



user's manual

for Tandy Model 1000 Personal Computers

Program Author for Tandy 1000 version: Bill Ong
Manual Author for Tandy 1000 version: Mitra Varza

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preface

This manual explains how to use the PFS:FILE program to help organize and manage the information you use every day. If you are not familiar with the general operation of your computer system, read through the manual that came with it before beginning to use the PFS:FILE program.

To use PFS:FILE, you need a Tandy Model 1000 Personal Computer system with at least 128KB of memory and the MS-DOS* operating system. You also need a printer, the PFS:FILE program diskette, and a supply of blank, formatted diskettes.

This manual provides step-by-step instructions on how to get started and how to use each FILE function. Each chapter proceeds through one function in detail. The manual works with the same major example throughout to allow you to use your computer and experience FILE as you are reading about it. The best way to learn FILE is to read the manual and follow along with the examples.

The appendices contain information on error messages and recovery, setting up the FILE program to use with different configurations, estimating how many forms will fit in a file, useful MS-DOS commands, a summary of special keys and commands and instructions on setting up your printer to work with your Tandy 1000. A glossary explains words that may not be familiar to you, and there is an index.

If you have not already done so, please take a moment to complete and mail the User Group Enrollment Card. Enrollment in the PFS User Group entitles you to receive product update information, new product announcements, and tips on using the PFS Family of Software.

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Protecting Your PFS Data Files

By the time you have created a PFS file and entered the information in it, you have invested a good deal of your time. To avoid losing the data stored in that file (and the time you've spent entering it), follow these guidelines:

1. *Never remove a data diskette or turn the computer system off unless the PFS:FILE Main Menu is displayed on the screen. IF YOU DO, YOUR FILE MAY BE PERMANENTLY DAMAGED.*
2. Use only high-quality, double-density diskettes.
3. Always keep at least one extra, or "backup" copy of each PFS file. See our backup recommendations below.
4. Handle your diskettes carefully. Store away from heat, sunlight, and devices with strong magnetic fields (TVs, diskette drives, etc.).
5. Print a copy of your files from time to time. See Chapter 5 for instructions.

Recommended Backup Procedure

1. Back up your data files on diskette or hard disk on a regular basis. If you update them daily, then back up daily. If you update less often, then back up whenever you update.
 2. After creating a new data file, make two backup copies. Thereafter, alternate the use of them. The first time you back up, use the first diskette; the next day, use the other diskette; and so on. This way, if a problem develops while making a backup, you will still have the data on the other backup diskette.
 3. Use the MS-DOS DISKCOPY command to back up your files (see Appendix D for instructions on how to use DISKCOPY).
 4. If you encounter problems with a file or get an I/O ERROR message, discard the diskette at once and use the backup diskette (make a copy of the backup diskette first). If the problem recurs with the backup diskette, ask your computer dealer for help.
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I: *introduction*

This introduction is divided into two parts: The first part is an overview of the PFS:FILE program and how it works. The second part tells you how to get started using PFS:FILE.

What is PFS:FILE?

PFS:FILE is a computer program that you can use to store and retrieve the information you deal with every day. It works with all kinds of information—about people, places, objects, ideas, events. PFS:FILE (or simply FILE) is useful in a wide range of applications, such as business, professional environments, home, and education. FILE organizes and stores information efficiently, providing easy access to any information you want. Retrieval is fast and reliable, and is not limited by the order in which the information is stored.

When you use FILE, your information is kept in forms of your own design. A form can have as much or little structure as you wish. Using the computer keyboard and screen, you design the form you want, save it in a file on a disk, and then use it to store your information.

Here are some examples of the kinds of forms you can design:

Personnel Records

Personnel Record Form		
Employee #:	Hired:	
Name:		
Address:		
City:	State:	Zip:
Job Title:		
Salary:		

Employee #:	Hired:	
Name:		
Address:		
City:	State:	Zip:
Job Title:		
Salary:		

File: STAFF FORM 1 Page 1
F2-Print F3-Remove F5-Date F6-Time F10-Continue

Customer List

CUSTOMERS		
ACCOUNT #		
NAME:		
ADDRESS:		
CITY:	STATE:	ZIP:
PHONE:		
CREDIT RATING:		
METHOD OF PAYMENT:		
DATE OF LAST PURCHASE:		
PURCHASES:		
COMMENTS:		

