UCID--20103

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THE
NUCLEAR CRITICALITY INFORMATION
SYSTEM

Database Examples

June 1984

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Lawrence Livermore National Laboratory

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PREFACE

The purpose of this publication is to provide our users with a guide to using the Nuclear Criticality Information System (NCIS). It is comprised of an introduction, an information and resources section, a how-to-use section, and several useful appendices. The main objective of this report is to present a clear picture of the NCIS project and its available resources as well as assisting our users in accessing the database and using the TIS computer to process data.

The introduction gives a brief description of the NCIS project, the Technology Information System (TIS), online user information, future plans and lists individuals to contact for additional information about the NCIS project. The information and resources section outlines the NCIS database and describes the resources that are available. The how-to-use section illustrates access to the NCIS database as well as searching datafiles for general or specific data. It also shows how to access and read the NCIS news section as well as connecting to other information centers through the TIS computer.

We have included appendices that assist our users with logging on and using the TIS computer, that provide our users with information about the NCIS project, UNIX commands, IIS commands, Using the Visual Editor, sending electronic mail, and that acquaint our users with other NCIS online users.

INTRODUCTION

What NCIS is

The Nuclear Criticality Information system (NCIS) is a vital part of the U. S. Department of Energy's (DOE) criticality safety information dissemination and communication activities. NCIS is centered at the Lawrence Livermore National Laboratory (LLNL), but its interactive user community is widely distributed.

NCIS offers electronic communications, interactive database management, bibliographic, textual, and numeric resources to a growing community of users in the field of nuclear criticality safety. In addition, publications derived from its computer databases are distributed worldwide.

NCIS also offers gateway connections to other related information centers, through the DOE's Technology Information System (TIS) also centered at LLNL.

What TIS is

The Technology Information System (TIS) is the computer system that is used by NCIS and other organizations. It is an Intelligent Gateway Computer for Information and Modeling Networks that provides automated access to information centers with data analysis, modeling and post-processing capabilities as well as communications, technology transfer, the unique "Meta-Machine" user interface, information networks and security.

Using NCIS via the TIS computer

TIS/NCIS is accessible by telephone dial-up from remote locations over commercial and FTS telephone lines, toll-free WATS lines, and the ARPANET/MILNET and TYMNET data networks.

Present & Potential Users of NCIS

The NCIS system is dedicated to support personnel responsible for the safe storage, transport and handling of fissile materials. Presently NCIS users include personnel from DOE headquarters, National Laboratories, and DOE contractors. We expect to support users from private industry and the international community in the future.

All individuals interested in becoming an online user of NCIS can contact Carol Foret at (415) 423-4748 FTS 543-4748.

NCIS User Communications

User-to-user communications are provided by several UNIX (the operating system used by TIS) programs. The most popular is the electronic mail (em) which allows any authorized user to send messages to another TIS/NCIS user. Messages are stored in each users mailbox for reading and reference. Other programs offered are the "write" program which allows communication between two online users and the "link" program which links two user terminals together for simultaneous display usually for teaching purposes.

User Assistance

Hotline user assistance is available for all NCIS users. Any user can contact Carol Foret by telephone at (415) 423-4748 FTS 543-4748 for on-the-spot assistance. They also can use any one of the user communication programs "em", "write" or "link" depending on their needs. The "link" program provides an excellent opportunity for online user training with both teacher and student working from two terminals effectively acting as one terminal. They can also establish voice communication by telephone during their teaching session.

User Workshops

We are planning three-day user workshops to acquaint our users with the NCIS databases and the TIS computer system. Each session will offer classes covering the UNIX Operating System, the IIS database management system, searching NCIS databases, using electronic mail and file creation and editing. Each class will consist of a one-hour presentation explaining and discussing each subject followed by a session of hands-on terminal time. The concluding class will be a discussion and review period.

NCIS Future Plans

NCIS welcomes input from its users and the criticality community. These comments and suggestions are often used as guidelines for our future tasks. Currently our future plans include such things as connections to related resources, addition of new databases, and storage of small computer codes for criticality calculations.

NCIS can serve as a gateway to remote computers which house computer codes that are of interest to criticality safety personnel. Some examples of these are the CESAR (Critical Experiments Search and Retrieval) program at ORNL, and the MAPPER graphics program at LANL. Output obtained while using these remote programs can be downloaded onto NCIS for later use, or to share with other users.

We have plans to install several more databases. These include a criticality accident database and a criticality training resources and tools database.

Small, first approximation, computer codes will also be stored on the NCIS system. In this way criticality safety specialists can share their codes, and download them from NCIS to use on their own personal computers or pocket computers/calculators.

NCIS is also establishing an information system of criticality training resources and tools. NCIS database management, graphics, and communication capabilities will assist criticality safety trainers to manage course records and in producing, cataloging, and sharing training materials.

Request for NCIS Information

For additional information, contact

Brian Koponen, Project Leader
Lawrence Livermore National Lab
P.O. Box 808 M/S L-275
Livermore, CA 94550

Tina McGowan
Systems Administrator
(415) 423-6293
FTS 543-6293

Carol Ann Foret
User Support
(415) 423-4748
FTS 543-4748

(415) 422-4466
FTS 532-4466
Telex 910-386-8339 UCLLL LVNR

NCIS DATABASE INFORMATION & RESOURCES

0 Nuclear Criticality Information System (NCIS)

1 Administrative Information

1.1 Program Overview - information overview of NCIS

1.2 International Directory of Personnel - a datafile containing records of information for nuclear criticality safety personnel. Two reports with long and short directory listings available.

2 Bibliographic Compendia

2.1 NCIS Experimental Bibliography - a collection of critical experiment citations originally published as UCRL-52769, "Nuclear Criticality Experiments From 1943 to 1978, An Annotated Bibliography", by Brian L. Koponen, Thomas P. Wilcox, and Viktor E. Hampel. Five reports available.

2.2 ANS Transactions Bibliography - a collection of transactions from the American Nuclear Society dealing with criticality published as UCRL-53369, "Nuclear Criticality Safety Experiments, Calculations, and Analyses -- 1958 to 1982". Four reports available.

2.3 General Bibliography - a collection of general criticality safety citations from 1973 to 1983. Contains over 1000 items and earlier work will be added as it is obtained. Four reports available.

2.4 General Bibliography, Experiments - a temporary database containing over 300 citations dealing with criticality safety experiments. It covers the period 1974 to 1983. Four reports available.

3 Criticality Safety Methodology - pending

3.1 Philosophy, Rules, Guidelines, and Regulations

3.2 Generic Methods

3.3 Computer Programs

3.4 Standards

4 Criticality Data - may contain information and resources for criticality data

4.1 Critical Mass Data - pending

4.2 Chemical and Engineering Data - pending

- 4.3 Subcritical Limits - pending
- 4.4 Nuclear Cross Sections - pending
- 4.5 Nuclear Cross Section Processing Codes - pending
- 4.6 Handbooks and Texts - pending
- 4.7 Code Evaluation & Comparison Libraries
 - 4.7.1 CESAR Oak Ridge TN - available

The automated access to this system is being granted with special permission on an experimental basis. For more information, contact Tina McGowan FTS 543-6293 or (415) 423-6293.

- 5 Training Records - private database
- 6 Integrated Computer Resources

The DOE/ACT TIS permits authorized users to connect automatically to the following geographically distributed resources:

- 6.1 Bibliographic Information Centers - available connection to DOE/RECON and others.
- 6.2 Numeric Information Centers
- 6.3 General Information Centers
- 6.4 Computers
- 6.5 News Services - connection to WORLDNEWS.
- 6.6 Communication Services

NEWS - this section is accessed directly by typing "news" at the "" prompt. It contains the latest news and information about NCIS. All news contributions are gladly accepted.

ACCESSING THE NCIS DATABASE

% iis database ncis

Welcome to the Integrated Information System Version 1.9.

If you need assistance, you may type "help" at any time.

0 Nuclear Criticality Information System (NCIS)

Available Resources		Last Revision
1	Administrative Information	Feb 1, 1984
2	Bibliographic Compendia	Apr 16, 1984
3	Criticality Safety Methodology	Pending
4	Criticality Data	Pending
5	Training Records	Proprietary
6	Integrated Computer Resources	Mar 30, 1984

HELP is available by typing - 'help' or 'help commands'.

ELECTRONIC MAIL may be entered by typing - 'em'.

NEWS may be accessed by typing 'news'.

Type an Option Number, a Command, or "stop".

*1

1 Administrative Information Feb 1, 1984

Last Revision

1.1	Program Overview	Jul 15, 1983
1.2	International Directory of Personnel	Feb 1, 1984

Type an Option Number, a Command, or "stop".

