

PNL--7877-Rev.1
DE93 002438

NATIONAL RADIobiology ARCHIVES
DISTRIBUTED ACCESS USER'S MANUAL
VERSION 1.1

S.K. Smith
J.C. Prather
E.K. Ligotke
C.R. Watson

June 1992

Prepared for
the U.S. Department of Energy
under Contract DE-AC06-76RL0 1830

Pacific Northwest Laboratory
Richland, Washington 99352

MASTER

EP

NATIONAL RADIobiology ARCHIVES

DISTRIBUTED ACCESS USER'S MANUAL

VERSION 1.1

June 1992

**Sean K. Smith
Jonathan C. Prather
Earleen K. Ligotke
Charles R. Watson**

Table of Contents

Purpose	5
Impact	5
History	5
How to Cite the Archives	5
Brief Instructions for Installing Version 1.1	6
Distributed Access Subset	7
Browse Screens	7
Menu Changes	8
Example Version 1.1 Main Menu	9
Example Version 1.0 Main Menu	9
Operational Changes	10
Version 1.1 Dose-Effects Browse Screen	11
HELP Display for DX field	12
HELP Display for TISSUE CATEGORY	13
HELP Display for EFFECT Morphology Category	14
HELP Display for DOSE	15
Zoom Process	16
Zoom Instruction Help Screen	16
Zoom Example - after user enters <i>CTRL-Z</i>	18
Zoom Example - after user enters <i>F1</i> for HELP	19
Zoom Example - after user enters "inhaled.."	20
Zoom Example - after zoom to "inhaled.."	20
General Help Screen	21
Pathology Text	22
Pathology Text Availability Message	22
Pathology Text Example - after user presses F5	23
Pathology Text Example Output	24
Detailed Installation Instructions	25
Suggestions or Problems?	32
Combined Index for V1.0 and V1.1	33

Paradox® Runtime Sublicense

This software package may be run under Paradox® Runtime (Copyright 1990), Borland International, all rights reserved). End users who run NRA Distributed Access under Paradox® Runtime agree to the following:

- *acknowledge that Paradox® Runtime is owned by Borland International and may not be copied,*
- *look to PNL, the application developer, and not Borland International, for any support services required by this application,*
- *take no action against Borland International for any damages resulting from the use of this application; it being understood that Paradox® Runtime is provided by Borland International "AS IS" and without warranties or liabilities for any damages.*

INSTALL™ Sublicense

The installation program used to install NRA Distributed Access, INSTALL™, is licensed software provided by Knowledge Dynamics Corp, P.O. Box 1558, Canyon Lake, Texas 78130-1558 (USA). INSTALL™ is Copyright (c) 1987-1991 by Knowledge Dynamics Corp which reserves all copyright protection worldwide. INSTALL™ is provided to you for the exclusive purpose of installing NRA Distributed Access. Battelle is exclusively responsible for the support of NRA Distributed Access, including support during the installation phase. In no event will Knowledge Dynamics Corp be able to provide any technical support for NRA Distributed Access.

Purpose

This supplement to the NRA Distributed Access User's Manual (PNL-7877), November 1991, describes installation and use of Version 1.1 of the software package; this is not a replacement of the previous manual.

Version 1.1 of the NRA Distributed Access Package is a maintenance release. It eliminates several bugs, and includes a few new features which are described in this manual. Although the appearance of some menu screens has changed, we are confident that the Version 1.0 User's Manual will provide an adequate introduction to the system. Users who are unfamiliar with Version 1.0 may wish to experiment with that version before moving on to Version 1.1.

Impact

This is an optional upgrade, either Version 1.0 or 1.1 may be used. We recommend Version 1.1 because of the enhancements to the software and the data set.

History

Version 1.0 diskettes and the User's Manual were distributed to the National Radiobiology Archives Advisory Committee in November 1991. Dr. Charles Watson installed and demonstrated the Distributed Access Package at the laboratories of selected users in December. In January 1992, an advisory meeting was conducted at PNL to review the package. The reviewers made several suggestions and reported a few previously unknown bugs in the software. In February, Jonathan Prather modified the software, Charles Watson modified the menus and the distributed data subset, and Sean Smith revised the installation process.

How to Cite the Archives

Please include the following acknowledgement in all publications containing information from the Distributed Access Package (or otherwise obtained from the NRA).

The authors acknowledge the assistance of the National Radiobiology Archives, operated at Pacific Northwest Laboratory for the U.S. Department of Energy by Battelle Memorial Institute under contract DE-AC06-76RLO 1830. For information, contact Dr. Charles Watson (509) 376-3483.

Brief Instructions for Installing Version 1.1

(Detailed Instructions start on page 25)

1. Insert NRA Distributed Access 1 into your floppy drive.
2. Execute the following commands.

C:\> A:
A:\> INSTALL

3. You will be prompted for a hard drive partition to install the software. You should choose a partition with at least 6 megabytes free. If the Install program determines there is not enough space, you will be notified.
4. Next, you will be prompted for a subdirectory to install the software. The default subdirectory is "\NRA". Just hit the Enter key to accept the default and start the process. (Hit the Enter key for the next screen to confirm this default).
5. The Install program will write the files to your hard drive prompting you to insert additional diskettes when ready. This process may take as long as twenty minutes. When the Install program has processed the first disk, the computer will "beep" and you will be prompted to insert the NRA Distributed Access 2 disk.
6. After the files are loaded, the Install program will check your config.sys file and notify you if any changes are required. The NRA requires a config.sys file with at least: FILES=20 and BUFFERS=20. If a change is necessary, you will have to re-boot before running the Distributed Access software.
7. Finally, you are prompted to re-insert the first diskette to allow the Install program to finish its bookkeeping.
8. To run the NRA Distributed Access application:

A:\> C:
C:\> CD NRA
C:\NRA> NRA

This Install program is different from the ZOO processor used with Version 1.0. If you encounter any problems installing Version 1.1, please call:

Sean K. Smith

(509) 376-5684

Distributed Access Subset

The subset of information from the NRA databases distributed with Version 1.1 is larger and more interesting than that distributed with Version 1.0.

Database Screen	Rows	Remarks
DOSE-EFFECTS SUMMARY	294	96 dogs injected with ^{90}Sr at Utah 100 typical exposed mice from Oak Ridge 98 typical control animals distributed with version 1.0
BIBLIOGRAPHY	139	Representative of current collection
INVENTORY	590	Inventory of every physical item at NRA which is related to the 294 animals and 139 books.

In addition to the typical control animals previously distributed, two groups of exposed animals have been included. Ninety-six records from the life-span effects study of injected ^{90}Sr on beagles at the University of Utah and 100 records of representative exposed mice from Oak Ridge are now included. The bibliography subset was expanded to include 39 additional citations. These were selected to illustrate the scope of the initial collection.

Browse Screens

The information on the first and second line of the browse screen has been revised. UPIMAGE and DNIMAGE are now known as CHANGE WINDOW. CLIN_TEXT is now shown as PATH_RPT. The CTRL-Z ZOOM option appears in a window which indicates the field which will be zoomed.

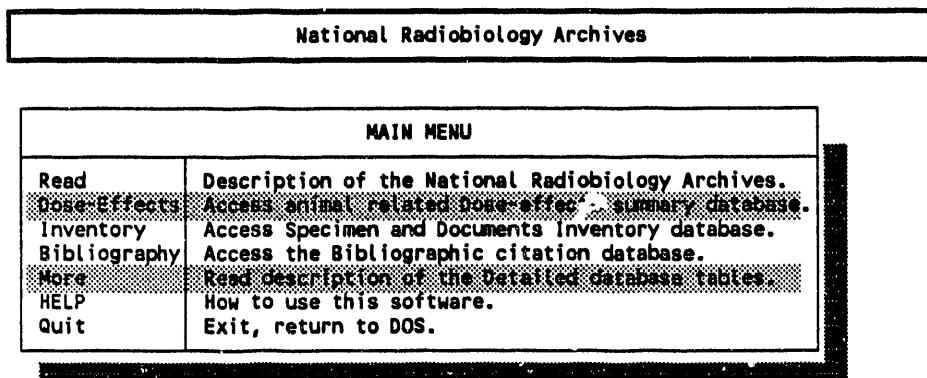
The EFFECT TABLE window on the DOSE-EFFECTS SUMMARY browse screen now includes the DX field. This code qualifies the effect by identifying the source of the information (H = histopath, B = biopsy, C = clinical, etc.). The F1 HELP text was re-written for all fields inside the DOSE TABLE and EFFECT TABLE windows.

Menu Changes

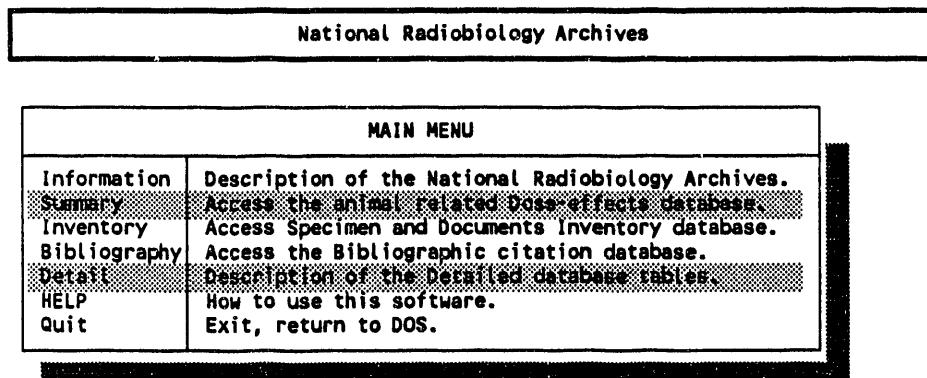
Some of the words on the menus were changed to clarify options and make the first letter of each option unique within a menu. Two new options were added to the HELP menu. The menu titles related to the Dose-effects Summary Database were changed from SUMMARY to DOSE-EFFECTS SUMMARY.