Name: Account #:
 Address:
 City: State: Zip:
 Phone:

Credit Rating:
 Method of Payment:

Date of Last Purchase:
 Purchases:

Comments:

File: CUSTLIST FORM 1 Page 1
 F2-Print F3-Remove F5-Date F6-Time F10-Continue

Patient Records

AZUKI MEDICAL GROUP 1357 W. SHAW AVE PETALUMA, CA 93711		
Patient Record		
Soc. Sec. #	666 66 2730	Age 67
Name	Mr. San Miguel	
Address	3199 Prieto Drive	
City	Palo Alto	State CA Zip 94025
Chronic Conditions	Arthritis	
Last Office Visit		
9/30/78 <i>San Miguel</i>		
7/16/79 <i>San Miguel</i>		

SS#: Age: Date:

Name:
 Address:
 City: State: Zip:
 Home Phone:
 Business Phone:

Occupation:
 Insurance:
 Bill To:

Last Treatment Date:

File: PATIENTS FORM 1 Page 1
 F2-Print F3-Remove F5-Date F6-Time F10-Continue

Drug Allergies:

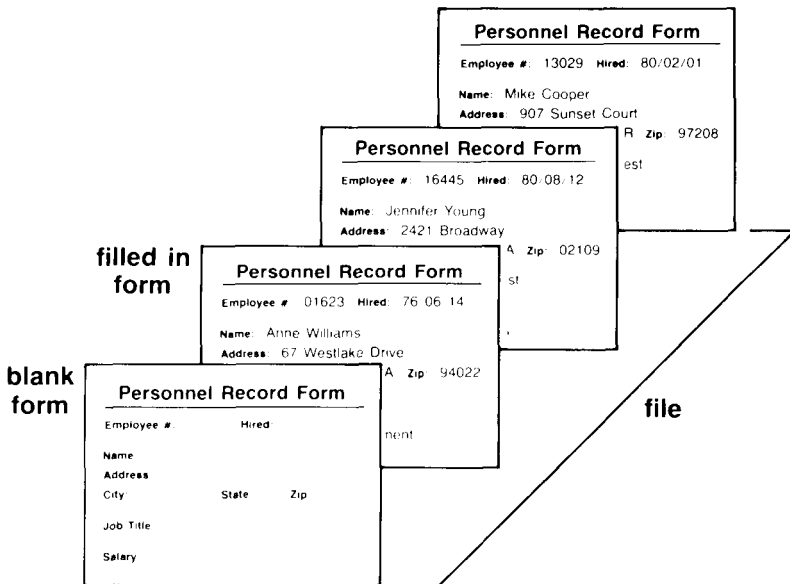
Chronic Conditions:

History:

Treatment Record:

File: PATIENTS FORM 1 Page 2
 F2-Print F3-Remove F5-Date F6-Time F10-Continue

After you have designed the blank form, you can recall it to the screen, fill it out with the information you want to keep, and then store the filled-in form back in the file. You can enter data in any order you like and FILE will find the information when you need it. Diskette storage is very compact. Depending on the number of pages there are in the form, how many items there are per page, and how much data is entered in each item, you can store up to 2500 simple forms. See *Appendix C, Diskette Storage Capacity*, to learn how to estimate accurately the number of forms that will fit in a file.



Once you store the information in the file, you can retrieve it in a variety of different ways. Using a retrieve spec form, you indicate what information you want to find by filling in retrieve specifications. You can ask for all items that exactly match a given set of characters:

"find the employee record for Eric Doerr"

Employee #:	Hired:
Name: Eric Doerr	
Address:	
City:	State: Zip:
Job Title:	
Salary:	

File: STAFF RETRIEVE SPEC Page 1
F1-Help F5-Date F6-Time F10-Continue

or all items that contain a certain set of characters:

"find all customers that have purchased a computer from us"

Name:	Account #:
Address:	
City:	State: Zip:
Phone:	
Credit Rating:	
Method of Payment:	
Date of Last Purchase:	
Purchases: ..computer..	
Comments:	

File: CUSTLIST RETRIEVE SPEC Page 1
F1-Help F5-Date F6-Time F10-Continue

If the item is a number, the request can be for all items less than, greater than, or equal to a given number:

"find all patients over 65"

SS#: Age: >65 Date:

Name:
Address:
City: State: Zip:
Home Phone:
Business Phone:

Occupation:
Insurance:
Bill To:

Last Treatment Date:

File: PATIENTS RETRIEVE SPEC Page 1
F1-Help F5-Date F6-Time F10-Continue

FILE allows you to enter a retrieve specification for every item in the form. Only those forms meeting all the specifications are found. This feature gives you access to complex relationships between different items of information:

"find all patients over 65 who live in Palo Alto and suffer from arthritis"

SS#: [REDACTED]	Age: >65	Date: [REDACTED]
Name: [REDACTED]		
Address: [REDACTED]		
City: Palo Alto	State: [REDACTED]	Zip: [REDACTED]
Home Phone: [REDACTED]		
Business Phone: [REDACTED]		
Occupation: [REDACTED]		
Insurance: [REDACTED]		
Bill To: [REDACTED]		
Last Treatment Date: [REDACTED]		

File: PATIENTS RETRIEVE SPEC Page 1
F1-Help F5-Date F6-Time F10-Continue

Drug Allergies: [REDACTED]
Chronic Conditions: ..arthritis..
History: [REDACTED]
Treatment Record: [REDACTED]

File: PATIENTS RETRIEVE SPEC Page 2
F1-Help F5-Date F6-Time F10-Continue

You can display the requested forms on the screen for quick viewing (and updating, if you wish) or print them for a more permanent record. You can print the entire form or selected portions of it, formatted to your specifications (for example, you can generate mailing labels).

Getting Started with PFS:FILE

This section provides basic information about starting to use the PFS:FILE program. It talks about your computer system, loading the program into your computer, FILE's Main Menu, and the special keys used in FILE.

What You Need to Use FILE

To take full advantage of all the features of the FILE program, you need the following equipment:

- a Tandy Model 1000 Personal Computer, with
 - at least 128K of memory
 - a video monitor
 - two diskette drives
 - a parallel or serial printer, properly connected to your computer
- the PFS:FILE package, including
 - the PFS:FILE program diskette
 - the spare copy of the PFS:FILE program diskette

Note: You cannot make a backup copy of the program using the MS-DOS DISKCOPY or COPY commands. Instead, this copy is provided in case something happens to damage your original program diskette. Store it in a safe place.
- blank, high-quality diskettes on which to store information

Using FILE with a Single-Drive System

While it is possible to use FILE with only one diskette drive, you will not be able to use the COPY or Change Design function. To make the most effective use of the program, you need to have two diskette drives. This manual assumes that you do have two drives. (To copy your PFS file with one diskette drive, use the MS-DOS COPY or DISKCOPY commands.)

Making the FILE Program Diskette Self-Loading

Before you begin using FILE, you should modify the program diskette so that it is self-loading, i.e., so that you can load FILE without first loading MS-DOS.

To modify the diskette, follow the instructions below, depending on whether your computer system has one or two diskette drives.

For a double-drive system:

1. Turn on your computer system, insert the MS-DOS diskette into drive A, and press RESET.
2. Enter the date (and time if requested) when MS-DOS asks you to do so. When the MS-DOS prompt (A>) appears, place the FILE diskette in drive A and the MS-DOS diskette in drive B. Type

INSTALL

and press the ENTER key.

3. When the computer displays the message

```
A> echo off
Place DOS diskette in drive "B",
leave PFS series diskette in drive "A"
Strike a key when ready . . .
```

press any key. You will see a series of commands and the in-use lights of the diskette drive will come on alternately for the next few moments as information is copied from the MS-DOS diskette to the FILE diskette. When the MS-DOS prompt reappears, you are ready to begin using PFS:FILE.

For a single-drive system:

1. First, turn on your computer system, insert the MS-DOS diskette into the drive and press RESET. Enter the date (and time if requested) when MS-DOS asks you to do so.
2. When the MS-DOS prompt appears, place the FILE diskette in the drive, type

INSTALL

and press the ENTER key.

3. When the computer displays the message

```
A> echo off
Place DOS diskette in drive "B",
leave PFS series diskette in drive "A"
Strike a key when ready . . .
```

press any key to continue.

4. When the computer displays the message

Insert diskette for drive B and strike any key when ready

insert the MS-DOS diskette in the drive and press a key.