*1.1

1.1 Program Overview

STATUS, PLANS, AND CAPABILITIES OF THE NUCLEAR CRITICALITY INFORMATION SYSTEM

Brian L. Koponen
Lawrence Livermore National Laboratory
P.O. Box 808, Livermore, California 94550, USA

The Nuclear Criticality Information System (NCIS), in preparation since 1981, has substantially evolved and now contains a growing number of resources pertinent to nuclear criticality safety. These resources include bibliographic compilations, experimental data, communications media, and the International Directory of Nuclear Criticality Safety Personnel. These resources are part of the LLNL Technology Information System (TIS) which provides the host computer for NCIS. The TIS provides nationwide access to authorized members of the nuclear criticality community via interactive dial-up from computer terminals that utilize communication facilities such as commercial and federal telephone networks, toll-free WATS lines, TYMNET, and the ARPANET/MILNET computer network.

Computer Searching

We have been compiling a library of criticality safety documents at LLNL. This collection has been updated by LLNL's Technical Information Department (TID) through selective searching and retrieval of pertinent reports from the literature. More recently, we have used the large, computer-based information system of the U.S. Department of Energy (DOE/RECON) in an automated manner to extract citations to the literature on nuclear criticality safety. This search and retrieval of the worldwide literature pertains especially to DOE/RECON's Nuclear Science Abstracts (DOE/NSA) and to its Energy Data Base (DOE/EDB).

Nuclear Critical Experiments Bibliography

To expedite the dissemination of our bibliographic information on nuclear safety, we began to publish a series of reports in 1979. The first of these reports focused on nuclear criticality experiments.[2] It contains reference to the literature that discuss critical or near-critical nuclear configurations. From the large numbers of reports, we omitted those dealing with theoretical studies, calculational techniques, neutron cross-section data, experimental techniques, control rod or reactivity worth measurements, and those on general reactor physics. Textbooks were also excluded. This left 1067 reports.

American Nuclear Society Transactions on Criticality Safety

A second publication of our bibliographic compilations was recently completed.[3] It contains 688 complete summaries of papers on nuclear criticality safety presented at meetings of the American Nuclear Society (ANS) from 1958 to 1982. The selected papers contain criticality parameters for fissile materials derived from experiments and calculations, as well as criticality safety analyses for fissile material processing, transport and storage.

This compilation is published in two volumes to allow their convenient and independent use. VOLUME 1, the directory, is organized in chronological and alphabetical order: Index to volume and page number of ANS Transactions, Author concordance, Author index, Subject concordance, and Subject index. VOLUME 2 contains the full-text.

The author and subject concordances list, respectively, in chronologically ascending order, the relevant publications associated with a particular author or a keyphrase taken from the titles of the publications. The volume and page numbers of ANS Transactions shown in the concordances lead to the full-text papers reproduced in Volume 2. These reprints are taken directly from the ANS Transactions. They can be used in lieu of the original papers which are scattered among forty-one volumes of published ANS transactions.

General Literature on Criticality Safety

A third release of our bibliographic compilations is in progress. This will be a general compilation of nuclear criticality safety experiments, calculations, and analyses from all available sources. Preliminary searches have identified about 4000 relevant references. These have been transferred to NCIS from the DOE/RECON system. When complete, the database will be available online as a dynamic counterpart to the publication.

Personnel Directory

The International Directory of Nuclear Criticality Safety Personnel [4] lists persons who have a direct involvement in the safe handling of fissile material throughout the world. The listees published in the Directory represent approximately 140 organizations from 16 countries. These individuals are either specialists in or have close involvement with nuclear criticality safety. They are from a wide range of fields that include engineers, physicists, attorneys, inspectors, professors, consultants, computer programmers, administrators, and others. All listees have verified the accuracy and approved publication of their personal data.

User Community

The NCIS community of TIS users can be limited to their programmatic information. Shared use of the computer facility, however, has to be granted on an individual basis. For example, legal and political considerations regarding exchange agreements among countries must be considered. The size of the online user community will depend upon resolution of the above considerations. Online users, however, will benefit from timely access to information and from other TIS features.

We plan to supplement existing TIS/NCIS with user aids, with a NCIS user's manual and other printed materials. In addition, we will help with electronic mail, linking of terminals, user workshops, NCIS demonstrations, etc.

Availability of "NCIS" Resources

When the computer databases are available they will be accessible, in a simple, self-prompting mode from remote computer terminals. A hierarchical index will guide users to desired information.

A brief summary of NCIS projects is the following:

Projects Completed	Projects In Progress	Projects Planned
.Experiments Bibliography	.Expanded Bibliographic Compilations	.Directory of Training Resources
.ANS Criticality Papers	.News	.Connections to Related Sources
.International Directory of CS Personnel	.Benchmark Library	.Fundamental CS References
	.Expansion of Online User Community	.Criticality Accident Database

References

1. V. E. Hampel, C. Bailey, R. A. Kavin, N. A. Lann, S. K. McGrogan, W. S. Scott, S. M. Stammers, and J. L. Thomas, "TIS" AN INTELLIGENT GATEWAY COMPUTER FOR INFORMATION AND MODELING NETWORKS, OVERVIEW, Lawrence Livermore National Laboratory, Livermore, CA UCRL-53439, (1983).
2. B. L. Koponen, T. P. Wilcox, and V. E. Hampel, NUCLEAR CRITICALITY EXPERIMENTS FROM 1943 TO 1979, An Annotated Bibliography, Lawrence Livermore National Laboratory, Livermore, CA, UCRL-52769, vols. 1-3 (1979).
3. B. L. Koponen and V. E. Hampel, NUCLEAR CRITICALITY SAFETY EXPERIMENTS, CALCULATIONS, AND ANALYSES - 1958 TO 1982, in two volumes, Lawrence Livermore National Laboratory, UCRL-53369, (1982).
4. Scheduled for publication in November, 1983.

all done!

Type an Option Number, a Command, or "stop".

*1

1	<u>Administrative Information</u>	Feb 1, 1984
		Last Revision
1.1	Program Overview	Jul 15, 1983
1.2	<u>International Directory of Personnel</u>	Feb 1, 1984

Type an Option Number, a Command, or "stop".

*.2

1.2	International Directory of Personnel	Feb 1, 1984
	Data Fields	Units
1.2.1	ID Number	Key
1.2.2	Title (Mr., Ms., Dr.)	id
1.2.3	Last Name	ti
1.2.4	First Name or Initial	last
1.2.5	Middle Name	first
1.2.6	Last Title (Jr., III.)	mid
1.2.7	Job Title	cti
1.2.8	Organization	job
1.2.9	Department/Division	org
1.2.10	Mail Code	dept
1.2.11	Room	mail
1.2.12	Building	rm
1.2.13	P.O. Box	bldg
1.2.14	Street Address	box
1.2.15	City	str
1.2.16	State	city
1.2.17	Zip Code	state
1.2.18	Country	zip
1.2.19	Telephone: Business	ctry
1.2.20	Extension	tel
1.2.21	FTS	ext
1.2.22	Other	fts
1.2.23	Area of Expertise	telx
1.2.24	Date Updated (yy-mm-dd)	area
		date

The following reports are already available for this database:

WIDTH	REPORT NAME	DESCRIPTION
80	ncis	NCIS Personnel Directory
80	ncis-tel	NCIS Telephone Book

To print a report, type the command "report" followed by the report name.

Type an Option Number, a Command, or "stop".

*report ncis

NAME: MR. JAMES D. ABRASHOFF

ORGANIZATION:

TITLE: Sr. Engineer
COMPANY: EG&G Idaho, Inc.

ADDRESS:

P.O. Box 1625
Idaho Falls, ID 83415
U.S.A.

PHONE:

BUSINESS: (208) 526-0420
FTS: 583-0420
OTHER: (208) 529-9765

NAME: MR. FRANCIS M. ALCORN

ORGANIZATION:

TITLE: Supervisor-Nuclear Criticality Safety
COMPANY: Babcock & Wilcox Company
DEPT/DIV: Lynchburg Research Ctr.

ADDRESS:

P.O. BOX 239
Lynchburg, VA 24505
U.S.A.

PHONE:

BUSINESS: (804) 522-5157
OTHER: (804) 239-7925

NAME: MR. SIDNEY J. ALTSCHULER

ORGANIZATION:

TITLE: Staff Engineer
COMPANY: Rockwell International
DEPT/DIV: Hanford Operations

ADDRESS:

P.O. BOX 800
M/C RM Bldg. 271/U 200W
Richland, WA 99352
U.S.A.

PHONE:

BUSINESS: (509) 373-2669
FTS: 440-2669

cntl-x (user types control X)

Process terminated by user interrupt.

Type an Option Number, a Command, or "stop".
*report ncis-tel

NAME: MR. JAMES D. ABRASHOFF

PHONE:

BUSINESS: (208) 526-0420

FTS: 583-0420

OTHER: (208) 529-9785

NAME: MR. FRANCIS M. ALCORN

PHONE:

BUSINESS: (804) 522-5157

OTHER: (804) 239-7925

NAME: MR. SIDNEY J. ALTSCHULER

PHONE:

BUSINESS: (509) 373-2669

FTS: 440-2669

NAME: MR. NORIO. ASANO

PHONE:

BUSINESS: (Tokyo) 256-7831

OTHER: Tokyo 969-5051

NAME: DR. RONALD C. ASHLIN

PHONE:

BUSINESS: (803) 259-1711

EXT: 594

cnt1-X

Process terminated by user interrupt.

