activation in the Phenix Reactor
 Devillers, C.; Nimal, J. C.; Vergnaud, T.
 ANS-SD-13, ARTICLE 4
 AVAILABILITY-ANS
 France

4277. Date 700300
 010000 210000 32A000 329000 521110 521130 531000
 710000 861000 870011
 Recent Advances in Reactor Shielding in France
 Rastoin, J.
 ANS-SD-8, PP.60-81; AD-712532, PP.60-81
 AVAILABILITY-NTIS
 France

CATEGORY NUMBER 870011

4288. Date 740900
020000 111110 421110 421130 422140 511110 551110
713000 870011

Sdt 12. the Ornl Benchmark Experiment for Neutron
Transport Through Sodium

Macrker, R. E.

ORNL-TM-4223; ENDF-189

AVAILABILITY-NTIS

Oak Ridge National Lab.

4411. Date 740700
020000 111110 32A000 329000 421130 422140 511110
511120 512210 713000 793000 795017 795046 795082
795089 795127 842000 870011

Shielding Benchmark Problems

Simmons, G. L.(Ed.)

ORNL-RSIC-25(SUPPL.2); ANS-SD-9(SUPPL.2)

AVAILABILITY-DEP., NTIS \$5.45

Oak Ridge National Lab.

4510. Date 740400
111210 122110 32A000 421130 421160 521230 861000
870011

Measurement and Calculation of Neutron Spectra at a
Sodium-Iron Interface

Kappler, F.

KFK-1959(IN GERMAN)

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$7.50

Germany (West)

4600. Date 730000
111110 112110 112500 32A000 521230 532000 713000
795082 861000 870011

Use of Integral Experiments to Improve Neutron
Propagation and Gamma Heating Calculations

Oceraires, Y.; Caumette, P.; Devillers, C.; Bussac, J.

CONF-731015,PP.486-505

AVAILABILITY-IAEA

France

4809. Date 750500
112B00 329000 423230 430000 870011
Monte Carlo Calculation of the Absolute Maximum
Detection Efficiency of A Cylindrical Gamma
Radiation Detector

Green, M. V.; Aamodt, R. L.; Johnston, G. S.

HEALTH PHYS., 28(5), 624-628

Army Installations

CATEGORY NUMBER 870012
MAGNESIUM

3565. Date 730100
112110 210000 861000 870012 885000

Estimation of Errors Caused By Radiation and
Temperature on Coaxial Signal Cables

Stringer, J. L.; Bourassa, R. R.; Dau, G. J.

NUCL. TECH., 17(1), 71-78

Battelle Memorial Inst.

3582. Date 730511
122100 122200 870012

Preliminary Evaluation of the Neutron and Photon
Production Cross Sections For Magnesium

Drake, M. K.; Fricke, M. P.

DNA-3130F

AVAILABILITY-INTELCOM RAD TECH, SAN
DIEGO, CALIF. 92138

Intelcom Rad Tech

3690. Date 730200
111110 329000 511110 870012
Monte Carlo Method and Variance Reduction in the
Shielding Calculation

Rataj, J.

UJV-2995-R

AVAILABILITY-NUCLEAR RESEARCH

INSTITUTE, INFORMATION CENTRE, REZ,

CZECHOSLOVAKIA

Czechoslovakia

CATEGORY NUMBER 870013
ALUMINUM

3516. Date 720200
111500 112B00 112200 32A000 329000 511110 512110
795042 795082 795127 820000 870013

Nuclear Radiation Analysis. Summary Report

Knies, R. J.; Byrn, N. R.; Smith, H. T.

NASA-CR-123636; N72-24728

AVAILABILITY-NTIS \$4.50

Teledyne Brown Eng. Co.

3646. Date 730900
112B00 112200 329000 512110 522130 632110 870013
870082

Calculation of Gamma-Ray Buildup Factors Including
the Contribution Of Bremsstrahlung

Kuspa, J. P.; Tsoulfanidis, N.

NUCL. SCI. ENG., 52(1), 117-123

Missouri Schools

CATEGORY NUMBER 870013

3760. Date 730500
111110 330000 521130 820000 870013 870082

A Study of Neutron Diffusion Lengths in
Heterogeneous, Non Multiplying Plate Assemblies
Siddiqui, S. A.; Williams, M. M.
J. NUCL. ENERGY, 27(5), 273-301
England

3762. Date 730500
112730 421200 430000 522210 853100 861000 870013
Backscattering of 137-Cs Gamma Rays By Finite
Barriers

Elias, E.; Segal, Y.; Notea, A.
J. NUCL. ENERGY, 27(5), 351-362
Israel

3778. Date 740100
111110 112110 112120 32A000 521130 522130 620000
710000 795082 853100 861000 870013 870082

Calculation of Energy Depositions and Dose Rates in
Proposed Shielding Surrounding the Tsr-II Reactor
Uchida, S.; Lewin, J.; Maerker, R. E.
ORNL-TM-4450
AVAILABILITY-NTIS \$4.00
Oak Ridge National Lab.

3803. Date 730600
111220 329000 421120 521210 842000 861000 870013
870082

Experimental Fast-Neutron Albedo From Plane
Scatterers
Segal, Y.; German, U.; Notea, A.
NUCL. SCI. ENG., 51(2), 223-234
Israel

4039. Date 720800
111110 112500 32A000 423250 522230 632110 715000
795048 870004 870013 885000 886000

Gamma Heating in Reflector Heat Shield of Gas Core
Reactor
Lofthouse, J. H.; Kunze, J. F.; Young, T. E.;
Young, R. C.
ANCR-1077; NASA-CR-120903; N72-33651
AVAILABILITY-DEP., NTIS
Aerojet-General

4233. Date 731000
111210 424000 870013 870014

Neutron-Flux Spatial Distribution and Nuclear
Constants: Application To Activation Analysis
Vorsatz, B.; Zemplen-Papp, E.; Kelen, E.
STI/PUB-343,V2,PP.295-300;
CONF-730302,V2,PP.295-300; IAEA-SM-170/31
AVAILABILITY-IAEA

CATEGORY NUMBER 870013

Hungary

4281. Date 700300
010000 511110 512110 521130 522110 710000 713000
721100 722100 820000 841000 861000 870013 870050

Latest Research on Reactor Shielding in Japan
Hyodo, T.; Miyasaka, S.; Nakata, M.
ANS-SD-8,PP.139-155; AD-712532,PP 139-155
AVAILABILITY-NTIS
Japan

4343. Date 740900
113100 121200 310000 513110 523100 870004 870013
870079

Analytic X-Ray Transport Theory for Numerical
Computation
Cole, R. K., Jr.
NUCL. SCI. ENG., 55(1), 76-84
Sandia Corporation

4353. Date 721200
111110 32A000 329000 422110 551110 770000 795089
795127 870013 870098

The Neutron Environment of a Cf-252 Facility
Wyatt, R. M.
LSU THESIS (MASTERS)
AVAILABILITY-LOUISIANA STATE UNIV.,
BATON ROUGE, LA. 70803
Louisiana Schools

4383. Date 731009
111110 321000 421130 551120 861000 870003 870013
870082 882000

Fast-Neutron Transport in Shields Having Limited
Transverse Dimensions
Bass, L. P.; Bozin, G. M.; Germogenova, T. A.;
Degtyarev, S. G.; Suvorov, A. P.;
Tikhonov, V. K.; Tsypin, S. G.; Shul'gin, A. I.
FTD-HT-23-854-73; AD-768493
AVAILABILITY-NTIS
Russia

4401. Date 740000
111210 121100 710000 717000 810000 870006 870013
Minimum Activity Blankets Using Aluminum Structure
Powell, J.; Aronson, A.; Bezler, P.; Miles, F.;
Winsche, W.

CONF-740402-P1,533-547
AVAILABILITY-NTIS
Brookhaven Natl. Lab.

CATEGORY NUMBER 870013

4408. Date 740000
 111500 210000 870006 870013 870022 870023 870041
 Damage Energy Cross Section and Primary Recoil
 Spectra for Ctr-Related Neutron Sources
 Parkin, D. M.; Goland, A. N.; Berry, H. C.
 BNL-18792; CONF-740402-27;
 CONF-740402-P1,339-349
 AVAILABILITY-DEP., NTIS \$4.00
 Brookhaven Natl. Lab.

4417. Date 741000
 111110 122310 861000 870013 870098
 Cross-Sections of Aluminum and Iron Averaged Over
 the Californium 252 Fission Neutron Spectrum.
 (Tech. Note)
 Alberts, W. G.; Matzke, M.
 NUCL. SCI. ENG., 55(2), 243-244
 Germany (West)

4478. Date 730800
 113100 220000 513120 760000 870013 870082
 Percentage Depth Dose for High Energy X-Ray Beams
 in Radiotherapy
 Rawlinson, J. A.; Johns, H. E.
 AM. J. ROENTGENOL., 118(4), 919-922
 Canada

4490. Date 750200
 112B00 327000 512110 632110 632120 820000 853100
 870013
 Tabulation and Empirical Representation of
 Infinite-Medium Gamma-Ray Buildup Factors for
 Monoenergetic, Point Isotropic Sources in Water,
 Aluminum, And Concrete
 Morris, E. E.; Chilton, A. B.; Vetter, A. F.
 NUCL. SCI. ENG., 56(2), 171-178
 Illinois Schools

4752. Date 700000
 113100 513200 760000 870013
 Exposure Rates From Diagnostic X-Ray Units
 McCullough, E. C.; Cameron, J. R.
 BRIT. J. RADIOLOG., 43(511), 448-451
 Wisconsin Schools

CATEGORY NUMBER 870014
 SILICON

3791. Date 731200
 122100 870014
 Gamma-Ray Production From Neutron Interactions
 With Silicon for Incident Neutron Energies Between
 1.0 and 20 Mev: Tabulated Differential Cross
 Sections

CATEGORY NUMBER 870014

Dickens, J. K.; Love, T. A.; Morgan, G. L.
 ORNL-4M-4389
 AVAILABILITY-NTIS
 Oak Ridge National Lab.

4233. Date 731000
 111210 424000 870013 870014
 Neutron-Flux Spatial Distribution and Nuclear
 Constants: Application To Activation Analysis
 Vorsatz, B.; Zemplen-Papp, E.; Kelen, E.
 STI/PUB-343,V2,PP.295-300;
 CONF-730302,V2,PP.295-300; IAEA-SM-170/31
 AVAILABILITY-IAEA
 Hungary

4565. Date 730300
 111500 32A000 511110 795130 842000 861000 863000
 870014
 Reduction of Neutron Damage in Silicon By Thick
 Shields of Iron, Tungsten, And Polyethylene
 Ewing, R. I.; Renken, J. H.; Adams, K. G.
 SLA-73-184
 AVAILABILITY-DEP., NTIS \$3.00
 Sandia Corporation

4568. Date 721200
 111110 111210 210000 870014
 Method to Determine Reactor Equivalence of Neutron
 Threat Spectra
 McKenzie, J. M.
 SC-RR-720871
 AVAILABILITY-DEP., NTIS
 Sandia Corporation

4940. Date 751000
 122100 870014
 Description of the Endf/b-Iv Silicon Evaluation Energy
 Distributions Of Outgoing Particles
 Larson, D.
 NBS SPEC.PUB.-425,PP.317-319; CONF-750303-25
 AVAILABILITY-NTIS AS CONF-750303-25
 Oak Ridge National Lab.

CATEGORY NUMBER 870022
 TITANIUM

3564. Date 730100
 111110 210000 861000 870022
 Postirradiation Mechanical Properties of Types 304 and
 304 Plus 0.15% Titanium Stainless Steel
 Bloom, E. E.; Stiegler, J. O.
 NUCL. TECH., 17(1), 24-37
 Oak Ridge National Lab.

CATEGORY NUMBER 870022

4238. Date 731000
 111300 112200 870022 870029 870042
 Nuclear Data for Bremsstrahlung Activation Analysis of
 Valuable Trace Elements in the Copper Ore
 Ratynski, W.; Stegner, A.; Sujkowski, Z.
 STI/PUB-343,V2,PP.411-429;
 CONF-730302,V2,PP.411-429; IAEA-SM-170/17
 AVAILABILITY-IAEA
 Poland

4408. Date 740000
 111500 210000 870006 870013 870022 870023 870041
 Damage Energy Cross Section and Primary Recoil
 Spectra for Ctr-Related Neutron Sources
 Parkin, D. M.; Goland, A. N.; Berry, H. C.
 BNL-18792; CONF-740402-27;
 CONF-740402-P1,339-349
 AVAILABILITY-DEP., NTIS \$4.00
 Brookhaven Natl. Lab.

CATEGORY NUMBER 870023
 VANADIUM

4084. Date 730700
 111500 121100 210000 861000 862000 870023 870041
 870042 870073
 Displacement Cross Sections for Fe, Cr, Ni, 18/10 Ss,
 Mo, V, Nb, and Ta
 Doran, D. G.; Graves, N. J.
 HEDL-TME-73-59
 AVAILABILITY-DEP., NTIS \$4.00
 Westinghouse

4118. Date 740100
 717000 795082 870023
 The Nuclear Performance of Vanadium As a Structural
 Material in Fusion Reactor Blankets
 Steiner, D.
 NUCL. FUSION, 14(1), 33-44; ORNL-TM-4353
 Oak Ridge National Lab.

4402. Date 740000
 111210 112710 121100 220000 710000 717000 810000
 870023 870041
 A Comparative Analysis of D-T Fusion Reactor
 Radioactivity and Afterheat
 Dudziak, D. J.; Krakowski, R. A.
 LA-UR-74-629; CONF-740402-18;
 CONF-740402-P1,548-564
 AVAILABILITY-NTIS
 Los Alamos Scientific Lab

CATEGORY NUMBER 870023

4408. Date 740000
 111500 210000 870006 870013 870022 870023 870041
 Damage Energy Cross Section and Primary Recoil
 Spectra for Ctr-Related Neutron Sources
 Parkin, D. M.; Goland, A. N.; Berry, H. C.
 BNL-18792; CONF-740402-27;
 CONF-740402-P1,339-349
 AVAILABILITY-DEP., NTIS \$4.00
 Brookhaven Natl. Lab.

CATEGORY NUMBER 870027
 COBALT

4053. Date 730700
 122110 870027
 Cobalt Fast Neutron Cross Section - Measurement and
 Evaluation
 Guenther, P. T.; Moldauer, P. A.; Smith, A. B.;
 Smith, D. L.; Whalen, J. F.
 ANL/NDM-1
 AVAILABILITY-DEP., NTIS \$7.50
 Argonne National Lab.

4126. Date 740700
 122100 870027
 Cobalt Fast-Neutron Cross Sections
 Guenther, P. T.; Moldauer, P. A.; Smith, A. B.;
 Whalen, J. F.
 NUCL. SCI. ENG., 54(3), 273-285
 Argonne National Lab.

