SHRP Archival Database B
User’s Manual Version 2.0

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Abstract

This report contains instructions for the use of the SHRP Asphalt Research Program Archival Database. The report provides detailed, step-by-step instructions for retrieving, viewing, searching and downloading of the files contained in the database.
Executive Summary

The Archival Database provides a historical record of all the data generated by the SHRP Asphalt Research Program contractors. Its primary purpose is to provide researchers with a well-documented record of the results obtained in the SHRP Asphalt Research Program. Two types of files exist in the database: text files and data files. An established format for each type of file has been followed by the contractors to organize these files. Text files describe the purpose, scope, details, and conclusions reached for each experiment. If laboratory testing was conducted for a certain experiment, data file(s) associated with that text file will contain all the data.

The Archival Database User’s Manual provides step-by-step instructions to the user for retrieving, viewing, searching and downloading of these files. The search capability of the database allows the user to search for an experiment by its number or by keyword or a material or materials used in an experiment. The user may also wish to view certain portions of selected text files such as data description, objective or scope.
I. Introduction

The Archival Database has been designed to serve as the historical record of data that are being generated as part of the SHRP Asphalt Research Program. The Archival Database will contain individual test results, data sufficient to describe the individual test results, and the conditions under which the results were obtained.

The primary purpose of the Archival Database is to provide SHRP researchers with an orderly and well-documented record of the results obtained in the SHRP Asphalt Research Program. Additionally, the Archival Database provides researchers with a valuable database that can be used for future studies.

II. Interacting With The Archival Database

1. Data Organization

The Archival Database is organized as a series of ASCII files which can be divided into two categories: text files and data files. A text file includes a description of the task, its scope, and objective. A data file contains the individual test results from a single experiment. A user-friendly interface is provided so that the user can readily retrieve the desired data or text files and download them.
2. Entering the Database

In order to be able to access The Archival Database, the user must first logon to the UT computer and then type 'shrp' or 'SHRP' (the system does not distinguish between upper and lower case). The first thing that a user of the SHRP Archival Database sees upon entry into the system is shown in Fig. A.1.

Fig. B. 1 shows the first menu that will be displayed upon entry (i.e., the Main Menu).

<table>
<thead>
<tr>
<th>CHOICE</th>
<th>DISPLAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;H&quot;</td>
<td>This brings up the Help Screen which provides the user information on the features of the database. The Help menus provide more detailed information about the items on each menu. (The Help Menu provided by an &quot;H&quot; entry from the Main Menu is shown in Fig. B. 2).</td>
</tr>
<tr>
<td>&quot;A&quot;</td>
<td>displays a list of all the experiment numbers in the database. Also, the number of text and data files for each experiment are indicated under the column headings 'T' and 'D' respectively. At this level, the user can select an experiment and view it's text file, data file, data description, objective or scope. The user may also choose to view the list of experiments by specific contract and specific agency.</td>
</tr>
</tbody>
</table>
| "B"   | on the Main Menu can be used for:  
(a) searching for experiments in the Database containing a combination of any 6 selected keywords or viewing an approved list of keyword abbreviations.  
(b) for searching for experiments containing a combination of a selected asphalt, aggregate and modifier, or anyone of the three.  
(c) for viewing the properties of a selected asphalt or aggregate. |
| "C"   | may be used to view the text files associated with each experiment. |
| "D"   | may be used to view all the data files (if any) associated with the experiment. |
| "E"   | displays the Data Description of the selected experiment or the data descriptions of all experiments sequentially. |
| "F"   | displays the Objectives of the selected experiment or the objectives of all the experiments sequentially. |
| "G"   | displays the Scope of the selected experiment or the scopes of all the experiments sequentially. |
| "DL"  | displays the Download Menu. |
"L" displays the Statisticians' List of Experiments.

"Q" causes an exit from the database.

Information cannot be entered into the database, nor can it be modified by the user. All text and data files in the database are those that have been approved by the SHRP Project personnel in the Austin Office and are in complete agreement with the specifications set forth for these files.

The remainder of this section is devoted to the steps involved in examining the database entries. Note that the choice for each menu is to be typed at the command prompt ('COMMAND ==>') provided for each menu screen. When the user types an invalid entry, an error message is displayed at the bottom of the screen. Each of the above mentioned choices is discussed separately. It should be noted that all the figures in this report are actual screen dumps and they have not been reproduced in a software program.

3. Experiment Numbers

This section describes the screen menus obtained upon entering choice 'A' on the Main Menu. An example of the first screen that appears is shown in Fig. C.1. This is a list of all the experiment numbers in the database along with the contract number, Research Agency and Experiment Title. It is possible to view a particular experiment by entering the choice number or the experiment number. Alternatively, all the experiment numbers for a specific contract may be viewed by entering "S". The user can scroll forward through the experiments by pressing the <ENTER> key or scroll backward by entering "P".

At this point, the user has the option of marking any text and data files from the displayed list of experiments for downloading. Option "D" takes the cursor to the "Choice Number" field. The user can move the cursor to the desired experiment with the help of the arrow keys and press PF1 to select a file. A '*' appears beside the selected file. This asterisk will persist throughout the current session permitting the user to download the selected file(s) prior to termination of the session. This is illustrated in Fig. C.1.1. The user can unselect a file by pressing PF3 and the '*' disappears indicating that the file is no longer selected for downloading. If the experiment has any associated data files, a new screen listing those files will appear. Here, the user has the option of selecting all the data Files on that screen by pressing "A" or the text file and all the data files on that screen by pressing 'B' or selecting particular ones with the "S" option. PF1 may be used to select a particular Data file and PF3 to cancel the selection. The "T" option selects the text file only. The screen for downloading data files is illustrated in Fig. C.1.2. The user can go back to the list of experiments by pressing "P". On both screens, PF2 is used to quit the selection process. Note that at this point the user has only marked the files for downloading. The actual downloading is done by selecting option "DL" from the Main Menu.

Upon entering a valid choice number or experiment number on the screen showing the list of experiments, a screen such as that shown in Fig. C.2. is displayed. This is the Experiment Number Menu for the specified experiment.
CHOICE | DISPLAY
--- | ---
"A" | displays the text files associated with the specified experiment. (Fig. C.2.1).
"B" | displays the list of data files (if any) associated with the experiment (Fig. C.2.2(a)). Here the user can type a choice number or the data file extension to view a particular experiment or scroll through all the data files sequentially (Fig. C.2.2(b)).
"C" | displays the Data Description for the selected experiment (Fig. C.2.3).
"D" | displays the Objective of the experiment (Fig. C.2.4).
"E" | displays the Scope of the experiment (Fig. C.2.5).

Once a selection of one of the above choices has been made, the user can go back to the Experiment Number Menu by pressing 'E'.

It is possible to scroll forward or backward through these sections by entering "F" or "B", respectively. When viewing the data files, the user can also move to the right, left, far right or far left by pressing 'R', 'L', 'RR' or 'LL' respectively.

A HELP Screen for the Experiment Menu is also available by pressing choice "H" (see Fig. C.3.).

The user can go back to the Main Menu from the Experiment Menu by pressing 'MM' or back to the List of Experiments by pressing "P".

When the user types "S" on the List of Experiments Screen, the screen in Fig. C.4 is displayed. This is a list of Contracts for the experiments in this database. This enables the user to view all the agencies under a contract and the experiments that have been performed at those agencies. For instance, by typing "2" or "A-002A" on the Contract List Menu (see Fig. C.4.) the screen shown in Fig. C.5. is displayed. The user can now select any agency to list the experiments performed at that agency. The screen that is displayed in response to the menu of Fig. C.5. is similar to that produced by The List of Experiments Menu except that it displays the experiments for a particular Agency and under a particular contract. For example, Fig. C.6 is the result of entering a "1" or "WRI" from the display shown in Fig. C.5.
4. **Keywords/ Materials/ Properties Menu**

Choice "B" on the Main Menu takes the user to the Keyword/Materials/Properties Menu (Fig. D.1).

**Keyword Search**

Choice "K" on the keyword/Materials/Properties menu takes the user to the Keyword Menu (Fig. D.2).

Choice "A" on the keyword menu displays a list of all the keyword abbreviations and equivalents (Fig. D.3). The user can scroll through the keyword abbreviation list by pressing <ENTER> to advance forward through the list or 'P' to examine the previous or earlier portion of the list.

The user can also start a search for a string of keywords by entering "S". Choice "S" on the Keyword Menu enables the user to start a search for a string of keywords. The first screen that appears contains the instructions for keyword search (Fig. D.4.1a). The user is prompted to enter the keywords (up to 6 words) separated by blanks (Fig. D.4.1b). The next screen that appears (Fig. D.4.2) asks the user for confirmation. An "N" response on this screen takes the user back to the keyword search screen (Fig. D.4.1a). A "Y" response on this screen confirms the selection of keywords to be used in the search. The list of files containing all the entered keywords is then displayed. (Fig. D.4.3). If no file containing the selected keyword(s) exists the screen in Fig. D.4.4 is displayed wherein the user can go back to the Keyword Menu or start a new search (Fig. D.4.1). Once the list of files is displayed, the user may enter a valid choice number or the experiment number which then displays the Experiment Number Menu for the specified experiment (Fig. C.2.).