Type an Option Number, a Command, or "stop".

*report ncis where ctry contains "sweden" or ctry contains "argentina"

NAME: MR. DENNIS E.I.. MENNERDAHL

ORGANIZATION:

TITLE: Consultant

COMPANY: E. Mennerdahl Systems

ADDRESS:

S-18600 Vallentuna,
SWEDEN

PHONE:

BUSINESS: 0762-70896

OTHER: 0762-78203

NAME: MS. SUSANA I. CANAVESE

ORGANIZATION:

COMPANY: Comision Nacional Energia Atomica

ADDRESS:

Casilla De Correo 40 1802
Aeropuerto de Ezeiza
ARGENTINA

PHONE:

BUSINESS: 620-0557

OTHER: 90-8445

Type an Option Number, a Command, or "stop".

*report ncis where last contains "koponen"

NAME: MR. BRIAN L. KOPONEN

ORGANIZATION:

TITLE: Physicist

COMPANY: Lawrence Livermore National Laboratory

DEPT/DIV: Criticality Safety Office

ADDRESS:

P.O. BOX 808
7000 East Avenue
M/C L-303 RM 218 Bldg. 218
Livermore, CA 94550
U.S.A.

PHONE:

BUSINESS: (415) 422-0799

FTS: 532-0799

OTHER: (415) 447-3498

Type an Option Number, a Command, or "stop".

*0

0 Nuclear Criticality Information System (NCIS)

Available Resources		Last Revision
1	Administrative Information	Feb 1, 1984
2	Bibliographic Compendia	Apr 16, 1984
3	Criticality Safety Methodology	Pending
4	Criticality Data	Pending
5	Training Records	Proprietary
6	Integrated Computer Resources	Mar 30, 1984

HELP is available by typing - 'help' or 'help commands'.

ELECTRONIC MAIL may be entered by typing - 'em'.

NEWS may be accessed by typing 'news'.

Type an Option Number, a Command, or "stop".

*2

2 Bibliographic Compendia Apr 16, 1984

		Last Revision
2.1	NCIS Experimental Bibliography	Oct 28, 1982
2.2	ANS Transactions Bibliography	Jun 15, 1983
2.3	General Bibliography	Apr 16, 1984
2.4	General Bibliography, Experiments	May 7, 1984

Type an Option Number, a Command, or "stop".

*.1

2.1 NCIS Experimental Bibliography Oct 28, 1982

The Nuclear Criticality Experimental Bibliography covers the periods from 1943 to 1978. This data was originally published as UCRL-52769, "Nuclear Criticality Experiments From 1943 to 1978, An Annotated Bibliography", by Brian L. Koponen, Thomas P. Wilcox, and Viktor E. Hampel.

	Data Fields	Units	Key
2.1.1	Identification Number		id
2.1.2	NSA-Number		nsa
2.1.3	Report Title		title
2.1.4	Author		au
2.1.5	Publication Date		date
2.1.6	Report Number Reference		rpt
2.1.7	Reference		pub
2.1.8	Site		site
2.1.9	Program		prg
2.1.10	Abstract Line Number		no
2.1.11	Abstract Text		ab

The following reports are already available for this database:

WIDTH	REPORT NAME	DESCRIPTION
80	exp-crit	NCIS Bibliography of Critical Experiments.
80	exp-date	NCIS Experimental Bibliography by Date.
80	exp-rpt	NCIS Experimental Bibliography by Report Number.
80	exp-site	NCIS Experimental Bibliography by Site.
80	exp-title	NCIS Experimental Bibliography Title Reference.
80	id.numbers.exp	Temporary user report

To print a report, type the command "report" followed by the report name.

Type an Option Number, a Command, or "stop".

*report exp-title

(1)

Nuclear Criticality Experiment Bibliography
Title Reference

ID	AUTHOR/TITLE/REPORT NBR.	DATE
--	-----	----
1	Paxton, H. C. LOS ALAMOS CRITICAL-MASS DATA LAMS-3067	64-05-06
1113	Schuske, C. L./ Arthur, M. G./ Goodwin, A./ Nickel, A. N./ Smith, SUBCRITICAL MEASUREMENTS ON PARALLELEPIPEDS CONTAINING URANIUM-235 AND SALT EUTECTIC RFP-0089	57-11-27
1669	Raffety, S. J. / Mihalcz, J. T. HOMOGENEOUS CRITICAL ASSEMBLIES OF 2 AND 3 PERCENT URANIUM-235- ENRICHED URANIUM IN PARAFFIN. NSFNAO, 48, 433-443	72-08-00
2	Mihalcz, J. T. PROMPT-NEUTRON LIFETIME IN CRITICAL ENRICHED-URANIUM METAL CYLINDERS AND ANNULI NSENAD, 20, 060-065	64-09-00
558	Bitelli, G./ Martinelli, R./ Orestano, F. V./ Santandrea, E. ANALYSIS OF CRITICAL EXPERIMENTS WITH ORGANIC-MODERATED ASSEMBLIES NSENAD, 28, 270-276	67-05-00
3	Dicott, R. N. HOMOGENEOUS HEAVY WATER MODERATED CRITICAL ASSEMBLIES. PART 1. EXPERIMENTAL NSENAD, 01, 327-341	56-08-00
1671	Lloyd, R. C./ Clayton, E. D./ Bierman, S. R. CRITICALITY OF PLUTONIUM-URANIUM NITRATE SOLUTIONS. TANSAD, 15, 803-804	72-11-00

cnt1-X

Process terminated by user interrupt.

Type an Option Number, a Command, or "stop".

*report exp-title where title contains "boron" and title contains "lattices"

(1)

Nuclear Criticality Experiment Bibliography
Title Reference

ID	AUTHOR/TITLE/REPORT NBR.	DATE
--	-----	----
1439	Johnson, E. B. THE CRITICALITY OF HETEROGENEOUS LATTICES OF EXPERIMENTAL BERYLLIUM OXIDE REACTOR FUEL PINS IN WATER AND IN AQUEOUS SOLUTIONS CONTAINING BORON AND URANYL NITRATE ORNL/ENG-2	76-07-00
2028	CRITICAL LATTICES OF URANIUM(4.89) RODS IN WATER AND IN AQUEOUS BORON SOLUTION TANSAO, 11, 674-675	68-11-00

Type an Option Number, a Command, or "stop".

*2

2	<u>Bibliographic Compendia</u>	Apr 16, 1984
		Last Revision
2.1	NCIS Experimental Bibliography	Oct 28, 1982
2.2	ANS Transactions Bibliography	Jun 15, 1983
2.3	General Bibliography	Apr 16, 1984
2.4	General Bibliography, Experiments	May 7, 1984

Type an Option Number, a Command, or "stop".

*2.2

2.2	<u>ANS Transactions Bibliography</u>	Jun 15, 1983
-----	--------------------------------------	--------------

American Nuclear Society Transactions Bibliography was
Published in UCRL - 53369 "Nuclear Criticality Safety
Experiments, Calculations, and Analyses - 1958 to 1982"

	Data Fields	Units	Key
2.2.1	Identification Number		id
2.2.2	Report Title		title
2.2.3	Author		au
2.2.4	Publication Date		date
2.2.5	Reference		pub
2.2.6	Session		ses
2.2.7	Abstract Line Number		no
2.2.8	Abstract Text		ab

The following reports are already available for this database:

WIDTH	REPORT NAME	DESCRIPTION
80	ans-all	American Nuclear Society Transactions
80	ans-au	American Nuclear Society Transactions by Author
80	ans-ses	American Nuclear Society Transactions by Session
80	ans-ti	American Nuclear Society Transactions by Title

To print a report, type the command "report" followed by the report name.

Type an Option Number, a Command, or "stop".

*report ans-au

(1)

American Nuclear Society Transactions by Author

AUTHOR Adcock, F. E.
TITLE DOT-6M PACKAGES FOR THE SHIPMENT OF PLUTONIUM
OXIDE
REFERENCE V. 17 PP. 280-281
DATE 73-11-00
SESSION SAFETY ANALYSIS OF SHIPPING PACKAGES AND CASKS -
II
ID NUMBER 1376

AUTHOR Aderhold, H. C. / Berg, S. S. / Clark, D. D. /
Fehr, E. B. / Shaw, R. A.
TITLE RESULTS OF INITIAL EXPERIMENTS ON THE CORNELL
ZERO-POWER-REACTOR CORES
REFERENCE V. 06 PP. 223-225
DATE 63-11-00
SESSION CRITICAL EXPERIMENTS I
ID NUMBER 20034

AUTHOR Albertson, D. G. / Busselman, G. J.
TITLE ANALYSIS AND MEASUREMENT OF PLUTONIUM
ALUMINUM-POLYTHENE SYSTEMS IN THE PCTR
REFERENCE V. 08 PP. 448-449
DATE 65-11-00
SESSION MEASUREMENT OF REACTOR PARAMETERS
ID NUMBER 20154

AUTHOR Alcorn, F. M.
TITLE NUCLEAR CRITICALITY SAFETY TRAINING IN THE
PRIVATE SECTOR
REFERENCE V. 27 PP. 401-402
DATE 77-11-00
SESSION TRAINING FOR PURPOSES OF NUCLEAR CRITICALITY
SAFETY
ID NUMBER 1397

cnt1-X

Process terminated by user interrupt.

