

Chapter 2

Program Installation Overview

This chapter is only an overview of the installation instructions. Please see separate "Installation Instructions for Microcomputer Version of HEC-1" for detailed installation information.

2.1 Computer Requirements

This version of HEC-1 will run on an IBM or compatible microcomputer that has the following:

- * **640 Kilobytes (KB) of Random Access Memory (RAM), with 571,000 bytes of base memory free for program execution.**
- * **MS DOS 2.1 or greater.**
- * **One 5¼ inch floppy diskette drive (360 Kb or 1.2 Mb).**
- * **A 10 Megabyte (or larger) hard disk (a minimum of 3 Mb of storage should be available when installing the system).**
- * **A math coprocessor (8087, 80287, or 80387) is highly recommended, but not required. The math coprocessor will greatly reduce the execution time of the program (increases computational speed by a factor of 5 to 10).**

NOTE: GSS DEVICE DRIVERS REQUIRED

The HECDSS DISPLAY graphics program included with the HEC-1 package of programs requires GSS device drivers to create graphical displays. Device drivers are software packages for specific plotters, printers and graphics adapters. Please review the installation instructions for device drivers.

GSS device drivers for non-Corps offices may be obtained from GSS (Graphic Software Systems, inc., 9590 S.W. Gemini Drive, Beaverton, OR 97005). Device drivers for Corps of Engineers offices may be obtained from HEC (Hydrologic Engineering Center, 609 Second Street, Davis, CA 95616).

2.2 Installation Options

Installation is usually accomplished through the execution of an interactive program called **INSTALL1** which is provided with the HEC-1 package. See "Installation Instructions for Microcomputer Version of HEC-1" for details. The **INSTALL1** program:

- Creates directories **\HECEXE** and **\HECEXE\SUP**. The **\HECEXE** directory is used to store all of the executable programs and the **\HECEXE\SUP** subdirectory is used for any supplemental files required by the executable programs.
- Un-compresses and copies files into the appropriate directories.
- Displays information about modifying the **CONFIG.SYS** and **AUTOEXEC.BAT** files in order to execute the programs.

The recommended directory configuration that **INSTALL1** creates is shown in Figure 2. After completing the installation, make sure that your PC has all of the same files in the **\HECEXE** and **\HECEXE\SUP** directories as shown in Figure 2. Alternative installation instructions (not using **INSTALL1**) are provided in "Installation Instructions for Microcomputer Version of HEC-1." However, the **INSTALL1** program is the preferred method for HEC-1 installation on your computer.

2.3 Contents of the HEC-1 Package Diskettes

The **HEC-1** computer program, example input data, example output, menu system and auxiliary programs are provided on five **360 Kb**, 5 1/4 inch floppy diskettes. The files may be de-archived and loaded onto your computer using the **INSTALL1** program or by manual installation; see separate "Installation Instructions for Microcomputer Version of HEC-1."

2.4 Memory Requirements

The standard **HEC-1** Package of programs was compiled under the **DOS** operating system, and is therefore constrained to the **640 kilobytes** of main memory limitation. In order for the **HEC-1** package to function correctly, there must be **571,000 bytes** of base memory available for program execution. The **DOS** command **CHKDSK** can be run to determine the amount of available base memory on your machine. If you do not have enough free memory, check your **AUTOEXEC.BAT** file to see if you are loading any **RAM** resident programs. You may have to remove some RAM resident programs to obtain the needed base memory. A large-array version of HEC-1 is available that requires 2.5 megabytes of total memory. See "HEC-1 Flood Hydrograph Package, Large-Array Version Implementation."

2.5 Configuration of Computer System

To allow access of the executable programs from any directory, it will be necessary to edit the **AUTOEXEC.BAT** file to include a path to the **\HECEXE** directory. Many **HEC** programs require the capability to open more than eight (8) files at any one time. Because eight is the system default, you will need to modify your **CONFIG.SYS** file to include the following two lines: **FILES=20**, and **BUFFERS=15**.

For more information concerning the **PATH** command and the **AUTOEXEC.BAT** and **CONFIG.SYS** files, consult your **DOS** manual and "Installation Instructions for Microcomputer Version of HEC-1."