4448. Date 740000
 111500 122200 862000 870027
 Measured and Evaluated Fast Neutron Cross Sections of
 Nickel and Cobalt
 Smith, A.; Guenther, P.; Smith, D.; Whalen, J.
 CONF-740402-P2,218-226
 AVAILABILITY-NTIS
 Argonne National Lab.

CATEGORY NUMBER 870029
 COPPER

3581. Date 730511
 122100 122200 870029
 Preliminary Evaluation of the Neutron and Photon
 Production Cross Sections For Copper
 Drake, M. K.; Fricke, M. P.
 DNA-3129F
 AVAILABILITY-INTELCOM RAD TECH, SAN
 DIEGO, CALIF. 92138
 Intelcom Rad Tech

CATEGORY NUMBER 870029

3799..... Date 730600
112500 870029 870040
Gamma-Ray Spectra From the Interaction of 14-Mev
Neutrons With Copper, Zirconium, and Antimony
Stamatelatos, M.; Lawergren, B.; Lidofsky, L. J.
NUCL. SCI. ENG., 51(2), 113-118
New York Schools

4188..... Date 730300
112200 870029 870082
External Bremsstrahlung Due to 90-Sr - 90-Y Beta
Particles
Mudhole, T. S.
INDIAN J. PURE APPL. PHYS., 11(3), 199-205
India

4238..... Date 731000
111300 112200 870022 870029 870042
Nuclear Data for Bremsstrahlung Activation Analysis of
Valuable Trace Elements in the Copper Ore
Ratynski, W.; Stegner, A.; Sujkowski, Z.
STI/PUB-343,V2,PP.411-429;
CONF-730302,V2,PP.411-429; IAEA-SM-170/17
AVAILABILITY-IAEA
Poland

4292..... Date 740711
122100 870029
Evaluation of Neutron and Photon-Production Cross
Sections for Natural Copper
Drake, M. K.; Fricke, M. P.
DNA-3356F
AVAILABILITY-SCIENCE APPLICATIONS, INC.;
1200 PROSPECT STREET, LA JOLLA,
CALIFORNIA 92037
Science Applications, Inc.

4660..... Date 730400
113100 220000 513110 613000 760000 870029 870082
Parameterization of 4 Mv Depth-Dose Data for the
Clinac-4 Accelerator
Dixon, R. L.
RADIOLOGY, 10(001), 207-211
North Carolina Schools

CATEGORY NUMBER 870040
ZIRCONIUM

3573..... Date 730626
111110 112110 620000 710000 716000 870040 881000
Radiation Shielding for Zirconium Hydride Reactor
Systems
Keshishian, V.; Facha, J. V.; Thomson, R. J.;
Welch, F. H.

CATEGORY NUMBER 870040

AI-AEC-13081; N73-33608
AVAILABILITY-DEP., NTIS \$11.75
Atomics International

3799..... Date 730600
112500 870029 870040
Gamma-Ray Spectra From the Interaction of 14-Mev
Neutrons With Copper, Zirconium, and Antimony
Stamatelatos, M.; Lawergren, B.; Lidofsky, L. J.
NUCL. SCI. ENG., 51(2), 113-118
New York Schools

CATEGORY NUMBER 870041
NIOBIUM

3537..... Date 730600
111210 122310 32A000 521130 717000 795123 870003
870006 870041
Cross-Section Sensitivity of Tritium Breeding in a Fusion
Reactor Blanket: Effects of Uncertainties in Cross
Sections of 6-Li, 7-Li, and 93-Nb
Tobias, M.; Steiner, D.
ORNL-TM-4200
AVAILABILITY-NTIS
Oak Ridge National Lab.

3547..... Date 730600
111210 210000 32A000 521130 531000 532000 717000
795082 861000 870003 870006 870041 870082
Magnet Shield Design for Fusion Reactors
Kriese, J. T.; Steiner, D.
ORNL-TM-4256
AVAILABILITY-NTIS
Oak Ridge National Lab.

3608..... Date 730417
111210 210000 423140 870041
Neutron Dosimetry (14 Mev) for Foil Samples Irradiated
With the Lawrence Livermore Laboratory Rotating
Target Neutron Source
Van Konynenburg, R. A.
UCRL-51393
AVAILABILITY-DEP., NTIS \$4.00
Lawrence Livermore Lab

3787..... Date 731100
122310 421130 863000 870004 870006 870041 870042
870073 870082
Transport Analysis of Measured Neutron Leakage
Spectra From Spheres As Tests Of Evaluated
High-Energy Cross Sections
Bogart, D.; Shook, D. F.; Fieno, D.
NASA-TN-D-7485; N74-10630
AVAILABILITY-NTIS

CATEGORY NUMBER 870041

National Aeronautics Support Agencies

3833..... Date 740100
 111210 122310 511110 717000 870003 870041
 Additional Results Concerning Cross-Section Sensitivity
 of Tritium Breeding In a Fusion Reactor Blanket:
 Effects of Cross Sections of 6-Li, 7-Li, and 93-Nb
 Tobias, M.; Steiner, D.
 ORNL-TM-4201; NUCL. FUSION, 14(2), 153-163
 AVAILABILITY-DEP., NTIS \$3.00
 Oak Ridge National Lab.

4084..... Date 730700
 111500 121100 210000 861000 862000 870023 870041
 870042 870073
 Displacement Cross Sections for Fe, Cr, Ni, 18/10 Ss,
 Mo, V, Nb, and Ta
 Doran, D. G.; Graves, N. J.
 HEDL-TME-73-59
 AVAILABILITY-DEP., NTIS \$4.00
 Westinghouse

4094..... Date 740300
 122310 32A000 795042 842000 870041 870042 870073
 870082
 Transport Analysis of Measured Neutron Leakage
 Spectra From Spheres As Tests Of Evaluated
 High-Energy Cross Sections
 Bogart, D.; Shook, D. F.; Fieno, D.
 NUCL. SCI. ENG., 53(3), 285-303
 National Aeronautics Support Agencies

4120..... Date 740300
 111210 122310 32A000 521130 717000 795082 795204
 870003 870006 870041
 Cross-Section Sensitivity of Breeding Ratio in a
 Fusion-Reactor Blanket
 Bartine, D. E.; Alsmiller, R. G., Jr.; Oblow, E. M.;
 Mynatt, F. R.
 NUCL. SCI. ENG., 53(3), 304-318; ORNL-TM-4208
 Oak Ridge National Lab.

4148..... Date 730200
 111500 122100 870041 870042
 (N, 2n) Cross-Sections on Nb and Mo Nuclei
 Kluge, Gy.; Jeki, L.
 J. NUCL. ENERGY, 27(2), 115-118
 Hungary

CATEGORY NUMBER 870041

4402..... Date 740000
 111210 112710 121100 220000 710000 717000 810000
 870023 870041
 A Comparative Analysis of D-T Fusion Reactor
 Radioactivity and Afterheat
 Dudziak, D. J.; Krakowski, R. A.
 LA-UR-74-629; CONF-740402-18;
 CONF-740402-P1,548-564
 AVAILABILITY-NTIS
 Los Alamos Scientific Lab

4408..... Date 740000
 111500 210000 870006 870013 870022 870023 870041
 Damage Energy Cross Section and Primary Recoil
 Spectra for Ctr-Related Neutron Sources
 Parkin, D. M.; Goland, A. N.; Berry, H. C.
 BNL-18792; CONF-740402-27;
 CONF-740402-P1,339-349
 AVAILABILITY-DEP., NTIS \$4.00
 Brookhaven Natl. Lab.

4910..... Date 751000
 111110 111210 32A000 421130 511120 795082 842000
 861000 870004 870041
 Integral Test of Cross Sections Using Neutron Leakage
 Spectra From Spheres Of Iron, Niobium, Beryllium,
 and Polyethylene
 Johnson, R. H.; Dornig, J. J.; Wehring, B. W.
 NBS SPEC.PUB.-425,PP.169-172;
 CONF-750303,PP.169-172
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Illinois Schools

4937..... Date 751000
 111210 122110 32A000 521130 717000 870041
 Application of Bondarenko Formalism to Fusion
 Reactors
 Soran, P. D.; Dudziak, D. J.
 NBS SPEC.PUB.-425,PP.722-728;
 CONF-750303,PP.722-728
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Los Alamos Scientific Lab

CATEGORY NUMBER 870042
MOLYBDENUM

3787..... Date 731100
 122310 421130 863000 870004 870006 870041 870042
 870073 870082
 Transport Analysis of Measured Neutron Leakage
 Spectra From Spheres As Tests Of Evaluated
 High-Energy Cross Sections

CATEGORY NUMBER 870042

Bogart, D.; Shook, D. F.; Fieno, D.
NASA-TNU/D-7485; N74-10630
AVAILABILITY-NTIS
National Aeronautics Support Agencies

4084. Date 730700
111500 121100 210000 861000 862000 870023 870041
870042 870073

Displacement Cross Sections for Fe, Cr, Ni, 18/10 Ss,
Mo, V, Nb, and Ta

Doran, D. G.; Graves, N. J.
HEDL-TME-73-59
AVAILABILITY-DEP., NTIS \$4.00
Westinghouse

4094. Date 740300
122310 32A000 795042 842000 870041 870042 870073
870082

Transport Analysis of Measured Neutron Leakage
Spectra From Spheres As Tests Of Evaluated
High-Energy Cross Sections

Bogart, D.; Shook, D. F.; Fieno, D.
NUCL. SCI. ENG., 53(3), 285-303
National Aeronautics Support Agencies

4148. Date 730200
111500 122100 870041 870042
(N, 2n) Cross-Sections on Nb and Mo Nuclei
Kluge, Gy.; Jeki, L.
J. NUCL. ENERGY, 27(2), 115-118
Hungary

4238. Date 731000
111300 112200 870022 870029 870042
Nuclear Data for Bremsstrahlung Activation Analysis of
Valuable Trace Elements in the Copper Ore
Ratynski, W.; Stegner, A.; Sujkowski, Z.
STI/PUB-343,V2,PP.411-429;
CONF-730302,V2,PP.411-429; IAEA-SM-170/17
AVAILABILITY-IAEA
Poland

CATEGORY NUMBER 870047
SILVER

3578. Date 730400
122100 870047 870055
Evaluated Neutron Cross Sections for 107-Ag, 109-Ag,
and 133-Cs
Bhat, M. R.; Prince, A.
BNL-50383; ENDF-163
AVAILABILITY-NTIS
Brookhaven Natl. Lab.

CATEGORY NUMBER 870047

4743. Date 730101
112B00 122200 870047 870079 870082 870092
Shell-Wise Photoelectric Cross-Sections of Gamma-Rays
Rao, K. S.; Rao, B. V.; Parthasaradhi, K.
NUOVO CIMENTO A, 13(1), 267-270
India

CATEGORY NUMBER 870050
TIN

3987. Date 710400
112B00 121200 870050 870082
Effective Atomic Numbers for Differential Processes of
Gamma Ray Interactions
Siddappa, K.; Parthasaradhi, K.; Rama Rao, J.
INDIAN J. PURE APPL. PHYS., 45(4), 184-186
India

4024. Date 711200
112B00 329000 512110 610000 820000 861000 870050
870082
Tabulated Values of Spatial, Directional, and Energy
Distributions Of Multiple Scattered Gamma
Radiation
Stehfest, H.
BMBW-FBK-71-2(SUPPL.)
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Germany (West)

4281. Date 700300
010000 511110 512110 521130 522110 710000 713000
721100 722100 820000 841000 861000 870013 870050
Latest Research on Reactor Shielding in Japan
Hyodo, T.; Miyasaka, S.; Nakata, M.
ANS-SD-8,PP.139-155; AD-712532,PP 139-155
AVAILABILITY-NTIS
Japan

CATEGORY NUMBER 870054
XENON

3576. Date 730200
122100 870054
Evaluated Neutron Cross Sections for the Stable
Isotopes of Xenon
Bhat, M. R.; Mughabghab, S. F.
BNL-50374; ENDF-185
AVAILABILITY-NTIS
Brookhaven Natl. Lab.

CATEGORY NUMBER 870055
CESIUM

3578. Date 730400
122100 870047 870055
Evaluated Neutron Cross Sections for 107-Ag, 109-Ag,
and 133-Cs
Bhat, M. R.; Prince, A.
BNL-50383; ENDF-163
AVAILABILITY-NTIS
Brookhaven Natl. Lab.

CATEGORY NUMBER 870063
EUROPIUM

4520. Date 741100
111500 122100 122200 870063
Evaluation of the Neutron and Gamma-Ray Production
Cross Sections of 151-Eu And 153-Eu
Takahashi, H.
BNL-19455; ENDF-213
AVAILABILITY-NATIONAL NEUTRON CROSS
SECTION CENTER, BROOKHAVEN
NATIONAL LABORATORY, UPTON, NEW
YORK 11973
Brookhaven Natl. Lab.

4521. Date 741100
111500 122100 122200 870063
Evaluation of the Neutron Cross Section for 152-Eu and
154-Eu
Takahashi, H.
BNL-19456; ENDF-214
AVAILABILITY-NATIONAL NEUTRON CROSS
SECTION CENTER, BROOKHAVEN
NATIONAL LABORATORY, UPTON, NEW
YORK 11973
Brookhaven Natl. Lab.

CATEGORY NUMBER 870073
TANTALUM

3787. Date 731100
122310 421130 863000 870004 870006 870041 870042
870073 870082
Transport Analysis of Measured Neutron Leakage
Spectra From Spheres As Tests Of Evaluated
High-Energy Cross Sections
Bogart, D.; Shook, D. F.; Fieno, D.
NASA-TN-D-7485; N74-10630
AVAILABILITY-NTIS
National Aeronautics Support Agencies

CATEGORY NUMBER 870073

3842. Date 731100
122310 210000 861000 862000 870073
Displacement Cross Sections for Iron, Chromium,
Nickel, Stainless Steel, And Tantalum
Doran, D. G.
NUCL. SCI. ENG., 52(3), 398-402
Hanford Eng Dev Lab.

4084. Date 730700
111500 121100 210000 861000 862000 870025 870041
870042 870073
Displacement Cross Sections for Fe, Cr, Ni, 18/10 Ss,
Mo, V, Nb, and Ta
Doran, D. G.; Graves, N. J.
HEDL-TME-73-59
AVAILABILITY-DEP., NTIS \$4.00
Westinghouse

4094. Date 740300
122310 32A000 795042 842000 870041 870042 870073
870082
Transport Analysis of Measured Neutron Leakage
Spectra From Spheres As Tests Of Evaluated
High-Energy Cross Sections
Bogart, D.; Shook, D. F.; Fieno, D.
NUCL. SCI. ENG., 53(3), 285-303
National Aeronautics Support Agencies

4442. Date 740000
111210 121100 220000 521130 717000 870073 870082
Use of Tantalum and Liquid Lead in a Fusion Reactor
Blanket
Davey, W. G.; Beck, C. L.; Palmer, R. G.
CONF-740402-P2,155-165
AVAILABILITY-NTIS
Argonne National Lab.