Type an Option Number, a Command, or "stop".
 *report ans-au where au contains "koponen"

(1)

American Nuclear Society Transactions by Author
 AUTHOR Koponen, B. L.
 TITLE THE ROLE OF COMPUTERS IN QUALITY ASSURANCE IN THE
 LLL CRITICALITY SAFETY PROGRAM
 REFERENCE V. 28 PP. 282-283
 DATE 78-06-00
 SESSION PITFALLS AND QUALITY ASSURANCE PRACTICES IN
 CRITICALITY SAFETY ANALYSIS
 ID NUMBER 1412

AUTHOR Koponen, B. L.
 TITLE CRITICALITY OF WATER-MODERATED AND -REFLECTED
 PLUTONIUM ARRAYS
 REFERENCE V. 34 PP. 327-328
 DATE 80-06-00
 SESSION DATA AND ANALYSIS FOR NUCLEAR CRITICALITY SAFETY
 ID NUMBER 1430
 AUTHOR Koponen, B. L.
 TITLE COMPUTER-AIDED IDENTIFICATION OF BENCHMARK
 CRITICALITY DATA
 REFERENCE V. 39 PP. 516
 DATE 81-11-00
 SESSION BENCHMARKS AND VALIDATIONS FOR NUCLEAR
 CRITICALITY SAFETY
 ID NUMBER 1437

AUTHOR Koponen, B. L. / Wilcox, T. P.
 TITLE COMPUTERIZED LIBRARY OF BIBLIOGRAPHIC CRITICALITY
 DATA
 REFERENCE V. 32 PP. 321-322
 DATE 79-06-00
 SESSION DATA AND ANALYSIS FOR NUCLEAR CRITICALITY SAFETY
 ID NUMBER 798

Type an Option Number, a Command, or "stop".

*2

2	<u>Bibliographic Compendia</u>	Apr 16, 1984
		Last Revision
2.1	NCIS Experimental Bibliography	Oct 28, 1982
2.2	ANS Transactions Bibliography	Jun 15, 1983
2.3	General Bibliography	Apr 16, 1984
2.4	General Bibliography, Experiments	May 7, 1984

Type an Option Number, a Command, or "stop".

*.3

2.3 General Bibliography

Apr 16, 1984

The Nuclear Criticality General Bibliography currently covers the periods from 1973 to 1983. It contains 1344 general criticality safety citations. Earlier work will be added to the bibliography as it is obtained.

	Data Fields	Units	Key
2.3.1	Identification Number		id
2.3.2	Accession Number		accno
2.3.3	Report Title		title
2.3.4	Author		au
2.3.5	Publication Date		date
2.3.6	Report Number		rptno
2.3.7	Reference		ref
2.3.8	Site		site
2.3.9	Program		prog
2.3.10	Cross Reference		cross
2.3.11	Language		lang
2.3.12	Flags		flag
2.3.13	Pending Flag		pflg
2.3.14	Comment		comm
2.3.15	Descriptor Flag		dflg
2.3.16	Descriptors		desc
2.3.17	Abstract Line Number		no
2.3.18	Abstract Text		ab

The following reports are already available for this database:

WIDTH	REPORT NAME	DESCRIPTION
80	gen-all	General Bibliography in progress
80	gen-ti	General Bibliography by Title in progress
80	gen-rpt	General Bibliography by Report Number in progress
80	gen-au	General Bibliography by Author in progress

To print a report, type the command "report" followed by the report name.

Type an Option Number, a Command, or "stop".

*report gen-ti

(1)

General Bibliography by Title

ID NUMBER	10000
TITLE	Fatal radiation syndrome from an accidental nuclear excursion
AUTHOR	Karas, J.S.; Stanbury, J.B.
DATE	15 Apr 1965
REFERENCE	New England Journal of Medicine (U.S.)--, V. 272, pp. 755-61
REPORT NUMBER	
ACCESSION NO.	75:025602

ID NUMBER 10001
TITLE Dangerous drift in uranium enrichment
AUTHOR Glackin, J.J.
DATE Feb 1976
REFERENCE Bulletin of the Atomic Scientists (U.S.)--, V. 32
, no. 2 , pp. 22-25
REPORT NUMBER
ACCESSION NO. 76:027503

ID NUMBER 10002
TITLE Nuclear reactors built, being built, or planned
in the United States as of December 31, 1975
AUTHOR Energy Research and Development Administration,
Washington, D.C. (USA). Div. of Reactor
Development and Demonstration
DATE Apr 1976
REFERENCE
REPORT NUMBER TID--8200-R33
ACCESSION NO. 76:034133

ID NUMBER 10003
TITLE Spent and fresh fuel shipping cask considerations
AUTHOR Shappert, L.B. ; Unger, W.E.; Freedman, J.M.
DATE 1975
REFERENCE Proceedings of the Conference on Remote Systems
Technology (U.S.) Formerly Proc. Conf. Hot
Lab. Equip.--, V. 23 , pp. 370-376
REPORT NUMBER
ACCESSION NO. 76:034189

cntl-X

Process terminated by user interrupt.

Type an Option Number, a Command, or "stop".

*2

2	<u>Bibliographic Compendia</u>	Apr 16, 1984 Last Revision
2.1	NCIS Experimental Bibliography	Oct 28, 1982
2.2	ANS Transactions Bibliography	Jun 15, 1983
2.3	General Bibliography	Apr 16, 1984
2.4	General Bibliography, Experiments	May 7, 1984

Type an Option Number, a Command, or "stop".

*.4

2.4 General Bibliography, Experiments

This is a temporary database. It covers the periods
from 1974 to 1983. It contains 342 citations.

	Data Fields	Units	Key
2.4.1	Identification Number		id
2.4.2	Accession Number		accno
2.4.3	Report Title		title
2.4.4	Author		au
2.4.5	Publication Date		date
2.4.6	Report Number		rptno
2.4.7	Reference		ref
2.4.8	Site		site
2.4.9	Program		prog
2.4.10	Cross Reference		cross
2.4.11	Language		lang
2.4.12	Flags		flag
2.4.13	Pending Flag		pflg
2.4.14	Comment		comm
2.4.15	Descriptor Flag		dflg
2.4.16	Descriptors		desc
2.4.17	Abstract Line Number		no
2.4.18	Abstract Text		ab

The following reports are already available for this database:

WIDTH	REPORT NAME	DESCRIPTION
80	gexp-all	General Bibliography, Experiments in progress
80	gexp-au	General Bibliography, Experiments by Author
80	gexp-rpt	General Bibliography, Experiments by Report Number
80	gexp-ti	General Bibliography, Experiments by Title

To print a report, type the command "report" followed by the report name.

Type an Option Number, a Command, or "stop".

*report gexp-au

(1)

General Bibliography, Experiments by Author

ID NUMBER	20023
TITLE	American National Standard safety guide for the performance of critical experiments
AUTHOR	
DATE	1976
REFERENCE	
REPORT NUMBER	
ACCESSION NO.	76:087709

ID NUMBER	20273
TITLE	Cross-section validation for fuel storage pools (enrichment 4.29 wt%)
AUTHOR	Abbas, T.; Carotenuto, M.; Landeyro, P.A.; Siciliano, F.
DATE	1981
REFERENCE	Transactions of the American Nuclear Society (U.S.)--, V. 39 , pp. 53D-53I
REPORT NUMBER	
ACCESSION NO.	82:138521

ID NUMBER 20277
TITLE Cross-section validation for fuel storage pools
AUTHOR Abbas, T.; Landeyro, P.A.; Siciliano, F.
DATE 1981
REFERENCE Transactions of the American Nuclear Society
(U.S.)--, V. 38 , pp. 361-362
REPORT NUMBER
ACCESSION NO. 82:141167

ID NUMBER 20072
TITLE Fast-thermal critical assembly P-AN 1A-1
AUTHOR Adamski, L.; Bukowski, K.
DATE 1974
REFERENCE Nukleonika (Poland)--, V. 19 , no. 6 , pp.
565-574
REPORT NUMBER
ACCESSION NO. 78:043853
ID NUMBER 20054
TITLE Measurement and calculation of the critical
masses of graphite moderated, 20%-enriched
uranium loaded cores
AUTHOR Akino, F.; Kaneko, Y.; Kitadate, K.; Kurokawa,
R.; Yasuda, H.
DATE Oct 1976
REFERENCE
REPORT NUMBER JAERI-M--6739
ACCESSION NO. 77:111493

cntl-X

Process terminated by user interrupt.