As explained in section 3 above, the user may then proceed to view the text file, data file(s), data description, objective or scope of the selected experiment.

After viewing one file, if the user wishes to view the other files on the list, he must press "E" to go to the Experiment Number Menu followed by a "P" to return to the list of experiments.

The user can mark files for downloading in a similar manner as explained in section 3.

Note that the keywords may be entered in uppercase or lowercase. The list of valid characters for the keyword search is the same as those given in the Archival Database specifications. Pressing "H" on the Keyword Menu displays the HELP screen which contains instructions for the choices in the Keyword Menu (Fig. D.5).

**Materials/ Properties Search**

Choice 'S' on The Keyword/Materials/Properties Menu takes the user to the Materials/Properties Menu. (Fig. D.6).

Choice 'A' takes the user to a menu (Fig. D. 7) giving the user the option of searching for experiments containing an asphalt (choice 1), aggregate (choice 2), or a modifier (choice 3).
Choices 4, 5 and 6 list the experiments containing a selected combination of asphalt, aggregate and modifier in the same mixture. For example, if the user wishes to search for experiments containing asphalt 'AAA-1' option 1 must be selected. This is illustrated in Fig. D.8. In case the asphalt to be searched is less than 5 characters long, the user will have to press the space bar twice to fill the entire 5-character field. The results of the search are seen in Fig. D.9. Once a List of experiments is obtained, one may proceed to view the text file, data files, data description, objective or scope of the experiment or mark them for downloading, as explained before.

Choice 'B' on The Materials/Properties Menu takes the user to the Properties Menu which gives the user the option of viewing the properties of an asphalt (choice 'A' on the menu) or the properties of an aggregate (choice 'B' on the menu). See Fig. D.10. The Asphalt Selection Menu (Fig. D.11) allows the user to select the asphalt whose properties are to be displayed. When the user enters the choice number of the asphalt, a list of properties of that asphalt is displayed (Fig. D.12). The user can scroll forward or backward through the list by pressing <ENTER> or 'P' respectively. The Aggregate Selection Menu (Fig. D.13) allows the user to select an aggregate whose properties are to be displayed. When the user enters the choice number of the aggregate, a list of properties of that aggregate is displayed (Fig. D.14). The user can scroll forward or backward through the list by pressing <ENTER> or 'P' respectively.

Option 'H' on all the menu screens display the HELP Screens (Figs. D.15 - D.18). Option 'MM' goes back to the Main Menu. Option 'P' causes the previous screen to be displayed.

5. Text Files

Choice "C" on the Main Menu takes the user to the Text File Menu (Fig. E.1).

<table>
<thead>
<tr>
<th>CHOICE</th>
<th>DISPLAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;A&quot;</td>
<td>displays all the text files sequentially (Fig. E.2). The user can scroll through the text of each file one by one by pressing &quot;N&quot; on this menu or scroll back by pressing &quot;P&quot;. The user can also scroll forward and backward through the text of the same file by pressing &quot;F&quot; or &quot;B&quot;, respectively.</td>
</tr>
<tr>
<td>&quot;L&quot;</td>
<td>lists all experiment numbers in the database (Fig. C.1). Choice &quot;S&quot; lists all experiment numbers for a specific contract and agency (Fig. C.4). The user can then proceed to view the text file, data file, data description, objective or scope of the selected experiment in a manner similar to that explained in Section 3.</td>
</tr>
<tr>
<td>&quot;H&quot;</td>
<td>displays the HELP screen available for this menu. (Fig. E.3).</td>
</tr>
</tbody>
</table>
6. **Data Files**

Choice "D" on the Data File Menu takes the user to the Data File Menu (Fig. F.1).

<table>
<thead>
<tr>
<th>CHOICE</th>
<th>DISPLAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;L&quot;</td>
<td>displays the list of all the experiment numbers in the database (Fig. C.1). Once an experiment has been selected, the menu shown in Fig. F.2(a) is displayed. Choice &quot;A&quot; on this menu displays sequentially all the data files for the selected experiment (Fig. F.2(b)).</td>
</tr>
<tr>
<td>&quot;S&quot;</td>
<td>on this menu displays a list of all the experiment numbers for a specific contract and agency. (Fig. C.4).</td>
</tr>
<tr>
<td>&quot;H&quot;</td>
<td>displays the HELP screen available for the choices on the Data File Menu (Fig. F.3.).</td>
</tr>
</tbody>
</table>

7. **Data Descriptions**

Choice "E" on the Main Menu takes the user to the Data Description Menu (Fig. G.1.).

<table>
<thead>
<tr>
<th>CHOICE</th>
<th>DISPLAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;A&quot;</td>
<td>displays all data descriptions sequentially (Fig. G.2.). The user can scroll forward or backward through the data description of a particular experiment by pressing &quot;F&quot; or &quot;B&quot;, respectively. The user can also move from one experiment to the next by pressing &quot;N&quot;.</td>
</tr>
<tr>
<td>&quot;L&quot;</td>
<td>displays all the experiment numbers in the database (Fig. C.1.).</td>
</tr>
<tr>
<td>&quot;S&quot;</td>
<td>displays all the experiment numbers for a specific contract and agency (Fig. C.4.).</td>
</tr>
<tr>
<td>&quot;H&quot;</td>
<td>displays the HELP screen available for the Data File Menu (Fig. G.3.).</td>
</tr>
</tbody>
</table>

8. **Objectives**

Choice "F" on the Main Menu takes the user to the Objective Menu (Fig. H.1).
CHOICE  |  DISPLAY
---|---
"A" | displays all objectives sequentially (Fig. H.2). The user can scroll forward or backward through the objective of a particular experiment by pressing "F" or "B", respectively. The user can also move from one experiment to the next by pressing "N".

"L" | on this menu displays all the experiment numbers in the database (Fig. C.1.).

"S" | displays all the experiment numbers for a specific contract and agency (Fig. C.4.).

"H" | displays the HELP screen available for the choices on the Objective Menu (Fig. H.3.).

9. **Scope**

Choice "G" on the Main Menu takes the user to the Scope Menu (Fig. I.1.).

CHOICE  |  DISPLAY
---|---
"A" | displays all the Scopes sequentially (Fig. I.2.). The user can scroll forward or backward through the scope of a particular experiment by pressing "F" or "B", respectively. The user can also move from one scope to the next by pressing "N".

"L" | on this menu displays all the experiment numbers in the database (Fig. C.1.).

"S" | displays all the experiment numbers for a specific contract and agency (Fig. C.4.).

"H" | displays the HELP screen available for the choices on the Scope Menu (Fig. I.3.).

10. **Statisticians List of Experiments**

Choice "L" on the Main Menu displays the Statisticians’ List of experiments. This is a list of all the valid experiments in the database. This contains the experiment number, the research agency, task manager, researcher, date of submission of experiment, date of start of experiment and title of experiment plan (Fig. J.1).
The user can scroll forward or backward through this list by pressing "F" and "B" respectively. Since the width of this file is more than the width of the screen, the user can also move to the left, right, extreme left and extreme right by pressing "L", "R", "LL", "RR" respectively. "T" goes to the top of the List while "BO" goes to the bottom of the List.

Option 'D' allows the user to mark the Statistician's List of Experiments for downloading.

11. Download all Marked Files

Choice "DL" on the Main Menu allows the user to download all marked files. The download menu is displayed wherein the user is given the option of selecting the mode of file transfer (Fig. K.1.). The user can choose between Kermit, Procomm, FTP, Sendfile and Note. A Help Screen (Fig. K.2) is provided with examples of the address format the user must enter to download the marked files.

Instructions for downloading:

(a) Kermit
Option '1' on the Download Menu is used to select Kermit as the mode of transfer. When the prompt to escape back to the local system appears, the user must press the <CTRL> <RtSqBRACKET> keys. Next the user must press "C" to go to the MSKERMIT prompt. Typing "REC" at this prompt starts the downloading of the files. When the downloading is complete, the user may press "C" to go back to the Downloading Menu.

(b) Procomm
Option '2' on the Downloading Menu is used to select Procomm as the mode of transfer. When the prompt to escape back to the local system appears, the user must press <PgDn> and then select KERMIT from the PROCOMM option menu.

(c) FTP
When FTP is selected (Option 3) as the mode of transfer, the user is prompted for the remote address to which the files are to be transferred.

The format of the remote address is as follows:
ADDRESS, USERID and PASSWORD

  e.g.  CSUVM.CSU.EDU      JOHNP      FISH

(d) Sendfile
Option '4' may be used to select Sendfile as the mode of file transfer. When prompted for the remote BITNET address, the format to be used is as follows:

  e.g.  FRED AT  OSUVVM

(e) Note
Option '5' may be used to select NOTE as the mode of file transfer. When prompted for the remote e-mail address, the format to be used is as follows:

  e.g.  MARK AT  OSUVAX1.OSU.EDU
From the Download Menu, the user can go back to the database using option '7' or exit completely using option '8'.