5. When the computer displays the message

Insert diskette for drive A and strike any key when ready

insert the FILE diskette in the drive and press a key.

6. Continue inserting the FILE diskette when the computer asks for a diskette for drive A, and the MS-DOS diskette when the computer asks for a diskette for drive B. When the MS-DOS prompt reappears, you are ready to begin using PFS:FILE.

Setting Up FILE to Run with Your Computer

FILE comes set up to work with an IBM compatible parallel printer, and to automatically use the diskette in drive B as a work diskette to store information temporarily when sorting forms for printing or when changing the design. If you are using a serial printer, or if you want to use a diskette in a different drive or the hard disk as the work diskette, you will need to run the SETUP utility program provided on the FILE program diskette before using the FILE program. See Appendix B for instructions on how to use SETUP.

If you have a printer that is not IBM compatible (Tandy daisy wheel and dot matrix printers listed in Appendix F), follow the instructions in Appendix F to make your printer work with FILE.

Using FILE with a Hard Disk

You can use the hard disk with PFS:FILE in two different ways:

- You can store your PFS files on the hard disk. This greatly increases the maximum number of forms you can store in a file, and also speeds up the search and sort operations.
- You can install the FILE program on the hard disk. This speeds up the process of starting FILE, and eliminates the need to use the diskette each time you start the program.

If you have a Tandy model 1000 with a hard disk, you will work with the FILE program in a slightly different way than this manual describes. This manual gives instructions assuming you have two floppy disk drives (A: and B:). See Appendix B for specific instructions on installing FILE on a hard disk.

Starting the FILE Program

Once you have configured FILE to run with your computer system, you can load the program and begin to use it. The procedure for loading the program is slightly different depending on whether or not the computer is turned on:

- if the computer is turned off, turn on the computer. Insert the FILE diskette in drive A and press RESET. Enter the date and time when requested, and FILE loads automatically. You hear the diskette drive as the program loads into memory.
- if the computer is turned on, simply exit from whatever program you are using. When the MS-DOS A> prompt appears, insert the FILE program diskette in drive A, type FILE, and press the ENTER key. FILE loads immediately into memory.

After loading FILE, remove the program diskette from the drive and put it back in its protective envelope. You won't need it again until you want to exit from FILE.