Type an Option Number, a Command, or "stop".

*3

3	Criticality Safety Methodology	Pending
3.1	Philosophy, Rules, Guidelines, and Regulations	Pending
3.2	Generic Methods	Pending
3.3	Computer Programs	Pending
3.4	Standards	Pending

Type an Option Number, a Command, or "stop".

*4

4	Criticality Data	May 15, 1984
4.1	Critical Mass Data	Pending
4.2	Chemical and Engineering Data	Pending
4.3	Subcritical Limits	Pending
4.4	Nuclear Cross Sections	Pending
4.5	Nuclear Cross Section Processing Codes	Pending
4.6	Handbooks and Texts	Pending
4.7	Code Evaluation & Comparison Libraries	May 15, 1984

Type an Option Number, a Command, or "stop".

*5

5 Luther Lowry

5.1	Grades	Nov 18, 1983
5.2	Student Information	Pending

Type an Option Number, a Command, or "stop".

*6

6 Integrated Computer Resources Nov 16, 1983

The DOE/ACT TIS permits authorized users to connect automatically to the following geographically distributed resources:

6.1	Bibliographic Information Centers	Sep 30, 1983
6.2	Numeric Information Centers	Sep 30, 1983
6.3	General Information Centers	Sep 30, 1983
6.4	Computers	Sep 30, 1983
6.5	News Services	Sep 14, 1982
6.6	Communication Services	Pending

To establish a connection with a remote computer, please enter its identification number (option number) or issue the "connect" command.

(For example, typing either "6.1.1.3" or "connect doe-recon3" will connect you with the DOE/RECON system at Oak Ridge.)

To connect to these resources, TIS uses the Network Access Machine Software (NAM) from the National Bureau of Standards.

Type an Option Number, a Command, or "stop".

*.1

6.1 Bibliographic Information Centers Nov 16, 1983

The Federal Information Systems are free of charge at this time.
The Commercial systems are setup in charge accounts.

The automated access to these systems is being granted with special permission, on an experimental basis, to select users. For more information, contact Viktor Hampel, FTS 532-4357 or (415) 422-4357.

6.1.1	DOE/RECON	Oak Ridge TN		Available
6.1.2	NASA/RECON	Baltimore MD		Available
6.1.3	DIALOG	Palo Alto CA	PROPRIETARY	Available
6.1.4	DOT/TSC	Cambridge MA		Available
6.1.5	DOD/DROLS	Alexandria VA	UNCLASSIFIED	Available
6.1.6	TECHNOTEC	Minneapolis MN	PROPRIETARY	Unavailable
6.1.7	TECTRA	Sacramento CA		Unavailable
6.1.8	AGNEW	Woodland Hills CA		Unavailable

Type an Option Number, a Command, or "stop".

*6

6 Integrated Computer Resources

Nov 16, 1983

The DOE/ACT TIS permits authorized users to connect automatically to the following geographically distributed resources:

6.1	Bibliographic Information Centers	Sep 30, 1983
6.2	Numeric Information Centers	Sep 30, 1983
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To connect to these resources, TIS uses the Network Access Machine Software (NAM) from the National Bureau of Standards.

Type an Option Number, a Command, or "stop".

*6.5

6.5 News Services

Sep 14, 1982

6.5.1 WORLDNEWS UP-AP-NYT SU-AI Available

Type an Option Number, a Command, or "stop".

*6.5.1

6.5.1 WORLDNEWS UP-AP-NYT SU-AI Available

Stanford University
Artificial Intelligence Laboratory
Palo Alto, California

6.5.1.1	Description of News Service System Resources.		
6.5.1.2	Basic Operating Instructions For The News Service.		
6.5.1.3	News Service System User Manual		
6.5.1.4	<u>Connect worldnews</u>	300 baud	Available

If additional information is needed in the use of the News Service System please contact Martin Frost at (415) 497-2462

Type an Option Number, a Command, or "stop".

*6.5.1.4

6.5.1.4 Connect worldnews 300 baud Available
Attempting Telephone Connection to WORLDNEWS at 1200-baud.

Dialing...
Dialing done.

Attempting login.
Login complete.

WORLDNEWS is ready.

Please enter 'ns' for News Service or 'hot' for Hot Line.

Type ? for help.

Some news available back to: Monday, 21-May-84

.?

***** ? ***** (Type ?HELP for explanation of NS command structure.)

CHAR MEANING AS COMMAND CHARACTER IN NS

- ? Display this information unless ? is followed by a command name, switch name or help topic name, in which case display helpful information on that subject.
- (space) Evaluate the keyword expression (and switches) that follow.
- (tab) Evaluate last expression with following (optional) switches.
 - : Execute following mnemonic command. ?COMMANDS displays list.
 - ; Mail following comment about NS to ME. Suggestions are welcome.
 - @ Read keyword expressions from command file. Default files are notification file, then OPTION.TXT. Type ?CMDFILE for help.
 - Q Read another keyword expression from open command file.
 - V Redraw (or retype) current story frame.
 - = Use following indexed file as text source. ?INDEX for help.
 - \$ Invoke automatic notification. Type ?NOTIFY for details.
 - Store temporary text string. Type ?TMPSTORE for details.
 - | Load temporary text string into input buffer (line editor).
 - E Exit.

In addition to the above, there are three special groups of command characters: type ?MOVE for help on commands M,JKUI that move around in your current story list; type ?SEARCH for help on commands BNGHTY that search your current story list; and type ?OUTPUT for help on the commands OL that do output to files and/or the Dover, XGP & Boise spoonle:s.

Type ALTMODE to abort any partially typed command.

On displays, type [ESC]I to interrupt any long process already begun. Also on displays, type [META] cr| to get back the last command line that contained a valid keyword expression.

Type ?TOPICS to see the list of all the ?-commands available for getting more help on specific subjects. Also, any switch name or mnemonic command name can also be preceded by a ? to get help on that switch or command. Complete documentation is in the file NS.ME[S,DOC].

.esc cntl D (user types esc followed by cntl-D)

Logging off WORLDNEWS.

ACCESSING NCIS NEWS

Type an Option Number, a Command, or "stop".

*0

0 Nuclear Criticality Information System (NCIS)

Available Resources

Last Revision

1	Administrative Information	Feb 1, 1984
2	Bibliographic Compendia	Apr 16, 1984
3	Criticality Safety Methodology	Pending
4	Criticality Data	Pending
5	Training Records	Proprietary
6	Integrated Computer Resources	Mar 30, 1984

HELP is available by typing - 'help' or 'help commands'.

ELECTRONIC MAIL may be entered by typing - 'em'.

NEWS may be accessed by typing 'news'.

Type an Option Number, a Command, or "stop".

*news

1	Announcements	Apr 17, 1984
2	NCIS Update	Nov 28, 1983
3	Comments & Suggestions	Pending
4	Quit	

Enter the option number you wish.

*2

NCIS UPDATE

1	Background
2	Philosophy
3	ANS Transactions Compilation (UCRL-53369)
4	Personnel Directory
5	Availability of NCIS Resources
6	American Nuclear Society
7	Job Opportunities
8	Calendar of Events
9	Recent Papers Presented
10	Recent Publications
11	Quit

Enter the number of the news item you wish to read.

*1

Background

The Nuclear Criticality Information System (NCIS) is the result of work that has been in progress at the Lawrence Livermore National Laboratory (LLNL) for about ten years. To obtain information for a critical-experiments database, we used LLNL computer database-management Pools to prepare a bibliographic database of critical experiment work. A computer-generated three-volume report, UCRL-52769, was released in 1979. Subsequently, we received inquiries about direct on-line access to the database, but were then unable to provide such access. Recently,

however, we have been able to transfer the data files to a system that is designed for use at remote locations. This system, also based at LLNL, is supported by the US Department of Energy (DOE). It is called the Technology Information System (TIS). It is available to authorized users by telephone dial-up, toll-free WATS lines, over the Advanced Research Projects Agency (ARPA) computer network (ARPANET), and over the international TYMNET. In September 1982, workers in the LLNL Criticality Safety Office received funding from the DOE Office of Nuclear Facilities Safety to incorporate NCIS into TIS and expand the criticality information resources. This work is in progress. It is in a prototype stage now, but will eventually be available to a wide community of users. This update, the first in a series, is intended to provide information on the plans and progress of NCIS, and other criticality-related information.

NCIS UPDATE

- 1 Background
- 2 Philosophy
- 3 ANS Transactions Compilation (UCRL-53369)
- 4 Personnel Directory
- 5 Availability of NCIS Resources
- 6 American Nuclear Society
- 7 Job Opportunities
- 8 Calendar of Events
- 9 Recent Papers Presented
- 10 Recent Publications
- 11 Quit

Enter the number of the news item you wish to read.