12. Quit

In order to exit the database, the user enters "Q" on the Main Menu. All selected files remain marked until they are either downloaded or cleared from memory by quitting the database.
Welcome to the SHRP Archival Database

DATA FILES WHEN CLOSED SHOULD NOT BE CITED WITHOUT THE PERMISSION OF THE RESEARCHER

Press <ENTER> to Continue

Fig. A.1 First Screen
SHRP ASPHALT RESEARCH PROGRAM ARCHIVAL DATABASE MAIN MENU

A----------EXPERIMENT NUMBERS
B----------SEARCH BY KEYWORD OR MATERIALS
C----------TEXT FILES
D----------DATA FILES
E----------DATA DESCRIPTIONS
F----------OBJECTIVES
G----------SCOPES
DL---------DOWNLOAD ALL MARKED FILES
H---------HELP
L---------STATISTICIANS' LIST OF EXPERIMENTS
Q---------QUIT

NO OF TEXT FILES : 110
NO OF DATA FILES : 198

PLEASE TYPE YOUR CHOICE AT THE CURSOR.

COMMAND ===>

Fig. B.1 Main Menu Screen
HELP FOR MAIN MENU

A - This option displays a list of the experiments in the Database. Here you can choose any experiment by Number, Research Agency or Contract Number and view the Text, Objective, Scope and Data Description or Data Files (if any) associated with the experiment.

B - This option gives the user the choice of two types of searches. One is the keyword search which displays a list of experiments containing a keyword or group of keywords specified by the user. The other displays a list of experiments containing a specified material or mixture or specified properties of asphalts/aggregates.

C - This option lists the text files for all the experiments. You can view these files sequentially or select a particular one and browse through it.

D - This option displays the data file menu. You can get a list of data files associated with any experiment and browse through them.

PRESS <ENTER> TO GO TO THE NEXT HELP SCREEN OR MM TO RETURN TO THE MAIN MENU

PLEASE TYPE THE COMMAND IN THE SPACE PROVIDED.

COMMAND ==>
### LIST OF EXPERIMENTS

<table>
<thead>
<tr>
<th>CHOICE</th>
<th>CONTR.</th>
<th>NUMBER</th>
<th>AGENCY</th>
<th>T D</th>
<th>EXP NO</th>
<th>TITLE OF EXPERIMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>A-002A</td>
<td>WRI</td>
<td>1 5</td>
<td>A2A111A1 CHEMICAL CHARACTERIZATION OF CORE ASPHALT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>A-002A</td>
<td>WRI</td>
<td>1 17</td>
<td>A2A111B1 SEPARATION OF CORE ASPHALTS INTO COMPONE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>A-002A</td>
<td>WRI</td>
<td>1 12</td>
<td>A2A111B2 SEPARATION OF CORE ASPHALTS INTO COMPONE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>A-002A</td>
<td>WRI</td>
<td>1 2</td>
<td>A2A111C1 CHEMICAL PROPERTIES OF ASPHALT COMPONENT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>A-002A</td>
<td>WRI</td>
<td>1 4</td>
<td>A2A111D1 POTENTIOMETRIC TITRATIONS OF ASPHALTS AN</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>A-002A</td>
<td>WRI</td>
<td>1 2</td>
<td>A2A112A1 INFLUENCE OF NON-POLAR COMPONENTS OF ASP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>A-002A</td>
<td>WRI</td>
<td>1 8</td>
<td>A2A112B1 SEC STUDIES ON ASPHALTS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8</td>
<td>A-002A</td>
<td>WRI</td>
<td>1 2</td>
<td>A2A112C1 SEC STUDIES ON AGED ASPHALTS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
<td>A-002A</td>
<td>WRI</td>
<td>1 0</td>
<td>A2A112D1 DEUTERATION STUDIES</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td>A-002A</td>
<td>SRI</td>
<td>1 4</td>
<td>A2A113A1 MECHANISMS OF ASPHALT OXIDATION</td>
</tr>
</tbody>
</table>

To choose a specific experiment number, type either the choice number OR the experiment number. To view a list of experiment numbers for a specific contract and agency, type S and hit enter.

P--Previous Screen; ENTER--Next Screen; S--Specific Contract; MM--Main Menu

**Fig. C.1** Screen showing a Partial List of Experiments in Database
<table>
<thead>
<tr>
<th>CHOICE NUMBER</th>
<th>CONTR. NUMBER</th>
<th>AGENCY</th>
<th>T</th>
<th>D</th>
<th>EXP NO</th>
<th>TITLE OF EXPERIMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A-002A</td>
<td>WRI</td>
<td>1</td>
<td>5</td>
<td>A2A111A1</td>
<td>CHEMICAL CHARACTERIZATION OF CORE ASPHALT</td>
</tr>
<tr>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>A-002A</td>
<td>WRI</td>
<td>1</td>
<td>17</td>
<td>A2A111B1</td>
<td>SEPARATION OF CORE ASPHALTS INTO COMPONENTS</td>
</tr>
<tr>
<td>3</td>
<td>A-002A</td>
<td>WRI</td>
<td>1</td>
<td>12</td>
<td>A2A111B2</td>
<td>SEPARATION OF CORE ASPHALTS INTO COMPONENTS</td>
</tr>
<tr>
<td>4</td>
<td>A-002A</td>
<td>WRI</td>
<td>1</td>
<td>2</td>
<td>A2A111C1</td>
<td>CHEMICAL PROPERTIES OF ASPHALT COMPONENT</td>
</tr>
<tr>
<td>5</td>
<td>A-002A</td>
<td>WRI</td>
<td>1</td>
<td>4</td>
<td>A2A111D1</td>
<td>POTentiometric Titrations of ASPHALTS AN</td>
</tr>
<tr>
<td>6</td>
<td>A-002A</td>
<td>WRI</td>
<td>1</td>
<td>2</td>
<td>A2A112A1</td>
<td>INFLUENCE OF NON-POLAR COMPONENTS OF ASP</td>
</tr>
<tr>
<td>7</td>
<td>A-002A</td>
<td>WRI</td>
<td>1</td>
<td>8</td>
<td>A2A112B1</td>
<td>SEC STUDIES ON ASPHALTS</td>
</tr>
<tr>
<td>8</td>
<td>A-002A</td>
<td>WRI</td>
<td>1</td>
<td>2</td>
<td>A2A112C1</td>
<td>SEC STUDIES ON AGED ASPHALTS</td>
</tr>
<tr>
<td>9</td>
<td>A-002A</td>
<td>WRI</td>
<td>1</td>
<td>0</td>
<td>A2A112D1</td>
<td>DEUTERATION STUDIES</td>
</tr>
<tr>
<td>10</td>
<td>A-002A</td>
<td>SRI</td>
<td>1</td>
<td>4</td>
<td>A2A113A1</td>
<td>MECHANISMS OF ASPHALT OXIDATION</td>
</tr>
</tbody>
</table>

To choose a specific experiment number, type either the choice number OR the experiment number. To view a list of experiment numbers for a specific contract and agency, type S and hit enter.

P—Previous Screen; ENTER—Next Screen; S—Specific Contract; MM—Main Menu
COMMAND ===> D D—Mark File (PF1—select, PF2—quit, PF3—unselect)

Fig. C.1.1 Screen with downloading feature (Note the * for selected file)
LIST OF DATA FILES

<table>
<thead>
<tr>
<th>CHOICE NUMBER</th>
<th>EXPERIMENT NUMBER</th>
<th>EXT</th>
<th>ENTRY DATE</th>
<th>REVISION DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A2A11B1</td>
<td>D01</td>
<td>03/15/92</td>
<td>03/15/92</td>
</tr>
<tr>
<td>* 2</td>
<td>A2A11B1</td>
<td>D02</td>
<td>03/15/92</td>
<td>03/15/92</td>
</tr>
<tr>
<td>* 3</td>
<td>A2A11B1</td>
<td>D03</td>
<td>03/15/92</td>
<td>03/15/92</td>
</tr>
<tr>
<td>4</td>
<td>A2A11B1</td>
<td>D04</td>
<td>03/15/92</td>
<td>03/15/92</td>
</tr>
<tr>
<td>5</td>
<td>A2A11B1</td>
<td>D05</td>
<td>03/15/92</td>
<td>03/15/92</td>
</tr>
<tr>
<td>6</td>
<td>A2A11B1</td>
<td>D06</td>
<td>03/15/92</td>
<td>03/15/92</td>
</tr>
<tr>
<td>7</td>
<td>A2A11B1</td>
<td>D07</td>
<td>03/15/92</td>
<td>03/15/92</td>
</tr>
<tr>
<td>8</td>
<td>A2A11B1</td>
<td>D08</td>
<td>03/15/92</td>
<td>03/15/92</td>
</tr>
<tr>
<td>9</td>
<td>A2A11B1</td>
<td>D09</td>
<td>03/15/92</td>
<td>03/15/92</td>
</tr>
<tr>
<td>10</td>
<td>A2A11B1</td>
<td>D10</td>
<td>03/15/92</td>
<td>03/15/92</td>
</tr>
</tbody>
</table>

To Download all the files press A. To select only specific data files press S and use the arrow keys to move to the particular file. Use PF1 key to select, PF2 key to end the selection, PF3 to unselect a file.