Menu	<i>Version 1.0</i>	<i>Version 1.1</i>	Reason for change
All menus	HOLDINGS	READ	Clarification of menu option
All menus	SEARCHES	SEARCH	Clarification
All menus	RETURN	PREVIOUS	Unique first letter
Main	SUMMARY	DOSE-EFFECTS	Clarification
Main	DETAIL	MORE	Clarification, unique first letter
Help	None	ZOOM	New help screen
Help	None	MORE ZOOM	New help text
Help	None	GENERAL	New help screen
Help	PURPOSE	SCOPE	Clarification, unique first letter
Search Dose- effects and search Inventory	ANIMAL	NRA ID's	Clarification, unique first letter
Search Dose- effects and search Inventory	ASSIGNED	Lab ID's	Clarification, unique first letter
Search Dose- effects	T-DOSE	DOSE	Clarification, unique first letter
Search Dose- effects	T-EFFECT	EFFECT	Clarification, unique first letter

Example Version 1.1 Main Menu



Example Version 1.0 Main Menu



Operational Changes

The following modifications make Version 1.1 more robust and easier to use:

- The EFFECT window on the DOSE-EFFECTS SUMMARY browse screen is expanded to include the DX field. This code qualifies the effect by identifying the source of the information (H = histopath, B = biopsy, C = clinical, etc.).
- The default on the print options is now the printer, and the print process no longer crashes if the printer is not ready. The error handling on user input print file names was improved.
- The default on the QUIT option is now DOS.
- There is a general help screen available when the *F1* key is pressed when viewing a help screen or when doing a zoom.
- The install process is completely new; it has a much more comprehensive user interface and handles problems more gracefully.
- The colors and borders of the text windows are improved in response to reviewers suggestions.
- The **CTRL-Z ZOOM** interface on browse screens is new. *F1* HELP is supported, and more information about the process is provided in the search string prompt window.
- The user input on SEARCH options is checked more closely for illegal characters.
- All the logical cursor movement keys are now properly mapped to the arrow keys. *Tab* and *Enter* become right arrow, *Reverse Tab* becomes left arrow.

Version 1.1 Dose-Effects Browse Screen

Many of the peer review comments about version 1.0 focused on the Dose-effects browse screen. This section of the manual focuses on improvements made to this screen. Each improvement is described in the interactive HELP. The revised HELP displays are shown on the following pages.

The new dose-effects browse screen has an expanded window showing the EFFECT TABLE. The new field, DX, shows the source of the effect diagnosis. In the example below, DX = G indicates that the degeneration and altered growth in the hemolymph tissue category were based on the gross observations made at necropsy. DX = H indicates that the observations of inflammation in the lymph node and bone category were made by a pathologist as part of the histopathological examination of necropsy specimens.

EFFECT TABLE		
TISSUE	MORPHOLOGY	DX
HEMOLYMPH	DEGENERATION	G
HEMOLYMPH	ALTERED GROWTH	G
LYMPH NODES	INFLAMMATION	H
BONE	INFLAMMATION	H

DOSE TABLE

The following displays are shown if you press **F1** while the cursor is in the highlighted field of the EFFECT window of the DOSE-EFFECT SUMMARY browse screen or the DOSE window of the DOSE-EFFECT SUMMARY browse screen.

HELP Display for DX field

EFFECT TABLE		DX
TISSUE	MORPHOLOGY	
HEMOLYMPH	DEGENERATION	H
HEMOLYMPH	ALTERED GROWTH	H
LYMPH NODES	INFLAMMATION	H
BONE	INFLAMMATION	H

TISSUE	DOSE	DATE

F1-General Help

HOME,END,?,!,PGUP,PGDN-Scroll Text
Press any other key to exit HELP...

F6-Print Text

ANIMAL: A000202

PRIMARY: N

CONTROL: Y ACCESSION_DATE: 9/16/91

LAB:

STUDY

HELP for fields: DX

GROUP

SPECI

NRA FIELD NAME: DX

DATA TYPE: A1

ASSIG

BIRTH

The morphology diagnosis categories are:

1ST_I

INSUL

REMOV

DEATH

D Die

COD:

ASSIG

BIRTH

1ST_I

INSUL

REMOV

DEATH

D Die

COD:

FINDI

TISS

HEMO

HEMO

Category

Translation

B	Biopsy or Surgical removal with Histopath exam
C	Clinical Observation of live animal
G	Gross Observation at Necropsy
H	Histopathology exam of Necropsy specimen
M	Microscopic examination
N	No tissues examined
P	Physical examination or observation, i.e. palpation
R	Radiographic examination
S	Scan (CAT scan, NMR, etc.)
1	Gross examination of body, head not examined
2	Gross examination of head, body not examined
3	Histopathology of body, head not examined
4	Histopathology of head, body not examined
5	Gross examination of body, Histopathology of head
6	Gross examination of head, Histopathology of body

LYMPH NODES	INFLAMMATION	H
BONE	INFLAMMATION	H

HELP Display for TISSUE CATEGORY

EFFECT TABLE			DOSE TABLE		
TISSUE	MORPHOLOGY	DX	TISSUE	DOSE	DATE
HEMO+MPH	DEGENERATION	G			
HEMOLYMPH	ALTERED GROWTH	G			
LYMPH NODES	INFLAMMATION	H			
BONE	INFLAMMATION	H			

F1-General Help HOME,END,+,I,PGUP,PGDN-Scroll Text F6-Print Text

Press any other key to exit HELP...

NATIONAL RADIobiology ARCHIVES

ANIMAL: A000202 PRIMARY: N CONTROL: Y ACCESSION_DATE: 9/16/91

LAB:

STUDY

GROUP

SPECI

ASSIG

BIRTH

1ST_I

INSUL

REMOV

DEATH

D Die

COD:

FINDI

TISS

HEMO

ASSIG

BIRTH

RESP, UPPER

RESP, LOWER

DIGESTIVE, U

DIGESTIVE, L

ORAL CAVITY

LIVER

KIDNEY

URINARY

FEMALE REPRO

EMBRYO/FETUS

ENDOCRINE

CNS + EYES

X_MISC

NRA FIELD NAME: TISSUE_CATEGORY

DATA TYPE: A7

There are 18 tissue categories for summarizing EFFECTS:

Category	Translation
SKIN+MAMMARY	Skin including Mammary glands
HEMOLYMPH	Hematopoietic and Reticuloendothelial System and circulating Blood
LYMPH NODES	Lymph nodes
BONE	Bone and joints
MUSCLE	Muscle and connective tissue
RESP, UPPER	Respiratory system, upper
RESP, LOWER	Respiratory system, lower (Lung)
DIGESTIVE, U	Digestive, upper (w/o liver)
DIGESTIVE, L	Digestive, lower (w/o liver)
ORAL CAVITY	Mouth, teeth, gums, salivary
LIVER	Liver and gallbladder
KIDNEY	Upper urinary tract and Kidney
URINARY	Lower urinary tract and male reproductive system
FEMALE REPRO	Female reproductive system (excluding fetus)
EMBRYO/FETUS	Embryo, fetus, placenta
ENDOCRINE	Endocrine system
CNS + EYES	Central nervous system including eyes
X_MISC	Miscellaneous tissues

Two DOSE categories are defined:

WHOLE BODY	Body as a whole
SKELETON	Skeleton

LYMPH NODES	INFLAMMATION	H
BONE	INFLAMMATION	H

HELP Display for EFFECT Morphology Category

EFFECT TABLE		
TISSUE	MORPH_CATEGORIES	DX
HEMOLYMPH	DEGENERATION	G
HEMOLYMPH	ALTERED GROWTH	G
LYMPH NODES	INFLAMMATION	H
BONE	INFLAMMATION	H

DOSE TABLE		
TISSUE	DOSE	DATE

F1-General Help

HOME,END,T,I,PGUP,PGDN-Scroll Text

F6-Print Text

Press any other key to exit HELP...

NATIONAL RADIobiology ARCHIVES

ANIMAL: A000202

PRIMARY: N

CONTROL: Y

ACCESSION_DATE: 9/16/91

LAB:

STUD:

GROU:

SPEC:

ASSI:

BIRT:

1ST:

INSU:

REMO:

DEAT:

D DI:

COD:

FIND:

TIS:

TIS:

HEM:

HEM:

LYMPH NODES

BONE

HELP for field: MORP_CATEGORY

DATA TYPE: A7

NRA FIELD NAME: MORP_CATEGORY

The 9 morphology categories are:

Category Translation

INFLAMMATION Inflammation and Fibrosis

DEGENERATION Degeneration, Necrosis, Dystrophy, Atrophy

ALTERED GROWTH Alterations, Hypertrophy, Hyperplasia, etc.

BENIGN NEOPLASH Neoplasm, benign

BENIGN OR MALIG? Neoplasm, uncertain if benign

CA. IN SITU Carcinoma in situ

PRIMARY MALIG Malignant, primary

MALIG W/METAST Malignant, metastatic

PRI OR METASTIC? Malignant, uncertain if primary

HELP Display for DOSE

EFFECT TABLE		
TISSUE	MORPHOLOGY	DX
HEMOLYMPH	DEGENERATION	G
HEMOLYMPH	ALTERED GROWTH	G
LYMPH NODES	INFLAMMATION	H
BONE	INFLAMMATION	H

DOSE TABLE		
TISSUE	DOSE	DATE

F1-General Help

HOME,END,↑,↓,PGUP,PGDN-Scroll Text
Press any other key to exit HELP...

F6-Print Text

ANIMAL: U000960

PRIMARY: Y

CONTROL: N ACCESSION_DATE: 11/09/90

LAB

STU

GRO

SPE

NRA FIELD NAME: DOSE AND DATE

ASS

BIR

The dose and dose units are shown in the middle column of the DOSE
1ST window. The date associated with the dose is shown at the left.

3

INS

REM

REM

ABSORBED DOSE:

DEA

E E

COD

FIN

If the Dose is shown in absorbed dose units (Rad, Sv), the dose was
computed from time of administration of the radionuclide to some
point in the animal's life. The DOSE TABLE window shows the dose
computed from insult to date of histopathological diagnosis of a
biopsy or the date of death as appropriate.

D;

TI

SPE

The NRA DOSE table contains 3 fields for dose:

ASS

BIR

DOSE_LAST_NORMAL from insult to the date the animal
1ST was last determined to be normal

3

INS

REM

DOSE_CLIN_DX from insult to the date of clinical
DEA diagnosis of a suspected neoplasm

E E

COD

FIN

DOSE_TISSUE_DX from insult to date of histopathological
diagnosis.

D;

TI

LY

The DOSE_TISSUE_DX is shown in the DOSE_TABLE window of
the Distributed Access Package.

SPE

ASS

BIR

1ST

INS

REM

DEA

E E

If the Dose is shown in exposure units (R or Gy), the date shown
may be either the date of exposure or the date of death or it may
be left blank, depending on the practice at the donating laboratory.

3

LY

ERROR IS DOSE ESTIMATION:

COD

FIN

Absorbed dose is a result of computations based on assumptions about
the biological and physical characteristics of the situation. The
NRA DOSE table has a field for an estimate of error associated with the
dose estimate. These are not shown in the NRA Distributed Access

D;

TI

LY

DOSE TABLE window.

72

LY

Zoom Process

One of the most frequent complaints about Version 1.0 was the inadequate documentation of the zoom process. We have revised the entire zoom process for Version 1.1, and provided instructions in the MORE ZOOM option of the HELP menu.