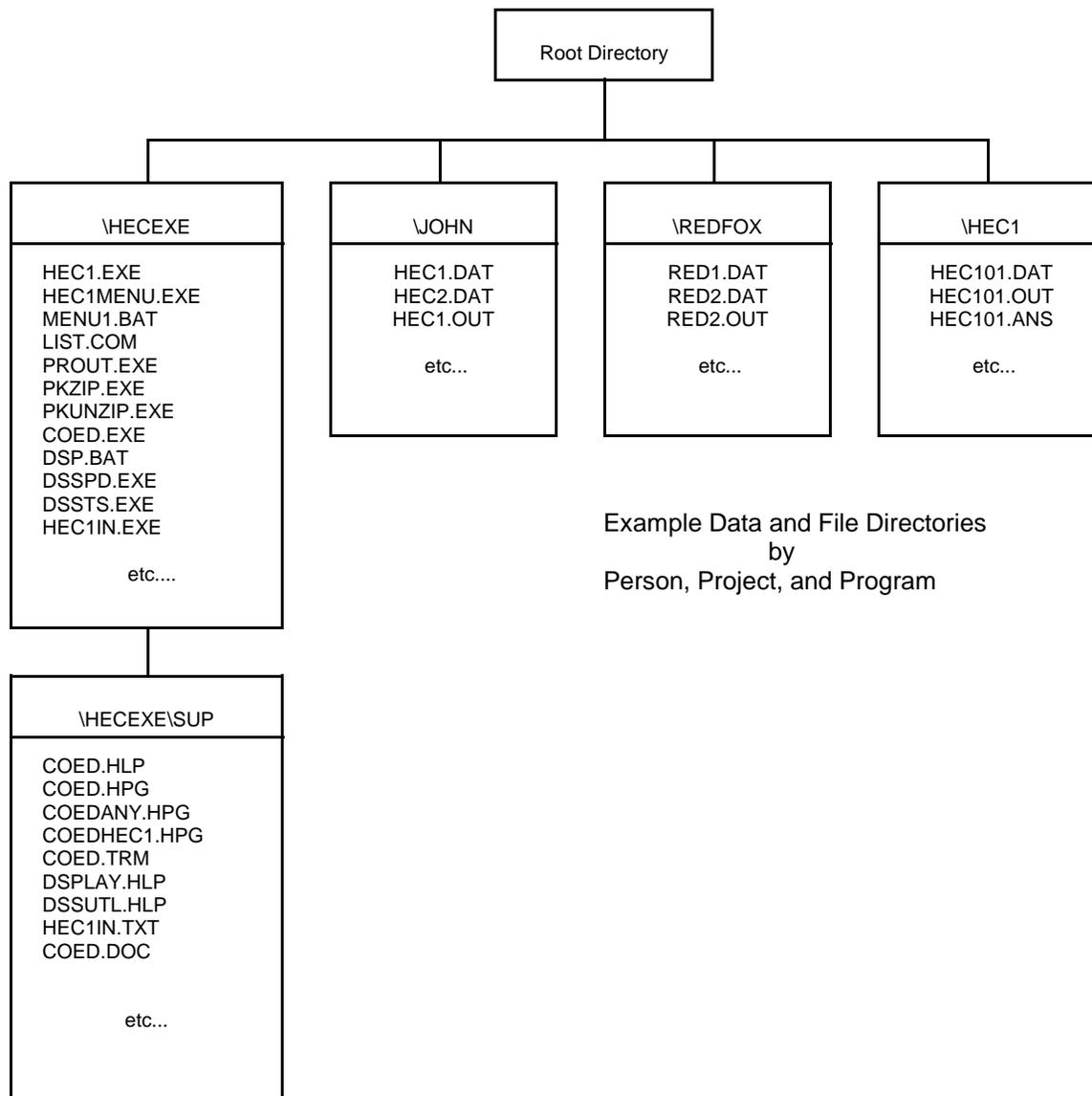


Figure 2. Recommended HEC Directory Configuration