T--Text File; A--All Data Files; S--Select/Unselect ENTER--Next Screen

COMMAND ===> S  B--Text & Data; P--Previous Screen

Fig. C.1.2 Screen showing the downloading of data files for 'A2A11B1'
EXPERIMENT NUMBER MENU

Experiment Number: A2A122A1

A----------TEXT FILE
B----------DATA FILES
C----------DATA DESCRIPTION
D----------OBJECTIVE
E----------SCOPE

H----------HELP
MM----------MAIN MENU
P----------PREVIOUS SCREEN

PLEASE TYPE THE COMMAND KEYWORD IN THE SPACE PROVIDED.

COMMAND ==> 

Fig. C.2 Experiment Number Menu
TEXT FOR EXPERIMENT A2A122A1

File Number: A2A122A1.TXT

Performing Agency: Pennsylvania State University

Project: A-002A Binder Characterization and Evaluation

Task 1.2: Physical Properties of Asphalts

Subtask 1.2.2: Characterization of Rheological and Other Physical Properties

Experiment Name: Non-Linear DMA: Core Asphalts

Date First Entered into Database: 17 May 1991
Date Last Revision Entered into Database: 17 May 1991
Task Manager: David A. Anderson
Researchers: D. W. Christensen
Experiment Statistician: Charles E. Antle

--------------------
F -- FORWARD, B -- BACKWARD, E -- EXPERIMENT MENU, MM -- MAIN MENU
COMMAND ===>

Fig. C.2.1 Text Screen for Specified Experiment
### LIST OF DATA FILES

<table>
<thead>
<tr>
<th>CHOICE NUMBER</th>
<th>EXPERIMENT NUMBER</th>
<th>EXT</th>
<th>ENTRY DATE</th>
<th>REVISION DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A2A136B1</td>
<td>D01</td>
<td>01/09/92</td>
<td>01/09/92</td>
</tr>
<tr>
<td>2</td>
<td>A2A136B1</td>
<td>D02</td>
<td>01/09/92</td>
<td>01/09/92</td>
</tr>
<tr>
<td>3</td>
<td>A2A136B1</td>
<td>D03</td>
<td>01/09/92</td>
<td>01/09/92</td>
</tr>
<tr>
<td>4</td>
<td>A2A136B1</td>
<td>D04</td>
<td>01/09/92</td>
<td>01/09/92</td>
</tr>
<tr>
<td>5</td>
<td>A2A136B1</td>
<td>D05</td>
<td>01/09/92</td>
<td>01/09/92</td>
</tr>
<tr>
<td>6</td>
<td>A2A136B1</td>
<td>D06</td>
<td>01/09/92</td>
<td>01/09/92</td>
</tr>
</tbody>
</table>

To view a specific data file, type either the choice number OR the extension and hit enter. To scroll through ALL of the data files for this experiment in order, type A and hit enter.

A--All Data Files; P--Previous Screen; MM--Main Menu.

**COMMAND ==>**

---

Fig. C.2.2(a) List of Data files for specified experiment
A3BA1101.D01

Date First Entered into Database: 26 Feb 1992
Date Last Revision Entered into Database: 26 Feb 1992
James P. Henley Jr.
Status: Open -- Data may be used and published by anyone with access to

<table>
<thead>
<tr>
<th>ID</th>
<th>Model</th>
<th>Amount</th>
<th>Const</th>
<th>Ener (KJ/mol)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Asph</td>
<td>0.74</td>
<td>3.89</td>
<td>*</td>
</tr>
<tr>
<td>8</td>
<td>Phenylsulfoxide</td>
<td>0.22</td>
<td>1.16</td>
<td>+3.44</td>
</tr>
<tr>
<td>9</td>
<td>1-Naphthol</td>
<td>0.06</td>
<td>0.32</td>
<td>-31.6</td>
</tr>
<tr>
<td>10</td>
<td>Phenanthridine</td>
<td>0.02</td>
<td>0.11</td>
<td>*</td>
</tr>
</tbody>
</table>

---

Fig. C.2.2(b) Data Screen for specified experiment
DATA DESCRIPTION FOR EXPERIMENT A2A132A1

8. Data Description

001.D01 Asphalt number 132a
002.D01 Sample identification number
003.D01 Replication number
004.D01 Date of oxidation
005.D01 Oxidation method
006.D01 Oxidation temperature, C
007.D01 Oxidation duration, hr
008.D01 Date specimen prepared
009.D01 Portion high molecular weight material, wt%
010.D01 Portion low molecular weight material, wt%
011.D01 Time 1 since preparation, 25 C sample, hr
012.D01 Viscosity at time 1, 25 C sample, poises
013.D01 G’ at time 1, 25 C sample, dynes/cm**2
***The above data are contained in data file with extension .D01
014.D02 G'' at time 1, 25 C sample, dynes/cm**2
015.D02 Time 2 since preparation, 25 C sample, hr

--- F -- FORWARD, B -- BACKWARD, E -- EXPERIMENT MENU, MM -- MAIN MENU COMMAND ===>

Fig. C.2.3 Data Description for specified experiment
OBJECTIVE FOR EXPERIMENT A2A122A1

1. Objective

Task: The objective of this task is to develop techniques for the characterization of fundamental physical properties of asphalts and correlate these properties to chemical composition.

Subtask: The objective of this subtask is to evaluate the rheological properties of asphalt cements using the rheometrics mechanical spectrometer and determine the effect of temperature on these properties.

Experiment: The objective of this experiment is to characterize the rheological properties of asphalt cements in the nonlinear range using the rheometric apparatus. The nonlinear properties are needed to correlate the physical properties to the chemical composition and also in predictive models of field performance. The relaxation properties in the nonlinear range will be obtained by subjecting a thin film of asphalt sandwiched between two parallel plates to various magnitudes of step deformations and the decay of torque and the axial trust with time will be measured with time. The data

F -- FORWARD, B -- BACKWARD, E -- EXPMANU, MM -- MAINMENU.
COMMAND ===>

Fig. C.2.4 Objective Screen for specified experiment
2. Scope

The hypotheses to be tested are that migrations of polar molecular entities within asphalts over extended time periods cause embrittlement of asphalt cements and that the embrittlement is thermally reversible. Emphasis will be placed on the expected enhancement of this effect by asphalt oxidation. To verify these hypotheses, selected core study materials will be placed into specially designed test fixtures and will be held at selected temperatures for varying times. A stringent protocol will be followed for sample loading and measurement. Kinetic curves will be developed for the study materials which measure reversible hardening over time. These results coupled with studies involving the chemistry of asphalt components will provide a better understanding of asphalt embrittlement and possibly suggest ways to reduce the rate of asphalt hardening and extend the life span of asphaltic pavements. Relationships between rate of steric hardening and complex flow properties will be sought in an attempt to find a rapid surrogate measurement to predict steric hardening and also as model verification of the...
HELP FOR EXPERIMENT FILE MENU

A - This option displays the text file for the specific experiment.
B - This option displays the experimental data for the experiment.
C - This option displays the data description for the experiment
D - This option displays the objective for the experiment.
E - This option displays the scope for the experiment.

** NOTE ** When viewing a file, a blank screen indicates the end of data

PLEASE TYPE EX TO GO BACK TO THE EXPERIMENT FILE MENU
COMMAND ===>

Fig. C.3 Help Screen for Experiment Menu
<table>
<thead>
<tr>
<th>CHOICE NUMBER</th>
<th>CONTRACT NUMBER</th>
<th>PROJECT TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A-001</td>
<td>TECHNICAL ASSISTANCE AND COORDINATION</td>
</tr>
<tr>
<td>2</td>
<td>A-002A</td>
<td>BINDER CHARACTERIZATION AND EVALUATION</td>
</tr>
<tr>
<td>3</td>
<td>A-002B</td>
<td>DEVEL. OF ASPHALT CORE TOMOGRAPHER, AGE HARDENING</td>
</tr>
<tr>
<td>4</td>
<td>A-002C</td>
<td>NMR SPECTROSCOPY OF BINDERS</td>
</tr>
<tr>
<td>5</td>
<td>A-003A</td>
<td>TESTING AND MEASURING OF MIXTURES</td>
</tr>
<tr>
<td>6</td>
<td>A-003B</td>
<td>ASPHALT-AGGREGATE INTERACTIONS</td>
</tr>
<tr>
<td>7</td>
<td>A-004</td>
<td>ASPHALT MODIFICATION</td>
</tr>
<tr>
<td>8</td>
<td>A-005</td>
<td>PERFORMANCE MODELS AND VALIDATION</td>
</tr>
<tr>
<td>9</td>
<td>A-006</td>
<td>SPECIFICATIONS FOR MIXTURES</td>
</tr>
<tr>
<td>10</td>
<td>AIIR-04</td>
<td>FLUROMETRIC CHARACTERIZATION OF AC</td>
</tr>
<tr>
<td>11</td>
<td>AIIR-05</td>
<td>COLLOIDAL BEHAVIOUR OF AC</td>
</tr>
<tr>
<td>12</td>
<td>AIIR-06</td>
<td>THERMAL CHARACTERIZATION OF AC</td>
</tr>
</tbody>
</table>

To choose a specific contract, type either the choice number OR the contract number and hit enter. After choosing a contract, a list of agencies for that contract will be displayed.