Zoom Instruction Help Screen

NRA DEMONSTRATION - ZOOM INSTRUCTIONS																										
NRA INFORMATION SYSTEMS ZOOM OPTION																										
[CTRL] [Z] = ZOOM	[ALT] [Z] = ZOOM NEXT																									
<p>The ZOOM option is a powerful way to search for a particular value in a table, even if you're not sure exactly how it is stored. You can either search for an exact value or use one of the wildcard operators to construct a pattern to use in the search. The .. operator stands for a series of any number of characters, including no characters or blank spaces. The @ operator stands for any single character.</p> <p>The character matching is CASE SENSITIVE unless a wildcard operator is used. Thus, if you know exactly what you are looking for, you do not need a wildcard, otherwise it is advisable to append "..." to your search string.</p> <p>In this demonstration system, the ZOOM option is available for all fields on the main window of any browse screen. Place the cursor in the field of interest. Then press CTRL-Z. A window will appear near the top of the screen,</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p style="margin: 0;">Zoom to a string in a field: _____</p> <p style="margin: 0;">FIELD NAME</p> <p style="margin: 0;">Type in search string (wildcard = ...) [F2], [ENTER] - execute search</p> </div> <p>You may then type in some characters. When you press ENTER or F2, the browse screen will shift to the next record in the table with field contents matching the search string.</p> <p>Examples (where FIELD NAME = ANIMAL_ID)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">User enters:</th> <th style="width: 40%;">Zoom request:</th> <th style="width: 30%;">Result:</th> </tr> </thead> <tbody> <tr> <td>I00009E</td> <td>CASE SENSITIVE match</td> <td>I00009E</td> </tr> <tr> <td>i00009e</td> <td>CASE SENSITIVE match</td> <td>Match not found</td> </tr> <tr> <td>i00009e..</td> <td>CASE INSENSITIVE match</td> <td>I00009E</td> </tr> <tr> <td>U..</td> <td>find first animal_id starting with "U"</td> <td>U000002</td> </tr> <tr> <td>..2</td> <td>find first animal_id with a "2" in any position</td> <td>A000202</td> </tr> <tr> <td>aaa2..</td> <td>find first animal_id with a "2" in the 4th character</td> <td>U002085</td> </tr> <tr> <td>..29</td> <td>find first animal_id with a "2" in the next to last position</td> <td>A000220</td> </tr> </tbody> </table>			User enters:	Zoom request:	Result:	I00009E	CASE SENSITIVE match	I00009E	i00009e	CASE SENSITIVE match	Match not found	i00009e..	CASE INSENSITIVE match	I00009E	U..	find first animal_id starting with "U"	U000002	..2	find first animal_id with a "2" in any position	A000202	aaa2..	find first animal_id with a "2" in the 4th character	U002085	..29	find first animal_id with a "2" in the next to last position	A000220
User enters:	Zoom request:	Result:																								
I00009E	CASE SENSITIVE match	I00009E																								
i00009e	CASE SENSITIVE match	Match not found																								
i00009e..	CASE INSENSITIVE match	I00009E																								
U..	find first animal_id starting with "U"	U000002																								
..2	find first animal_id with a "2" in any position	A000202																								
aaa2..	find first animal_id with a "2" in the 4th character	U002085																								
..29	find first animal_id with a "2" in the next to last position	A000220																								

aaaaaa2	find first animal_id with a "2" in the last position	A000202
---------	--	---------

If there is no match for the search string, a small message window will appear at the bottom right of the screen.

The ZOOM function is only available for fields in the main browse screen. It cannot find a match for fields in windows which have double line borders.

ZOOM available for fields in main portion of browse screen

ZOOM not functional in this window

ALT-Z - ZOOM NEXT is used to zoom to the next record which matches the zoom request.

Examples (where FIELD NAME = ANIMAL_ID)

User enters:	Result:
[CTRL] [Z] 100009E	I00009E
[ALT] [Z]	Match not found
[CTRL] [Z] U..	U000002
[ALT] [Z]	U000019
[ALT] [Z]	U000027
[CTRL] [Z] ..2	A000202
[ALT] [Z]	DD00F12
[CTRL] [Z] a002..	U002085
[ALT] [Z]	Match not found
[CTRL] [Z] ..2a	A000220
[ALT] [Z]	A000421
[ALT] [Z]	DD00F24
[CTRL] [Z] aaaaaaa2	A000202
[ALT] [Z]	DD00F02
[ALT] [Z]	DD00F12

The following screens, taken from the Bibliography browse screen with the cursor in the TITLE field, show the revised zoom window, its use and associated *F1* help.

Zoom Example - after user enters *CTRL-Z*

F1-HELP [CTRL] [Z]-ZOOM ESC-RETURN TO MENU		VIEWING RECORD 1 OF 139	
F3,F4-CHANGE WINDOW F6-PRINT		HOME,END,↑,↓,PGUP,PGDN-SCAN RECORDS	
NATIONAL RADIobiology ARCHIVES			
BAR_CODE: 0000001			
TITLE: Life-Span Effects of Ionizing Radiation in the Beagle Dog			
SUBTITLE		Zoom to a string in field: <input type="text" value="S."/>	
JOURNAL		TYPE IN SESSION ENTRY OR F1 HELP	
JOURNAL		F22-ENTER/EXECUTE SEARCH	
PUBLISH			
LOCATION			
VOLUME:		YEAR:1989 PAGES: 323	
REPORT_NO:		PNL-6822;UC-608	
DOC_TYPE:		BOOK DONOR_ID: RCT LAB_ID:	
BIBLIOGRAPHY AUTHOR TABLE			
LAST_NAME	FIRST_NAME	MIDDLE_NAME	STATUS
Thompson	Ray	C	A 1
INVENTORY LOCATION TABLE			
LAB: P	BUILDING: 3767	ROOM: 0018	CABINET: 0003 SHELF: 0001 POS: 0001 1

Zoom Example - after user enters *F1* for HELP

In addition to the zoom instructions available from the HELP menu, there is a one screen summary available by pressing *F1* while viewing the zoom window.

F1-HELP [CTRL] [Z]-ZOOM ESC-RETURN TO MENU	VIEWING RECORD 1 OF 139	
F3,F4-CHANGE WINDOW F6-PRINT	HOME,END,↑,↓,PGUP,PGDN-SCAN RECORDS	
<hr/>		
BAR_CODE: 0000001	NATIONAL RADIobiology ARCHIVES	
<hr/>		
ZOOM HELP		
CTRL-Z - zoom on a browse field (use cursor to select field)		
Zoom is a method of rapid browsing. You supply a string of characters which you want to match in this data field. If you wish, you may use two dots as a wildcard to indicate that you do not care what is found in that portion of the field. The ? operator stands for a single character.		
Examples of zoom in the ANIMAL field:		
User input:	Zoom request:	Result:
U000002	zoom to animal U000002	
I..	zoom to first animal which starts with "I"	I00002C
..2	zoom to first animal containing a "2"	A000202
aaa2..	zoom to first animal with "2" as 4th character	U002085
ALT-Z will repeat the current zoom request, searching for the next match.		
F2 or ENTER will start the zoom process		
Press any key to exit Zoom Help...		

To use the zoom feature, enter the search string in the zoom window and press enter (or *F2*). The following two screens illustrate a case insensitive search of the TITLE field for a title starting with "inhaled." Note that the user appended ".." to the search string "inhaled." This use of a wildcard operator 1) insures that the search is case insensitive, and 2) allows zoom to the first record with title starting "inhaled" followed by any characters.

Zoom Example - after user enters "inhaled.."

F1-HELP [CTRL] [Z]-ZOOM ESC-RETURN TO MENU VIEWING RECORD 1 OF 139
 F3,F4-CHANGE WINDOW F6-PRINT HOME,END,↑,↓,PGUP,PGDN-SCAN RECORDS
 NATIONAL RADIobiology ARCHIVES

BAR_CODE: 0000001
 TITLE: Life-Span Effects of Ionizing Radiation in the Beagle Dog

SUBTITLE: Zoom to a string in field: S.
 JOURNAL:
 JOURNAL: Type in search string (Wildcard = ...)
 PUBLISH: [F2], [ENTER] - execute search
 LOCATIO:

VOLUME: YEAR:1989 PAGES: 323
 REPORT_NO: PNL-6822;UC-408
 DOC_TYPE: BOOK DONOR_ID: RCT LAB_ID:

BIBLIOGRAPHY AUTHOR TABLE
 LAST_NAME FIRST_NAME MIDDLE_NAME STATUS
 Thompson Roy C A 1

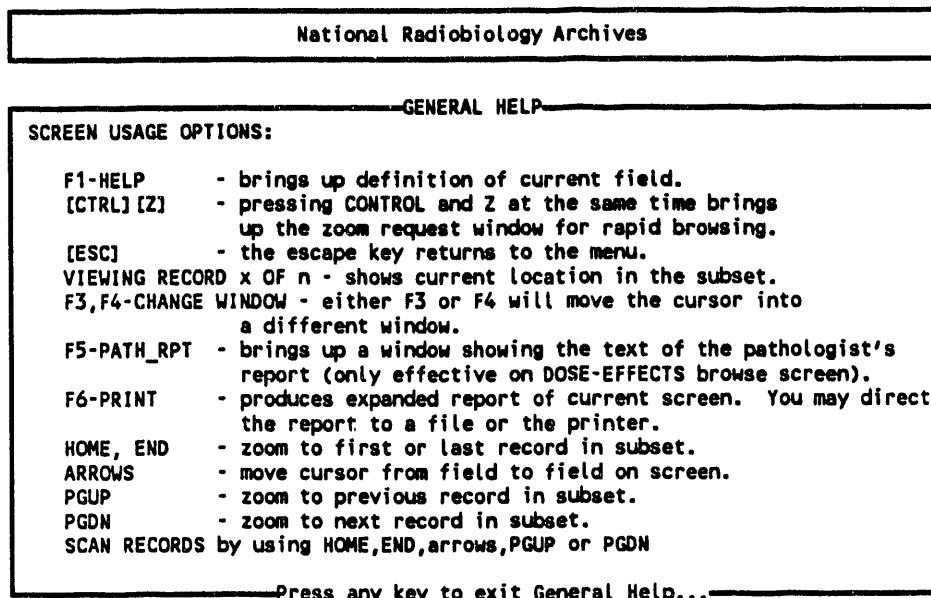
INVENTORY LOCATION TABLE
 LAB: P BUILDING: 3767 ROOM: 0018 CABINET: 0003 SHELF: 0001 POS: 0001 1

Zoom Example - after zoom to "inhaled.."

General Help Screen

Version 1.1 contains several significant enhancements to the help screens. Those related to the Dose-Effects Summary browse screen are shown in the section showing the revised EFFECTS TABLE window. The help screens associated with the **CTRL-Z ZOOM** process was shown as part of the discussion of the revised zoom interface. Another enhancement in Version 1.1 is called General Help.

General Help is available when **F1** is pressed while viewing a text screen. It is designed to provide the user with a general idea of what options are available.



Pathology Text

The pathology text feature was not fully documented in Version 1.0, and it had a confusing name. It was called CLIN_TEXT in Version 1.0, and is known as PATH_TEXT in Version 1.1. This feature allows viewing or printing of a narrative summary written by the pathologist. Pathology summaries have been donated for many of the UTAH beagles. They are not yet available from other donating institutions.