4647. Date 750227
111500 112B00 122100 122200 870073
An Evaluated Data Set for Tantalum
Howerton, R. J.; Haight, R. C.; Macgregor, M. H.;
Perkins, S. T.
UCRL-51306,REV.1
AVAILABILITY-NTIS \$4.00
Lawrence Livermore Lab

CATEGORY NUMBER 870079
GOLD

4038. Date 721100
111500 421140 511110 713000 870079
Self-Shielding in Stacked Foils
Nisle, R. G.; Harker, Y. D.
ANCR-1066

CATEGORY NUMBER 870079

AVAILABILITY-DEP., NTIS
Aerojet-General

4343. Date 740900
113100 121200 310000 513110 523100 870004 870013
870079

Analytic X-Ray Transport Theory for Numerical
Computation

Cole, R. K., Jr.

NUCL. SCI. ENG., 55(1), 76-84

Sandia Corporation

4653. Date 741000
111500 112B00 122100 122200 870079

Evaluated Neutron Cross Sections of 197-Au

Mughabghab, S. F.; Prince, A.; Goldberg, M. D.;

Bhat, M. H.; Pearlstein, S.

BNL-50439; ENDF-215

AVAILABILITY-DEP., NTIS \$4.00

Brookhaven Natl. Lab.

4743. Date 730101
112B00 122200 870047 870079 870082 870092

Shell-Wise Photoelectric Cross-Sections of Gamma-Rays

Rao, K. S.; Rao, B. V.; Parthasaradhi, K.

NUOVO CIMENTO A, 13(1), 267-270

India

CATEGORY NUMBER 870082

LEAD

3512. Date 730321
122100 870082

Evaluated Neutron Reaction Data for Uranium 235

Howerton, R. J.; Macgregor, M. H.

UCRL-51370

AVAILABILITY-NTIS

Lawrence Livermore Lab

3521. Date 710600
111110 32A000 421130 521230 716000 794000 795082
795089 820000 870082

Measured and Calculated Fast Neutron Spectra in a
Lead-And-Water Shielded Reactor

Lahti, G. P.; Wrights, G. N.

NASA-TM-X-67861; N71-28968

AVAILABILITY-NTIS

National Aeronautics Support Agencies

CATEGORY NUMBER 870082

3547. Date 730600
111210 210000 32A000 521130 531000 532000 717000
795082 861000 870003 870006 870041 870082

Magnet Shield Design for Fusion Reactors

Kriese, J. T.; Steiner, D.

ORNL-TM-4256

AVAILABILITY-NTIS

Oak Ridge National Lab.

3558. Date 730300
111110 111120 111220 32A000 521130 712000 795082
861000 870082

Neutron Shielding Problems in the Shipping of High
Burnup Thermal Reactor Fuel

Bailey, H. S.; Evatt, R. N.; Gyorey, G. L.;

Ruiz, C. F.

NUCL. TECH., 17(3), 217-223

General Electric Co.

3646. Date 730900
112B00 112200 329000 512110 522130 632110 870013
870082

Calculation of Gamma-Ray Buildup Factors Including
the Contribution Of Bremsstrahlung

Kuspa, J. P.; Tsoulfanidis, N.

NUCL. SCI. ENG., 52(1), 117-123

Missouri Schools

3655. Date 730713
122100 870082

Evaluated Neutron Reaction Data for Uranium 238

Howerton, R. J.; Macgregor, M. H.

URCL-51427

AVAILABILITY-NTIS

Lawrence Livermore Lab

3760. Date 730500
111110 330000 521130 820000 870013 870082

A Study of Neutron Diffusion Lengths in
Heterogeneous, Non Multiplying Plate Assemblies

Siddiqui, S. A.; Williams, M. M.

J. NUCL. ENERGY, 27(5), 273-301

England

3778. Date 740100
111110 112110 112120 32A000 521130 522130 620000
710000 795082 853100 861000 870013 870082

Calculation of Energy Depositions and Dose Rates in
Proposed Shielding Surrounding the Tsr-II Reactor

Uchida, S.; Lewin, J.; Maerker, R. E.

ORNL-TM-4450

AVAILABILITY-NTIS \$4.00

Oak Ridge National Lab.

CATEGORY NUMBER 870082

3787. Date 731100
122310 421130 863000 870004 870006 870041 870042
870073 870082

Transport Analysis of Measured Neutron Leakage
Spectra From Spheres As Tests Of Evaluated
High-Energy Cross Sections

Bogart, D.; Shook, D. F.; Fieno, D.

NASA-TN-D-7485; N74-10630

AVAILABILITY-NTIS

National Aeronautics Support Agencies

3803. Date 730600
111220 329000 421120 521210 842000 861000 870013
870082

Experimental Fast-Neutron Albedo From Plane
Scatterers

Segal, Y.; German, U.; Notea, A.

NUCL. SCI. ENG., 51(2), 223-234

Israel

3843. Date 731100
111110 870082
The Uranium-233 Fission Neutron Spectrum From 0.8 to
10 Mev

Green, L.; Mitchell, J. A.; Steen, N. M.

NUCL. SCI. ENG., 52(3), 406-412

Bettis Atomic Power Lab.

3847. Date 680900
112730 522210 870006 870082
Back Scattering of Gamma-Radiation By Heterogeneous
Barriers

Pozdneev, D. B.

SOVIET J. AT. ENERGY (ENGLISH TRANSL.),
25(3), 1001-1002

Russia

3892. Date 720200
112760 740000 760000 870082

Comments on Shielding By the Lead Shot Method

Maruyama, Y.; Wrede, D.; Van Arsdale, E.; Sayeg, J.;
Engels, E. P.

RADIOLOGY, 102(2), 445

Kentucky Schools

3962. Date 721000
112770 421200 512220 820000 861000 870082
Benchmark Data for High Energy Gamma Penetration
Bishop, G. B.; Smitton, C.; Packwood, A.
CONF-721018, PP.1472-1492
AVAILABILITY-OECD
England

CATEGORY NUMBER 870082

3963. Date 721000
421200 512120 522210 853100 861000 870082

Gamma-Ray Transport at 6 and 8 Mev

Johnson, W. R.; Thompson, W. L.; Risher, D. H.;
Hassler, L. A.; Rogers, J. E.

CONF-721018, PP.1493-1508

AVAILABILITY-OECD

Virginia Schools

3981. Date 731101
710000 870082

A Shielding Cave for Low-Level Gamma Experiments on
Van De Graff Accelerators

Neal, G.; Humphrey, C.; Ritter, R.; Schier, W. A.

NUCL. INSTR. METHODS, 113(1), 119-123

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3987. Date 710400
112B00 121200 870050 870082

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Gamma Ray Interactions

Siddappa, K.; Parthasaradhi, K.; Rama Rao, J.

INDIAN J. PURE APPL. PHYS., 45(4), 184-186

India

3989. Date 691000
112200 121200 512110 512210 610000 794000 861000
870082

The Importance of Bremsstrahlung in the Shielding of
Gamma Rays Having Energies Less Than 10 Mev

Dutton, L. M.

AEW-R-675

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY),
UK 9S .6D.

England

3999. Date 700000
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I. Backscattered and Attenuated Radiation

Wechselberger, E.

ATOMKERNENERGIE, 16, 64-70

Germany (West)

4024. Date 711200
112B00 329000 512110 610000 820000 861000 870050
870082

Tabulated Values of Spatial, Directional, and Energy
Distributions Of Multiple Scattered Gamma
Radiation

Stehfest, H.

BMBW-FBK-71-2(SUPPL.)

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)

CATEGORY NUMBER 870082

Germany (West)

4092..... Date 720900
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 Energy Bremsstrahlung
 Crites, T. R.
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4094..... Date 740300
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 Spectra From Spheres As Tests Of Evaluated
 High-Energy Cross Sections
 Bogart, D.; Shook, D. F.; Fieno, D.
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4113..... Date 740600
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 Neutron Pulses Slowing Down in Heavy Media Analysis
 With Applications of The Lead Spectrometer
 Sawan, M.; Conn, R. W.
 NUCL. SCI. ENG., 54(2), 127-142
 Wisconsin Schools

4124..... Date 740700
 112B00 323000 328000 512110 820000 870006 870082
 Prediction of Gamma-Ray Spectra at Deep Penetration
 Utilizing The Equilibrium Angular Distribution
 Johnson, D. M.
 NUCL. SCI. ENG., 54(3), 235-253
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4138..... Date 731100
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 German, U.; Segal, Y.; Notea, A.
 J. NUCL. ENERGY, 27(11), 787-796
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4188..... Date 730300
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 Mudhole, T. S.
 INDIAN J. PURE APPL. PHYS., 11(3), 199-205
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CATEGORY NUMBER 870082

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 112720 632200 710000 770000 830000 870082
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 Boundary of a Large Gamma Garden
 Murthy, M. S.; Vyas, A.; Murthy, B. K.; Chandra, B.
 INTERN. J. APPL. RADIATION ISOTOPES, 24(12),
 671-676
 India

4383..... Date 731009
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 870082 882000
 Fast-Neutron Transport in Shields Having Limited
 Transverse Dimensions
 Bass, L. P.; Bozin, G. M.; Germogenova, T. A.;
 Degtyarev, S. G.; Suvorov, A. P.;
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 FTD-HT-23-854-73; AD-768493
 AVAILABILITY-NTIS
 Russia

4442..... Date 740000
 111210 121100 220000 521130 717000 870073 870082
 Use of Tantalum and Liquid Lead in a Fusion Reactor
 Blanket
 Davey, W. G.; Beck, C. L.; Palmer, R. G.
 CONF-740402-P2,155-165
 AVAILABILITY-NTIS
 Argonne National Lab.

4478..... Date 730800
 113100 220000 513120 760000 870013 870082
 Percentage Depth Dose for High Energy X-Ray Beams
 in Radiotherapy
 Rawlinson, J. A.; Johns, H. E.
 AM. J. ROENTGENOL, 118(4), 919-922
 Canada

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 Effect of Absorber Thickness on
 Narrow-Beam-Collimated Geometry Condition
 Gopal, S.; Sanjeevaiah, H.; Sanjeevaiah, B.
 CONF-701219(V.2),513-517
 AVAILABILITY-DEPARTMENT OF ATOMIC
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CATEGORY NUMBER 870082

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 113100 220000 513110 613000 760000 870029 870082
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 Dixon, R. L.
 RADIOLOGY, 10(001), 207-211
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 Materials
 Hyodo, T.
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4743. Date 730101
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 Rao, K. S.; Rao, B. V.; Parthasaradhi, K.
 NUOVO CIMENTO A, 13(1), 267-270
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 111220 421130 511120 512220 760000 842000 861000
 870082 882000
 Intensity Measurements and Shielding of a Fast-Neutron
 Beam for Biological And Medical Applications
 Meulders, J. P.; Leleux, P.; Macq, P. C.; Pirart, C.;
 Valenduc, G.
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 Belgium

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 Haworth, R.; Liquorish, R. A.; Taylor, C. B.
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CATEGORY NUMBER 870090
 THORIUM

4031. Date 730100
 112120 421200 870090 870092
 Gamma Ray Spectra of Uranium and Thorium Ores By
 High Resolution (Ge(Li)) Spectrometry
 Urquhart, D. F.
 AAEC/TM-634
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$3.75
 Australia

CATEGORY NUMBER 870090

4115. Date 740600
 112120 121100 532000 870090 870092 870094
 Calculation of the Decay Power of Fission Products
 Tasaka, K.; Sasamoto, N.
 NUCL. SCI. ENG., 54(2), 177-189
 Japan

4318. Date 730000
 111110 870090 870092 870094
 Prompt and Delayed Neutron Yields From Low Energy
 Photofission of Th-232, U-235, U-238, and Pu-239
 Caldwell, J. T.; Dowdy, E. J.; Worth, G. M.
 LA-UR-73-968; CONF-730823-2; SM-174/100
 AVAILABILITY-DEP., NTIS \$3.00
 Los Alamos Scientific Lab

4494. Date 750100
 111120 870090 870092 870094
 Delayed-Neutron Data for Reactor-Physics Analysis
 Tuttle, R. J.
 NUCL. SCI. ENG., 56(1), 37-71
 Atomics International

4511. Date 741100
 111110 111120 424000 870090 870092
 The Delayed Neutron Pellet Assay Gage (Lwbr
 Development Program)
 Milani, S.; Emert, C. J.
 WAPD-TM-1088
 AVAILABILITY-DEP., NTIS \$4.00
 Bettis Atomic Power Lab.

4607. Date 730400
 112120 122100 870090 870092 870094
 Discussion of Fission-Product Yield Evaluation Methods
 and a New Evaluation
 Lammer, M.; Eder, O. J.
 SGAE-2115; STI/PUB-343,V.1,505-551;
 CONF-730302-22
 AVAILABILITY-IAEA, VIENNA
 Austria

4618. Date 740500
 112120 870090 870092 870094
 Assessment of Known Independent Yields and the
 Calculation of Those Unknown In the Fission of
 232-Th, 233-U, 235-U, 238-U, 239-Pu, 240-Pu and
 241-Pu
 Crouch, E. A. C.
 AERE-R-7680
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$5.25
 England

CATEGORY NUMBER 870090

4802. Date 741100
111110 112110 511110 512110 512210 610000 845000
870090

Calculated Depth Dose Tables for Californium-252 Seed
Sources in Tissue
Krishnaswamy, V.
PHYS. MED. BIOL., 19(6), 886-888
New York Schools

4842. Date 750600
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Gamma-Ray Energy Release in the Decay of Fission
Products
Sasamoto, N.; Nemoto, T.
NUCL. ENG. DESIGN, 32(2), 252-276
Japan

CATEGORY NUMBER 870092
URANIUM

3522. Date 730300
112120 870092 870094

Yields in Thermal Neutron Fission - Some Results and
Recommendations Based On a Recent Evaluation
Walker, W. H.
AECL-4453

AVAILABILITY-SCIENTIFIC DOCUMENT
DISTRIBUTION OFFICE, ATOMIC ENERGY
OF CANADA LIMITED, CHALK RIVER,
ONTARIO, CANADA \$0.50

Canada

3597. Date 720400
111110 421130 870092 870094 870098

Fission-Neutron Spectra Measurements of 235-U,
239-Pu, and 252-Cf
Werle, H.; Bluhm, H.
J. NUCL. ENERGY, 26(4), 165-175
Germany (West)

3629. Date 730400
111110 122110 32A000 325000 521130 713000 861000
862000 870011 870092 870094 882000

One-Dimensional Calculations in Support of the
Reactivity Surveillance Procedures for the Fast Test
Reactor

Flanagan, G. F.; Simpson, D. B.; Buhl, A. R.
ORNL-TM-4014

AVAILABILITY-AT (TECHNICAL INFORMATION
CENTER, OAK RIDGE, TENN. 37830) \$5.45
Oak Ridge National Lab.