*5

Availability of NCIS Resources

NCIS materials are primarily available in printed form. The computer databases are still being made ready for on-line access. When available, the databases should be accessible in a simple self-prompting mode from remote computer terminals. A hierarchical index will guide a user to desired information. We plan to include abstracts for each of the bibliographic citations. If a user wishes a complete document he should order it through standard channels. Distribution of documents is a service we do not expect to provide. We expect soon to invite some organizations to use the NCIS in a prototype fashion. It is necessary, however, to make the addition of on-line users of NCIS in increments which will not suddenly overburden the hardware and manpower resources of our host, the DOE Technology Information System (TIS). Since we are funded by DOE, we expect our initial users to be from interested DOE laboratories or contract organizations, but we will eventually expand on-line usage, even to interested users overseas.

NCIS UPDATE

- 1 Background
- 2 Philosophy
- 3 ANS Transactions Compilation (UCRL-53369)
- 4 Personnel Directory
- 5 Availability of NCIS Resources
- 6 American Nuclear Society
- 7 Job Opportunities
- 8 Calendar of Events
- 9 Recent Papers Presented
- 10 Recent Publications
- 11 Quit

Enter the number of the news item you wish to read.

*11

1	Announcements	Apr 17, 1984
2	NCIS Update	Nov 28, 1983
3	Comments & Suggestions	Pending
4	<u>Quit</u>	

Enter the option number you wish.

*4

Type an Option Number, a Command, or "stop".

*stop

Thank you for using the Integrated Information System.

% (user is now back in UNIX shell)

CAF/eva
7068c

APPENDIX A

FOR YOUR INFORMATION

NCIS 84-076

Who's Who

The Nuclear Criticality Information System (NCIS)

- * a new source of nuclear criticality safety information that is meant both to *stimulate and improve the exchange of information throughout the nuclear criticality safety community*
- * located at the Lawrence Livermore National Laboratory in Livermore, CA
- * sponsored by the Department of Energy (DOE), Nuclear Facilities Safety Division, Office of Nuclear Safety (ONS)
- * available to authorized users at remote locations

The Technology Information System (TIS)

- * the computer system that is used by NCIS and other organizations
- * an Intelligent Gateway Computer for Information and Modeling Networks that provides automated access to information centers with data analysis, modeling and post-processing capabilities as well as communications, technology transfer, the unique "Meta-Machine" user interface, *information networks and security.*

TIS FEATURES

Communications

Access

- * TIS is accessible by telephone dialup over FTS and commercial telephone lines, toll-free WATS lines, the ARPA computer network, and TYMNET.

User Communications

- * "link" - links two terminals
Simultaneous graphical display and voice communication
(Terminals of expert and student are equivalent)
- * "write" - online communications with another user
- * "em" - Electronic Mail
Sending messages to any TIS/NCIS user

The UNIX Operating System

- * User Communications
- * Text File Creation and Editing
- * File Manipulation and Management

The Integrated Information System (IIS)
(Also referred to as the "Meta-Machine")

- * integrated information resources consisting of datafiles, models and communications
- * unique user interface
- * self-guided programs for establishing and maintaining databases
- * ability to access UNIX commands

Automated Access Procedures to external information resources

- * users are granted selective access to resources
- * communications are established automatically
- * users use the connect command and the name of the resource
e.g. 'connect dare' to search the chemical structure and nomenclature file of 6 million structures in Paris)

Data Analysis and Modeling

- * transfer of files from TIS to other computers and vice versa
- * downloaded information can be placed in files for post-processing, analysis, and graphical display.
- * TIS can be used to establish an integrated modeling network

NCIS OFFERS

International Directory of Criticality Safety Personnel

- * online directory of individuals who have a direct involvement in the safe handling of fissile material throughout the world.
- * over 480 participants representing 18 countries and over 150 organizations
- * available as a NCIS publication. UCAR-10105

Bibliographic Databases

1) NCIS Experimental Bibliography

- * a collection of critical experiment citations
- * available as an online database
- * originally published as UCRL-52769, "Nuclear Criticality Experiments from 1943 to 1978, an update is planned

2) ANS Transactions Bibliography

- * a collection of transactions from the American Nuclear Society dealing with criticality
- * available as an online database
- * published in UCRL-53369, "Nuclear Criticality Safety Experiments, Calculations, and Analyses - 1958 to 1982"

3) General Bibliography

- * bibliography of criticality safety literature
- * available as an online database
- * publication planned

APPENDIX B

GETTING STARTED

NCIS 84-066

TIS communications requirements:

baud rate: 300 or 1200, dependent on your modem and terminal

parity: none

duplex: full

asynchronous communications,

word length & stop bits: 8 and 1 or 7 and 2, respectively
(if one combination doesn't work,
try the other combination!)

Some important keys:

Locate the following keys on your keyboard before you begin, they can be different, but may look like:

Backspace: 'Backspace', (left arrow), or H (control H)

Carriage return: 'Return', CR, 'Enter', (down and left arrow)

Control: 'CTRL', 'CNTL'
The control key is used like the shift key on a typewriter. For example, to type ' H' (control H), depress the control key and the 'H' key simultaneously.

Escape: 'ESC', 'Esc'

Login procedure:

Once you have successfully established communications with the TIS system, you should see:

USER NAME:

displayed on your screen. Type in your login name, in lower case letters, followed by a carriage return.

Next, you should see:

PASSWORD:

displayed on your screen. Type in your password, followed by a carriage return. This will not be echoed to your screen as you type!

Next you should see an inquiry as to the type of terminal you are using. You will be able to respond with your terminal type, if you know it, such as hp2648 for a Hewlett Packard graphics terminal. If you do not know the acronym for your terminal type, you can respond with a question mark, '?'. A question mark response will result in a list of terminals, and their acronyms appearing on your terminal. You can stop the list to view it by using `3` (press `Q` to re-start the list). After the list is displayed, you will be prompted again for your terminal type, enter it now, followed by a carriage return.

A successful login should result in a percent sign, '%', appearing on your terminal.

Logout:

To end your session with TIS, type:

logout

followed by a carriage return, at a percent sign, '%', prompt.

STAFF LIST - TIS/NCIS

NAME	PROJECT	LOC	PHONE #	COM LINE	BLDG/RM	HOME #
Anguiano, Elsa	NCIS	Liv.	423-4749	9	T1830-103	836-4116
Bailey, Carolyn*	TIS	Liv.	422-4763	21	T1827-104	447-6575
Barker, Randy	EDS	Day.	(513) 287-4689			(513) 848-4043
Berch, Michael	FAA/EDS	Liv.	423-6547	Need	T1830-104	697-4717
Bollinger, Bill	TIC	Liv.	423-6347	23	T1830-115	345-6393
			2-5840 (TID)			
Chau Lise*	EDS	S.D.	(714) 851-5614		(213) 926-4362	
Draper, Margaret	TIS	Liv.	423-4010	22	T1830-103	449-4828
Foret, Carol	NCIS	Liv.	423-4748	9	T1830-103	(209) 623-0273
Gaynor, Carol	TIS	Liv.	423-6174	24	T1830-102	449-0361
Grinstead, Randy	FAA	Liv.	423-6175	25	T1827-103	483-6752
Hampel, Viktor	TIS	Liv.	422-4357/7925	1	T1830-112	846-3593
			Pager: 122-793			
Hegemann, Bruce	TIS	Liv.	422-4763	21	T1827-104	447-4140
Johnson, Pame	TIS	Liv.	423-4755	3	T1827-110	(209) 835-7549
Johnson, Sandra	TIS	Liv.	423-4010	0	T1830-106	447-5807
Kawin, Rick A.	TIS	Liv.	422-1991/9317	8	T1827-107	843-5152
Koponen, Brian	NCIS	Liv.	422-4466	28	T1830-108	447-3498
			422-0799 (CSO)			
Lann, Neil	TIS	Liv.	422-9200	3	T1827-110	443-6820
			Pager: 122-813			
Lunow, Eric	NCIS	Liv.	423-6443	20	T1830-120	(408) 263-1763
McGowan, Tina	NCIS	Liv.	423-6293	29	T1830-122	846-3332
McGrogan, Steve*	EDS/FAA	Liv.	423-4751	5	T1827-102	886-4722
Murphy, Thomas*	TIC	Liv.	423-4751	5	T1827-102	934-5664
Pavel, George	TIS	Liv.	422-4262		Bldg. 116	527-5550
Salisbury, Jack*	NCIS	Liv.				447-1913
Sanner, Bob	TIS	Liv.	422-4763	21	T1827-104	443-2095
Scott, Walter*	TIS	Liv.	422-7529/3-4753	4	T1827-106	540-5874
						642-9669
Selander, Mike*	TIC	D.C.	(703) 883-7294	---	---	(703) 437-6040
Selander, S.*	TIC	D.C.	(202) 342-4241	---	---	(703) 437-6040
Smith, Norm**	TIC	O.R.	(615) 482-9031			
			Ext. 294			
Steele, Bruce	FAA	OKC	8-749-2587			
Thomas, John L.	EDS/TIC	Liv.	423-6029	27	T1830-118	(408) 246-7423
Wallace, Richard*	TIC	Pitts	---	---	---	(505) 662-2631
Whisler, Doug*	EDS	Liv.	422-7529	4	T1827-106	829-2013
Winiger, Gary	FAA/EDS	Liv.	423-6252	26	T1827-105	964-6982
Yatabe, Margaret	NCIS	Liv.	422-1960		T1830-103	462-8343
<hr/>						
Conference Room		Liv.		6	T1827	
Computer Trailer		Liv.	422-4271/0812	7	T9141	
			FTS 532-4271/0812			
Computer Status		Liv.	422-0812			
			FTS 532-0812			
Micro-Computer		Liv.	423-6029	27	T1830-118	
<hr/>						
Computer Access:						
Commercial:			(415) 422-1718 (1200 baud)			
FTS:			(415) 532-1716			
Commercial:			(415) 422-3615 (300 Baud)			
FTS:			(415) 532-3615			
WATS Line:			(800) 824-7407			
TYMNET			HOST: TIS PW: CODATA			