The pathology text is available from the browse screen via the *F5* option. Since most animals do not have associated pathology text, the typical response to the *F5* key is a message, "Pathology text not available for this animal." Utah animals which have pathology text files are indicated by the phrase, "Pathology report available as NRA file," as part of the Findings field.

Pathology Text Availability Message

F1-HELP [CTRL] [Z]-ZOOM		ESC-RETURN TO MENU	VIEWING RECORD 229 OF 294	
F3,F4-CHANGE WINDOW		F6-PRINT	HOME,END,T,I,PGUP,PGDN-SCAN RECORDS	
NATIONAL RADIobiology ARCHIVES				
ANIMAL: U000450	PRIMARY: Y	CONTROL: Y	ACCESSION_DATE: 11/09/90	
LAB: U University of Utah				
STUDY: 05 UTAH-1954 strontium-90				
GROUP: 01 Control, 14 to 21 months old				
SPECIES: Canis familiaris, Beagle				
ASSIGNED ID: M006S00		SIRE: U009910	DAM: U000101	
BIRTH: 2/15/57	SEX: M			
1ST_INSULT: 5/27/58	1ST_INSULT AGE: 1.3	LAST: 5/27/58	LAST_INSULT AGE: 1.3	
1ST_INSULT:		1ST_WEIGHT:	9680	
REMOVAL:	REMOVAL AGE: n/a			
DEATH: 5/05/71	DEATH AGE: 14.2	RESULTS_FINAL: N		
E Euthanized - killed because death was judged imminent.				
COD: not available				
FINDINGS: MELANOMA (MOUTH);				
EFFECT TABLE		DOSE TABLE		
TISSUE	MORPHOLOGY	DX	DOSE	DATE
SKIN+MAMMARY	M ALTERED GROWTH	M		
LYMPH NODES	M INFLAMMATION	M		
LYMPH NODES	M DEGENERATION	M		
LYMPH NODES	M ALTERED GROWTH	M		

Pathology Text Example - after user presses F5

F1-General Help	HOME,END,↑,↓,PGUP,PGDN-Scroll Text	F6-Print Text
Press any other key to return to Summary browse...		
<hr/> NATIONAL RADIOBIOLOGY ARCHIVES <hr/>		
ANIMAL: U000450	PRIMARY: Y	CONTROL: Y ACCESSION_DATE: 11/09/90
LAB: U University of Utah		
STUDY: 05 UTAH-1954 strontium-90		
GROUP: 01 Control, 14 to 21 months old		
<hr/> PATHEOLOGY REPORT OF ANIMAL: U000450 <hr/>		
SUMMARY		
<p>M650 was sacrificed at 5192 days age and 4726 days postinjection because of an oral melanoma. Clinical factors were: multiple minor bite wound episodes; removal of an embedded brown dog tick; fistula in soft palate that ultimately healed; prominent systolic bruit; proteinuria and persistently elevated BUN noted 2 1/2 years prior to death; tonsillitis that produced difficult swallowing; and an oral melanoma which was noted 1 month prior to sacrifice. The hemograms indicated an age-related leukopenia; a persistently elevated sedimentation rate at 9 years PI; and a terminal anemia and neutrophilia. The blood chemistry studies were characterized by an elevated cholesterol until 2 years PI and a progressive elevation of the BUN during the final 2 1/2 years. Significant histopathological findings were: An oral melanoma with contingent invasion into the mandible and metastases to several lymph nodes and the lungs; a relatively small cholangiocarcinoma and focal degeneration in the liver; A leydig cell tumor of the testis; a pheochromocytoma of the adrenal gland, with extensions into the inferior vena cava; focal ulceration of the tongue; focal hyperplasia of one mammary gland; a salivary cyst; marked glomerulonephritis; moderate interstitial nephritis; cystic dilatation of multiple kidney tubules; focal interstitial inflammation in the lungs; parathyroid hyperplasia; cystic hyperplasia and mild leukocytosis in the prostate; interstitial fibrosis of the thyroid; a small thyroid adenoma; and leukocytosis in the maxilloturbinate bone.</p> <p>Radiographic observations at autopsy were: Rarefactions in the palatine bone and in the calvarium (3 mm diameter) which was associated with focal osteogenesis; tumor involving the left mandible in the region extending from the canine to the first premolar; degenerative osteoarthritis of the right stifle joint; ossifying spondylosis of the C6-7 and L3-4; marked focal dystrophic calcification of the lungs; and 30 missing teeth.</p>		
GNT		

Pathology Text Example Output

When the pathology text is shown on the screen (see previous page), an option to print the text is available. When the user presses *F6*, two choices are presented, PRINTER or FILE. The example below was sent to a file.

4/21/92

National Radiobiology Archives

Page 1

SUMMARY

M6SO was sacrificed at 5192 days age and 4726 days postinjection because of an oral melanoma. Clinical factors were: multiple minor bite wound episodes; removal of an embedded brown dog tick; fistula in soft palate that ultimately healed; prominent systolic bruit; proteinuria and persistently elevated BUN noted 2 1/2 years prior to death; tonsillitis that produced difficult swallowing; and an oral melanoma which was noted 1 month prior to sacrifice. The hemograms indicated an age-related leukopenia; a persistently elevated sedimentation rate at 9 years PI; and a terminal anemia and neutrophilia. The blood chemistry studies were characterized by an elevated cholesterol until 2 years PI and a progressive elevation of the BUN during the final 2 1/2 years. Significant histopathological findings were: An oral melanoma with contingent invasion into the mandible and metastases to several lymph nodes and the lungs; a relatively small cholangiocarcinoma and focal degeneration in the liver; A leydig cell tumor of the testis; a pheochromocytoma of the adrenal gland, with extensions into the inferior vena cava; focal ulceration of the tongue; focal hyperplasia of one mammary gland; a salivary cyst; marked glomerulonephritis; moderate interstitial nephritis; cystic dilatation of multiple kidney tubules; focal interstitial inflammation in the lungs; parathyroid hyperplasia; cystic hyperplasia and mild leukocytosis in the prostate; interstitial fibrosis of the thyroid; a small thyroid adenoma; and leukocytosis in the maxilloturbinate bone.

Radiographic observations at autopsy were: Rarifications in the palatine bone and in the calvarium (3 mm diameter) which was associated with focal osteogenesis; tumor involving the left mandible in the region extending from the canine to the first premolar; degenerative osteoarthritis of the right stifle joint; ossifying spondylosis of the C6-7 and L3-4; marked focal dystrophic calcification of the lungs; and 30 missing teeth.

GNT

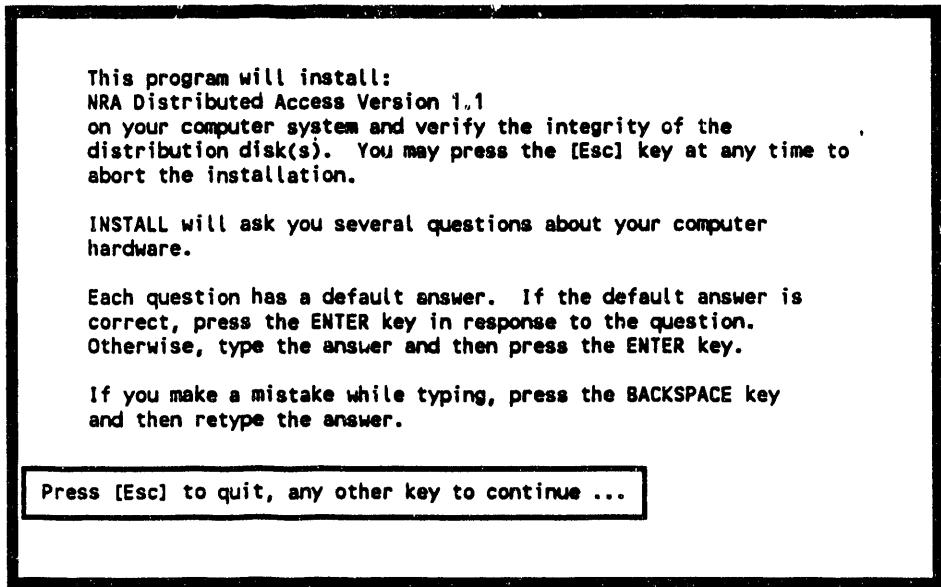
Detailed Installation Instructions

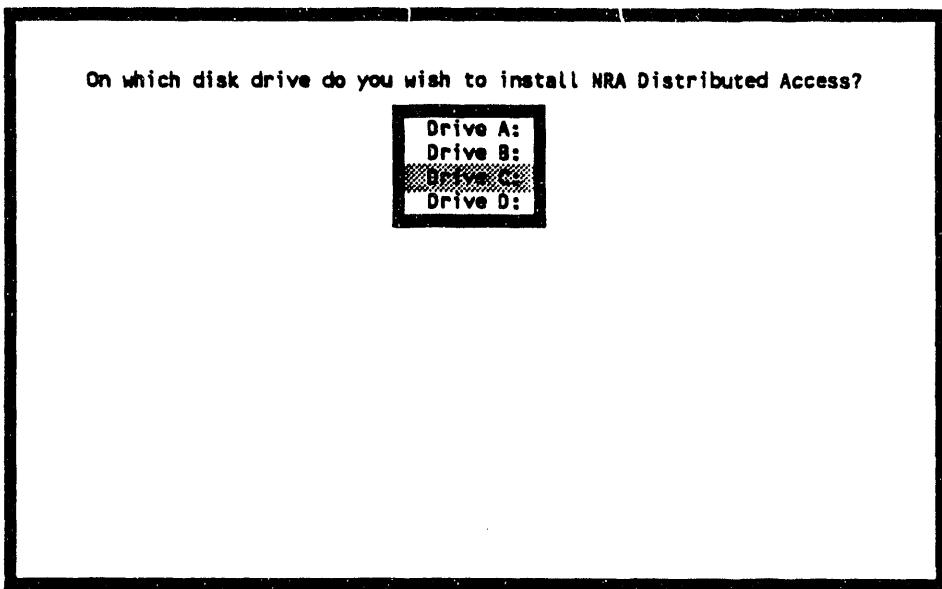
The installation process is quite simple. Place diskette 1 in the floppy disk drive, start the install program, and answer a few questions. We have set the default answers to install the NRA software in a directory named \NRA on the drive of your choice. To accept our defaults, simply hit the enter key in response to all questions.

To start the install process, enter the DOS commands to set your default to the A drive and execute the program INSTALL.