The PFS:FILE Main Menu

When you load the FILE program, the first thing you see is the FILE Main Menu:

```
PFS:FILE MAIN MENU
-----
1 DESIGN FILE      5 PRINT
2 ADD              6 REMOVE
3 COPY             7 SET UP PRINTER
4 SEARCH/UPDATE    8 EXIT

SELECTION NUMBER:
FILE NAME:

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```

You see this menu when you first load FILE and whenever you press the ESC key. You use this menu to select the function you want FILE to perform. It consists of a numbered list of the FILE functions, along with two items that you need to fill in:

SELECTION NUMBER: Enter the number corresponding to the function you want to perform (1 selects DESIGN FILE, 5 selects PRINT, etc.) Each time the Main Menu appears, this item is cleared, indicating FILE is ready for you to enter a new selection.

FILE NAME: Enter the name of the file you are going to use. You initially give the file a name when you design it (see Chapter 1). This can be a simple file name, such as STAFF, a drive name and file name, such as B:STAFF, or a complete path name. If no drive is specified, FILE assumes the file is in the default drive (drive A unless you have changed it.)

WARNING

Do not remove the diskette containing your data file from the disk drive unless the FILE Main Menu is displayed on the screen. Removing it at other times may damage the data in the file.

Keyboard Control Keys

The list below shows the special control keys you use most often when working with FILE. Others are explained throughout the manual. They are all summarized in Appendix E.

<i>Key</i>	<i>Function</i>
ESC	Escape. Use this key at any point while using FILE to cancel the current operation and return to the Main Menu.
F10	Continue. Use this key to begin or continue the specified function.
F1	Help. Use this key to display quick reference information appropriate to the function you are performing.
TAB	Tab. The Tab key moves the cursor from one item to the next on a menu or FILE form. With SHIFT, it moves the cursor back to the previous item.
BACKSPACE	Backspace. This key moves the cursor one space to the left and removes any character in that space. Use this key to correct mistakes made when filling in items on the screen.
ENTER	Enter. This key moves the cursor to the beginning of the next line.
PG DN	Next Page. This key brings up the next page of the form, or an attachment page if the page on the screen is the last page of the form.
PG UP	Previous Page. This key recalls the previous page of the form to the screen. You can review it and make changes if you wish.

F4

Erase Page. Use this key to clear all entered information from the menu or form, and to move the cursor to the top left-hand corner of the screen.

INSERT

Insert Characters. This key switches back and forth between normal and insert mode. In insert mode (shown by a rectangular cursor), FILE inserts typed characters at the cursor position, moving other characters on that line to the right to make room. If the line is full, nothing happens.

DELETE

Delete Characters. This key deletes the character at the current cursor location, moving other characters on the line one location to the left to fill up the space.

Using FILE with MS-DOS

You can store your PFS files on any MS-DOS compatible disk device that is properly connected to your computer. Before using a diskette or a hard disk, you must format it with MS-DOS.

If you plan to store PFS files on diskettes, we recommend that only one file be stored on each diskette, since files tend to get large over time and cannot be continued on another diskette.

PFS File Names

To the computer, PFS files look just like other files. The conventions for naming PFS files are the same as for other MS-DOS files. These conventions are briefly summarized below. For a complete description of file naming, see the MS-DOS manual.

A file name usually has two parts: the name of the drive on which the file is stored, and then the name of the file. The two parts are separated with a colon (:). For example, the file name A:STAFF refers to the file named STAFF on the disk in drive A. If you use the name of the file only (e.g., STAFF), FILE assumes the file is on the diskette in the default drive.

File names can be from one to eight characters long. You can use the letters A through Z, the numbers 0 through 9, and some special characters. Here are some sample file names:

TARGET82

SALES

PATIENTS

A file name can also have an optional extension of a period and one, two, or three more characters. If a file name has an extension, you must always use the extension with the name in referring to that file. Some file names with extensions are:

TARGET.JAN SALES.PFS CLIENTS. \$\$\$

FILE also recognizes file names that contain volume labels instead of drive names, or complete pathnames that utilize the tree-structured directory capability.

For example, if you store PFS files on a hard disk, you can specify the name of the disk or directory as part of the filename; e.g., C:\PFSDAT\ BUDGET refers to the file named BUDGET in the directory PFSDAT on the disk named C:. If the directory has a long name, you can use the MS-DOS CHDIR (Change Directory) command to set a default pathname before loading FILE. See your MS-DOS manual for details.

When You Need Help





Help screens are available when designing a form; when searching through the file; when copying, removing, or printing forms; and when changing the design of an existing file. Simply press F1 and FILE displays quick reference information to help you remember what to do.

Summary

- PFS:FILE is a computer program that helps you store and retrieve information in a way that is familiar, fast, reliable, and powerful.
 - Make backup copies of your data files to prevent the loss of valuable data.
 - Use only high-quality diskettes.
 - | |
|-----|
| ESC |
|-----|

 cancels the current operation and returns to the Main Menu.
 - | |
|-----|
| F10 |
|-----|

 begins or continues the specified function.
-

F1	displays a help screen when filling in forms to perform FILE's functions.
TAB	moves the cursor from one item to the next on a menu or form. With SHIFT, moves to the previous item.
BACKSPACE	moves the cursor one space to the left and removes any character in that space.
ENTER	moves the cursor to the beginning of the next line.
	} move the cursor one space in the direction shown by the arrow. No characters are erased.
	
	
	
PG DN	brings up the next page of the form, or an attachment page.
PG UP	recalls the previous page of the form to the screen.
F4	clears all entered information from the menu or form, and moves the cursor to the top left-hand corner of the screen.
INSERT	switches between normal and insert mode.
DELETE	deletes the character at the current cursor location.
NUM LOCK	switches the numeric keypad to the right of the main keyboard between numbers and the PG UP, PG DN, and END keys.

WARNING

Do not remove the diskette containing your data file from the disk drive unless the FILE Main Menu is displayed on the screen. Removing it at other times may damage the data in the file.

1:

design file

With the DESIGN FILE function, you create a file for storing your information. You select a diskette to hold your file, give the file a name, design the form, and store this form in the file. Later, you fill in the form with information, and FILE stores that information in the same file.

Starting the DESIGN FILE Function

Start the FILE program according to the directions in the Introduction. When the FILE Main Menu appears on the screen, the cursor is always positioned in SELECTION NUMBER:

