

# Chapter 3

## HEC-2 Package Menu Program

### 3.1 Program Purpose

A menu program, MENU2, has been created to provide convenient access to all the programs in the HEC-2 package, including COED and LIST, when operating on hard-disk systems. All of the programs in the package can operate independently without the menu; however, the menu makes it more convenient to define and transfer filenames among the various programs in the package. The following provides a description of the menu operation.

### 3.2 Program Set-Up

For a hard-disk system, the executable programs in the HEC-2 package would be stored in a directory (e.g., \HECEXE), along with the menu batch file (MENU2.BAT). Refer to Chapter 2 of this document for installation instructions. The DOS PATH command is used to list the directories to be searched for commands or batch files. The installation instructions include adding **\HECEXE** to the PATH. Usually the PATH command is included in the AUTOEXEC.BAT file so that it automatically enters the command when you boot the system. Refer to your DOS manual for information on the PATH command and the AUTOEXEC.BAT file.

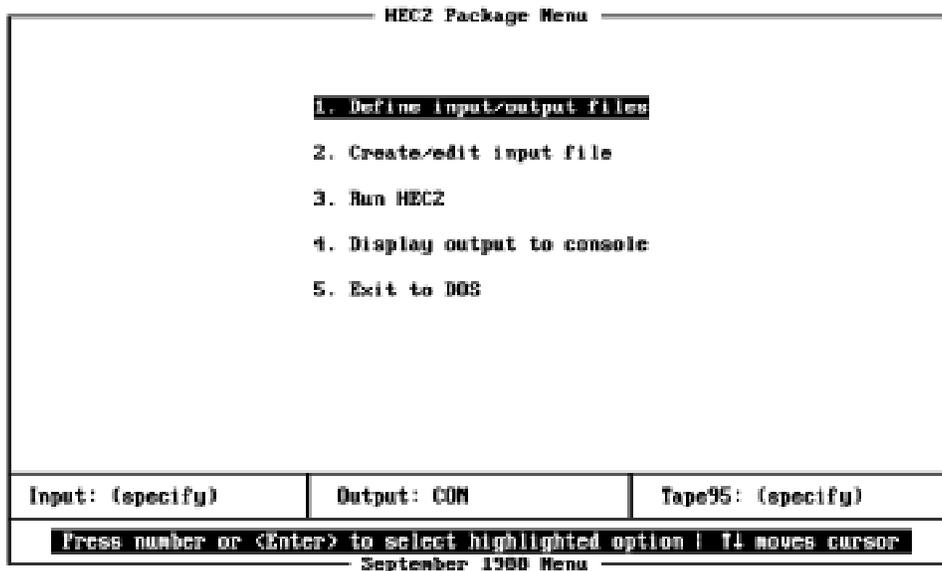
The data files for HEC-2 should be developed in a separate working directory (e.g., \HEC2). The test data can be copied into this directory if you want to run the standard tests. Program execution will occur in this directory; therefore, all input, output and scratch files will be in this directory.

### 3.3 Program Operation

The HEC-2 programs in the \HECEXE directory can be called while operating in any other directory because the PATH includes \HECEXE. To operate the HEC-2 package, change into the working directory (e.g., \HEC2), and execute the MENU2 program.

```
C:>CD \HEC2  
C:>MENU2
```

The menu, shown in Figure 3, will appear. All the programs in the HEC-2 package can be executed from this menu, as well as defining input and output filenames. The **background and text colors** can be changed for color monitors by pressing the **F9 and F10** keys, respectively. The program will save the selected colors and filenames.



**Figure 3**  
**HEC-2 Package Menu, MENU2**

**1. Define input/output files**

This option is used to define the target input and output filenames that will be used when executing HEC-2, and the support programs. When this option is selected, a pop-up menu will appear as shown in Figure 4.

**2. Create/edit input file**

This option will only function if you have also installed the full screen editor COED on your system. Selecting this option will call COED with the previously defined input filename, call the COED help file for HEC-2 (COEDHEC2.HPG) and open the file in full screen mode.