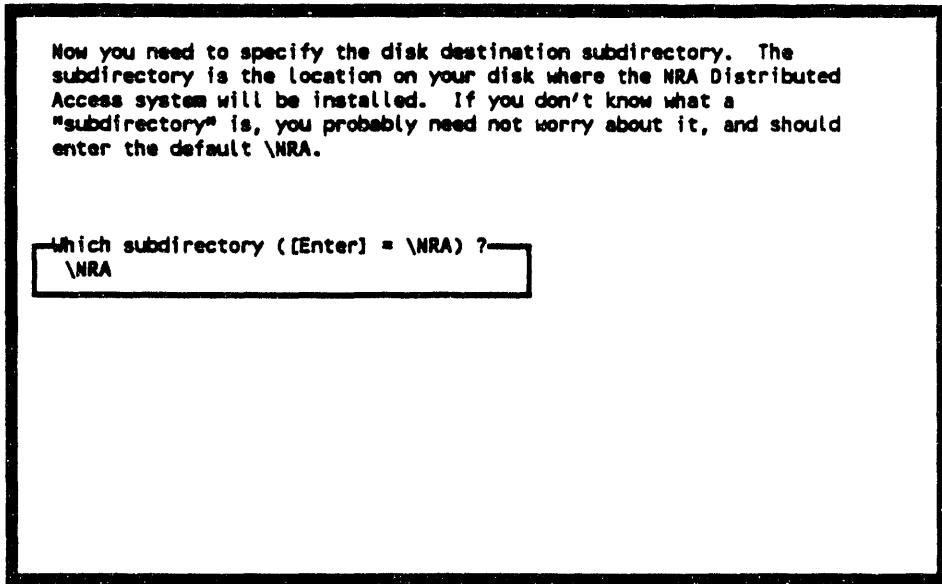
```
C:\> A:  
A:\> INSTALL
```

Read each of the following screens. Hit any key to accept the default and continue.



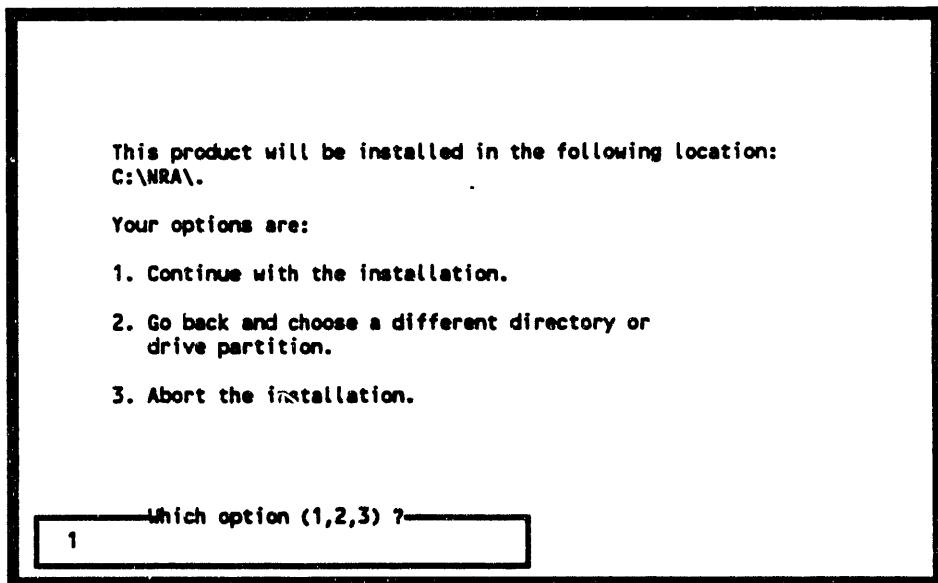


USE ARROW KEYS TO HIGHLIGHT THE DISK YOU SELECT, We chose C: for this example.

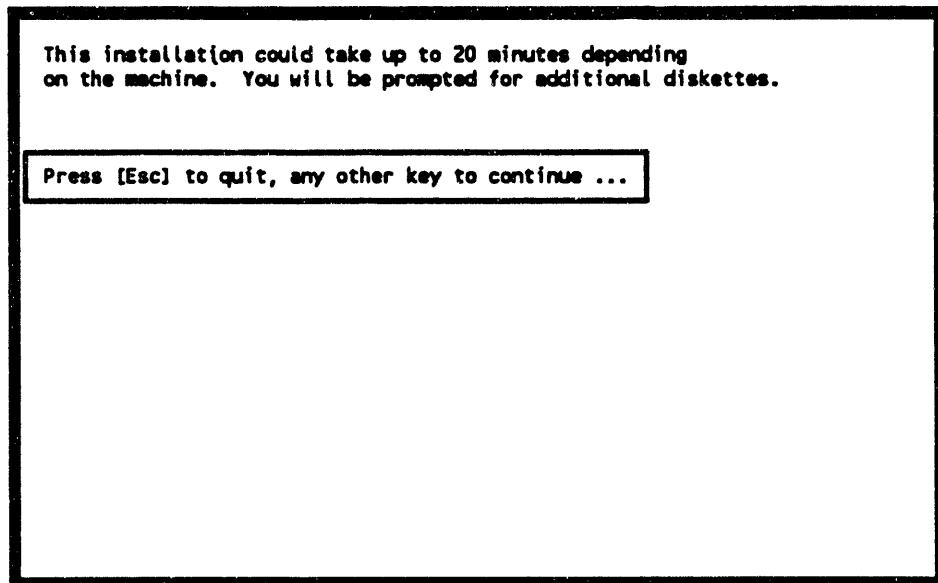


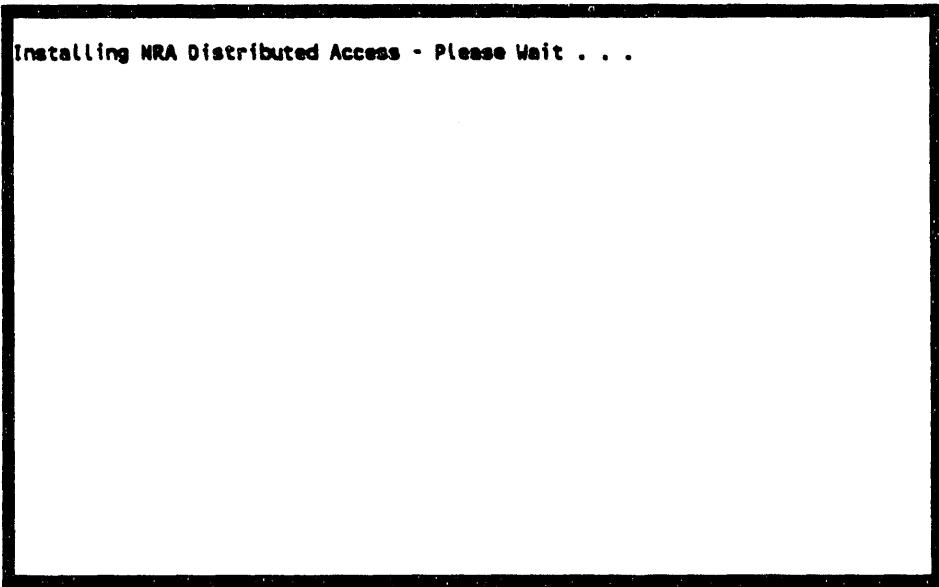
We recommend that you choose the default, \NRA.

You may hit *Enter* to confirm your selection:



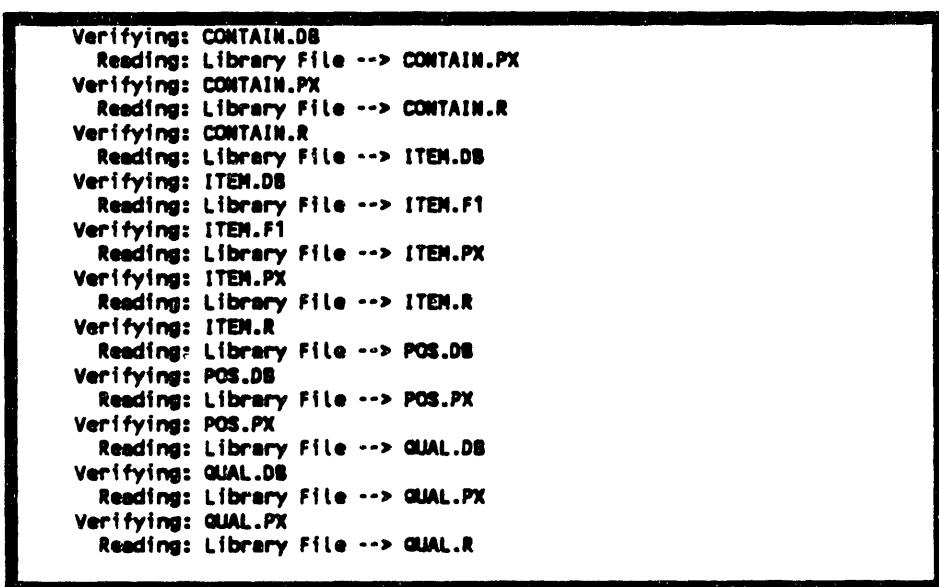
Then you are advised that the installation could take several minutes.





Installing NRA Distributed Access - Please Wait . . .

After the process gets started, the names of the files will stream by on the screen.



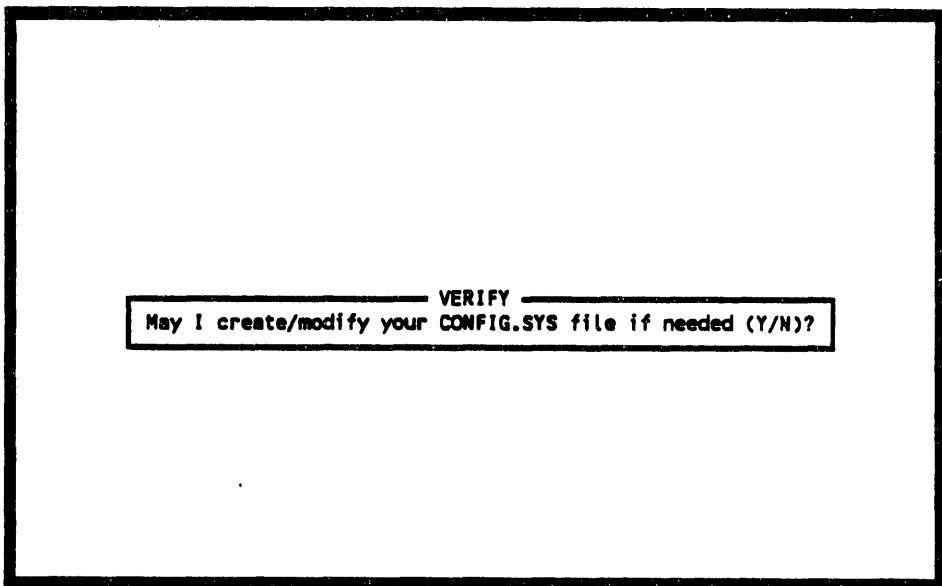
```
Verifying: CONTAIN.DB
  Reading: Library File --> CONTAIN.PX
Verifying: CONTAIN.PX
  Reading: Library File --> CONTAIN.R
Verifying: CONTAIN.R
  Reading: Library File --> ITEM.DB
Verifying: ITEM.DB
  Reading: Library File --> ITEM.F1
Verifying: ITEM.F1
  Reading: Library File --> ITEM.PX
Verifying: ITEM.PX
  Reading: Library File --> ITEM.R
Verifying: ITEM.R
  Reading: Library File --> POS.DB
Verifying: POS.DB
  Reading: Library File --> POS.PX
Verifying: POS.PX
  Reading: Library File --> QUAL.DB
Verifying: QUAL.DB
  Reading: Library File --> QUAL.PX
Verifying: QUAL.PX
  Reading: Library File --> QUAL.R
```

The computer will "beep" when it is time to change diskettes.