```
PFS:FILE MAIN MENU
-----

1  DESIGN FILE      5  PRINT
2  ADD              6  REMOVE
3  COPY             7  SET UP PRINTER
4  SEARCH/UPDATE    8  EXIT

SELECTION NUMBER:
FILE NAME:

Copyright 1984, SOFTWARE PUBLISHING CORPORATION

F10-Continue
```

To select the DESIGN FILE function, first enter a 1 in SELECTION NUMBER. Press the TAB key to move the cursor to the FILE NAME item, and enter a name for your file. If you want to store the file on a diskette other than the diskette in the default drive (drive A unless you have changed it), precede the file name with a drive name and a colon (:). For example, to store a file named ORDERS on the disk in drive B, enter B:ORDERS in FILE NAME. (The section titled *PFS File Names* in the Introduction describes the use of drive, directory and file names.)

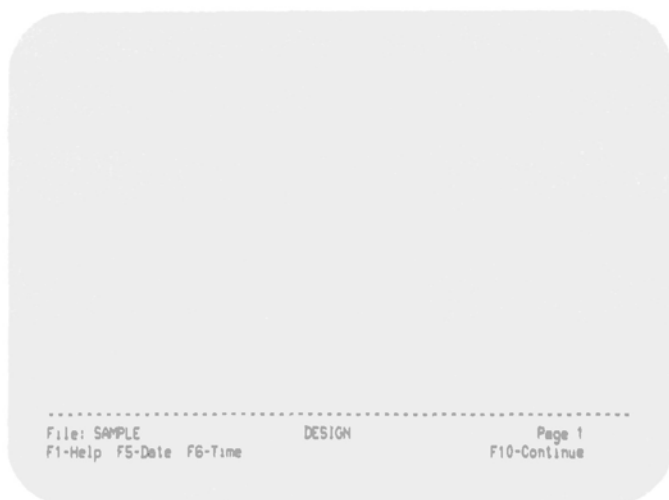
When you have filled in both items, press the F10 key. The Design File Menu appears next:



The DESIGN FILE function has two options. With Create File, you can design the form for a new file. With Change Design, you can change the design of a form from an existing file, whether or not the file contains data. This second option is discussed in Chapter 9.

The Create File Option

To create a new file, enter a 1 in the SELECTION NUMBER item of the Design File Menu, and press F10. A blank screen appears for you to design the form:



FILE uses the message area at the bottom of the screen to tell you:

- the name of the file you are creating (SAMPLE)
- what stage of file development you are in (DESIGN)
- the page number (1)
- the function keys available, and what they do

If the file name you entered already exists on the diskette, FILE will display the message THE FILE ALREADY EXISTS before displaying the blank screen. If you want to replace the existing file with the new file, press F10; otherwise, press the ESC key to cancel the operation, then start again with a different name.

Designing a Form

When you design a form, you create a place to store your information. Using the keyboard and screen, you create an image of the form you want. You can use a ready-made form as a guide in designing your FILE form, or you can use the following guidelines to create your own form:

- Decide how to arrange the information you wish to store in your file.
- Choose names that best describe each section of information.
- Determine approximately how much space you should leave for each section of information.

Each section set aside for information (and later the filled-in section) is called an "item". As you are designing your form, keep in mind these important points about items:

- Leave plenty of space for each item. This does not take more space on your diskette and is important because your form is used for both storing and retrieving information. When you use it to retrieve something, the format necessary to retrieve the information may actually require more character positions than the data itself. For example, an item named PAGE may be expected to store a maximum of three digits. If you design your form with only three spaces following PAGE, you cannot ask for all pages less than 100, because the necessary format would look like this: PAGE: <100.
 - Make the first item in your form the one you will look for most frequently. This provides the fastest possible retrieval. When FILE is searching for the first item on a form, it can go directly to the desired form in the file. When FILE is searching for other items in the form, it searches through each form in the file from the end of the file forward, which takes longer.
 - When FILE prints out information from your files, it prints items in the order in which they appear on the form. Design your form with this in mind. For example, suppose you want to print mailing labels from a file. Your forms must be set up in the order of a standard mailing address (name, address, city, state, zip), or you will not be able to print a mailing label with the items in that order. Note that the items you choose for printing do not have to be adjoining, just in the proper order on the form.
 - If you would like to have the same information stored in two different ways for different purposes, set up two items with different names. For example, have a LAST NAME item for searching and sorting customers by last name, and have a NAME item for keeping names in the format you would use in a mailing address.
 - Terminate each item name with a colon. Any character entered on the screen during the design process is part of some item name, and the colon identifies characters as item names for the FILE program. For example, suppose the form from the PATIENTS file mentioned in the Introduction looked like this:
-

SS#:	Age:	Date:

Name:		
Address:		
City:	State:	Zip:
Home Phone:		
Business Phone:		

Occupation:		