CATEGORY NUMBER 870092

3635. Date 711000
32A000 551110 552210 716000 795089 863000 870003
870092 881000

Effect of Angular Quadrature on Results of
Two-Dimensional Space Power Reactor Shield
Calculations

Connolley, D. J.; Lahti, G. P.
NASA-TM-X-67937; N71-37066

AVAILABILITY-NTIS

National Aeronautics Support Agencies

3675. Date 730900
112120 510000 532000 870092

Fission-Product Afterheat - a Review of Experiments
Pertinent to The Thermal-Neutron Fission of 235-U

Perry, A. M.; Maienschein, F. C.; Vondy, D. R.
ORNL-TM-4197

AVAILABILITY-NTIS

Oak Ridge National Lab.

3696. Date 731000
111110 421130 521130 521230 795089 870092 881000

Measured and Calculated Fast Neutron Spectra in a
Depleted Uranium And Lithium Hydride Shielded
Reactor

Lahti, G. P.; Mueller, R. A.
NASA-TM-X 2906

AVAILABILITY-NTIS

National Aeronautics Support Agencies

3806. Date 730700
122100 122200 870092

Gamma-Ray Production Cross Sections of
Neutron-Induced Uranium-238 Reactions

Takahashi, H.
NUCL. SCI. ENG., 51(3), 296-315
Brookhaven Natl. Lab.

3819. Date 730400
111110 122110 122310 713000 870092 870094

Adjustment of Multigroup Neutron Cross Sections By a
Correlation Method

Salvatores, M.
NUCL. SCI. ENG., 50(4), 345-354
Italy

3821. Date 730400
111110 111220 32A000 521130 713000 870092

The Inelastic Scattering Reaction in Calculation of Fast
Reactor Neutron Spectra (Tech. Note)

Fricke, M. P.; Neill, J. M.
NUCL. SCI. ENG., 50(4), 392-396
Gulf General Atomic

CATEGORY NUMBER 870092

3824. Date 730500
 111120 421120 870092 870094
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 Shalev, S.; Cuttler, J. M.
 NUCL. SCI. ENG., 51(1), 52-66
 Israel

3841. Date 731100
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 of the Cross Sections Of Fissile Nuclides
 De Saussure, G.; Perez, R. B.
 NUCL. SCI. ENG., 52(3), 382-395
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4012. Date 700700
 112500 521130 870092
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 in Resonance Absorbers
 Bogart, D.
 NUCL. SCI. ENG., 41(1), 37-46
 National Aeronautics Support Agencies

4031. Date 730100
 112120 421200 870090 870092
 Gamma Ray Spectra of Uranium and Thorium Ores By
 High Resolution (Ge(Li)) Spectrometry
 Urquhart, D. F.
 AAEC/TM-634
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$3.75
 Australia

4033. Date 720500
 112120 121100 870092 870094
 Absolute Yields in the Fission of 235-U, 238-U, and
 239-Pu Irradiated in Dfr
 Cuninghame, J. G.; Goodall, J. A. B.; Willis, H. H.
 AERE-R-6862(REV)
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 England

4055. Date 720900
 122100 870092
 Evaluation of the U-235 Fission Cross Section
 Kohshin, V. A.; Nikolaev, M. N.
 INDC(CCP)-26/U
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 Russia

CATEGORY NUMBER 870092

4058. Date 730900
 111110 122110 32A000 511110 870092
 Calculation of Neutron Angular Flux Emerging From
 Shells of Natural Uranium Surrounding a Central
 Source
 West, P. H.
 AWRE-0-35/73
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$4.00
 England

4068. Date 731200
 111110 870092
 The 233-U Fission Neutron Spectrum From 0.8 to 10
 Mev (Lwbr Development Program)
 Green, L.; Mitchell, J. A.; Steen, N. M.
 WAPD-TM-1129
 AVAILABILITY-DEP., NTIS \$3.00
 Bettis Atomic Power Lab.

4073. Date 720500
 122110 870092 870094
 Evaluation and Production of Fast Reactor Group
 Constants (for 236-U, 238-Pu, 242-Pu and 10-B)
 Ishiguro, Y.; Hasegawa, A.; Takano, H.;
 Nakagawa, M.; Katsuragi, S.
 JAPFNR-70; PNC-J-250; JAERI-MEMO-4850
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Japan

4099. Date 740400
 122310 870092
 An Assessment of Proposed (N, Gamma N') Data Based
 on Measured And Calculated Neutron Spectra in
 Uranium Depleted in Uranium-235
 Becker, M.; Kaushal, N. N.
 NUCL. SCI. ENG., 53(4), 487-488
 New York Schools

4113. Date 740600
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 Neutron Pulses Slowing Down in Heavy Media Analysis
 With Applications of The Lead Spectrometer
 Sawan, M.; Conn, R. W.
 NUCL. SCI. ENG., 54(2), 127-142
 Wisconsin Schools

4115. Date 740600
 112120 121100 532000 870090 870092 870094
 Calculation of the Decay Power of Fission Products
 Tasaka, K.; Sasamoto, N.
 NUCL. SCI. ENG., 54(2), 177-189
 Japan

CATEGORY NUMBER 870092

4116. Date 740600
111500 325000 510000 511110 861000 870092

Functionals to Represent the Neutron Flux in Fast Pulsed Assemblies

Knickle, H. N.; Daitch, P. B.
NUCL. SCI. ENG., 54(2), 196-200
Rhode Island Schools

4127. Date 740700
122100 870092

Evaluation of Uranium-238 Neutron Cross Sections From Spectral Measurements

Bluhm, H.; Fieg, G.; Werle, H.
NUCL. SCI. ENG., 54(3), 300-316
Germany (West)

4132. Date 740700
111110 325000 551110 713000 870011 870092 885000

Anisotropic Neutron Diffusion in Lattices of the Zero-Power Plutonium Reactor Experiments

Gelbard, E. M.
NUCL. SCI. ENG., 54(3), 327-340
Argonne National Lab.

4141. Date 730000
111110 329000 870092

Effects Upon Neutron-Transport Owing to Granules of Material Randomly Dispersed in Fuel-Elements

Barrett, P. R.
ATOMKERNENERGIE, 20(4), 258-262
Germany (West)

4205. Date 720900
111110 32A000 511110 795042 870092 870094 870098

Subcritical Multiplication of Californium-252 Neutrons and Its Applications

Hansen, L. E.; Wogman, N. A.; Perkins, R. W.; Clayton, E. D.
NUCL. TECH., 15(2), 422-430
Battelle Memorial Inst.

4225. Date 731000
111110 122110 122310 32A000 511110 713000 870092 870094

A Systematic Test of the Endf-B/3 Evaluated Cross-Section Library on "Clean" Critical Assemblies

Wagschal, J. J.; Yaari, A.
STI/PUB-343,V2,PP.83-101;
CONF-730302,V2,PP.83-101; IAEA-SM-170/19
AVAILABILITY-IAEA
Israel

CATEGORY NUMBER 870092

4227. Date 731000
111110 122110 32A000 325000 521130 795082 870006 870092

Effects of Different Nuclear Computer Codes and Data Libraries on The Evaluation of the Critical Htr-Experiment Cesar II

Scherer, W.
STI/PUB-343,V2,PP.135-145;
CONF-730302,V2,PP.135-145; IAEA-SM-170/79
AVAILABILITY-IAEA
Germany (West)

4249. Date 710729
111110 112120 112710 421200 430000 870092 870094

Measurement of Fission Fragment Isomers With Ge(Li) Detectors: Unfolding Spectra With Discrete and Continuum Components

Verbinski, V. V.; Weber, H.; Sund, R. E.
GULF-RT-A10782; ANS-SD-12, ARTICLE 8
AVAILABILITY-GULF RADIATION TECH., P.O. BOX 608, SAN DIEGO, CALIF. 92112
Gulf General Atomic

4278. Date 700300
010000 32A000 32E000 32F000 326000 329000 511110

620000 710000 722100 795022 795081 795121 820000 861000 870092

Key Problems in Radiation Shielding in the Federal Republic of Germany

Bunemann, D.
ANS-SD-8,PP.82-108; AD-712532,PP.82-108
AVAILABILITY-NTIS
Germany (West)

4318. Date 730000
111110 870090 870092 870094

Prompt and Delayed Neutron Yields From Low Energy Photofission of Th-232, U-235, U-238, and Pu-239

Caldwell, J. T.; Dowdy, E. J.; Worth, G. M.
LA-UR-73-968; CONF-730823-2; SM-174/100
AVAILABILITY-DEP., NTIS \$3.00
Los Alamos Scientific Lab

4320. Date 721000
111110 112120 123000 221000 532000 870092 870094

Data for the Calculation of Gamma Radiation Spectra and Beta Heating From Fission Products (Revision 2)

Tobias, A.
RD/B/M-2453
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
England

CATEGORY NUMBER 870092

4325. Date 740400
111110 112710 610000 713000 719A00 795217 870092
870094

Calculation and Compilations of Composition,
Radioactivity, Thermal Power, Gamma and Neutron
Release Rates of Fission Products and Actinides of
Spent Power Reactor Fuels and Their Reprocessing
Wastes

Haug, H. O.

KFK-1945

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)

Germany (West)

4328. Date 730700
111110 112110 112120 870092 870094 870098

Neutron and Gamma Emission in Fission

Nifenecker, H.; Signarbieux, C.; Babinet, R.;
Poitou, J.

LBL-1950; CONF-730823-15; SM-174/207

AVAILABILITY-DEP., NTIS \$8.75

Lawrence Berkeley Lab

4330. Date 740300
112710 712000 870092

Shielded Shipping Container for Fissile Material Class I
or Large Quantities Of Radioactive Material
Supplement

Noyes, H. E.

LA-4686-MS,SUPPL.

AVAILABILITY-DEP., NTIS \$4.00

Los Alamos Scientific Lab

4348. Date 740900
111500 122200 870092 870094

Comparative Analysis of Neutron Files As a Sensitivity
Study (Tech. Note)

Segev, M.; Yiftah, S.; Gur, Y.; Gitter, L.

NUCL. SCI. ENG., 55(1), 103-104

Israel

4360. Date 740800
010000 111110 112120 424000 713000 870092 870094

The State-Of-the Art in Non-Destructive Assay Systems
and Their Applications To An Lmfbr Aqueous Fuel
Reprocessing Plant

Shahrokhi, F.; Robinson, J. C.; Mihalcz, J. T.;
Ackermann, N. J., Jr.

ORNL-TM-4586; ORNL-TM-4586

AVAILABILITY-DEP., NTIS \$5.45

Oak Ridge National Lab.

CATEGORY NUMBER 870092

4367. Date 730000
111110 111220 220000 421130 511120 870004 870092
870094 870095 870098

Measurement of Spectral Distributions of Neutrons
From Radioactive Sources And Uranium-235
Fission, and the Resulting Fluence-Dose Conversion
Factors

Kluge, H.; Weise, K.; Zill, H. W.

STI/PUB/318,V.1,13-22; CONF-721203,V.1,13-22;
IAEA-SM-167/7

AVAILABILITY-IAEA

Germany (West)

4371. Date 730000
111110 220000 423140 511110 820000 870092

Prediction of Fast Neutron Spectra in Criticality
Accidents

Cross, W. G.; Ing, H.

STI/PUB/318,VOL.1,73-86; CONF-721203,V.1,73-86;
IAEA-SM-167/45

AVAILABILITY-IAEA

Canada

4390. Date 740000
111110 111210 717000 810000 870092 870094

Geometry and Performance of a Theta Pinch Power
Breeder

Braun, G. W.; Lidsky, L. M.

CONF-740402-P1,199-210

AVAILABILITY-NTIS

Massachusetts Schools

4391. Date 740000
111110 111210 521130 710000 717000 795082 810000
870092 870094

A Modular Fission-Fusion Hybrid Blanket

Hansborough, L. D.; Werner, R. W.

CONF-740402-P1,211-222

AVAILABILITY-NTIS

Lawrence Livermore Lab

4392. Date 740000
111110 111210 329000 521130 717000 810000 870092
870094

Neutronics Analysis of a 2500 Mwth Fast Fission
Natural Uranium Blanket For A Dt Fusion Reactor

Lee, J. D.

CONF-740402-P1,223-237

AVAILABILITY-NTIS

Lawrence Livermore Lab

CATEGORY NUMBER 870092

4393. Date 740000
 111110 111210 710000 717000 810000 870092 870094
 Conceptual Design of a Fusion-Fission Hybrid Reactor
 Based on a Mirror Fusion Reactor With a
 Subcritical Gas Cooled Fission Blanket
 Wolkenhauer, W. C.; Leonard, B. R., Jr.;
 Sutey, A. M.; Moir, R. W.
 BNWL-SA-4865; CONF-740402-43;
 CONF-740402-P1,238-255
 AVAILABILITY-NTIS
 Pacific Northwest Lab

4394. Date 740000
 111110 111210 521130 522130 710000 717000 793000
 794000 795082 810000 870092 870094
 Neutronic and Photonic Analyses of Fusion Reactor
 Blankets Containing Natural Uranium
 Parish, T. A.; Draper, E. L., Jr.
 CONF-740402-P1,256-270
 AVAILABILITY-NTIS
 Texas Schools

4395. Date 740000
 111110 111210 329000 521130 710000 717000 810000
 870092 870094
 Calculations of a Fast Fission Blanket for Dt Fusion
 Reactors With Two Evaluated Data Libraries
 Haight, R. C.; Lee, J. D.
 CONF-740402-P1,271-280
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4405. Date 740000
 111210 112710 717000 810000 870092
 Some Safety Considerations of Hybrid Reactors in
 Comparison With Fission And Fusion Reactors
 Wolkenhauer, W. C.; Stewart, C. W.; Werner, R. W.;
 Lee, J. D.
 BNWL-SA-4988; CONF-740402-P1,588-598
 AVAILABILITY-NTIS
 Pacific Northwest Lab

4494. Date 750100
 111120 870090 870092 870094
 Delayed-Neutron Data for Reactor-Physics Analysis
 Tuttle, R. J.
 NUCL. SCI. ENG., 56(1), 37-71
 Atomics International

CATEGORY NUMBER 870092

4511. Date 741100
 111110 111120 424000 870090 870092
 The Delayed Neutron Pellet Assay Gage (Lwbr
 Development Program)
 Milani, S.; Emert, C. J.
 WAPD-TM-1088
 AVAILABILITY-DEP., NTIS \$4.00
 Bettis Atomic Power Lab.

4559. Date 730100
 111110 870092 870098
 Prompt Neutrons From Fission
 Skarsvag, K.
 KR-148
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$3.00
 Norway

4580. Date 740700
 112120 222000 230000 510000 532000 870092 870094
 Decay Heating Measurements and Calculations for
 Irradiated 235-U, 233-U, 239-Pu, and 232-Th (Lwbr
 Development Program)
 Gunst, S. B.; Conway, D. E.; Connor, J. C.
 WAPD-TM-1183
 AVAILABILITY-DEP., NTIS \$6.75
 Bettis Atomic Power Lab.