**3. Run HEC2**

This option executes HEC-2 and the support programs EDIT2, PLOT2, and SUMPO. The program selection is made by moving the cursor to this line and pressing the space bar until the desired program is displayed.

**4. Display output to console**

This option is used to display output to the console or the printer. To switch from console to printer, press the space bar while option 4 is highlighted. Program LIST is called with the output filename to provide console display, and PROUT is called to send output to the printer.

**5. Exit to DOS**

Selecting this option will exit you from the MENU2 program and return control to DOS. The defined filenames and screen colors will be saved.

The menu operates by using the cursor arrow keys to move to the desired operation and then pressing the <ENTER> key, or by pressing the number of the option desired. The menu options are listed in the order of a typical application. The following sections describe each option. First the input and output filenames must be defined.

If the filenames have been defined in a previous session, the input and output files are shown at the bottom of the menu. The filenames are stored when you exit MENU2 and recalled when you return to the menu. At the start, the input filename will show "(specify)".

To define, or change the files, move the cursor to "1. Define Input/output files" and press <ENTER> or enter <1>. A menu will pop up (see Figure 4) for the INPUT, OUTPUT, and TAPE95 files. Also, note the **default extensions** and **data directory** options.

```
----- HEC2 Package Menu -----
                                     1. Define input/output files
-----
Input file ..(specify)
Output File ..CON
Tape95 file ..(specify)

Default extensions ..YES
Data directory .....C:\$

Return to previous menu

-----
Input: (specify)      Output: CON      Tape95: (specify)
-----
Type file name or press 7 for file directory
-----
September 1988 Menu -----
```

Figure 4  
Define Input/Output Files Menu

With

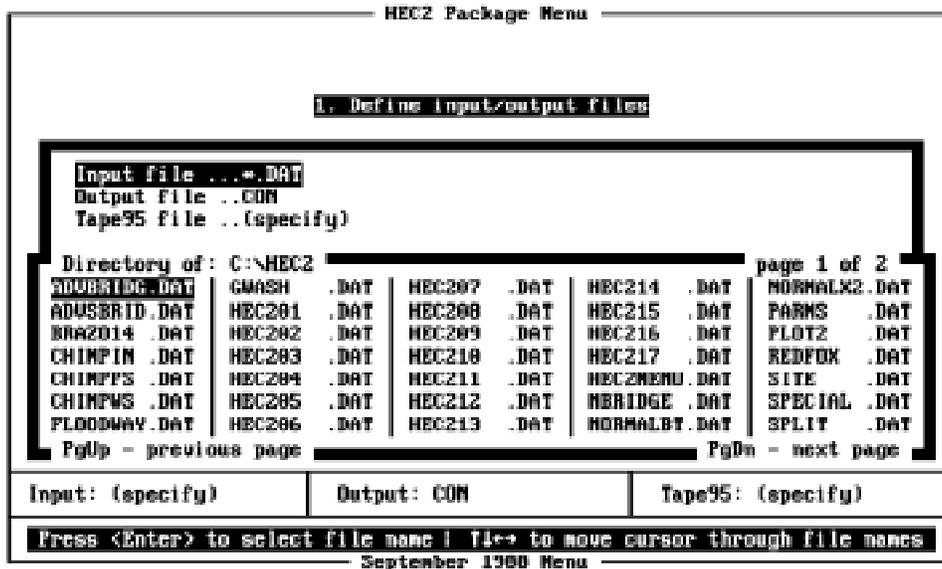
**Default extensions .. YES**, you only enter the filename (without extension) for the input file. This feature provides the same filename for all the files with the following extensions for HEC-2 files:

- .DAT for input data files
- .OUT for output "Print" files
- .T95 for the binary TAPE95 files

The automatic extension feature can be turned off by moving the cursor to **Default extensions** and pressing the space bar to toggle the choice to **NO**.

The default directory for file definition is shown next to **Data directory**. The directory can be changed by moving the cursor to that location and editing/entering the directory name. This allows access to data files in different drive and directory locations.