APPENDIX C

IIS Commands and Clauses

Command	Description
connect	connect to a remote computer system
count	count the records in a data file
create	create an IIS option number
database	transfer to another IIS database
define	define string macros
destroy	remove user's reports or data files
em	electronic mail
equation	define a data field by a formula
help	list or explain commands
link	link two user terminals together to act as one
makeform	construct form for data entry
news	display TIS system news
permit	permit other users to access reports or plots
print	create and display new report
rename	rename existing IIS report
report	display pre-defined report
reports	list available reports and plots
run	run a UNIX program from IIS
sequence	create or perform a batch of commands
show	display user status information
showme	display format of a data file
stop	terminate IIS and return to UNIX
survey	display the contents or format of an option number
update	update a data file
where	select data records by key

DIRECTORIES: All files are located within a directory. When you login to the computer you are automatically placed in your 'home directory' (eg./id1/kawin). Files not located in your current directory must be identified by the complete directory path-name followed by the file-name (eg.cat /id0/hampel/world/filename).

pwd Displays the full-pathname of your current directory.
ls List the names of files located in your current directory.
cd Change directory cd mydir; cd Back to home directory.
mkdir Make a new directory (eg. mkdir mydir).
rmdir Remove a directory (eg.rmdir mydir). Directory must be empty of files.

FILES: Any collection of information stored as a unit is called a 'file' and has a unique name in any given directory. Each file can be viewed to show when it was last modified and who can access it.

To Display File Contents

cat Display the entire file (eg. cat myfile).
more Display file, one screen at a time (eg. more myfile).
see Displays all characters in a file, including control characters:
 (eg. see myfile).
tail Display the last 10 lines of a file (eg. tail myfile). Show last 20 lines
 (eg. tail-20 myfile).

To Obtain & Edit the Contents of a File

ex Pattern matching editor is compatible with ALL terminals.
vi Visual editor for terminals with screens.

Obtain & Modify Information About the File.

ls -l Lists the file names, when they were last modified, their size in characters, and file permissions:

```

-rw-r--r-- 1 kawin 2134 Mar 24 10:31 equip
drwxr-xr-x 1 kawin 52 Feb 17 10:16 mydir

```

 If first character is 'd' it is a directory name, if it's a dash it's a file. The next 3 groups of 3 characters represent the owner, user group, all other users (r = read, w = write, x = execute).
chmod Change Mode of access. Make a file readable by all users: chmod 744 filename. The 3 numbers represent the owner, user group, all users (1 = execute only, 2 = write only, 3 = write & execute, 4 = read only, 5 = read & execute, 6 = read & write, 7 read write & execute).
rm Remove file (eg. rm myfile 1 myfile 2; rm myfile*; rm myfile !1-21).
mv Change file name (eg. mv oldname newname).

Other File Commands.

cat Join files (eg. cat file 1 file 2 file 3 = newfile).
cp Copy a file or a series of files (cp oldfile newfile; cp file 1 file 2 = file 3).

OTHER COMMANDS:

apropos Locates UNIX commands by search by keywords (eg. apropos copy)
em Electronic mail.
man Retrieves the manual description for a specified command (eg. man cat).
passwd Change password.
user Searchable directory of users. (eg. user Hampel or user Viktor).
who Displays who is currently using the computer.
write Communicate with a user who is on the computer (eg. write hampel).

USING ELECTRONIC MAIL (em)

NCIS 84-109

Note: The earlier version of electronic mail "em" has been updated. The latest version is experimental mail "xm". To use the new version, you have to enroll in "xm". After the % prompt, you type 'xmenroll' and carriage return. To use "xm", simply type 'xm' after the prompt.

To Begin Type:

% xm

and carriage return.

Your screen should look something like this:

Electronic Mail: Version 5.21

Type 'h' for help.

You have 1 messages (1 new).

+ (The prompt for electronic mail (xm) is the plus sign. To execute xm commands you must type the command name at the + prompt followed by a carriage return.)

READING A MESSAGE

To read a message

+r message-number example +r 1 (Be sure to carriage return.)

SENDING A MESSAGE

To send a message, you type "m" example +m

+m

TO: kopenen (You must use a valid userid name. You can get a list by typing "w" at the + prompt.)

CC: megowan (You can send copies to anyone you wish. You use each person's userid name. You type carriage return if you are not sending copies.)

Subject: Using Electronic Mail (The subject is a short phrase)

You type your message and end with a carriage return followed by a ctrl-D. You will then be prompted with:

abort, display, help, justify, modify, send/save, userinfo, who to:

Abort "a" - will destroy your message

Display "d" - will display your message on your terminal

Help "h" - will give you a list of xm commands

Justify "j" - will justify the right margin of your message

Modify "m" - allows you to correct mistakes

Send/save "s" - will send your message and save it in your sentmail file

Userinfo "u" - gives you a listing of users and their userid names

Who to "w" - lets you know who the message is going to

INDEX OF MESSAGES

+i (gives you a list of messages in your mailbox. You can also list them by numbers and ranges)
 example **+i 10-15** will list messages 10 through 15

DELETING A MESSAGE

+d message-number(s) (You can delete a range of messages.)

ANSWERING A MESSAGE

+a message-number (This will send a copy of the header from the message you are answering, and then prompt you as if you had used the 'm' command.)

QUIT ELECTRONIC MAIL

+q (leaves the xm program and re-enters the UNIX shell.)

OTHER COMMANDS

s message-number filename - will save a message in a file
 example **+s 2 notes**

f message-number - forward a message with a comment

F message-number - forward a message without a comment

check user - will report the date and time the user last read their mail.

l ~ lists the name of files containing messages

u - message-number - undeletes a message

u - new mail will switch to incoming mail file

COMPLETE LIST OF ELECTRONIC MAIL COMMANDS

h - The help command will display a complete list of electronic mail commands.

LET'S USE THE VISUAL EDITOR (vi)

NCIS 84-069

Creating and Editing Files

GETTING STARTED

Terminal Preparation

Before you can use vi you must tell the system what kind of terminal you are using. (Some of you may have already let the system know your terminal type during your login. If so, you can start using vi).

To find a list of terminals and their code names type:

% is expert

and carriage return. You will see

Welcome to the Integrated Information System Version 1.9

If you need assistance, you may type "help" at any time.

Type an Option Number, a Command, or "stop".

*terminal

Please select from the following options:

1. Ask computer to display what it thinks is the current terminal id.
2. Change terminal id.
3. Reset terminal to condition at time of login.
4. Display list of terminals that are supported by TIS.
5. Quit.

*1

Your terminal is set to : hp2648

Please select from the following options:

1. Ask computer to display what it thinks is the current terminal id.
2. Change terminal id.
3. Reset terminal to condition at time of login.
4. Display list of terminals that are supported by TIS.
5. Quit.

*4

ABBREVIATIONS & SYNONYMS

ADM 3 (Lear Siegler)	adm3 3
ADM 3a (Lear Siegler)	adm3a 3a
ADM 3a+ (Lear Siegler)	adm3a+ 3a+
ADM 5 (Lear Siegler)	adm5 5
ADM 31 (Lear Siegler)	adm31 31 adm42 42 adm5 5
ADM 42 (Lear Siegler)	adm42 42
AED 512	aed AED aed512 AED512
Adds Consul 980	a980
Adds Regent 100	regent100
Adds Regent 20	regent20
Adds Regent 25	regent25