4606. Date 731000
 111110 122310 210000 311000 861000 870092 870094
 Cross-Section Uncertainty Effects on the Ratio of the
 High-Energy Neutron Flux to the Power and
 Resulting Estimation of the Irradiation Limit Errors
 in A Fast Power Reactor
 Boioli, A.; Cecchini, G. P.; Cosimi, M.; Salvatores, M.
 STI/PUB-343,V.1,155-162; CONF-730302,V.1,155-162;
 IAEA-SM-170/7
 AVAILABILITY-IAEA, VIENNA
 Italy

4607. Date 730400
 112120 122100 870090 870092 870094
 Discussion of Fission-Product Yield Evaluation Methods
 and a New Evaluation
 Lammer, M.; Eder, O. J.
 SGAE-2115; STI/PUB-343,V.1,505-551;
 CONF-730302-22
 AVAILABILITY-IAEA, VIENNA
 Austria

CATEGORY NUMBER 870092

4618..... Date 740500
 112120 870090 870092 870094
 Assessment of Known Independent Yields and the
 Calculation of Those Unknown In the Fission of
 232-Th, 233-U, 235-U, 238-U, 239-Pu, 240-Pu and
 241-Pu
 Crouch, E. A. C.
 AERE-R-7680
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 \$5.25
 England

4675..... Date 731000
 111210 430000 511120 870092 870094
 Calculational Models for LII Pulsed Spheres. Csewg
 Shielding Benchmark Collection No. Sdt 10
 Plechaty, E. F.; Howerton, R. J.
 UCID-16372
 AVAILABILITY-DEP., NTIS \$5.50
 Lawrence Livermore Lab

4737..... Date 701026
 112120 870092 870098
 Prompt Gamma Decay of Fission Fragments
 Sarkar, R.; Chatterjee, A.
 PHYS. REV. B, 33B(4), 263-267
 India

4743..... Date 730101
 112B00 122200 870047 870079 870082 870092
 Shell-Wise Photoelectric Cross-Sections of Gamma-Rays
 Rao, K. S.; Rao, B. V.; Parthasaradhi, K.
 NUOVO CIMENTO A, 13(1), 267-270
 India

4749..... Date 750300
 112710 424000 870092 870094
 A Guide to Gamma-Ray Assay for Nuclear Material
 Accountability
 Reilly, T. D.; Parker, J. L.
 LA-5794-M
 AVAILABILITY-NTIS \$5.45
 Los Alamos Scientific Lab

4765..... Date 740000
 122310 870092
 Estimated Data Covariance Files of Evaluated Cross
 Section Examples For 235-U and 238-U
 Perey, F. G.; De Saussure, G.; Perez, R. B.
 CONF-740903-10
 AVAILABILITY-DEP. NTIS \$4.00
 Oak Ridge National Lab.

CATEGORY NUMBER 870092

4814..... Date 741200
 111110 870092 870098
 Standard Fission Neutron Spectra
 Ferguson, A. T. G.
 STI/PUB-371, PP.333-338; CONF-721127, PP.333-338;
 IAEA-PL-246-2/37
 AVAILABILITY-IAEA
 England

4826..... Date 750600
 111120 870092
 Reevaluation of the Emission Probabilities of Delayed
 Neutrons From Fission Products
 Izak-Biran, T.; Amiel, S.
 NUCL. SCI. ENG., 57(2), 117-121
 Israel

4833..... Date 750900
 111110 310000 511110 870092
 Telegrapher's Equation Analysis of the Cooling Effect of
 a Cavity on The Fast Neutron Spectra. (Tech. Note)
 Kudo, K.; Narita, M.; Ozawa, Y.
 NUCL. SCI. ENG., 58(1), 95-98
 Japan

4842..... Date 750600
 112120 532000 610000 870090 870092 870094
 Gamma-Ray Energy Release in the Decay of Fission
 Products
 Sasamoto, N.; Nemoto, T.
 NUCL. ENG. DESIGN, 32(2), 252-276
 Japan

4843..... Date 750700
 112720 112730 328000 632200 722100 861000 870082
 870092
 Radiation Leakage From Narrow Gaps in Shields
 Haworth, R.; Liquorish, R. A.; Taylor, C. B.
 NUCL. ENG. DESIGN, 32(3), 428-437
 England

4863..... Date 750700
 112120 112930 870092 870094
 Gamma and Beta Decay Power Following 235-U and
 239-Pu Fission Bursts
 England, T. R.; Schenter, R. E.; Whittemore, N. L.
 LA-6021-MS
 AVAILABILITY-NTIS \$4.00
 Los Alamos Scientific Lab

CATEGORY NUMBER 870092

4865. Date 751000
 111110 32A000 551110 795195 870092
 Effects of Neutron Streaming and Geometric Models on
 Molten Fuel Recriticality Accidents
 McLaughlin, T. P.
 LA-6127-MS
 AVAILABILITY-NTIS \$4.00
 Los Alamos Scientific Lab

4913. Date 751000
 111220 112120 610000 870092 870094
 Fission-Product Gamma-Ray and Photoneutron Spectra
 Stamatelatos, M. G.; England, T. R.
 NBS SPEC.PUB.-425,PP.193-198;
 CONF-750303,PP.193-198
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Los Alamos Scientific Lab

4914. Date 751000
 111110 870092 870098
 Fission Spectrum Neutrons for Cross Section Validation
 and Neutron Flux Transfer
 Grundl, J. A.; Eisenhauer, C. M.
 NBS SPEC.PUB.-425,PP.250-253;
 CONF-750303,PP.250-253
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 National Bureau of Standards

4916. Date 751000
 122110 870092 870094
 Recent Evaluation for the German Nuclear Data Library
 Kedak-3
 Goel, B.; Kusters, H.; Weller, F.
 NBS SPEC.PUB.-425,PP.313-316;
 CONF-750303,PP.313-316
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Germany (West)

4924. Date 751000
 112120 532000 870092
 Decay Heat Analysis for An Lmfbr Fuel Assembly Using
 Endf/b-Iv Data
 Weisbin, C. R.; Morrison, G. W.; Kee, C. W.
 NBS SPEC.PUB.-425,PP.455-458;
 CONF-750303,PP.455-458
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Oak Ridge National Lab.

CATEGORY NUMBER 870092

4936. Date 751000
 111210 329000 511120 521130 717000 870092
 238-U Pulsed Measurements and Ctr Fusion-Fission
 Blanket Calculations
 Wong, C.; Anderson, J. D.; Haight, R. C.;
 Hansen, L. F.; Komoto, T.
 UCRL-76263; NBS SPEC.PUB.-425,PP.704-707;
 CONF-750303,PP.704-707
 AVAILABILITY-DEP., NTIS \$4.00
 Lawrence Livermore Lab

CATEGORY NUMBER 870094
PLUTONIUM

3522. Date 730300
 112120 870092 870094
 Yields in Thermal Neutron Fission - Some Results and
 Recommendations Based On a Recent Evaluation
 Walker, W. H.
 AECL-4453
 AVAILABILITY-SCIENTIFIC DOCUMENT
 DISTRIBUTION OFFICE, ATOMIC ENERGY
 OF CANADA LIMITED, CHALK RIVER,
 ONTARIO, CANADA \$0.50
 Canada

3580. Date 730400
 122100 870094
 An Analysis of the 239-Pu Neutron Cross Sections From
 20 Kev to 20 Mev
 Prince, A.; Drake, M. K.; Hlavac, P.
 BNL-50388; ENDF-190
 AVAILABILITY-NTIS
 Brookhaven Natl. Lab.

3597. Date 720400
 111110 421130 870092 870094 870098
 Fission-Neutron Spectra Measurements of 235-U,
 239-Pu, and 252-Cf
 Werle, H.; Bluhm, H.
 J. NUCL. ENERGY, 26(4), 165-175
 Germany (West)

3629. Date 730400
 111110 122110 32A000 325000 521130 713000 861000
 862000 870011 870092 870094 882000
 One-Dimensional Calculations in Support of the
 Reactivity Surveillance Procedures for the Fast Test
 Reactor
 Flanagan, G. F.; Simpson, D. B.; Buhl, A. R.
 ORNL-TM-4014
 AVAILABILITY-AT (TECHNICAL INFORMATION
 CENTER, OAK RIDGE, TENN. 37830) \$5.45

CATEGORY NUMBER 870094

Oak Ridge National Lab.

3654. Date 730600
 122100 870094
 Evaluated Neutron-Induced Cross Sections for 239-Pu
 and 240-Pu
 Hunter, R. E.; Stewart, L.; Hiron, T. J.
 LA-5172
 AVAILABILITY-NTIS
 Los Alamos Scientific Lab

3672. Date 730900
 111110 111220 870094
 Neutron Yield From a Small High Purity 238-Pu Sub 2
 Source
 Bair, J. K.; Butler, H. M.
 NUCL. TECH., 19(3), 202-203
 Oak Ridge National Lab.

3701. Date 711100
 122100 870094
 Evaluation of Neutron Data for Pu-239
 Ribon, P.; Le Coq, G.
 CEA-N-1484
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 France

3723. Date 710000
 112760 423250 870094
 Assessment of External Radiation Exposure From
 Handling of Plutonium
 Herrmann, G.; Hunzinger, W.
 CONF-681013, PP.181-185
 AVAILABILITY-LE VESINET, FRANCE; SERVICE
 CENTRAL DE PROTECTION CONTRE LES
 RAYONNEMENTS IONISANTS (1971)
 Belgium

3819. Date 730400
 111110 122110 122310 713000 870092 870094
 Adjustment of Multigroup Neutron Cross Sections By a
 Correlation Method
 Salvatores, M.
 NUCL. SCI. ENG., 50(4), 345-354
 Italy

3824. Date 730500
 111120 421120 870092 870094
 The Energy Distribution of Delayed Fission Neutrons
 Shalev, S.; Cutler, J. M.
 NUCL. SCI. ENG., 51(1), 52-66
 Israel

CATEGORY NUMBER 870094

3841. Date 731100
 121100 870092 870094
 Multilevel Effects in the Unresolved Resonances Region
 of the Cross Sections Of Fissile Nuclides
 De Saussure, G.; Perez, R. B.
 NUCL. SCI. ENG., 52(3), 382-395
 Oak Ridge National Lab.

3974. Date 700615
 112120 870094
 Gamma Radiation Characteristics of Plutonium Dioxide
 Fuel
 Gingo, P. J.; Dore, M. A.
 JPL-TR-32-1481; NASA-CR-110136; N70-35897
 AVAILABILITY-NTIS
 Jet Propulsion Lab

4019. Date 650607
 714000 870094
 Plutonium-238 Isotopic Power Sources: a Summary
 Report
 Grove, G. R.; Powers, J. A.; Goldenberg, N.;
 Kelly, D. P.; Prosser, D. L.
 MLM-1270
 AVAILABILITY-DEP., NTIS \$13.75
 Monsanto

4033. Date 720500
 112120 121100 870092 870094
 Absolute Yields in the Fission of 235-U, 238-U, and
 239-Pu Irradiated in Dfr
 Cuninghame, J. G.; Goodall, J. A. B.; Willis, H. H.
 AERE-R-6862(REV)
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 England

4054. Date 720500
 122100 870094
 Nuclear Data Evaluation for 240-Pu
 Caner, M.; Yiftah, S.
 IA-1243
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Israel

4073. Date 720500
 122110 870092 870094
 Evaluation and Production of Fast Reactor Group
 Constants (for 236-U, 238-Pu, 242-Pu and 10-B)
 Ishiguro, Y.; Hasegawa, A.; Takano, H.;
 Nakagawa, M.; Katsuragi, S.
 JAPFNR-70; PNC-J-250; JAERI-MEMO-4850
 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
 Japan

CATEGORY NUMBER 870094

4106. Date 600819
870094
Predicted Z Plant Radiation Exposure Levels Vs
Plutonium Isotopic Concentration of Products
Chitwood, R. B.
HW-66675
AVAILABILITY-DEP., NTIS
General Electric Co.

4113. Date 740600
111210 421160 540000 870082 870092 870094
Neutron Pulses Slowing Down in Heavy Media Analysis
With Applications of The Lead Spectrometer
Sawan, M.; Conn, R. W.
NUCL. SCI. ENG., 54(2), 127-142
Wisconsin Schools

4115. Date 740600
111210 121100 532000 870090 870092 870094
Calculation of the Decay Power of Fission Products
Tasaka, K.; Sasamoto, N.
NUCL. SCI. ENG., 54(2), 177-189
Japan

4201. Date 741100
111110 220000 760000 870094
Status of Dosimetry for 252-Cf Medical Neutron Sources
Anderson, L. L.
PHYS. MED. BIOL., 18(6), 779-799
Sloan Kettering Inst. for Cancer Rese

4205. Date 720900
111110 32A000 511110 795042 870092 870094 870098
Subcritical Multiplication of Californium-252 Neutrons
and Its Applications
Hansen, L. E.; Wogman, N. A.; Perkins, R. W.;
Clayton, E. D.
NUCL. TECH., 15(2), 422-430
Battelle Memorial Inst.

4225. Date 731000
111110 122110 122310 32A000 511110 713000 870092
870094
A Systematic Test of the Endf-B/3 Evaluated
Cross-Section Library on "Clean" Critical
Assemblies
Wagschal, J. J.; Yaari, A.
STI/PUB-343,V2,PP.83-101;
CONF-730302,V2,PP.83-101; IAEA-SM-170/19
AVAILABILITY-IAEA
Israel

CATEGORY NUMBER 870094

4249. Date 710729
111110 112120 112710 421200 430000 870092 870094
Measurement of Fission Fragment Isomers With Ge(Li)
Detectors: Unfolding Spectra With Discrete and
Continuum Components
Verbinski, V. V.; Weber, H.; Sund, R. E.
GULF-RT-A10782; ANS-SD-12, ARTICLE 8
AVAILABILITY-GULF RADIATION TECH., P.O.
BOX 608, SAN DIEGO, CALIF. 92112
Gulf General Atomic

4284. Date 740610
112710 424000 870094
A Simulation Study of Plutonium Gamma Ray
Groupings for Isotopic Ratio Determinations
Gunnink, R.
UCRL-51605
AVAILABILITY-NTIS
Lawrence Livermore Lab

4318. Date 730000
111110 870090 870092 870094
Prompt and Delayed Neutron Yields From Low Energy
Photofission of Th-232, U-235, U-238, and Pu-239
Caldwell, J. T.; Dowdy, E. J.; Worth, G. M.
LA-UR-73-968; CONF-730823-2; SM-174/100
AVAILABILITY-DEP., NTIS \$3.00
Los Alamos Scientific Lab

4320. Date 721000
111110 112120 123000 221000 532000 870092 870094
Data for the Calculation of Gamma Radiation Spectra
and Beta Heating From Fission Products (Revision
2)
Tobias, A.
RD/B/M-2453
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
England

4325. Date 740400
111110 112710 610000 713000 719A00 795217 870092
870094
Calculation and Compilations of Composition,
Radioactivity, Thermal Power, Gamma and Neutron
Release Rates of Fission Products and Actinides of
Spent Power Reactor Fuels and Their Reprocessing
Wastes
Haug, H. O.
KFK-1945
AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
Germany (West)

CATEGORY NUMBER 870094

4328..... Date 730700
 111110 112110 112120 870092 870094 870098
 Neutron and Gamma Emission in Fission
 Nifenecker, H.; Signarbieux, C.; Babinet, R.;
 Poitou, J.
 LBL-1950; CONF-730823-15; SM-174/207
 AVAILABILITY-DEP., NTIS \$8.75
 Lawrence Berkeley Lab

4332..... Date 740418
 112710 424000 870094
 A System for Plutonium Analysis By Gamma Ray
 Spectrometry. Part I: Techniques for Analysis of
 Solutions
 Gunnink, R.; Niday, J. B.; Siemens, P. D.
 UCRL-51577, PART I
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4348..... Date 740900
 111500 122200 870092 870094
 Comparative Analysis of Neutron Files As a Sensitivity
 Study (Tech. Note)
 Segev, M.; Yiftah, S.; Gur, Y.; Gitter, L.
 NUCL. SCI. ENG., 55(1), 103-104
 Israel

4360..... Date 740800
 010000 111110 112120 424000 713000 870092 870094
 The State-Of-the Art in Non-Destructive Assay Systems
 and Their Applications To An Lmfbr Aqueous Fuel
 Reprocessing Plant
 Shahrokhi, F.; Robinson, J. C.; Mihalcz, J. T.;
 Ackermann, N. J., Jr.
 ORNL-TM-4586; ORNL-TM-4586
 AVAILABILITY-DEP., NTIS \$5.45
 Oak Ridge National Lab.