The filename can be entered, or enter a question mark <?>. For the <?> entry, a list of files on the current directory will be displayed, see Figure 5 below. The cursor keys can be used to highlight the desired file, and pressing <ENTER> will select the highlighted file. The **default extension** option, described above, will limit the file listing to those with the appropriate assumed extension, e.g., **.DAT** for data files.



**Figure 5**  
**MENU2 Data File Listing**

If you enter an input filename that does not exist, the program will echo:

**File does not exist.**  
**Would you like to create it (y/n)?**

Enter <y> and the filename will be created.

When all the filenames have been defined, move the cursor to **Return to previous menu** and press <ENTER>. This will return you to the main menu. With **default extensions** option on, the cursor will automatically move to the return position after the input filename is defined; you only have to press <ENTER>.

After the files have been defined, you may want to enter data in a new input file or edit an existing file. Move the cursor to **2. Create/Edit Input file**, or enter <2> to call COED. The program will echo:

**Edit "filename" (y/n)?**

to check the "filename" before calling COED with the defined input filename. Enter <y> or press <ENTER> to proceed. Enter <n> if you want to change "filename"; then enter the desired filename to edit.

COED is called with the HEC-2 help file **<HP HEC2>** and the full screen option **<FS>**. This will load the HEC-2 input variables help file, set the tab setting for input to the HEC-2 program, and put you in the full screen edit mode. As each record ID is entered in columns 1 and 2 of a line, the variables for that ID are displayed at the bottom of the screen. Also, the input description for each variable is available within COED. Within COED the **<F1>** key provides on-screen help, or refer to the HP command instructions in the COED manual. Chapter 4 of this document also provides additional information. If the automatic HEC2 help file does not load, carefully review the COED installation. The assumed configuration is shown in Figure 2.

When you have completed the edit session, exit COED (usually with the SAVE option). With the completion of COED, or any program in the package, the screen will display:

**Strike a key when ready . . .**

This allows you to see if there are any error messages written to the screen from the current program operation. Pressing any key will return you to the main menu.

After the input file has been created or edited, it is a good practice to check the file with EDIT2. To run one of the programs, move the cursor to **"3. Run HEC2"**. The program to run can be changed by pressing the **<SPACE BAR>**. (The instructions are shown at the bottom of the menu.) Press the **<SPACE BAR>** until **EDIT2** is displayed, and then press **<ENTER>**. The defined input file will be processed with **EDIT2**, and the output will be written to the specified output file. When the job is complete, press any key to return to the main menu. The specified output file will contain the **EDIT2** output.

If a filename was given, item **"4. Display Output to console"** can be used to display the output file with program LIST. Simply enter the number **<4>**, or move the cursor to that line and press **<ENTER>**. LIST provides a screen display of the output file, using the cursor keys to move through the file. The **<END>** and **<HOME>** keys are convenient for moving to the bottom or beginning of the file. Press **<F1>** to see the LIST commands.

If the input file needs correction, move the cursor to **"2. Create/edit input file"** and press **<ENTER>**, or enter **<2>** and the input file will be directed to COED for editing. If the input file is ready to run with HEC-2, move the cursor to **"3. Run HEC2"** and toggle the program to **HEC2**, with the **<SPACE BAR>**, and press **<ENTER>**. The input will be passed to HEC-2 and the job executed. When complete, press any key to return to the main menu.

After running HEC-2, programs SUMPO and PLOT2 can be used to examine the results from the job. They are called from **"3. Run HEC2"**, in the same manner as HEC-2, described above. Chapters 8 and 9 provide detailed descriptions of the SUMPO and PLOT2 programs.

The HEC-2 output file can be reviewed on the screen with LIST by entering **<4>**, as described above. Also, LIST can also be used to print portions of the output file. A complete printing of the output file can be obtained by pressing the **<SPACE BAR>** to display **"4. Display output to printer"**. A utility program, PROUT, will print the output file with the carriage controls. PROUT will print with either 80- or 132-character line length. However, you must set the printer prior to starting the MENU2 program.

When complete, press number **<5>** or move the cursor to **"5. Exit to DOS"** and press **<ENTER>**. That will take you out of the Menu and return you to the DOS prompt.