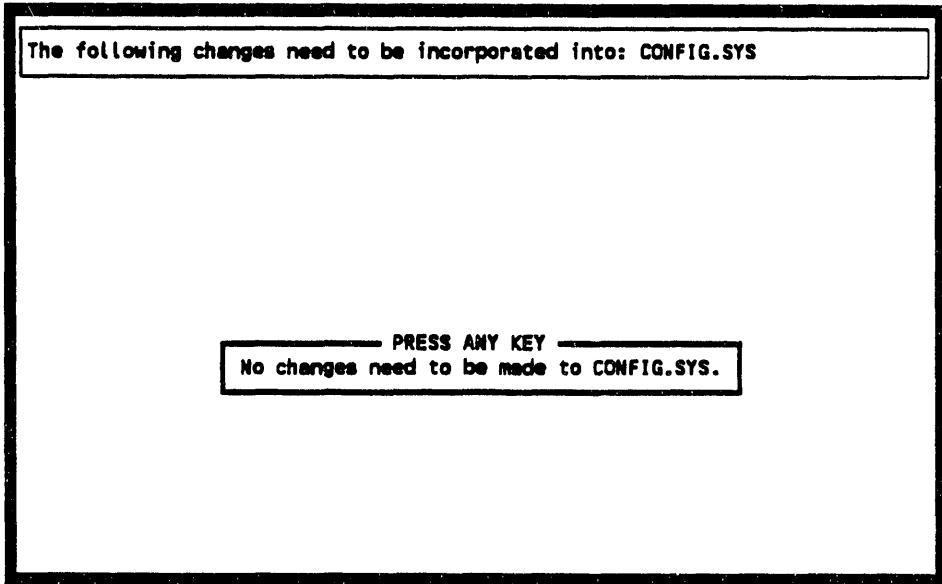
```
Decompressing: C:\NRA\S\V\SPECIES.R1
Writing: C:\NRA\S\V\SPECIES.R10
Decompressing: C:\NRA\S\V\SPECIES.R10
Writing: C:\NRA\S\V\UNITS.DB
Decompressing: C:\NRA\S\V\UNITS.DB
Writing: C:\NRA\S\V\UNITS.PX
Decompressing: C:\NRA\S\V\UNITS.PX
Writing: C:\NRA\S\V\UNITS.R1
Decompressing: C:\NRA\S\V\UNITS.R1
Writing: C:\NRA\S\V\UNITS.R10
Decompressing: C:\NRA\S\V\UNITS.R10
Writing: C:\NRA\UTIL\DEMOUTIL.LIB
PRESS ANY KEY
R Please place the Master Distribution Disk labeled
Ver "NRA Distributed Access 2" Version: 1.1 in drive A:
R Press the [Esc] key to abort, any other key to continue...
Ver
Decompressing: C:\NRA\UTIL\DEMOUTIL.LIB
Writing: C:\NRA\UTIL\MAIN.SC
Decompressing: C:\NRA\UTIL\MAIN.SC
Writing: C:\NRA\UTIL\WENUMADE.LIB
Decompressing: C:\NRA\UTIL\WENUMADE.LIB
```

Place the **diskette 2** in the disk drive and hit any key to continue.

When install is complete, your configuration is checked.



You must have at least FILES = 20 and BUFFERS = 20, if you don't, Install will change things for you. If you are unsure what this step is about, consult your computer support person.



Finally, you must place diskette 1 back in the drive so that the installation program can complete its bookkeeping.

— PRESS ANY KEY —
Please remove the disk in drive A:
and replace it with the disk labeled:
NRA Distributed Access 1
Press the [Esc] key to abort
Any other key to continue...

Place diskette 1 back in the disk drive and hit any key to continue.

Installation of NRA Distributed Access is now finished.

Press any key to continue ...

To run the NRA Distributed Access application, enter commands to change your default to the NRA disk and directory and start the program:

A:\> C:
C:\> CD NRA
C:\NRA> NRA

Suggestions or Problems? - Report them to us

The National Radiobiology Archives is interested in your reaction to this software and associated subset of data. Our goal is to provide you with a convenient way to learn about the archives. We encourage you to "play" with the data.

If you encounter any problems in the use of this software, please describe them on the form appended to this document and send them to the address indicated.

You can also use the same form to send in suggested improvements.

Combined Index for V1.0 and V1.1

".." wildcard (V1.1: 16)
"@" wildcard (V1.1: 16)
\NRA DOS directory (V1.0: 7-8, 39)

A

Abstract *Table of Bibliography Database*
Contents (V1.0: 47)
Description (V1.0: 37)
Acknowledging NRA information
(V1.1: 5)
Accession date *field* (V1.0: 59)
ALT-Z *keystroke*
see ZOOM, ZOOM NEXT
(V1.1: 16, 21)
Animal ID *field* (V1.0: 59)
ANIMAL option on SEARCH menu
(V1.0: 17)
example (V1.0: 20)
F1 shows list of (V1.0: 20)
New name is NRA ID's (V1.1: 8)
Animal Quantity *field* example
(V1.0: 43)
Animal *Table* of Dose-Effect
Database
Contents (V1.0: 41)
Description (V1.0: 34)
ANL, donor laboratory (V1.1: 11),
(V1.0: 1, 34, 35, 41, 43,
53, 55-60, 62, 67)
ARROW *keystrokes* (V1.1: 21)
Assigned ID *field* (V1.0: 60)
Assigned ID option on SEARCH
menu (V1.0: 17, 20)
New name is Lab ID's
(V1.1: 8)
AUTHOR option of Bibliography Search

menu (V1.0: 17)
Author *Table* of Bibliography *Database*
Contents (V1.0: 46)
Description (V1.0: 37)

B

Bar Code *field* (V1.0: 1, 53, 60)
Bibliography *Database* (V1.0: 36)
Browse Screen (V1.0: 30)
Contents of (V1.0: 46)
Description of (V1.0: 49)
Menu (V1.0: 17, 19)
Report example (V1.0: 31)
Subset included in Distributed
Access Package (V1.1: 7)
(V1.0: 46, 49)
Tables in:
Abstract *Table* (V1.0: 37)
Author *Table* (V1.0: 37)
Book *Table* (V1.0: 36)
Key Word *Table* (V1.0: 37)
Birth Date *field* (V1.0: 61)
Book *Table* of Bibliography *Database*
Contents (V1.0: 46)
Description (V1.0: 37)
BROWSE option of menus (V1.0: 17)
Browse Screen
Bibliography (V1.0: 31)
Dose-Effects (V1.1: 10-12)
example V1.1: (V1.1: 11)
Inventory (V1.0: 28)
Summary (V1.0: 27)
Building *field* (V1.0: 61)
Burden Type *field* (V1.0: 61)

C

Cabinet *field* (V1.0: 61)

- Category
 - Morphology (V1.0: 68)
 - Tissue (V1.0: 73)
- Cause of Death *field* (V1.0: 62)
- CHANGE WINDOW *keystroke* (V1.1: 7, 21)
- Changes to Version 1 (V1.1: 6, 8, 10)
- Citing the NRA (V1.1: 5)
- CLIN_TEXT
 - example (V1.1: 22)
 - new name is PATH_RPT (V1.1: 7, 22)
- Comments *field* (V1.0: 62)
- Computing Environment (V1.0: 7)
 - Disk Storage required (V1.0: 39), (V1.1: 6)
 - Paradox® software (V1.0: 7)
 - required hardware (V1.0: 7)
 - software requirements (V1.0: 7)
- Config.sys (V1.1: 6, 27)
 - files and buffers minimum (V1.1: 6, 27)
- Container *field* (V1.0: 62)
- Control *field* (V1.0: 63)
- Control Table of Dose-Effects
 - Database*
 - Contents (V1.0: 43)
 - Description (V1.0: 35)
- CTRL-Z *keystroke* (V1.1: 16)
 - see ZOOM
- Cursor Control *keystrokes* (V1.0: 50)
- CURSOR KEY option on HELP menu (V1.0: 17, 50)
- Cursor Related Help (V1.0: 59)
- D**
- Dam ID *field* (V1.0: 63)
- DAVIS, donor laboratory (V1.0: 1, 24-28,
- 34-35, 41-42, 44, 46, 51, 53, 55-59, 61, 65-66, 68, 71, 75, 78)
- Death Date *field* (V1.0: 63)
- Detail *Table of Inventory Database*
 - Contents (V1.0: 45)
 - Description (V1.0: 36)
- DETAIL option on MAIN menu (V1.0: 17-18)
 - new name is MORE (V1.1: 8)
- Detailed *Database Tables* (V1.1: 9), (V1.0: 1, 18, 37)
 - Description (V1.0: 51)
- Directory
 - NRA Directory Tree (V1.0: 39)
- Disk Storage Required (V1.0: 7, 39)
- Diskette 1 (V1.1: 25, 31), (V1.0: 9)
- Diskette 2 (V1.0: 11), (V1.1: 29)
- Disposition *field* (V1.0: 64)
- Distributed Access Subset
 - defined (V1.0: 2)
 - V1.1: compared with V1.0 (V1.1: 7)
- Distribution Media (V1.0: 5, 9)
- Distribution via NESC (V1.0: 5)
- DNIMAGE *keystroke* (V1.1: 7)
- Document Type *field* (V1.0: 64)
- Donor Identification *field* (V1.0: 64)
- Dose (V1.1: 15)
- DOSE-EFFECTS *Database*
 - Contents (V1.0: 56-57)
 - Description (V1.0: 33)
 - Menu (V1.0: 18)
 - old name was SUMMARY (V1.1: 8)
 - Search Menu (V1.0: 20)
 - space required (V1.0: 39)

Tables in:

Animal Table (V1.0: 34)
Control Table (V1.0: 35)
Group Table (V1.0: 34)
Lab Table (V1.0: 33)
Study Table (V1.0: 33)
Tissue Effect Table
 (V1.0: 35)

Tissue Dose Table (V1.0: 34)

DX field

example (V1.1: 11)
Help display (V1.1: 12)
 new in V1.1: (V1.1: 7)

E

END keystroke (V1.1: 21) (V1.0: 50)
ENTER keystroke (V1.0 15)
 Error Reporting and Assistance
 (V1.0: v, 5)
ESC keystroke (V1.0: 15, 52)