P—Previous Screen; ENTER—Next Screen; MM—Main Menu.

**COMMAND ==>**

Fig. C.4 Screen showing the List of Contracts
<table>
<thead>
<tr>
<th>CHOICE NUMBER</th>
<th>AGENCY</th>
<th>RESEARCH AGENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>WRI</td>
<td>WESTERN RESEARCH INSTITUTE, LARAMIE, WY</td>
</tr>
<tr>
<td>2</td>
<td>PTI</td>
<td>PENN STATE UNIVERSITY, UNIVERSITY PARK</td>
</tr>
<tr>
<td>3</td>
<td>TTI</td>
<td>TEXAS TRANS. INST. (TEXAS A&amp;M UNIV.), COLLEGE STATION</td>
</tr>
<tr>
<td>4</td>
<td>SRI</td>
<td>SRI INTERNATIONAL, STANFORD, CA</td>
</tr>
</tbody>
</table>

To choose a specific agency, type either the choice number OR the agency abbreviation and hit enter.

P--Previous Screen; MM--Main Menu.

COMMAND ==> Fig. C.5 List of Agencies for specified contract
### LIST OF EXPERIMENTS FOR WRI UNDER CONTRACT A-002A

<table>
<thead>
<tr>
<th>CHOICE NUMBER</th>
<th>CONTRACT NUMBER</th>
<th>AGENCY</th>
<th>EXP NO</th>
<th>TITLE OF EXPERIMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A-002A</td>
<td></td>
<td>A2A111A1</td>
<td>CHEMICAL CHARACTERIZATION OF CORE ASPHAL</td>
</tr>
<tr>
<td>2</td>
<td>A-002A</td>
<td></td>
<td>A2A111B1</td>
<td>SEPARATION OF CORE ASPHALTS INTO COMPONENT</td>
</tr>
<tr>
<td>3</td>
<td>A-002A</td>
<td></td>
<td>A2A111B2</td>
<td>SEPARATION OF CORE ASPHALTS INTO COMPONENT</td>
</tr>
<tr>
<td>4</td>
<td>A-002A</td>
<td></td>
<td>A2A111C1</td>
<td>CHEMICAL PROPERTIES OF ASPHALT COMPONENT</td>
</tr>
<tr>
<td>5</td>
<td>A-002A</td>
<td></td>
<td>A2A111D1</td>
<td>POTENTIOMETRIC TITRATIONS OF ASPHALTS AND MEASUREMENTS</td>
</tr>
<tr>
<td>6</td>
<td>A-002A</td>
<td></td>
<td>A2A112A1</td>
<td>INFLUENCE OF NON-POLAR COMPONENTS OF ASPAL</td>
</tr>
<tr>
<td>7</td>
<td>A-002A</td>
<td></td>
<td>A2A112B1</td>
<td>SEC STUDIES ON ASPHALTS</td>
</tr>
<tr>
<td>8</td>
<td>A-002A</td>
<td></td>
<td>A2A112C1</td>
<td>SEC STUDIES ON AGED ASPHALTS</td>
</tr>
<tr>
<td>9</td>
<td>A-002A</td>
<td></td>
<td>A2A112D1</td>
<td>DEUTERATION STUDIES</td>
</tr>
<tr>
<td>10</td>
<td>A-002A</td>
<td></td>
<td>A2A113B1</td>
<td>METAL COMPLEX CATALYSIS OF ASPHALT OXIDATION</td>
</tr>
</tbody>
</table>

To choose a specific experiment, type either the choice number OR the experiment number.

P--Previous Screen; ENTER--Next Screen; MM--Main Menu.

D--M Files (PF1--Select File, PF2--Quit, PF3--Unselect)

**COMMAND ==>**

Fig. C.6 List of experiments for specified Agency under specific Contract.
SEARCH MENU

K--------KEYWORD SEARCH MENU
S--------MATERIALS / PROPERTIES SEARCH MENU

H--------HELP
MM--------MAIN MENU
P--------PREVIOUS MENU

PLEASE TYPE THE COMMAND KEYWORD IN THE SPACE PROVIDED.

COMMAND ===>

Fig. D.1 Keyword/Materials/Properties Search
KEYWORD MENU

A--------LIST OF KEYWORD ABBREVIATIONS
        AND EQUIVALENTS
S--------SEARCH BY KEYWORDS

H--------HELP
MM--------MAIN MENU
P--------PREVIOUS MENU

PLEASE TYPE THE COMMAND KEYWORD IN THE SPACE PROVIDED.

COMMAND ==> 

Fig. D.2 Keyword Menu Screen
### LIST OF KEYWORD ABBREVIATIONS AND EQUIVALENTS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANOVA</td>
<td>ANALYSIS OF VARIANCE</td>
</tr>
<tr>
<td>CRREL</td>
<td>U. S. ARMY COLD REGIONS RESEARCH AND ENGINEERING LABORATORIES</td>
</tr>
<tr>
<td>DMA</td>
<td>DYNAMIC MECHANICAL ANALYSIS</td>
</tr>
<tr>
<td>ESR</td>
<td>ELECTRON SPIN RESONANCE</td>
</tr>
<tr>
<td>EVT</td>
<td>EQUIVOCOUS TEMPERATURE</td>
</tr>
<tr>
<td>FEAP</td>
<td>FINITE ELEMENT ANALYSIS PROCEDURE</td>
</tr>
<tr>
<td>FTIR</td>
<td>FOURIER TRANSFORM INFRARED SPECTROSCOPY</td>
</tr>
<tr>
<td>GPC</td>
<td>GEL PERMEATION CHROMATOGRAPHY</td>
</tr>
<tr>
<td>HPLC</td>
<td>HIGH PRESSURE LIQUID CHROMATOGRAPHY</td>
</tr>
<tr>
<td>ICP</td>
<td>INDUCTIVITY COUPLED PLASMA</td>
</tr>
<tr>
<td>IR</td>
<td>INFRARED</td>
</tr>
<tr>
<td>LV</td>
<td>LINEAR VISCOELASTIC</td>
</tr>
<tr>
<td>NCHRP</td>
<td>NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM</td>
</tr>
<tr>
<td>NMR</td>
<td>NUCLEAR MAGNETIC RESONANCE</td>
</tr>
<tr>
<td>PAV</td>
<td>PRESSURE AIR VESSEL</td>
</tr>
</tbody>
</table>

---

P--Previous Screen; ENTER--Next Screen; K--Keyword Menu; MM--Main Menu.

COMMAND ==>  

---

**Fig. D.3** Keyword Abbreviations and their equivalents
KEYWORD SEARCH SCREEN

PLEASE ENTER THE KEYWORDS SEPARATED BY BLANKS. YOU CAN ENTER UP TO 6 KEYWORDS. ENTER Q TO QUIT AND RETURN TO THE KEYWORD MENU

KEYWORDS ==> 

Fig. D.4.1(a) First Screen in Keyword Search
KEYWORD SEARCH SCREEN

PLEASE ENTER THE KEYWORDS SEPARATED BY BLANKS. YOU CAN ENTER UP TO 6 KEYWORDS. ENTER Q TO QUIT AND RETURN TO THE KEYWORD MENU

KEYWORDS ==> ASPHALT

Fig. D.4.1(b) First Screen in Keyword Search (with keyword entered)
HERE IS THE KEYWORD FOR WHICH YOU HAVE REQUESTED A SEARCH:

KEYWORD ==> ASPHALT

IS THIS THE KEYWORD TO BE SEARCHED?