4367..... Date 730000
 111110 111220 220000 421130 511120 870004 870092
 870094 870095 870098
 Measurement of Spectral Distributions of Neutrons
 From Radioactive Sources And Uranium-235
 Fission, and the Resulting Fluence-Dose Conversion
 Factors
 Kluge, H.; Weise, K.; Zill, H. W.
 STI/PUB/318,V.1,13-22; CONF-721203,V.1,13-22;
 IAEA-SM-167/7
 AVAILABILITY-IAEA
 Germany (West)

CATEGORY NUMBER 870094

4390..... Date 740000
 111110 111210 717000 810000 870092 870094
 Geometry and Performance of a Theta Pinch Power
 Breeder
 Braun, G. W.; Lidsky, L. M.
 CONF-740402-P1,199-210
 AVAILABILITY-NTIS
 Massachusetts Schools

4391..... Date 740000
 111110 111210 521130 710000 717000 795082 810000
 870092 870094
 A Modular Fission-Fusion Hybrid Blanket
 Hansborough, L. D.; Werner, R. W.
 CONF-740402-P1,211-222
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4392..... Date 740000
 111110 111210 329000 521130 717000 810000 870092
 870094
 Neutronics Analysis of a 2500 Mwth Fast Fission
 Natural Uranium Blanket For A Dt Fusion Reactor
 Lee, J. D.
 CONF-740402-P1,223-237
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4393..... Date 740000
 111110 111210 710000 717000 810000 870092 870094
 Conceptual Design of a Fusion-Fission Hybrid Reactor
 Based on a Mirror Fusion Reactor With a
 Subcritical Gas Cooled Fission Blanket
 Wolkenhauer, W. C.; Leonard, B. R., Jr.;
 Sutey, A. M.; Moir, R. W.
 BNWL-SA-4865; CONF-740402-43;
 CONF-740402-P1,238-255
 AVAILABILITY-NTIS
 Pacific Northwest Lab

4394..... Date 740000
 111110 111210 521130 522130 710000 717000 793000
 794000 795082 810000 870092 870094
 Neutronic and Photonic Analyses of Fusion Reactor
 Blankets Containing Natural Uranium
 Parish, T. A.; Draper, E. L., Jr.
 CONF-740402-P1,256-270
 AVAILABILITY-NTIS
 Texas Schools

CATEGORY NUMBER 870094

4395..... Date 740000
111110 111210 329000 521130 710000 717000 810000
870092 870094

Calculations of a Fast Fission Blanket for D_t Fusion
Reactors With Two Evaluated Data Libraries

Haight, R. C.; Lee, J. D.

CONF-740402-PI,271-280

AVAILABILITY-NTIS

Lawrence Livermore Lab

4494..... Date 750100
111120 870090 870092 870094

Delayed-Neutron Data for Reactor-Physics Analysis

Tuttle, R. J.

NUCL. SCI. ENG., 56(1), 37-71

Atomics International

4514..... Date 740900
112760 220000 222000 632110 795048 845000 870094

Dose-To-The-Population Estimates for Use of
Radioisotope Powered Cardiac Pacemakers

McKee, R. W.; Clark, L. L.; Cole, B. M.;
Libby, R. A.

BNWL-1858

AVAILABILITY-DEP., NTIS \$5.45

Battelle-Northwest

4537..... Date 750200
112120 112750 112760 713000 870094 887000

Radionuclide Behavior During Normal Operation of
Liquid-Metal Cooled Fast Breeder Reactors. Part I:
Production

Erdman, C. A.; Reynolds, A. B.

NUCL. SAFETY, 16(1), 43-59

Virginia Schools

4580..... Date 740700
112120 222000 230000 510000 532000 870092 870094

Decay Heating Measurements and Calculations for
Irradiated ²³⁵U, ²³³U, ²³⁹Pu, and ²³²Th (Lwbr
Development Program)

Gunst, S. B.; Conway, D. E.; Connor, J. C.

WAPD-TM-1183

AVAILABILITY-DEP., NTIS \$6.75

Bettis Atomic Power Lab.

4606..... Date 731000
111110 122310 210000 311000 861000 870092 870094

Cross-Section Uncertainty Effects on the Ratio of the
High-Energy Neutron Flux to the Power and
Resulting Estimation of the Irradiation Limit Errors
in A Fast Power Reactor

Boioli, A.; Cecchini, G. P.; Cosimi, M.; Salvatores, M.

CATEGORY NUMBER 870094

STI/PUB-343,V.1,155-162; CONF-730302,V.1,155-162;
IAEA-SM-170/7

AVAILABILITY-IAEA, VIENNA

Italy

4607..... Date 730400
112120 122100 870090 870092 870094

Discussion of Fission-Product Yield Evaluation Methods
and a New Evaluation

Lammer, M.; Eder, O. J.

SGAE-2115; STI/PUB-343,V.1,505-551;

CONF-730302-22

AVAILABILITY-IAEA, VIENNA

Austria

4618..... Date 740500
112120 870090 870092 870094

Assessment of Known Independent Yields and the
Calculation of Those Unknown In the Fission of
²³²Th, ²³³U, ²³⁵U, ²³⁸U, ²³⁹Pu, ²⁴⁰Pu and
²⁴¹Pu

Crouch, E. A. C.

AERE-R-7680

AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
\$5.25

England

4625..... Date 741015
111220 870009 870094

The Neutron Spectrum of Plutonium Fluoride

Massand, O. P.; Venkataraman, G.

NUCL. INSTR. METHODS, 121(2), 405-406

India

4675..... Date 731000
111210 430000 511120 870092 870094

Calculational Models for LII Pulsed Spheres. Csewg
Shielding Benchmark Collection No. Sdt 10

Plechaty, E. F.; Howerton, R. J.

UCID-16372

AVAILABILITY-DEP., NTIS \$5.50

Lawrence Livermore Lab

4749..... Date 750300
112710 424000 870092 870094

A Guide to Gamma-Ray Assay for Nuclear Material
Accountability

Reilly, T. D.; Parker, J. L.

LA-5794-M

AVAILABILITY-NTIS \$5.45

Los Alamos Scientific Lab

CATEGORY NUMBER 870094

4842..... Date 750600
 112120 532000 610000 870090 870092 870094
 Gamma-Ray Energy Release in the Decay of Fission
 Products
 Sasamoto, N.; Nemoto, T.
 NUCL. ENG. DESIGN, 32(2), 252-276
 Japan

4863..... Date 750700
 112120 112930 870092 870094
 Gamma and Beta Decay Power Following 235-U and
 239-Pu Fission Bursts
 England, T. R.; Schenter, R. E.; Whittemore, N. L.
 LA-6021-MS
 AVAILABILITY-NTIS \$4.00
 Los Alamos Scientific Lab

4913..... Date 751000
 112120 112120 610000 870092 870094
 Fission-Product Gamma-Ray and Photoneutron Spectra
 Stamatelatos, M. G.; England, T. R.
 NBS SPEC.PUB.-425, PP.193-198;
 CONF-750303, PP.193-198
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Los Alamos Scientific Lab

4916..... Date 751000
 122110 870092 870094
 Recent Evaluation for the German Nuclear Data Library
 Kedak-3
 Goel, B.; Kusters, H.; Weller, F.
 NBS SPEC.PUB.-425, PP.313-316;
 CONF-750303, PP.313-316
 AVAILABILITY-GPO \$19.45 PER 2 VOL. SET -
 SOLD IN SETS ONLY
 Germany (West)

CATEGORY NUMBER 870095
 AMERICIUM

4367..... Date 730000
 111110 112200 220000 421130 511120 870004 870092
 870094 870095 870098
 Measurement of Spectral Distributions of Neutrons
 From Radioactive Sources And Uranium-235
 Fission, and the Resulting Fluence-Dose Conversion
 Factors
 Kluge, H.; Weise, K.; Zill, H. W.
 STI/PUB/318, V.1, 13-22; CONF-721203, V.1, 13-22;
 IAEA-SM-167/7
 AVAILABILITY-IAEA
 Germany (West)

CATEGORY NUMBER 870095

4452..... Date 740822
 111220 329000 511120 810000 870004 870095
 Calculated Neutron Emission Spectra From Spherical
 Shells Surrounding a 0- To 11-Mev Neutron Source:
 Tests of the LLNL and Nuclear Data Library
 (Endl)
 Haight, R. C.; Howe, J. L.
 UCRL-51,637
 AVAILABILITY-NTIS
 Lawrence Livermore Lab

4742..... Date 740600
 111110 112B00 421130 870095 870098
 A Proton Recoil Spectrometer for In-Pile Measurements
 in the Energy Range Between 500 Kev and 3 Mev
 Korthaus, E.
 EURFNR-1197; KFK-1994(IN GERMAN)
 AVAILABILITY-DEP., NTIS
 Germany (West)

CATEGORY NUMBER 870098
 CALIFORNIUM

3587..... Date 720500
 111110 220000 845000 870098
 Radiation Quality of Californium-252
 Dicello, J. F.; Gross, W.; Kraljevic, U.
 PHYS. MED. BIOL., 17(3), 345-355
 New York Schools

3588..... Date 720500
 111110 112110 220000 423110 511120 512120 845000
 870098
 Dose Distributions Around a 252-Cf Needle
 Colvett, R. D.; Rossi, H. H.; Krishnaswamy, V.
 PHYS. MED. BIOL., 17(3), 356-364
 New York Schools

3595..... Date 720700
 111110 220000 32A000 511110 795042 845000 870098
 Calculated Neutron Dose Rates for Implantable 252-Cf
 Sources
 Windham, J. P.; Shapiro, A.; Kereiakes, J. G.
 PHYS. MED. BIOL., 17(4), 493-502
 Ohio Schools

3597..... Date 720400
 111110 421130 870092 870094 870098
 Fission-Neutron Spectra Measurements of 235-U,
 239-Pu, and 252-Cf
 Werle, H.; Bluhm, H.
 J. NUCL. ENERGY, 26(4), 165-175
 Germany (West)

CATEGORY NUMBER 870098

3603. Date 720400
 111110 220000 32A000 511110 512110 512210 760000
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 Calculated Dose Rate From 252-Cf Radiotherapy Source
 Stoddard, D. H.
 RADIOLOGY, 103(1), 187-190
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3692. Date 700100
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 Calculated and Experimentally Determined Neutron
 Dose Conversion Factor For Californium
 Stone, D. R.; Wagner, E. B.; Jones, T. D.;
 Shinpaugh, W. H.
 HEALTH PHYS., 18(1), 69-71
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3815. Date 740100
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 Energy Spectra of Beta Rays From Californium-252
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 Knief, R. A.; Wehring, B. W.; Wyman, M. E.
 NUCL. SCI. ENG., 53(1), 47-60
 Illinois Schools

3854. Date 730800
 111110 710000 760000 870098
 A Storage and Handling Facility for Californium-252
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 Veerling, J. P., Jr.; Oliver, G. D., Jr.; Moore, E. B.
 HEALTH PHYS., 25(2), 163-167
 Texas Schools

3859. Date 690400
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 Moshkin, G. N.; Tyufyakov, N. D.; Shtan', A. S.;
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 SOVIET J. AT. ENERGY (ENGLISH TRANSL.),
 26(4), 439-440
 Russia

4067. Date 731200
 111110 421160 430000 794000 870098
 The 252-Cf Fission Neutron Spectrum From 0.5 to 13
 Mev (Lwbr Development Program)
 Green, L.; Mitchell, J. A.; Steen, N. M.
 WAPD-TM-1072
 AVAILABILITY-NTIS
 Bettis Atomic Power Lab.

CATEGORY NUMBER 870098

4110. Date 740500
 111110 324000 422110 511120 820000 870098
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 Spiegel, V.
 NUCL. SCI. ENG., 54(1), 28-34
 National Bureau of Standards

4133. Date 731100
 111110 112110 32A000 511110 512110 512210 793000
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 Stoddard, D. H.
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 E. I. Dupont Denemours

4205. Date 720900
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 Hansen, L. E.; Wogman, N. A.; Perkins, R. W.;
 Clayton, E. D.
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4328. Date 730700
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 Neutron and Gamma Emission in Fission
 Nifenecker, H.; Signarbieux, C.; Babinet, R.;
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 LBL-1950; CONF-730823-15; SM-174/207
 AVAILABILITY-DEP., NTIS \$8.75
 Lawrence Berkeley Lab

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 Jared, R. C.; Nifenecker, H.; Thompson, S. G.
 LBL-1963; CONF-730823-13; SM-174/62
 AVAILABILITY-DEP., NTIS \$3.00
 Lawrence Berkeley Lab

4353. Date 721200
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 The Neutron Environment of a Cf-252 Facility
 Wyatt, R. M.
 LSU THESIS (MASTERS)
 AVAILABILITY-LOUISIANA STATE UNIV.,
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 Louisiana Schools

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4367..... Date 730000
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Measurement of Spectral Distributions of Neutrons
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Kluge, H.; Weise, K.; Zill, H. W.
STI/PUB/318,V.1,13-22; CONF-721203,V.1,13-22;
IAEA-SM-167/7
AVAILABILITY-IAEA
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4417..... Date 741000
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CONF-740402-P2,202-217
AVAILABILITY-NTIS
Texas Schools

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Greene, D.; Major, D.
PHYS. MED. BIOL., 19(4), 448-459
England

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Experience With Californium-252 in Clinical
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Castro, J. R.; Oliver, G. D.; Withers, H. R.;
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California Schools

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Bloch, P.; Krishnaswamy, V.; Hale, J.
AM. J. ROENTGENOL, 115(4), 822-833
Pennsylvania Schools

4534..... Date 730000
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Californium-252: Neutron Source for Industry and
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Reinig, W. C.; Permar, P. H.; Cornman, W. R.
DP-MS-73-50; CONF-731116-1
AVAILABILITY-DEP., NTIS \$6.75
E. I. Dupont Denemours

4535..... Date 720901
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DP-MS-72-45; CONF-720902-8
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Skarsvag, K.
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A Proton Recoil Spectrometer for In-Pile Measurements
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Korthaus, E.