F

F1-HELP keystroke (V1.0: 15, 52)
 General help for (V1.1: 21)
 shows list of animals on
 search (V1.0: 21)
F2 keystroke (V1.0: 52)
F3 keystroke (V1.0: 52)
F3,F4-CHANGE WINDOW
 keystrokes (V1.0: 52)
 general help for (V1.1: 21)
F5-PATH_RPT keystroke
 general help for (V1.1: 21)
F6-PRINT keystroke (V1.0: 52)
 Summary Browse screen
 example (V1.0: 24)
 general help for (V1.1: 21)
F7 through F12 keystrokes
 (V1.0: 52)

File

example of report sent to
 (V1.1: 24)
 instructions for sending
 report to (V1.0: 26)
Final Insult Date field (V1.0: 64)
Findings field (V1.0: 65)
First Insult Date field (V1.0: 65)
First Name field (V1.0: 65)
Function Keys (V1.0: 3, 52)
 FUNCTION KEY option of HELP menu
 (V1.0: 17, 52)
Function Table of Dose-Effects
Database
 Contents (V1.0: 43)
 Description (V1.0: 35)

G

GENERAL option on HELP menu
 (V1.1: 8)
General Help screen (V1.1: 21)
Group Identification field (V1.0: 65)
Group Table of Dose-Effects
Database
 Contents (V1.0: 41)
 Description (V1.0: 34)

H

Hardware requirements (V1.0: 7)
HELP (F1) keystroke (V1.1: 10,
 12, 18, 21), (V1.0:
 52, 59)
HELP Menu (V1.0: 50, 52, 55)
HOLDINGS option on menus
Bibliography (V1.0: 17, 49)
Detail (V1.0: 17, 51)
Inventory (V1.0: 17, 53)
 new name is READ
 (V1.1: 8)

Summary (V1.0: 17, 56)
HOME keystroke (V1.1: 21)
 (V1.0: 50)

I**Identification**

Animal (V1.0: 59)
 Assigned (V1.0: 60)
 Dam (V1.0: 63)
 Donor (V1.0: 64)
 Group (V1.0: 65)
 Laboratory (V1.0: 67)
 Sire (V1.0: 71)
 Study (V1.0: 72)

Impact of upgrade to V1.1: (V1.1: 5)

Initial, Middle *field* (V1.0: 67)

Installation

\NRA - recommended target
 directory (V1.1: 25)

Brief instructions

Version 1.0 (V1.0: iii)
 Version 1.1 (V1.1: 6)

Detailed instructions

Version 1.0 (V1.0: 9)
 Version 1.1
 (V1.1: 25)

second diskette (V1.1: 29)

selection of target
 directory (V1.1: 25)
 disk drive (V1.1: 23)

Insult Date *fields*

Final (V1.0: 64)
 First (V1.0: 65)

Insult Units *field* (V1.0: 73, 66)

Introductory Subset

Difference between versions
 (V1.1: 7-8)

Selection

Version 1.0 (V1.0: 39)
 Version 1.1 (V1.1: 7)

Inventory Database

Browse Screen example (V1.0: 29)
 Contents (V1.0: 43)
 Described (V1.0: 53)
 Menu (V1.0: 17, 19, 53)
 Report example (V1.0: 30)
 Tables in:

Detail *Table* (V1.0: 36)
 Location *Table* (V1.0: 36)
 Loan *Table* (V1.0: 36)
 Master *Table* (V1.0: 35)
 Patron *Table* (V1.0: 36)

Item *field* (V1.0: 66)
 Item Quantity *field* (V1.0: 67)

ITRI, donor laboratory (V1.0: 30-31, 34-
 35, 40, 54-57, 60, 62, 67)

J

Journal *field* (V1.0: 67)

K**Key Word *Table* of Bibliography**

Database
 Contents (V1.0: 47)
 Description (V1.0: 37)

L**Lab *Table* of Dose-Effects *Database***

Description (V1.0: 33)
 Contents (V1.0: 40)

Laboratory Identification *field*
 (V1.0: 67)

Lab ID option on SEARCH menus
 (V1.1: 8)

See Assigned ID

Last Name *field* (V1.0: 67)

License Agreement (V1.0: 16)

Litter Number *field* (V1.0: 67)

Loan Table of Inventory Database
 Contents (V1.0: 45)
 Description (V1.0: 36)

Location Table of Inventory Database
 Contents of (V1.0: 44)
 Description (V1.0: 36)

M

Main Menu (V1.1: 9), (V1.0: 15, 17-20, 51, 55)
 V1.1: compared with V1.0: (V1.1: 9)

Master Table of Inventory Database
 Contents (V1.0: 43)
 Description (V1.0: 36)

Menus

Bibliography (V1.0: 19)
 Help (V1.0: 49)
 Inventory (V1.0: 19)
 Main (V1.1: 9), (V1.0: 18)
 Navigation of (V1.0: 15)
 One Page Summary of (V1.0: 17)
 Summary (V1.0: 18)
 Summary (new name is DOSE-EFFECTS) (V1.1: 8-9)
 Summary (DOSE-EFFECTS) Search (V1.0: 20)

V1.1: compared with V1.0: (V1.1: 8)

Middle Initial field (V1.0: 67)

MORE

replaces DETAIL on menus (V1.1: 8)

MORE ZOOM

new option on HELP menu (V1.1: 8)

Morphology Category field (V1.1: 14), (V1.0: 68)

Help display (V1.1: 14)

N

Name fields
 First (V1.0: 65)
 Last (V1.0: 67)

National Radiobiology Archives
 acronym for is NRA
 description (V1.0: 55)
 description, brief (V1.0: 1)
 Report philosophy (V1.0: 23)

Navagation
 of browse screen - Zoom (V1.1: 16)

No Help Available example (V1.0: 68)

NRA database

Subset chosen for V1.0 distribution: (V1.0: 39)

NRA directory tree (V1.0: 39)

NRA ID's option on SEARCH menu (V1.1: 8)
 See ANIMAL
NRA Information Systems
 description (V1.0: 33)
 disk storage at PNL (V1.0: 33)

O

Operating System (V1.0: 7)
 ORNL, donor laboratory (V1.1: 7), (V1.0: 1, 34-35, 40-41, 55-58, 60-61, 75)
 Other Subsets (V1.0: 2)

P

Pages field (V1.0: 68)
 Paradox®(V1.0: 7, 13, 16, 37)

Paradox® Runtime (V1.0: 7)
 Paradox® versus Paradox® Runtime Execution (V1.0: 7)
PATH_RPT keystroke (V1.1: 7, 21)
 example (V1.1: 22)
 Pathologist's report available on Dose-Effects browse screen (V1.1: 22-24)
Patron Table of Inventory Database
 Contents (V1.0: 45)
 Description (V1.0: 36)
PGDN keystroke (V1.1: 21)
 (V1.0: 50)
PGUP keystroke (V1.1: 21),
 (V1.0: 50)
Philosophy
 Information Distribution (V1.0: 2)
 Report design (V1.0: 23)
PNL, donor laboratory (V1.1: 5, 18, 20),
 (V1.0: 1, 16, 33-35, 41, 44, 46,
 53, 55-58, 60-61, 65, 75)
Position field (V1.0: 68)
PREVIOUS option on menus (V1.1: 8)
 Replaces V1.0 RETURN (V1.1: 8),
 (V1.0: 17)
Primary field (V1.0: 69)
Print
 Example Summary report (V1.0: 28)
 Example Pathology Report (V1.1: 24)
 Output to a file (V1.0: 26)
 Output to printer (V1.0: 27)
 Summary Browse Screen (V1.0: 24)
Printer
 assumptions about (V1.0: 23)
 instructions for use (V1.0: 23)
 sending output to (V1.0: 27)

Problem reporting (V1.1: 32-33)
Publication Year field (V1.0: 69, 77)
 Publications based on NRA information
 Acknowledgement of (V1.1: 5)
Publisher field (V1.0: 69)
Purpose option on HELP menu (V1.0: 17, 55)
 new name is SCOPE (V1.1: 8)

Q

Qualifier field (V1.0: 69)
Quantity of Insult field (V1.0: 69)
Quantity, Item field (V1.0: 67)
Quick Start (V1.0: iii)
QUIT option of menus (V1.1: 10),
 (V1.0: 17)

R

Rank field (V1.0: 70)
READ option on menus
 Bibliography (V1.0: 17, 49)
 Detail (V1.0: 17, 51)
 Inventory (V1.0: 17, 53)
 replaces HOLDINGS (V1.1: 8)
 Summary (V1.0: 17, 56)
Removal Date field (V1.0: 70)
Report
 Bibliography (V1.0: 32)
 Inventory Browse Screen (V1.0: 30)
PATH_RPT (V1.1: 7, 22-24)
 Summary Browse screen (V1.0: 28)
 shows more than screen (V1.0: 29)

- to a file (V1.0: 26)
- to printer (V1.0: 27)
- Report Number *field* (V1.0: 70)
- Results Final *field* (V1.0: 70)
- Retrieval
 - example subset of animals (V1.0: 20)
 - see SEARCH menus
- RETURN option on menus (V1.0: 17-21)
- new name is PREVIOUS (V1.1: 8)
- Room *field* (V1.0: 70)
- Running NRA Distributed Access (V1.0: 5, 13)
 - using Runtime (V1.0: 13)
 - using your own copy of Paradox® (V1.0: 13)

S

- Scan records
 - how to (V1.1: 21)
- SCOPE
 - replaces PURPOSE on HELP menu (V1.1: 8)
- Search by Animal Number (V1.0: 20)
- SEARCH meuns
 - Bibliography (V1.0: 17)
 - Dose-Effects (V1.0: 17, 20)
 - Inventory (V1.0: 17)
 - Summary (V1.0: 17, 20)
- Search Screen
 - F1 *keystroke* displays list (V1.0: 21)
- Security (V1.0: 5)
- Selection of Introductory Subset (V1.0: 39)
- Sex *field* (V1.0: 71)
- Shelf *field* (V1.0: 71)
- Sire Identification *field* (V1.0: 71)
- Snodog *field* (V1.0: 71)
- Software Changes (V1.1: 10)
- Software Distribution (V1.0: 5)
- Software Package Contents (V1.0: 5)
- Species *field* (V1.0: 72)
- Starting the NRA Distributed Access software (V1.0: 13)
- V1.0, brief instructions (V1.0: iii)
- Status *field* (V1.0: 72)
- Study *Table of Dose-Effects Database*
 - Contents (V1.0: 40)
 - Description (V1.0: 33)
- Study Identification *field* (V1.0: 72)
- STUDY option of SUMMARY and INVENTORY menus (V1.0: 17)
- Sub Title *field* (V1.0: 72)
- Subset of NRA database
 - defined (V1.0: 2)
 - V1.1: compared with V1.0: (V1.1: 7)
- Suggestions or Problems? (V1.1: 29)
- Summary Browse Screen
 - new name is DOSE EFFECTS (V1.1: 8)
 - example (V1.1: 11), (V1.0: 24)
 - Report example (V1.0: 28)
- Summary *Database* see DOSE-EFFECTS *Database*
 - described (V1.0: 33)
 - description of (V1.0: 56)
 - Menu (V1.0: 18)
 - new name is DOSE-EFFECTS (V1.1: 8)
- Search Menu (V1.0: 20)
- space required (V1.0: 39)