PRESS Y or y TO START THE SEARCH OR N or n TO REVISE THE KEYWORD

COMMAND ==> 

Fig. D.4.2 Third Screen in Keyword Search asking for confirmation.
<table>
<thead>
<tr>
<th>CHOICE NUMBER</th>
<th>EXP NO</th>
<th>TITLE OF EXPERIMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A2A111B1</td>
<td>SEPARATION OF CORE ASPHALTS INTO COMPONENTS</td>
</tr>
<tr>
<td>2</td>
<td>A2A111B2</td>
<td>SEPARATION OF CORE ASPHALTS INTO COMPONENTS</td>
</tr>
<tr>
<td>3</td>
<td>A2A111C1</td>
<td>CHEMICAL PROPERTIES OF ASPHALT COMPONENT</td>
</tr>
<tr>
<td>4</td>
<td>A2A112A1</td>
<td>INFLUENCE OF NON-POLAR COMPONENTS OF ASP</td>
</tr>
<tr>
<td>5</td>
<td>A2A112B1</td>
<td>SEC STUDIES ON ASPHALTS</td>
</tr>
<tr>
<td>6</td>
<td>A2A112C1</td>
<td>SEC STUDIES ON AGED ASPHALTS</td>
</tr>
<tr>
<td>7</td>
<td>A2A112D1</td>
<td>DEUTERATION STUDIES</td>
</tr>
<tr>
<td>8</td>
<td>A2A113A1</td>
<td>MECHANISMS OF ASPHALT OXIDATION</td>
</tr>
<tr>
<td>9</td>
<td>A2A113B1</td>
<td>METAL COMPLEX CATALYSIS OF ASPHALT OXIDATION</td>
</tr>
<tr>
<td>10</td>
<td>A2A115B1</td>
<td>COMPOSITIONAL FACTORS THAT INFLUENCE ASP</td>
</tr>
</tbody>
</table>

To choose a specific experiment number, type either the choice number or the experiment number.

P--Previous Screen; ENTER--Next Screen; MM--Main Menu; K--KEYWORD MENU
D--Mark Files (PF1 -- Select, PF2 -- Quit, PF3 -- Unselect)

COMMAND ==> Fig. D.4.3 Screen displaying the results of Keyword Search.
THERE ARE NO FILES WITH THE FOLLOWING KEYWORD(S):

**-----------------------------------------------**

KEYWORD ==> AIRRE

Press S to start a new search or Press K to go to the Keyword menu

COMMAND ==> 

Fig. D.4.4 Screen displaying failure of Keyword Search
***************
HELP FOR KEYWORD MENU
***************

A - This option displays a list of Abbreviations for the keywords currently in the database

S - This option allows you to search for a single keyword or up to 6 keywords. The user is prompted for the keywords and a list of files containing all the keywords is displayed.

PLEASE TYPE KK TO GO BACK TO KEYWORD MENU

COMMAND ==> 

Fig. D.5 Help Screen for keyword Menu
MATERIALS / PROPERTIES SEARCH MENU

A--List of Experiments for a selected asphalt, aggregate or modifier or selected mixture
B--Properties for a selected Asphalt or Aggregate

H----------HELP
MM----------MAIN MENU
P----------PREVIOUS MENU

PLEASE TYPE THE COMMAND KEYWORD IN THE SPACE PROVIDED.

COMMAND ===> 

Fig. D.6 Materials/Properties Menu
SELECTION OF ASPHALT/AGGREGATE/MODIFIER:

1. ASPHALT
2. AGGREGATE
3. MODIFIER

MIXTURES:

4. ASPHALT, AGGREGATE and MODIFIER
5. ASPHALT and AGGREGATE
6. ASPHALT and MODIFIER

H--------HELP
MM--------MAIN MENU
P--------PREVIOUS MENU

PLEASE TYPE THE CHOICE NUMBER IN THE SPACE PROVIDED.

COMMAND ===> 

Fig. D.7 Materials/Mixtures selection Menu
ENTER THE ASPHALT TO BE SEARCHED FOR OR "Q" TO QUIT. IF THE ASPHALT IS LESS THAN 5 CHARACTERS LONG, ENTER SPACES TO FILL THE ENTIRE FIELD.

ASPHALT ==> AAA-1

PLEASE TYPE "Y" TO PROCEED WITH SEARCH, "N" TO REVISE SEARCH AND "Q" TO QUIT SEARCH

COMMAND ==> 

Fig. D.8 Screen showing asphalt AAA-1 selected for the search
LIST OF EXPERIMENTS CONTAINING THE SELECTED ASP/AGG/MOD OR MIXTURE
NUMBER OF EXPERIMENTS FOUND: 31

<table>
<thead>
<tr>
<th>CHOICE NUMBER</th>
<th>EXP NO</th>
<th>CONTRACT</th>
<th>AGENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A2A111A1</td>
<td>A-002A</td>
<td>WRI</td>
</tr>
<tr>
<td>2</td>
<td>A2A111B1</td>
<td>A-002A</td>
<td>WRI</td>
</tr>
<tr>
<td>3</td>
<td>A2A111B2</td>
<td>A-002A</td>
<td>WRI</td>
</tr>
<tr>
<td>4</td>
<td>A2A111C1</td>
<td>A-002A</td>
<td>WRI</td>
</tr>
<tr>
<td>5</td>
<td>A2A111D1</td>
<td>A-002A</td>
<td>WRI</td>
</tr>
<tr>
<td>6</td>
<td>A2A112A1</td>
<td>A-002A</td>
<td>WRI</td>
</tr>
<tr>
<td>7</td>
<td>A2A112B1</td>
<td>A-002A</td>
<td>WRI</td>
</tr>
<tr>
<td>8</td>
<td>A2A112C1</td>
<td>A-002A</td>
<td>WRI</td>
</tr>
<tr>
<td>9</td>
<td>A2A113A1</td>
<td>A-002A</td>
<td>WRI</td>
</tr>
<tr>
<td>10</td>
<td>A2A113B1</td>
<td>A-002A</td>
<td>WRI</td>
</tr>
</tbody>
</table>

To choose a specific experiment number, type either the choice number OR the experiment number.

P--Previous Screen; ENTER--Next Screen; MM--Main Menu; K--Search Menu
D--Mark Files (PF1 -- Select, PF2 -- Quit, PF3 -- Unselect)

COMMAND =

Fig. D.9 Result of search for the asphalt 'AAA-1'
SELECTION OF ASPHALT/AGGREGATE PROPERTIES

A. Asphalt Properties. The following screen will allow you to select the Asphalt whose properties are to be displayed.

B. Aggregate Properties. The following screen will allow you to select the Aggregate whose properties are to be displayed.

MM--------MAIN MENU
P----------PREVIOUS MENU

PLEASE TYPE THE CHOICE NUMBER IN THE SPACE PROVIDED.

COMMAND ===>

Fig. D.10 Asphalt/Aggregate Properties Selection Menu
SELECTION OF ASPHALT PROPERTIES

PLEASE ENTER THE CHOICE NUMBER OF THE ASPHALT WHOSE PROPERTIES ARE TO BE DISPLAYED

1. AAA-1 10. AAF-1 19. AAM-1 28. AAS-3 37. ABC 46. ABM-1
2. AAA-2 11. AAF-2 20. AAM-2 29. AAT 38. ABD 47. ABM-2
4. AAB-2 13. AAG-2 22. AAO 31. AAV 40. ABG
5. AAC-1 14. AAH 23. AAP 32. AAW 41. ABH
6. AAC-2 15. AAJ 24. AAQ 33. AAX 42. ABK
7. AAD-1 16. AAK-1 25. AAR 34. AAY 43. ABL-1
8. AAD-2 17. AAK-2 26. AAS-1 35. AAZ 44. ABL-2
9. AAE 18. AAL 27. AAS-2 36. ABA 45. ABL-3

H---------HELP
MM--------MAIN MENU
P----------PREVIOUS MENU

PLEASE TYPE THE CHOICE NUMBER IN THE SPACE PROVIDED.

COMMAND ===>

Fig. D.11 Asphalt Properties Selection Menu
## Properties of Asphalt: AAB-1

<table>
<thead>
<tr>
<th>Number</th>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Asphalt Grade</td>
<td>AC-10</td>
</tr>
<tr>
<td>2</td>
<td>MRL Code</td>
<td>AAB-1</td>
</tr>
<tr>
<td>3</td>
<td>Crude</td>
<td>WY Sour</td>
</tr>
<tr>
<td>4</td>
<td>Original Asphalt</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Viscosity</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>140 °F, poise</td>
<td>1029</td>
</tr>
<tr>
<td>7</td>
<td>275 °F, cSt</td>
<td>289</td>
</tr>
<tr>
<td>8</td>
<td>Penetration, 0.1 mm</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>(77 °F, 100 g, 5 s)</td>
<td>98</td>
</tr>
<tr>
<td>10</td>
<td>(39.2 °F, 100 g, 5 s)</td>
<td>6</td>
</tr>
<tr>
<td>11</td>
<td>Ductility, cm</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>(39.2 °F, 1 cm/min)</td>
<td>40.1</td>
</tr>
</tbody>
</table>

Fig. D.12 Partial List of Properties of asphalt 'AAB-1'
SELECTION OF AGGREGATE PROPERTIES

PLEASE ENTER THE CHOICE NUMBER OF THE AGGREGATE WHOSE PROPERTIES ARE TO BE DISPLAYED

1. RA 7. RG
2. RB 8. RH
3. RC 9. RJ
4. RD 10. RK
5. RE 11. RL
6. RF

H---------HELP
MM---------MAIN MENU
P---------PREVIOUS MENU

PLEASE TYPE THE CHOICE NUMBER IN THE SPACE PROVIDED.