Adds Regent 40	regent40
Adds Regent 60	regent60 regent200
Adds Regent series	regent
Adds Viewpoint	viewpoint addsviewpoint
Ampex Dialogue	ampex d80 dialogue dialogue80
Anderson Jacobson	aj830 aj832 aj
Ann Arbor 4080	aa annarbor 4080
Ann Arbor Ambassador	ambas ambassador aaa
RBN BitGraph terminal	bg bitgraph
Beehive Super bee	sb1 superbee superb
Beehivellm	bh3m
Bell Labs Blit	blit jerq
Bell Labs Blit Layer	blitlayer layer vitty
CB UNIX Virtual Terminal	virtual VIRTUAL
CDI	edi edil203
Compucolor	8001 ISC8001 compucolor intecolor
Compucolor 2	compucolor2 compucolorII
Concept 100	cl00 concept cl04 cl00-4p concept100
Control Data	cde456 cde cde456tst
Cybernex XL-83	xl83
Cybernex mdl-110	mdl110
DEC vt100	vt100 vt100-am
DEC GT series	gt40 gt42
DEC VT series	vt132 vt50 vt50h vt52
DEC gigi	gigi
Data general 6053	dg dg6053
Datagraphix 132a:	d132 datagraphix
Datamedia 1520:	dml520 dm dml521 1521 1520
Datamedia 2500:	dm2500 datamedia2500 2500
Datamedia 3025:	dm3025
Datamedia 3045:	3045 dm3045
Datamedia 80:	dt80 dmdt80 dm80 dt80w dmdt80w dm80w
Datapoint 3360	datapoint dp3 dp3360
Decwriter I	dwI
Decwriter II	dw2 dw3
IBM 3101-10:	ibm ibm3101 3101 i3101
Infoton 400	i400 400
Interactive Systems	intext (modified owl 1200)
Intertec Data Systems Intertube 2:	adm3a 3a adm3l 3l adm2 adm3 3 adm42 42 adm5
Lear Siegler ADM series	adm3a+ 3a+
Microterm act iv	microterm act4
Microterm act v	microterm5 act5
Microterm mimel	mim mime mimel mime2 mimei mimeii mime3a
Multiwriter 2:	Mw2
Omron 8025AG	omron
Osborne Executive	os
Perkin Elmer 1:30	fox
Perkin Elmer 1200	owl
Perkin Elmer 550	pe pe550 bantam
Qume Sprint 5	qume5 qume Qume Sprint 5:
Radio Shack trs-80 I	trs80 trs-80
Soroc 120:	soroc
Southwest Technical Products:	swtp ct82
Superbee	sb2 sb3
TRS-80 Model 100	trs100
Tek Scope 400	tec 400

Tek Scope 500	tec 500
Tektronix 4012	tek tek4012 4012
Tektronix 4013	tek4013 4013
Tektronix 4014	tek4014 4014 tek4014-sm 4014-sm
Tektronix 4015	tek4015 4015 tek4015-sm 4015-sm
Tektronix 4023	tek4023 4023 tex
Tektronix 4024/4025/4027 4025 4027 4024	tek4025 tek4027 tek4024 4025cu 4027cu
Tektronix 4110 series	4112 4113 4114 tek4112 4112-nd 4112-5
Teleray 1061	t1061 t10 teleray t1061f
Teleray 3700	t3700 teleray
Teleray 3800 series	t3800
Teletec Datascreen	tek teletec
Teletype Dataspeed 33	33 tty33 tty
Teletype Dataspeed 37	37 tty37
Teletype Dataspeed 41/2	40 tty40 ds40 ds40/2 ds40-2 dataspeed 40
Teletype Dataspeed 43	43 tty43
Teletype Dataspeed 4424	4424 tty4424
Televideo (old)	tvi912 912 920 tvi920
Televideo 912	912b 912c tvi912b tvi912c
Televideo 920	920b 920c tvi920b tvi920c
Televideo 950	tvi950 950 televideo950 tvi950-2p 950-2p
Terak	terak (emulating Datamedia 1520)
Texas Instrument	ti ti700 ti733 735 ti735
Texas Instrument 740x	ti745 745 743
Texas Instrument crni	ti800
Unknown	dumb un unknown
Visual 200	vi200 vi200-rv-ic vi200-f vi200-rv vi200-ic
Volker-craig 303	vc303 vc103 vc203
Volker-craig 303a	vc303a vc403a
Volker-craig 404	vc404 vc404-s vc404 na vc404-s-na
Xerox	x1720 x1700 1700 x1750
Zentec 30	zen30 z30

Please select from the following options:

1. Ask computer to display what it thinks is the current terminal id.
2. Change terminal id.
3. Reset terminal to condition at time of login.
4. Display list of terminals that are supported by TIS.
5. Quit.

*5

Type an Option Number, a Command, or "stop".

*stop

Thank you for using the Integrated Information System.

Use the following command to tell the system your terminal type:

% setenv TERM 2621

NOTE: 2621 is the terminal code found on the terminal codes list. Be sure to use your terminal code.

HINT: Beware! The wrong terminal code could cause the editor to make a mess out of your screen.

CREATING A FILE

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% vi filename

NOTE: Filenames are your preference, usually relating to the contents of the file. Also, be sure not to put spaces between a file name. The system will think you mean two files and access to this file will require double quotes around the filename.

The visual editor has now opened a new file. Your screen should look something like this:

"filename" [New File]

ENTERING TEXT INTO A NEW FILE

Note: Terminate all text entering commands with an Escape (ESC). Also, opening a new line in a file is considered entering text.

a	append
i	insert
o	open space for a new line below the line you are on
O	open space for a new line above the line you are on

To use append:

- 1) Type "a" to get you into the append mode
- 2) Type in desired text
- 3) to terminate entering text hit the ESC

Hint: You use carriage return, tab and space bar just like you are typing. Also, you can backspace over your mistakes and retype the correct text. (If your terminal does not have a backspace, you can use control H instead).

Note: The append mode will add text after the cursor.

To use insert:

- 1) Type "i" to get you into the insert mode
- 2) Type in desired text
- 3) to terminate insert hit ESC

Note: The insert mode will add text in front of the cursor.

To open lines above or below text:

- 1) Type "o" to open a new line below the line you are on or type "O" to open a new line above the line you are on
- 2) hit ESC after each line opened

Note: If you want to add text on the line you have opened you can start entering text. After you open a line, you are in the append mode until you hit an ESC.

SAVE FILE IN MEMORY

- 1) type colon
- 2) type "w" to write the file to memory

EXIT THE EDITOR

- 1) type colon
- 2) type "q" to quit the editor.

Note: You can combine the write and quit commands together.
Type colon, "wq" and carriage return.

READING AND EDITING AN EXISTING FILE

You can use the visual (vi) or view editors to read a file.
If you want to edit a file you must use vi.

% view filename (for reading only)

% vi filename (read and edit)

The first screen of text will be displayed.

Scrolling & Paging

entl D scrolls down
entl U scrolls up
entl F moves forward a page
entl B moves backward a page

GOTO positions in a file

G go to end of file
#G (# is any number) positions at that line number
(e.g. 2G goes to line 2)
\$G go to end of file
entl G lists name of file, line # of cursor, # of lines in the buffer and the % through the buffer

Moving Around the Screen

+ cursor advances to next line in file
- cursor advances to previous line in file
cr cursor advances to next line in file (carriage return)
H moves to top line of screen
#H (# is any number) moves to line numbered in first part of screen
M moves to middle line of screen
L moves to last line of screen
#L (# is any number) moves to line numbered in last part of screen
entl N moves to next line, same column
entl P moves to previous line, same column

\$ moves to end of line
 z cr takes current line where cursor is positioned & makes it the top line of the screen

Moving Within A Line

Note: Vi considers punctuation as a word

w advances one word at a time
 W advances one word at a time and ignores punctuation
 b moves backward one word at a time
 B moves backward one word at a time and ignores punctuation
 e moves to end of current word
 h backspace one character
 entl h backspace one character

Cursor Arrow Substitutions

h replaces left cursor arrow
 l replaces right cursor arrow
 j replaces down cursor arrow
 k replaces up cursor arrow

Searching Text

/ scan for a following string afterwards
 (e.g. /time looks for the word time forwards in the file)
 (a string is a collection of characters and numbers)

? scan for a following string backwards

To keep scanning

n find next occurrence in scan pattern
 N find next occurrence in scan pattern in opposite direction

Making Corrections

x deletes single characters
 dw deletes word, 3dw deletes three words
 db deletes previous word, 3db deletes three previous words
 dd deletes line, 3dd deletes three lines
 D deletes line from cursor to end of line

 cw changes a word. 3cw changes three words
 C change line from cursor to end of line
 c changes what you specify
 CW changes word up until next blank space

 r replaces a character
 J joins two lines
 u undoes last change made
 U restores line to original state before changes

 s substitutes single characters, 5s will substitute 5 characters

Yank and Put

Y or yy Yank will temporarily store a line
 p Puts back the lines that were yanked
 (Be sure to move the cursor to the place that you want to put the
 lines).

Note: The lines you yank will also remain on the screen. When you put
 back the lines into the place desired the original lines will still be
 there. You will have to delete those using dd.

Hint: You can yank and put more than one line at a time.
 (e.g. 6yy 6p will yank and put 6 lines)

"xy yanks a line and stores it in buffer x
 (you can name a buffer anything)

5"xy yanks five lines and stores it in buffer x

"xp puts back lines from buffer x

OTHER COMMANDS

Note: These commands must be given from a colon prompt.

: enters the non-visual editor (ex)
 % Locates matching parantheses, brackets or square brackets
 . repeats the last command
 ! !unix command - allows running unix commands from non-visual
 editor(ex)

APPENDIX D

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