T

T-DOSE option on SUMMARY menu (V1.0: 17)
 new name is DOSE (V1.1: 8)
 T-EFFECT option on SUMMARY menu (V1.0: 17)
 new name is EFFECT (V1.1: 8)

Table Contents

Animal (V1.0: 41)
 Bibliography Abstract (V1.0: 47)
 Bibliography Author (V1.0: 46)
 Bibliography Book (V1.0: 46)
 Bibliography Key Word (V1.0: 47)
 Control (V1.0: 43)
 Function (V1.0: 43)
 Group (V1.0: 41)
 Inventory Detail (V1.0: 45)
 Inventory Loan (V1.0: 45)
 Inventory Location (V1.0: 44)
 Inventory Patron (V1.0: 46)
 Lab (V1.0: 40)
 Master (V1.0: 43)
 Study (V1.0: 40)
 Tissue Dose (V1.0: 42)
 Tissue Effect (V1.0: 42)

Table Description

Animal (V1.0: 34)
 Author (V1.0: 37)
 Bibliography Abstract (V1.0: 37)
 Bibliography Book (V1.0: 37)
 Bibliography Key Word (V1.0: 37)
 Control (V1.0: 35)

Detailed Database Tables
(V1.0: 37)

Function (V1.0: 35)
 Group (V1.0: 34)
 Inventory Detail (V1.0: 36)
 Inventory Loan (V1.0: 37)
 Inventory Location (V1.0: 36)
 Inventory Master (V1.0: 36)
 Inventory Patron (V1.0: 36)
 Lab (V1.0: 33)
 Study (V1.0: 33)
 Tissue Dose (V1.0: 34)
 Tissue Effect (V1.0: 35)

Tissue Category field (V1.1: 11, 13), (V1.0: 73)**Tissue Dose Table of Dose-Effects**
Database

Contents (V1.0: 42)
 Description (V1.0: 34)

Tissue Effect Table of Dose-Effects

Database
 Contents (V1.0: 42)
 Description (V1.0: 35)

Tissue Quality field (V1.0: 73)**Title field** (V1.0: 73)
TITLE option on Bibliography Search menu (V1.0: 17)**Title Screen** (V1.0: 15)**Trademarks** (V1.0: 3)**Typographic Conventions** (V1.0: 3)**U**

Units, Insult field (V1.0: 66)
UPIMAGE keystroke (V1.1: 7)
Using Paradox® Runtime as supplied (V1.0: 13)
Using your own copy of Paradox® (V1.0: 13)

NRA Distributed Access V1.1

May 1992

UTAH, donor laboratory (V1.1: 7, 22-24),
(V1.0: 1, 34-35, 41, 45, 53, 55-58,
60, 62, 66, 75, 78)

[CTRL][Z]-ZOOM *keystroke* (V1.1: 21),
(V1.0: 24)
[ESC] *keystroke* (V1.1: 21)

V

VIEWING RECORD x OF n (V1.1: 21)
Volume *field* (V1.0: 74)

W

Weight at First Insult *field* (V1.0: 74)
What if subdirectory NRA is already
there? (V1.0: 10)
What is the NRA? (V1.0: 1)
Wildcard operators
used in Zoom (V1.1: 16-17)

X

Y

YEAR option on Bibliography Search
menu (V1.0: 17)
Year, see Publication Year

Z

Zoo (V1.1: 6), (V1.0: 10, 11)
ZOOM *keystroke* (V1.0: 24)
examples (V1.1: 18, 21)
process
(V1.1: 16-17, 19, 21)
ZOOM NEXT *keystroke* (V1.1: 17)
ZOOM option on HELP menu
(V1.1: 8)

[ALT][Z]-ZOOM NEXT *keystroke*
(V1.1: 17)

Software Package: NRA Distributed Access System

Project Title: National Radiobiology Archives

Project Number: 10650

Document Title(s): Watson, C.R., J.C. Prather, and S.K. Smith. 1991. *National Radiobiology Archives Distributed Access User's Manual*. PNL-7877. Pacific Northwest Laboratory, Richland, Washington.

Release Version: 1.1 (June 1992)

Change(s) Requested and/or Problem(s) Reported:

Submitted by:

Name _____ Date _____

Organization/Address

Send to: Sean K. Smith
NRA Database Manager
Epidemiology & Biometry Department
Pacific Northwest Laboratory
P.O. Box 999 P7-82
Richland, WA 99352

DISTRIBUTION

<u>No. of Copies</u>	<u>No. of Copies</u>
<u>OFFSITE:</u>	
12 DOE Office of Scientific and Technical Information	Stephen A. Benjamin, Ph.D. Director, CRHL Foothills Campus Colorado State University Fort Collins, CO 80523
David A. Smith, Ph.D. Acting Director of HERD OHER-ER 72 U.S. Department of Energy (GTN) Washington, D.C. 20545	Bruce B. Boecker, Ph.D. Inhalation Toxicology Research Institute P.O. Box 5890 Albuquerque, NM 87185-5890
Marvin E. Frazier, Ph.D. U.S. Department of Energy (GTN) Office of Health and Environmental Research ER-72 Washington, D.C. 20545	Mr. Clifford Burton Laboratory for Energy Related Health Research University of California at Davis Old Davis Road Davis, CA 95616
Michael E. Ginevan, Ph.D. Deputy Director Office of Epidemiology and Health Surveillance US Department of Energy Office of Health, EH-42 (GTN) Washington, D.C. 20545	Bruce Carnes, Ph.D. Argonne National Laboratory Building 202 Argonne, IL 60439
Ann Barber, M.D., Ph.D Health Effects and Life Sciences Research Division ER-72 Office of Energy Research US Department of Energy (GTN) Washington, D.C. 20585	Ms. Martha E. DeMarre Section Chief, Coordination and Information Center Archives and Research Section Technical Information Department Reynolds Electrical & Engineering Company P.O. Box 98521 M/5548 Las Vegas, NV 89193-8521

<u>No. of Copies</u>	<u>No. of Copies</u>
Mr. Don E. Doyle Argonne National Laboratory 9700 South Cass Avenue Argonne, IL 60439	Fletcher Hahn, Ph.D. Inhalation Toxicology Research Institute P.O. Box 5890 Albuquerque, NM 87185-5890
J.A. Louis Dubeau, M.D., Ph.D. Urological Cancer Research Laboratory USC Comprehensive Cancer Center University of Southern California Los Angeles, CA 90033-0800	Michael G. Groves, Ph.D. Department of Epidemiology and Community Health School of Veterinary Medicine Louisiana State University and Agricultural and Mechanical College Baton Rouge, LA 70803-8404
Patricia W. Durbin-Heavey, Ph.D. University of California Lawrence Berkeley Laboratories 1 Cyclotron Road Building #74-B Berkeley, CA 94720	Kenneth L. Jackson, Ph.D. Graduate Program Coordinator Radiological Sciences Group SB-75 University of Washington Seattle, WA 98195
Tom E. Fritz, Ph.D. Argonne National Laboratory 9700 South Cass Avenue Argonne, IL 60439	Ms. Janice Kaschmitter 12621-B Cleardale Stanton, CA 90680
Ed Frome, Ph.D. Oak Ridge National Laboratory P.O. Box 2008 Oak Ridge, TN 37831-6367	Nancy Knight, Ph.D. American College of Radiology 1891 Reston White Drive Reston, VA 22091
Michael Fry, Ph.D. Oak Ridge National Laboratory P.O. Box 2009 Oak Ridge, TN 37831-8077	Paul LaCelle, Ph.D. Chairman, Department of Biophysics University of Rochester School of Medicine and Dentistry 601 Elmwood Avenue Rochester, NY 14642
Mr. William Griffith Inhalation Toxicology Research Institute P.O. Box 5890 Albuquerque, NM 87185-5890	

<u>No. of Copies</u>	<u>No. of Copies</u>
James B. Lloyd, Ph.D. Special Collections Library Main Library University of Tennessee Knoxville, TN 37996-1000	James Parks, Ph.D. Laboratory for Energy Related Health Research University of California at Davis Old Davis Road Davis, CA 95616
Ray D. Lloyd, Ph.D. University of Utah Department of Radiology Salt Lake City, UT 84112	Mr. Jonathan C. Prather Linfield College Linfield Box 3094 Room 303 McMinnville, OR 97128-6894
Ms. Anna M. Martinez Northern Arizona University 700 South Blackbird Rst Apt. #71 Flagstaff, AZ 86001	Otto G. Raabe, Ph.D. Laboratory for Energy Related Health Research University of California at Davis Old Davis Road Davis, CA 95616
Scott C. Miller, Ph.D. Department of Radiobiology University of Utah Salt Lake City, UT 84112	Michael J. Russell, Ph.D. University of California at Davis Medical Center 4301 X Street Sacramento, CA 95817
Bruce A. Muggenburg, Ph.D. Institute of Toxicology Research Institute P.O. Box 5890 Albuquerque, NM 87185-5890	J. Newell Stannard, Ph.D. 17441 Plaza Animado #132 San Diego, CA 92128
Kazuo Neriishi, M.D., Ph.D. Chief of Internal Medicine Radiation Effects Research Foundation 5-2 Hijiyama Park Minami Ku Hiroshima, 732 Japan	Robert G. Thomas, Ph.D. Argonne National Laboratory 9700 South Cass Avenue Building 203 Room 1103 Argonne, IL 60439

<u>No. of Copies</u>	<u>No. of Copies</u>
Philip R. Watson, Ph.D. Associate Professor Department of Chemistry 153A Gilbert Hall Oregon State University Corvallis, OR 97331	JF Park LG Smith SK Smith (40) RG Stevens JM Thomas RC Thompson CR Watson RE Weller Publication Coordination Technical Report Files (5)
Russell G. White, Ph.D. Institute of Toxicology and Environmental Health University of California at Davis Davis, CA 95617	
McDonald E. Wrenn, Ph.D. School of Medicine Environmental Radiation & Toxicology Laboratory University of Utah 1771 South 900 West #10 Salt Lake City, UT 84104	

ONSITE:

US DOE, Richland Field Office

PW Kruger

Hanford Environmental Health
Foundation

R Filipy
RL Kathren

58 Pacific Northwest Laboratory

GE Dagle
ES Gilbert
MT Karagianes
EK Ligotke
JA Mahaffey

END

**DATE
FILMED**

12 / 2 / 92