COMMAND ==>

Fig. D.13 Aggregate Properties Selection Menu
## PROPERTIES OF AGGREGATE: RA

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>PROPERTY</th>
<th>VALUE (TAI/SWL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>Acidity</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Acid Insolubles, ASTM D-3042</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Insoluble Residue, %</td>
<td>94.6</td>
</tr>
<tr>
<td>34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Water Insolubles</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Water solubles, %</td>
<td>11.7</td>
</tr>
<tr>
<td>37</td>
<td>pH</td>
<td>9.5</td>
</tr>
<tr>
<td>38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>Zeta Potential</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Zeta Potential, mv</td>
<td>-28.1</td>
</tr>
<tr>
<td>41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>Major Oxides, %</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>Silicon Dioxide</td>
<td>70.5</td>
</tr>
<tr>
<td>44</td>
<td>Aluminium Oxide</td>
<td>15.77</td>
</tr>
<tr>
<td>45</td>
<td>Ferric Oxide</td>
<td>2.13</td>
</tr>
</tbody>
</table>

Fig. D.14 Partial List of Properties of aggregate 'RA'
HELP FOR MATERIALS/PROPERTIES SEARCH MENU

A - This option displays a list of files containing a specified material or a specified mixture.

B - This option allows the user to select an asphalt or aggregate. A list of properties for that asphalt or aggregate is then displayed. The user can scroll backward or forward through the list to view the desired property.

PLEASE TYPE "P" TO GO BACK TO MATERIALS/PROPERTIES SEARCH MENU

COMMAND ==>  

Fig. D.15 Help Screen for Materials/Properties Menu
Options 1, 2 and 3 may be used to search for experiments containing a specified asphalt, aggregate or modifier respectively.

Option 4 displays a list of experiments with a specified asphalt, aggregate and modifier in a mixture. Option 5 displays a list of experiments with a specified asphalt and aggregate in a mixture. Option 6 displays a list of experiments with a specified asphalt and modifier in a mixture.

PLEASE TYPE "P" TO GO BACK TO MATERIALS/MIXTURES SEARCH MENU

COMMAND ===>

Fig. D.16 Help Screen for Material/Mixtures Menu
Enter the choice number of the Asphalt whose properties are to be displayed, and a list of all properties of the selected asphalt will appear on the screen. You can scroll through the list backward and forward to see the desired property.

PLEASE TYPE "P" TO GO BACK TO ASPHALT PROPERTIES SEARCH MENU

COMMAND ==> 

Fig. D.17 Help Screen for Asphalt Properties Menu
Enter the choice number of the Aggregate whose properties are to be displayed, and a list of all properties of the selected aggregate will appear on the screen. You can scroll through the list backward and forward to see the desired property.

PLEASE TYPE "P" TO GO BACK TO AGGREGATE PROPERTIES SEARCH MENU

COMMAND ==> 

Fig. D.18 Help Screen for Aggregate Properties Menu
TEXT FILE MENU

A---------DISPLAY ALL TEXT FILES (SEQUENTIALLY)
L---------LIST ALL EXPERIMENT NUMBERS IN THE DATABASE
S---------LIST ALL EXPERIMENT NUMBERS FOR A SPECIFIC
          CONTRACT AND AGENCY
H---------HELP
MM---------RETURN TO MAIN MENU

OR

Enter an experiment number in the space given below.

COMMAND ===>

Fig. E.1 Text File Menu Screen
TEXT FOR EXPERIMENT A2A111A1

FILE NUMBER: A2A111A1.TXT

Performing Agency: University of Texas, Austin, TX

Project: A-001 Technical Assistance Contractor

Task Y.Y Use of Metal Fibers in Hot-Mix Asphalt

Subtask Y.Y.1: Evaluation of Titanium Fibers

Experiment Name: Sample Experiment

Date Entered into Database: June 31, 1989
Date Last Revision Entered into Database: January 04, 1992
Task Manager: J. Fiber
Researchers: S. Bitumen
Experiment Statistician: H. Variance

----------------------------------------
F--FORWARD; B--BACKWARD; P--PREVIOUS FILE; N--NEXT FILE; T--TEXT FILE;
COMMAND ==> MM--MAIN MENU.

Fig. E.2 Screen Displaying all text files sequentially
HELP FOR TEXT FILE MENU

A - This option displays the text files for all the experiments in the database sequentially. Type N/n to go to the next experiment.

L - This gives a list of all the experiment numbers in the database so that the text file for any experiment can be viewed by specifying the experiment number.

S - This option allows the user to view the text file for an experiment according to a specified contract number and agency.

** NOTE ** When viewing a file, a blank screen indicates the end of data.

PLEASE TYPE TT TO GO BACK TO THE TEXT FILE MENU

Fig. E.3 Help Screen for Text File
DATA FILE MENU

L----------LIST ALL EXPERIMENT NUMBERS IN THE DATABASE
S----------LIST ALL EXPERIMENT NUMBERS FOR A SPECIFIC
            CONTRACT AND AGENCY
H----------HELP
MM----------RETURN TO MAIN MENU

OR

Enter an experiment number in the space given below.

To select a data file, you must first select an experiment number.
Associated data file(s), if any, will then be displayed on the screen.

COMMAND =>>

Fig. F.1 Data File Menu Screen
To view a specific data file, type either the choice number OR the extension and hit enter. To scroll through ALL of the data files for this experiment in order, type A and hit enter.

A--All Data Files; P--Previous Screen; MM--Main Menu.

---

Fig. F.2(a) List of Data Files Screen
DATA FILE A2A122A2.D01

A2A122A2.D01

D. Christensen
Closed

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Asphalt</td>
<td>Treat.</td>
<td>Repno.</td>
<td>Strain</td>
<td>Temp.</td>
<td>Log_at</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>%</td>
<td>°C</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>7</td>
<td>AAA-1</td>
<td>TANK</td>
<td>1</td>
<td>.019</td>
<td>-35.1</td>
<td>9.518</td>
</tr>
<tr>
<td>8</td>
<td>AAA-1</td>
<td>TANK</td>
<td>1</td>
<td>.049</td>
<td>-25.2</td>
<td>7.191</td>
</tr>
<tr>
<td>9</td>
<td>AAA-1</td>
<td>TANK</td>
<td>1</td>
<td>.099</td>
<td>-15.3</td>
<td>5.309</td>
</tr>
<tr>
<td>10</td>
<td>AAA-1</td>
<td>TANK</td>
<td>1</td>
<td>.198</td>
<td>-4.8</td>
<td>3.623</td>
</tr>
</tbody>
</table>

F--Forward; B--Backward; R--Right; L--Left; RR--Far Right; LL--Far Left; T--Top

COMMAND ===>
N--NEXT FILE; P--PREV. FILE; E--EXP. MENU; MM--MAIN MENU.

Fig. F.2(b) Screen displaying one Data file in a sequential display
HELP FOR DATA FILE MENU

L - This gives a list of all the experiment numbers in the database so that the data files of any experiment can be viewed by specifying the experiment number.

S - This option allows the user to view the data file for an experiment according to a specified contract number and agency.

** NOTE ** When viewing a file, a blank screen indicates the end of data

PLEASE TYPE DA TO GO BACK TO THE DATA FILE MENU

COMMAND ===>  

Fig. F.3 Help Screen for Data File Menu
DATA DESCRIPTION MENU

A----------DISPLAY ALL DATA DESCRIPTIONS (SEQUENTIALLY)
L----------LIST ALL EXPERIMENT NUMBERS IN THE DATABASE
S----------LIST ALL EXPERIMENT NUMBERS FOR A SPECIFIC CONTRACT AND AGENCY
H----------HELP
MM----------RETURN TO MAIN MENU

OR

Enter an experiment number in the space given below.

COMMAND ===>

Fig. G.1 Data Description Menu Screen
DATA DESCRIPTION FOR EXPERIMENT A2A111A1

8. Data Description

001.D01 Asphalt number
002.D01 Aggregate number
003.D01 Laboratory sample identification number
004.D01 Replicate specimen number
005.D01 Length of fiber, cm
006.D01 Diameter of fiber, mm
007.D01 Percent of fiber added to mix based on weight of total mix
008.D01 Date when mix was made
009.D01 Mixing temperature, F
010.D01 Bulk specific gravity, ASTM D 2726
011.D01 Maximum theoretical specific gravity, Rice Method, ASTM D 2041
012.D01 Percent air voids in compacted mixture, \([100] \times \frac{(11)-(10)}{(10)}\)
013.D01 Peak to peak stress in Resilient Modulus Test, psi, MARK IV Schmidt apparatus, ASTM D 3497

COMMAND ===> D--Data Desc. Menu; MM--Main Menu.

Fig. G.2 Screen displaying one Data Description in a sequential display
HELP FOR DATA DESCRIPTION MENU

A - This option displays the Data Descriptions of all the experiments sequentially. Type N/n for the next experiment.