EURFNR-1197; KFK-1994(IN GERMAN)
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Jones, T. D.; Auxier, J. A.
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STI/PUB-371,PP.321-325; CONF-721127,PP.321-325;
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AVAILABILITY-IAEA
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4814..... Date 741200
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Ferguson, A. T. G.
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AVAILABILITY-IAEA
England

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AVAILABILITY-DEP., NTIS \$5.25
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AVAILABILITY-NTIS
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Battelle-Northwest

3829. OTE %40100
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Spectra and Dose Fractions of Monoenergetic Neutrons
Passed Through Different Shields and Their
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Makra, S.; Palfalvi, J.; Vertes, P.
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Yvars, M.; Degas, P.; Quetier, M.; Rousseau, G.
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Gyuresak, J.; Umiastowski, K.
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 KFKI-72-67; STI/PUB/318,V.1,47-57; CONF-721203-11
 AVAILABILITY-IAEA
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 Bass, L. P.; Bozin, G. M.; Germogenova, T. A.;
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 Tikhonov, V. K.; Tsypin, S. G.; Shul'gin, A. I.
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 Makra, S.; Palfalvi, J.; Vertes, P.
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 AVAILABILITY-DEP., NTIS (U.S. SALES ONLY)
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 Composed of Steel, Polyethylene, and Borated
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 Maruyama, T.; Bouts, C. J.
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 Netherlands (Holland)

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 Czirr, J. B.; Van Hemert, R. L.
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4774. Date 721100
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 Stewart, L.
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 Intensity Measurements and Shielding of a Fast-Neutron
 Beam for Biological And Medical Applications
 Meulders, J. P.; Leleux, P.; Macq, P. C.; Pirart, C.;
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 NUCL. INSTR. METHODS, 126(1), 81-85
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METAL-HYDROGENOUS MIXTURES

3818. Date 740100
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 Burke, G. D.; Beck, H. L.
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 Herrnberger, V.; Tai, A.S.; Zuber, J. F.
 CONF-721018, PP.1009-1025
 AVAILABILITY-OECD
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Chinaglia, B.; Bosio, G.
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3565. Date 730100
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Stringer, J. L.; Bourassa, R. R.; Dau, G. J.
NUCL. TECH., 17(1), 71-78
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4039. Date 720800
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ANCR-1077; NASA-CR-120903; N72-33651
AVAILABILITY-DEP., NTIS
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4132. Date 740700
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Ando, M.

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Andoh, H.

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Andrews, H. L.

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Angeli, I.

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Angelo, J. A., Jr.

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 719B00 4716

Anselone, P. M.

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Anspaugh, L. R.

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Anton, V.

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Aoki, K.

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Arkuszewski, J.

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Arkuszewski, J. J.

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Aronson, R.

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Arthur, E. D.

122310 4349
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Asami, N.

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Asaoka, T.

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Asprey, M. E.

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Asprey, M. W.

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Atara Ya'ari

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Aten, A. H., Jr.

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Atkinson, G. L.

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Attia, E. A.

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Attix, F. H.

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Atwater, H. F.

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Atwell, J. T.

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845000 3746 4621 4655
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Avci, H.

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Axtmann, R. C.

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Babuska, I.

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Backus, H.

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Baikalov, N. D.

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Bailey, H. S.

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Bailey, P. G.

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Bakov, A. T.

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Balagna, J. P.

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Banach, H. J.

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Banks, N. E.

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Barbee, S. G.

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Barnett, C. S.

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Barschall, H. H.

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Bartine, D. E.

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Barton, C. J.

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Barton, G. W.

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Bartsch, G.

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511110 3657

Batz, H. U.

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Basin, S. L.

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Bass, L. P.

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Batzer, T. H.

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Beck, C. L.

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Beck, H. L.

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Becker, K.

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Becker, M.

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 123000 4497
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Beeler, J. R., Jr.

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Beer, M.

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Bell, J. P.

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Bell, M. J.

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Belleni-Morante, A.

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Bellman, R.

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Belov, S.

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Bement, A. L., Jr. (Ch.)

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Bendall, D. E.

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Bentley, B. W.

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Benzi, V.

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Berger, M. J.

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Bergqvist, I.

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Berman, B. L.

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Bernard, D. L.

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Bernnat, W.

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Berry, H. C.

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Bertolini, E.

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112120 3933

Bessis, J.

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Beverly, W. B.

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Bewley, D. K.

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Bezler, P.

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Bhat, M. H.

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Bhat, M. R.

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Bhat, M. R. (Ed.)

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Bhatti, R. A.

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Bielefeld, M. J.

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Biggerstaff, J. A.

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Biggio, M.

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Bigler, R. E.

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Binney, S. E.

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Bird, J. R.

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Birks, L. S.

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Biro, G. G.

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Bishop, G. B.

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Bishop, W. P.

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Bluhm, H.

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Bogart, D.

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Bond, V. P.

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Bond, W. D.

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Bondarenko, V. V.

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Bonzon, L. L.

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Boot, S. J.

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Bourdeau, F.

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Bowman, C. D.(Ed.)

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Bowman, K. O.

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Bozin, G. M.

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Bridgman, C. J.

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Brindley, K. W.

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Bringham, P. S.

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Brinkley, F. W.

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Brockmann, H.

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Broers-Challiss, J. E.

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Broerse, J. J.

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Brown, P.

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Brown, R. T.

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Brysk, H.

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Buckham, J. A.

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Budnitz, R. J.

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Buhl, A. R.

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Buhl, A. R.

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Buleev, N. I.

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Bunch, W.

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Bunch, W. L.

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Burke, G. D.

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Burleigh, R. C.

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Burlin, T. E.

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Burns, E.

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Burson, Z. G.

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Burte, D. P.

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Burton, R. W.

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Busoni, G.

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Bussac, J.

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Bussard, R. W.

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Bustamante, N.

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Butland, A. T.

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Butland, A. T. D.

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 122100 3719
 820000 3719

Butler, H. M.

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Butler, J.

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Caizergues, J.

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Caizerques, R.

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Calamand, A.

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Caldwell, J. T.

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Caldwell, J. T.

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Camarda, H. S.

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Cameron, J. R.

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Campbell, H. D.

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Campbell, J. E.

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Campbell, P. M.

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Canali, U.

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Caner, M.

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Canfield, E. H.

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Canosa, J.

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Carlson, G. A.

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Carlson, G. W.

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Carmichael, B. M.

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Carroll, G.

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Carre, C.

424000 4928
851000 4928

Carrell, T. E.

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Carruthers, H. M.

717000 4869

Carter, L. L.

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Casadei, G.

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Cashwell, E. D.

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Cashwell, E. D.

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Casini, G.

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Castro, J. R.

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Caumette, P.

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Cavanaugh, G. P.

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Cawley, R. G.

632300 4183
 731100 4183
 861000 4183

Cecchini, G. P.

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Cerbone, R. J.

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Chandler, K. C.

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 795178 4762
 845000 4762

Chandra, B.

632200 4189
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Chapman, G. T.

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 112600 4949
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 845000 4762

Chapus, J.

719B00 3946

Charles, M. W.

220000 4306
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 842000 4306
 845000 4306

Chatani, H.

410000 4551

Chatterjee, A.

112120 4737
 870092 4737
 870098 4737

Chaudhuri, N.

121200 3687
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Cheka, J. A.

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Chen, W. L.

220000 4799
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 845000 4799

Chester, R. O.

112930 4479
 719A00 4479

Childs, R. L.

122310 3827 4767
 311000 3570
 32A000 3570
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 522130 3570
 551120 3827
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 795082 3570 3827
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 795127 3827
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 870011 3570 3827
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Chilton, A. B.

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 32A000 3503 4256
 329000 4634
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Chinaglia, B.

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Ching, J.

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 795082 4499
 861000 3951 4499

Chitwood, R. B.

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Cho, B. Y.

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Chrien, R. E.

112500 4210
 121100 4210
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 810000 4210

Christensen, E. R.

424000 3721

Christian, D. J.

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 512220 4355

Christy, R. W.

423250 3604

Chuang, L. S.

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Chudley, C. T.

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Chulkov, L. V.

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Cicognani, G.

713000 3903

Claiborne, H. C.

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Clark, L. L.

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Clark, R. W.

632200 3784

Clarke, R. H.

112120 3876
 112710 3876
 112920 3876
 795163 3876

Clausen, K.

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Clayton, C. G.

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Clayton, C. G.

424000 4237

Clayton, E.

121100 4029
 122110 4029

Clayton, E. D.

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 870094 4205
 870098 4205

Clifford, C. E. (Can.)

220000 3688

Clifford, C. E. (Can)

511120 4217
 512120 4217
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 853100 4217

Clifford, C. E. (Usa)

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 713000 3931 4253 4766
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 795209 3931
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 870011 4156 4253

Cline, M. C.

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Cloutier, R. J.

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Cocciolone, D.

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Coccorese, E.

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 810000 4384

Cohen, E. R.

020000 4592
123000 4592

Cohen, M. A.

329000 3731
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795187 3731
853100 3731

Cohen, M. O.

511110 3614
512210 3614
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795187 3614
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Cohen, S. C.

32A000 4011

Cole, B. M.

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870094 4514

Cole, R. K., Jr.

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870079 4343

Coleman, M.

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861000 3763

Coleman, W. A.

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Collen, J.

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Collen, J.

820000 3650

Collins, D. G.

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Colvett, R. D.

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Comsan, M. N. H.

121100 4087

Conlon, T. W.

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870003 4502

Conn, R.

32B000 4364
717000 4364

Conn, R. W.

210000 4806
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32B000 4488
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810000 4385 4386 4418
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870094 4113

Connolley, D. J.

32A000 3635
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Connolley, D. J.

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Connor, J. C.

112120 4580
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510000 4580
532000 4580
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Conrad, E. E.

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851000 3992

Constantine, G.

717000 4869

Conway, D. E.

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230000 4580
510000 4580
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870094 4580

Cook, N. D.

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632200 4291

Coolbaugh, M. J.

421130 4102

Cooper, M. H.

112760 4841
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Coops, M. S.

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Corbo, M.

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Corcuera, R.

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Corngold, N.

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Cornman, W. K.

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Cosimi, M.

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870094 4606

Costa, L.

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795094 4082

Cottrell, W. B.

020000 4293

Couchat, P.

424000 4928
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Coultas, T. A.

222000 4403
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Couvert, D.

721200 3751
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853100 3751

Cowper, D. R.

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Cramer, S. N.

122310 4161
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Cramer, S. N.

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Crandall, J. L.

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 870098 4535

Creholder, D. L.

220000 3589 4468
 423250 3589 4468
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Cripps, S. J.

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Cristy, G. A.

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Crites, T. R.

522210 4092
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 870082 4092

Cross, W. G.

111110 4371
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 870092 4371

Crouch, E. A. C.

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 870090 4618
 870092 4618
 870094 4618

Croucher, D. W.

421140 4578
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Croucher, D. W.

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Csikai, J.

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Culambourg, J.

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 713000 3901

Cullen, D. E.

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 122110 4266 4267 4919
 123000 4486
 32A000 4486
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 810000 4266 4267

Cummings, W. V.

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Cundiff, J. H.

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Cuniberti, R.

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Cunningham, J. G.

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Cunningham, J. R.

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Cuttler, J. M.

111120 3824
421120 3824
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Czirr, J. B.

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Daenner, W.

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Dahl, E. B.

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Dahn, E.

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Daitch, P. B.

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D'amato, D. P.

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Danchak, M.

122310 4789

Daruga, V. K.

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Das, S. K.

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Dau, G. J.

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D'auria, J. M.

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632400 3717
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Davey, W. G.

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422110 4447
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Davidson, J. N.

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810000 4404
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Davies, B. S.

112120 4307
532000 4307
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Davis, C.

712000 4547

Davis, J. C.

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Dawn, T. Y.

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Dawson, J. K.

710000 3916

Day, C. K.

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Day, L. R.

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De Almeida, C. E.

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Debuchananne, G. D.

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De Corte, F.

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De Fremont, R.

112120 3935
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Degas, P.

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Degtyarev, S. F.

32A000 3918 3920
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Degtyarev, S. G.

421130 4383
 551120 4383
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Deimel, E.

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Deimel, P.

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Deimel, P.

842000 4484

Dekker, J. W.

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 122310 4909

Delafield, H. J.

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 845000 4035

De Leeuw, S.

421110 4888
 430000 4888

De Leeuw-Gierts, G.

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Delestre, C.**Dellin, T. A.**

121200 4562
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De Meijer, R. J.

112500 4781
 112710 4297
 123000 4297
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Demonsant, J.

329000 4705
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Dennis, J. A.

220000 4507 4508 4509

Deonigi, D. E.

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De Polignac, C.

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Deppe, L. O.

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De Saussure, G.

121100 3841 3844
 122100 3844 4944
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 870094 3841

Detaint, J.

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De Turreil, R.

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Devaney, J.

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Devaney, J. J.

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Devillers, C.

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Dexter, W. L.

531000 4512
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Dexter, W. L.

795127 4512
 810000 4512

Dicello, J. F.

111110 3587
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Dickens, J. K.

112400 4949
 112500 4949
 112600 4949
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 421200 4949
 810000 4949
 870007 3574
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Dickey, B. R.

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Dickson, H. W.

220000 3834 4591 4884
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 423140 3834
 423240 3834
 511120 3834 4591
 512120 3834 4591
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Diettrich, O.

721100 3959
 721200 3949
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 870011 3959

Dillman, L. T.

112200 4240
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 760000 4240

Dillon, I. G.

424000 4787

Dixon, R. L.

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 513110 4660
 613000 4660
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Dixon, V. A.

310000 4779

Dmitrieva, V. A.

326000 3850
 721200 3850

Dolias, M.

311000 4379
 32A000 4379
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Donnert, H. J.

631000 3768
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 731200 3768
 795115 3768

Doran, D. G.

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 870042 4084
 870073 3842 4084

D'orazi, R.

121100 4323
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 810000 4323

Dore, M. A.

112120 3974
 870094 3974

Dormuth, K. W.

112120 4097
 532000 4097

Dorning, J. J.

421130 4910
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 795082 4910

Dorning, J. J.

842000 4910
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 870041 4910

Dorofeev, A. A.

32A000 3918

Doskocil, A. C.

731200 4786

Dousset, M.

220000 3754
 551110 3754
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Dowdy, E. J.

111110 4318
 870090 4318
 870092 4318
 870094 4318

Doyas, R. J.

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 511120 4422
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Dragt, J. B.

112500 4909
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Drake, D. M.

122310 4349
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Drake, M. K.

122100 3580 3581 3582 4292 4352
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 810000 4352
 870012 3582
 870029 3581 4292
 870094 3580

Draley, J. E.

222000 4403
717000 4403

Draper, E. L., Jr.

422110 4447
511110 4363
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522130 4394
710000 4394
717000 3783 4363 4394
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795082 3783 4363 4394
810000 4394
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Driscoll, M. J.

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Drosg, M.

421130 3642
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Drouvin, G.

721200 3751
750000 3751
853100 3751

Droz dov, V. E.

610000 3846
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Drumheller, K.

010000 4726
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Dubin in, A. A.

220000 4649
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Dubois, F.

853100 3925
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853600 3925
853800 3925

Dubrovskii, V. B.

210000 3849 3863
853800 3849
853900 3863

Duco, J.

719B00 3946

Ducos, C.

112200 3602
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Duderstadt, J. J.

310000 4347
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713000 4347

Dudey, N. D.

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410000 4399
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870004 4399

Dudziak, D.

511110 4438
717000 4438
795042 4438

Dudziak, D. J.

010000 4282 4934
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112400 3953
112500 3953
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870004 4444

Dudziak, D. J.

870006 4400
870023 4402
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Dufreche, F.

112120 4032 4553
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532000 4032 4553

Dunford, C.

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Dupont, C.

122210 4063
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Durner, H.

421200 3641
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Dutton, L. M.

112200 3989
121200 3989
512110 3989
512210 3989
610000 3989
794000 3989
861000 3989
870082 3989

Dutton, L. M. C.

719B00 3930
721100 3930

Dvinyaninov, B. L.

112300 3852
522110 3852
810000 3852

Dyer, F. F.

112710 4236
421200 4236
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793000 4236

Dzhgarkava, N. N.

327000 3590
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861000 3590

Easterly, D. G.

512120 4729
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Ebert, P. J.

113100 3705

Eder, O. J.

112120 4607
122100 4607
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750000 4572
810000 4573
870090 4607
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Efimov, E. F.

551120 3900

Egorov, P. T.

731200 4792

Egorov, Yu. A.

511120 3647
810000 3647

Ehrlich, K.

210000 4871
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Eid, Y.

540000 4080
820000 4080

Eiland, H. M.

421140 4549

Eisenbud, M.

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Eisenhauer, C.

327000 3913 4631
511110 3913 4631
512110 3913
632500 4216
731200 4216
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830000 4631
853100 3913 4216 4631
861000 4216

Eisenhauer, C. M.

111110 4914
870092 4914
870098 4914

Eisenlohr, H. H.

121200 4596
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 820000 3606 4596

Eissa, E. A.

421200 4598
 430000 4598

Elias, E.

421200 3762
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 861000 3762
 870013 3762

El-Kady, A.

421200 4598
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El Kady, A. A.

112500 4273
 421200 4273
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 810000 4273

El-Konsol, S.

421160 4057
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 820000 4057

Eller, E. L.

422200 4191

Ellis, W. R.

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 522130 4620
 531000 4620
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 810000 4620

El-Maghrabi, M.

210000 4806
 521130 4806
 522130 4806
 717000 4806
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El-Maghrabi, M.

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El-Shinawy, R. M.

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El-Wakil, S. A.

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El Wakil, S. A.

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Emel'yanov, I. Ya.

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Emmett, M. B.

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Endt, P. M.

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Engebretson, A. C.

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Engelke, M. J.

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Engels, A. C.

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Engholm, B. A.

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Engle, W. W.

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Engle, W. W., Jr.

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Epstein, G.

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Erdman, C. A.

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Filippone, W. L.
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Fillmore, F. L.
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Fillmore, F. L.

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Fish, B. R.

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Fish, R. L.

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Flett, A.

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Foderaro, A.

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Ford, G. P.

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Ford, M. R.

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Forest, C. A.

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Forkman, B.

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Foster, D. G., Jr.

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Fourcade-Cancelle, N.

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Fox, P. F.

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Franceschi, L. D.

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Francis, N. C.

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Frank, T.

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Franke, H. P.

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Fraser, J. S.

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Freiwald, D.

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Freiwald, D. A.

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Frejaville, G.

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French, R. L.

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Frisins, F.

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Fritelli, L.

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Fritz, Z.

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Frohner, F. H.**Fu, C. Y.**

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Furuta, Y.

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Fuse, T.

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Futtermenger, W.

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Futtermenger, W. H.

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Fymat, A. L.

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Gabrashvili, A. I.

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Gabriel, J.

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Gabriel, T. A.

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Gaerttner, E. R.

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Galiev, N. B.

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Galissian, F.

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Gandini, A.

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Gibson, T. A., Jr.
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Giessing, R.
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Gilbert, R. O.
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Gileadi, A. E.
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Godot, B.
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Goel, B.
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Goldstein, H.

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Greenhalgh, F. G.

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Grove, G. R.

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Guenther, P. T.
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Gujrathi, S. C.
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Gunst, S. B.
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Gur, Y.
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870094 4348

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Gusev, N. G.
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Gyorey, G. L.
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Gyuresak, J.
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Haack, K.

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Hackbarth, H.

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Haggbloom, H.

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Haight, R. C.

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Hale, G. M.

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Hale, J.

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Hall, E. J.

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Hall, J. F.

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Hamilton, G. W.

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Hamm, R. N.

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Hamouda, I.

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Hamouda, I.

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Hankins, D. E.

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Hannan, W. J.

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Hansborough, L. D.

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Hansen, G. E.

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Hansen, K. F.

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Hansen, L. E.

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Hansen, L. F.

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Hanson, C. L.

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Hanson, L. F.

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Hardman, W. F.

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 112910 4700

Harima, Y.

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Haring, G.

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Harker, Y. D.

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Harms, A. A.

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Harris, D. R.

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Harris, D. W.

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Harris, L., Jr.

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Kobozev, M. G.

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Kochetkov, O. A.

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Koenig, D. R.

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Kohler, W. H.

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Kohshin, V. A.

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Kol'chuzhkin, A. M.

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Komatsu, I.

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Komoto, T.

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Kondo, M.

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Korthaus, E.

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Kovalev, V. P.

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Kownacka, L.

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Kozlovskii, S. A.

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Kraiton, S. N.

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Krause, R. A.

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Krick, M. S.

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Krishnaswamy, V.

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Krueger, H.

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Kruger, G. W.

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Kruger, H. W.

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Kudo, K.

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Kulakovskii, M. Ya.

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Kuspa, J. P.

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Kusters, H. (Ed.)

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Labauve, R.

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Labauve, R. J.

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Ladygin, A. Ya.

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Laguerre, R.

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Lahti, G. P.

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Lakey, J. R. A.

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Lamberieux, J.

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Lammer, M.

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Lammer, M.

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Lane, R. G.

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Larson, H. A.

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Larson, M. O.

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Lau, L. W.

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Lautenbach, G.

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Lavergne, G.

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Lawergren, B.

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Lawson, L. A.

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Lawson, R. C.

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Le Coq, G.

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Le Dieu De Ville, A.

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Lee, C. K.

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Lee, H.

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Lee, J. D.

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Lee, M. H.

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Lefvert, T.

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Leleux, P.

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Leonard, B. R., Jr.

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Leuze, R. E.
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Levert, F. E.
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Libby, R. A.
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Liden, K.
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Lindahl, S. O.

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Lindeman, A. G.

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Lindeman, A. J.

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Linemann, H.

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Logre, P.

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Love, M. D.
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Love, T. A.
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Loyalka, S. K.
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Lucoff, D. M.
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Lurie, N. A.
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Macbeth, P. J.
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Maddougal, J. D.
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Maddougall, J. D.

Macgregor, M. H.
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Madeev, V. G.
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Madsen, N. K.
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Madsen, N. K.

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Maeder, C.

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Mackawa, H.

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Maienschein, F. C.

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Maki, K.

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Malaviya, B. K.

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Maniscalco, J.

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Marchal, A.

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Marconi, V. A.

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Marshall, D. A.

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Marshall, T. O.

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Martin, M. J. (Ed.)

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Martin, T. G.

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Martini, M.

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Maruyama, Y.

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Mas, P.

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Massand, O. P.

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Masser, C. C.

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Mattes, W.

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Mattes, W.

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Matthes, W.

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Matthews, S. M.

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Matuska, W., Jr.

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Matzke, M.

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Maushart, R.

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Mautz, R. E.

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Mayhugh, M. R.

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Maynard, C. W.

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Maynard, C. W.

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Mcclain, W. C.

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Mccracken, G. M.

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Mccrosson, F. J.

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Mcculloch, J. S. G.

424000 4900

Mccullough, E. C.

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 870013 4752

Mcdavid, W. D.

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Mcdonald, E. P.

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 740000 3514

Mcelroy, W. N.

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Pauw, H.

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Penkuhn, H.

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Santhanam, K.

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Schanzler, L.

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Schatz, B.

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Scheffel, F. M.

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Schenter, R. E.

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Schenter, R. E.

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Scherer, W.

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Schilling, F.

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Schmadebeck, R. L.

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Schmatz, W.**Schmidt, F.**

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Schmittroth, F. A.

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Schmoke, M. A.

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Schmoke, M. A. (Ed.)

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Schneider-Kuhnle, P.

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Schoknecht, G.

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Schrack, R. A.(Ed.)

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Schultz, H. G.

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Schultz, R. J.

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Schumann, H.

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Schumann, U.

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Schuren, H.

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Schwenzke, G.

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Scofield, J. H.

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Scofield, N. E.

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Scott, W. H., Jr.

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Seamon, R. E.

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Sebok, F.

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853100 3550

Seck, R. E.

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Seeger, P. A.

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Seeligmann, P.

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Segal, Y.

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Seifferth, L.

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Seifritz, W.

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Seman, D. J.

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Sen Gupta, S. N.

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Serpan, C. Z., Jr.

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Seth, S.

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Sethulakshmi, R.

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Shah, N. H.

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Shalev, S.

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Shalin, V. A.

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Shalin, V. A.

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Shapiro, A.

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Shappert, L. B.

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Sharma, S. C.

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Shcherbakov, V. I.

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Sheahan, T. P.

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Sher, R.

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Shibuya, K.

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Shimizu, A.

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Shinde, S. S.

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Shinpaugh, W. H.

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Shiraishi, T.

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Shkorbatova, L. S.

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Shlyakhov, I. A.

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Shook, D. F.

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Shul'gin, A. I.

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Shultis, J. K.

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Shure, K.

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Siddappa, K.

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Siddiqui, S. A.

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Sidhu, G. S.

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Sidorov, N. I.

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Sidwell, J. M.

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Siemens, P. D.

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Siewert, C. E.

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Sigg, B.

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Signarbieux, C.

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Silbergeld, M.

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Silvennoinen, P.

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Silver, W. J.

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Simmons, G. L.

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Simons, G. G.
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Simpson, D. B.
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Sims, T. M.
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Sinev, V. N.
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Sinitsyn, B. I.
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Sjostrand, N. G.
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Skarsvag, K.
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Slater, C. O.
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Slater, C. O.

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Slavik, C. J.
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Smathers, J. B.
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Smetanin, A. A.
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722200 3851

Smiley, S. H.
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Smith, A.
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Smith, A. B.
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Smith, A. E.
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230000 4728

Smith, B. H.
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Smith, C. A.
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329000 3795

Smith, D.

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Smith, D. L.

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Smith, D. R.

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Smith, H. T.

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Smith, H. H.

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Smith, J. R.

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Smitton, C.

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Smyrl, E.

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Snow, D. L.

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Snyder, J. W.

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Snyder, W. S.

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Snyder, W. S.

713000 3689
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Snyder, W. S. (Ed.)

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Sokolovskii, L. L.

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Solodukhin, G. V.

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Solomito, M.

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Sonnet, A.

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Soole, B. W.

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Soran, P. D.

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Southworth, F. H.

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Spadoni, M.

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Spencer, L. V.

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Sperling, S. M.

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Spiegel, V.

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Spiegelhauer, H.

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Spiers, E. W.

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Spiga, G.

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Spurny, Z.

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Srinivasan, N. (Comp.)

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Stacey, W. M., Jr.

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Stals, L.

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Stamatelatos, M.

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Stamatelatos, M. G.

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Stanbridge, J. R.

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Stanolov, A.

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Stansbury, P. S.

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Stavitskii, R. V.

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Stecker, F. W.
422200 4191

Steen, N. M.
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794000 4067
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Stegner, A.
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Stehfest, H.
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Steichen, J. M.
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Steiner, D.
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870003 3513 3531 3537 3547 3833 4445
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Steiner, D. (Comp.)
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Steiner, W.
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Steinman, D. K.
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Steinnes, E.
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Stenberg, C. G.
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Stephan, B. G.
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Stevens, C. A.
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Stevens, P. N.
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Stevens, P. N.

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Stevenson, G. R.

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Stewart, C. W.

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Stewart, K. B.

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Steyn, J. J.

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Stiegler, J. O.

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Stinnett, W. D.

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Stinnett, W. D. (Ed.)

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Stone, D. R.

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Storm, E.

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Straker, E. A.

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Straker, E. A. (Ed.)

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Strand, J. A.

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Streetman, J. R.

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Streng, D. L.

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Stringer, J. L.

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Strumane, R.

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Stubbins, W. F.

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Stuker, S.

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Su, S. D.

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Sujkowski, Z.

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Sukhanova, K. A.

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Sullivan, L. H.

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Sullivan, T. D.

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Sumner, G. K.

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Suroegin, L. M.

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Sutey, A. M.

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Suvorov, A. P.

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Suzuki, I.

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Suzuki, T.

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Swartz, B.

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Swisher, S. D.

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Taherzadeh, M.

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Tai, A.S.

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Takeshita, K.

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Tamor, S.

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Tanaka, K.

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Tanaka, S.

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Tanaka, Y.

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Tanaka, Y.

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Wrights, G. N.

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Wrigley, M. F.

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Wyatt, R. M.

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Wyckoff, J. M.

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Wydler, P.

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Wyman, M. E.

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Yaari, A.

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Yakubovich, M. M.

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Yamaji, A.

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Yamakoshi, H.
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Yamamoto, H.
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Yan'kov, G. B.
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Yasinsky, J. B.
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Yaskevich, V. S.
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Yegorov, Yu. A.
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Yeivin, Y.
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Yeske, R. A.
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Yiftah, S.
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Yingling, W. A.
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Yoo, Y. S.
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Yoshikawa, H. H.
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Yost, K. J.
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Young, C. S.
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Young, J. C.
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Young, P. G.

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Yvars, M.

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Zelac, R. E.

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Zhuravlev, V. I.

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Ziebold, T. O.

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Zuber, J. F.

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Zukeran, A.

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Zumach, W.

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Zweifel, P. F.

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Zwibel, H. S.

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 112760 3776

Zwittlinger, H.

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