L - This gives a list of all the experiment numbers in the database so that the Data Description of any particular experiment may be viewed by specifying the experiment number.

S - This option allows the user to view the Data Description of an experiment according to a specified contract number and agency.

**NOTE** When viewing a file, a blank screen indicates the end of data

PLEASE TYPE DD TO GO BACK TO THE DATA DESCRIPTION MENU

COMMAND ==> 

Fig. G.3 Help Screen for Data Description Menu
OBJECTIVE MENU

A----------DISPLAY ALL OBJECTIVES (SEQUENTIALLY)
L----------LIST ALL EXPERIMENT NUMBERS IN THE DATABASE
S----------LIST ALL EXPERIMENT NUMBERS FOR A SPECIFIC CONTRACT AND AGENCY
H----------HELP
MM---------RETURN TO MAIN MENU

OR

Enter an experiment number in the space given below.

COMMAND ==>
1. Objective

Task: The object of this task is to determine the effect of the addition of metal fibers on the physical properties of hot-mix asphalt concrete.

Subtask: The objective of this subtask is to study the effect of titanium fibers on the physical properties of hot-mix asphalt concrete.

Experiment: The objective of this experiment is to establish whether or not titanium fibers sufficiently enhance the properties of hot-mix asphalt to warrant further study. This experiment will also be used to determine the experimental error variance for the response variables. (Note: One cannot assume that the experimental error variance will be the same for the control (no fibers) and modified mixes.) If the results from this experiment are positive, a second experiment will be designed to...

---

Fig. H.2 Screen displaying one objective in a sequential display
HELP FOR OBJECTIVE MENU

A - This option displays the Objectives of all the experiments in
the database sequentially. Type N/n for the next experiment.

L - This gives a list of all the experiment numbers in the database
so that the Objective for any particular one may be viewed by
specifying the experiment number.

S - This option allows the user to view the Objective for an experiment
according to a specified contract number and agency.

** NOTE ** When viewing a file, a blank screen indicates the end of
data

PLEASE TYPE OO TO GO BACK TO THE OBJECTIVE MENU

COMMAND ===>

Fig. H.3 Help Screen for Objective Menu
SCOPE MENU

A--------DISPLAY ALL SCOPES (SEQUENTIALLY)
L--------LIST ALL EXPERIMENT NUMBERS IN THE DATABASE
S--------LIST ALL EXPERIMENT NUMBERS FOR A SPECIFIC CONTRACT AND AGENCY
H--------HELP
MM--------RETURN TO MAIN MENU

OR

Enter an experiment number in the space given below.

COMMAND ===>

Fig. I.1 Scope Menu Screen
2. Scope

In this experiment, a single mix (aggregate and gradation) and asphalt cement will be used to quantify the effect of adding titanium fibers to hot-mix asphalt concrete. Diametral resilient modulus and diametral tensile strength will be measured at one temperature to characterize the physical properties of the mixes. Two different fiber lengths and diameters will be studied at two levels of fiber addition. Exhibit 2. Example of experiment plan (con

---

F--FORWARD; B--BACKWARD; P--PREVIOUS SCOPE; N--NEXT SCOPE;
COMMAND ==> SC--SCOPE MENU; MM--MAIN MENU.

Fig. I.2 Screen displaying one scope in a sequential display.
A - This option displays the Scopes of all the experiments in the database sequentially. Type N/n for the next experiment.

L - This gives a list of all the experiment numbers in the database so that the Scope for any particular one may be viewed by specifying the experiment number.

S - This option allows the user to view the Scope for a particular experiment according to a specified contract number and agency.

** NOTE ** When viewing a file, a blank screen indicates the end of data

PLEASE TYPE SS TO GO BACK TO THE SCOPE MENU

COMMAND ==> 

Fig. I.3 Help Screen for Scope Menu
## Statisticians' List of Experiments

<table>
<thead>
<tr>
<th>Exp. Number</th>
<th>Res Agency</th>
<th>Task</th>
<th>Manager</th>
<th>Researcher</th>
<th>Plan Start of Exp.</th>
<th>Plan Start of Exp.</th>
<th>Title of Experiment Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2A111A1</td>
<td>WRI</td>
<td></td>
<td>Brant'hvr</td>
<td>Duvall</td>
<td>08/01/88 09/05/88</td>
<td></td>
<td>Chemical Characterization</td>
</tr>
<tr>
<td>A2A111B1</td>
<td>WRI</td>
<td></td>
<td>Brant'hvr</td>
<td>Branthaver</td>
<td>08/01/88 09/05/88</td>
<td></td>
<td>Separation of Core Asphalt</td>
</tr>
<tr>
<td>A2A111B2</td>
<td>WRI</td>
<td></td>
<td>Brant'hvr</td>
<td>Branthaver</td>
<td>08/01/88 09/05/88</td>
<td></td>
<td>Chemical Properties of</td>
</tr>
<tr>
<td>A2A111C1</td>
<td>WRI</td>
<td></td>
<td>Brant'hvr</td>
<td>Branthaver</td>
<td>08/01/88 09/05/88</td>
<td></td>
<td>Chemical Properties of</td>
</tr>
<tr>
<td>A2A111D1</td>
<td>WRI</td>
<td></td>
<td>Brant'hvr</td>
<td>Robertson</td>
<td></td>
<td></td>
<td>Potentiometric Titration</td>
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<tr>
<td>A2A112A1</td>
<td>WRI</td>
<td></td>
<td>Brant'hvr</td>
<td>Barbour</td>
<td>08/01/88 09/05/88</td>
<td></td>
<td>Influence of Non-Polar</td>
</tr>
<tr>
<td>A2A112B1</td>
<td>WRI</td>
<td></td>
<td>Brant'hvr</td>
<td>Duvall</td>
<td>08/01/88 09/05/88</td>
<td></td>
<td>SEC Studies on Asphalts</td>
</tr>
<tr>
<td>A2A112C1</td>
<td>WRI</td>
<td></td>
<td>Brant'hvr</td>
<td>Duval</td>
<td>08/01/88 09/05/88</td>
<td></td>
<td>SEC studies on Aged Asph</td>
</tr>
<tr>
<td>A2A113A1</td>
<td>WRI</td>
<td></td>
<td>Brant'hvr</td>
<td>Mill</td>
<td>04/10/90 07/01/90</td>
<td></td>
<td>Mechanisms of Asphalt</td>
</tr>
<tr>
<td>A2A113B1</td>
<td>WRI</td>
<td></td>
<td>Brant'hvr</td>
<td>Branthaver</td>
<td>04/10/90 07/01/90</td>
<td></td>
<td>Metal Complex Catalysis</td>
</tr>
<tr>
<td>A2A115B1</td>
<td>WRI</td>
<td></td>
<td>Brant'hvr</td>
<td>Branthaver</td>
<td>04/10/90 07/01/90</td>
<td></td>
<td>Compositional Factors</td>
</tr>
<tr>
<td>A2A117A1</td>
<td>WRI</td>
<td></td>
<td>Brant'hvr</td>
<td>Harnsberge</td>
<td>04/10/89 09/05/89</td>
<td></td>
<td>An Aging Test Using Inc</td>
</tr>
<tr>
<td>A2A122A1</td>
<td>PTI</td>
<td></td>
<td>Anderson</td>
<td>Christ'sen</td>
<td>03/19/90 01/01/91</td>
<td></td>
<td>Non-Linear DMA: Core Asph</td>
</tr>
<tr>
<td>A2A122A2</td>
<td>PTI</td>
<td></td>
<td>Anderson</td>
<td>Christ'sen</td>
<td>03/06/90 01/01/90</td>
<td></td>
<td>Linear DMA: Core Asphatal</td>
</tr>
</tbody>
</table>

---

**COMMAND ==>**

F—Forward; B—Backward; R—Right; L—Left; RR—Far Right; LL—Far Left;

**Fig. J.1 Statistician's List of Experiments**
Select Method of File Transfer

1) Kermit
2) Procomm
3) FTP
4) Sendfile
5) Note
6) Help
7) Return to Database
8) Quit

Enter the choice number of the transfer mode:

Fig. K.1 Screen showing the options for file transfer
FILE TRANSFER HELP SCREEN

KERMIT: Press <CTRL> <RtSqBRACKET> keys when prompted to escape.
Type "C" to toggle to the MSKERMIT prompt.
Type "REC" to begin downloading the files.
Type "C" to toggle back to CMS when transfer completes.

PROCOMM: Press the <PgDn> key when prompted to escape.
Select KERMIT from the PROCOMM option menu.

FTP: Enter the remote ADDRESS, USERID, and PASSWORD.
Example: CSUVM.CSU.EDU JOHNP FISH

SENDFILE: Enter the remote BITNET ADDRESS.
Example: FRED AT OSUVM

NOTE: Enter the remote E-MAIL ADDRESS.
Example: MARK AT OSUVAX1.OSU.EDU

Press <ENTER> to return to the File Transfer Menu.

Fig. K.2 Help Screen for Downloading Menu