Insurance:		
Bill To:		

Last Treatment Date:		

File: PATIENTS	DESIGN	Page 1
F1-Help F5-Date F6-Time		F10-Continue

SS# is an item name, and so are AGE and DATE. The line of dashes inserted between the first and second lines of the form are a part of the NAME item. (Every character entered after the colon ending the DATE item and before the colon ending the NAME item is a part of the NAME item.) Knowing exactly what characters an item name includes is very important if you want to change the design of your form after you enter data in it. Information is not copied unless the item names in both the old design and the new design match exactly (see Chapter 9).

Entering Your Design on the Screen

When you are ready to enter the design for your form on the screen, the following keys allow you to move the cursor to different positions on the screen so that you can enter item names wherever you choose:



moves the cursor back one space.



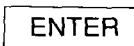
moves the cursor forward one space.



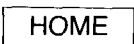
moves the cursor up one line.



moves the cursor down one line.



moves the cursor to the beginning of the next line.



moves the cursor to the top lefthand corner of the screen.

You can make changes to the item names you enter by typing over them, or by using one of the following keys:

INSERT

switches between normal and insert mode. In insert mode (shown by a rectangular cursor), **FILE** inserts typed characters at the current cursor location, moving other characters to the right to make room. (This allows you to insert an item to the left of an existing item.) If the line is full, nothing happens.

DELETE

deletes the character at the current cursor location, moving other characters on the line to the left to fill up the space.

Note that each page of the form can contain a maximum of 100 items.

Multiple Page Forms

Your form can consist of more than one page, though the screen can show, at most, only one page at a time. If you need more than one page for a form, you can create up to 31 additional pages. Then you can move back and forth between pages, like turning pages in a book, by using these keys:

PG DN

brings up the next page of the form on the screen. When designing a form, it brings up a blank page. You can continue to enter more item names.

PG UP

recalls the previous page of the form to the screen. You can review it and make changes if you wish.

As you move through your multi-page form, the current page number is displayed in the message area at the bottom of the screen. An asterisk (*) to the right of the page number indicates there are additional pages in the form.

Erasing a Page

You can press the F4 key to erase the currently displayed page of the form that you are designing. Other pages remain unchanged. Pressing this key does not remove the page from the form, however; it merely turns it into a blank page. For example, if you design a four-page form and decide to erase page two, you still have a four-page form with a blank page two. To remove the blank page, use the Change Design option (see Chapter 9).

Storing the Form Design

When you are satisfied that your form has all the right items in the right places, you are ready to store it in the file on the disk. To do this, press the F10 key. FILE stores the form and returns to the Main Menu.

FILE is now ready to accept another function selection. The cursor is positioned in SELECTION NUMBER. The FILE NAME remains unchanged, however, because FILE assumes you are working on the same file until you enter a new name.

WARNING

If you press the ESC key while designing a form, that form is not saved in the file. You must press the F10 key to save the form in the file.

Leaving the DESIGN FILE Function

If at any time you want to terminate the DESIGN FILE function, you may do so by pressing the ESC key. If you press ESC while designing a form, however, the form design is not saved and the file is erased from the disk. You must press the F10 key to save the form design in the file.

Example of Designing a File:

By following along with this example, you will create a file to store typical personnel information for six sample employees. The personnel form that you want to duplicate as the form for the file looks like this:

Personnel Record Form			
Employee #:	Hired:		
Name:			
Address:			
City:	State:	Zip:	
Job Title:			
Salary:			

To begin designing the file, make sure the Main Menu is on the screen (press ESC, if necessary) and place a blank, formatted diskette (or other diskette with available space) in drive A. The cursor should be in the SELECTION NUMBER item. Type

1

to select DESIGN FILE, press the TAB key to move the cursor to FILE NAME, and type

STAFF

to give the file its name. Your screen should look like this:

```
PFS:FILE MAIN MENU
-----

1  DESIGN FILE      5  PRINT
2  ADD              6  REMOVE
3  COPY             7  SET UP PRINTER
4  SEARCH/UPDATE   8  EXIT

SELECTION NUMBER: 1
FILE NAME: STAFF

F10-Continue
```

This file will be created on the disk in drive A, since a drive name is not included as part of the file name. Also, note that you can enter the file name as any combination of uppercase and lowercase letters: STAFF, staff, Staff, etc. MS-DOS doesn't distinguish between cases.

Now press the F10 key and the Design File Menu appears. Since you are going to create a new file, type

1

in the SELECTION NUMBER item:

```
DESIGN FILE MENU

1  CREATE FILE
2  CHANGE DESIGN

SELECTION NUMBER 1

F10-Continue
```

Press F10 again and the following screen appears, ready for you to design the form:

```
-----
File: STAFF          DESIGN          Page 1
F1-Help F5-Date F6-Time          F10-Continue
```

Information about employees is most frequently retrieved by employee number, so the item EMPLOYEE # should be the first item on the form. This speeds up the search process. The cursor should currently be in the top left-hand corner of the screen (press the HOME key if it isn't), so type

Employee #:

as the first item name. Remember to end it with a colon. Then press the right arrow key to move the cursor to the middle of the same line and type

Hired:

Continue moving the cursor with the cursor movement keys and typing item names until the screen looks like this:

```
Employee #:                Hired:

Name:
Address:
City:                State:      Zip:

Job Title:
Salary:

-----
File: STAFF          DESIGN          Page 1
F1-Help  F5-Date  F6-Time          F10-Continue
```

When you have entered all of the items on the form, press F10. FILE stores the form on the disk in a new file named STAFF, then returns to the Main Menu:

PFS:FILE MAIN MENU

- | | |
|-----------------|------------------|
| 1 DESIGN FILE | 5 PRINT |
| 2 ADD | 6 REMOVE |
| 3 COPY | 7 SET UP PRINTER |
| 4 SEARCH/UPDATE | 8 EXIT |

SELECTION NUMBER: --

FILE NAME: STAFF

F10-Continue

Notice that the SELECTION NUMBER item has been cleared—at this point, you can enter another function selection. The FILE NAME item remains the same, since FILE assumes you are working with the same file until you enter a new name.

Summary

- The DESIGN FILE function has two options:
 1. Use Create File to create a new file.
 2. Use Change Design to change the design of the form from a file that already exists (see Chapter 9).
 - A file name (not including volume names, drive names, or extensions) must be between one and eight characters in length.
 - Give each file that you create a different name.
 - The first item in your form should be the one you will look for most frequently.
 - Place a colon at the end of each item name.
 - Leave plenty of space for each item.
 - A page can hold a maximum of 100 items.
 - A form can have a maximum of 32 pages.
 - An asterisk to the right of the page number means there are additional pages in the form.
 - moves the cursor to the next item on the menu. With SHIFT, moves to the previous item.
 - moves the cursor one space to the left.
 - moves the cursor one space to the right.
 - moves the cursor up one line.
 - moves the cursor down one line.
 - moves the cursor to the beginning of the next line.
-

HOME	moves the cursor to the top lefthand corner of the page.
PG DN	brings up the next page of the form.
PG UP	recalls the previous page of the form.
F4	erases the page displayed on the screen.
F10	stores the form design and returns to the Main Menu.
ESC	stops the <i>DESIGN FILE</i> function and returns to the Main Menu. The form is not saved.

2:

add

Once you have created a file, you use the ADD function to store information in it. Using ADD, you fill in a form with the information you want to keep, then store that form in the file. The actual number of forms that will fit in a file depends on the available space on the diskette, the number of pages in the form, the number of items per page, and amount of data entered for each item. Appendix C explains how to calculate the exact number of forms that will fit in a given situation.

Selecting the ADD Function

To select ADD, return to the Main Menu (press ESC, if necessary) and enter a 2 in the SELECTION NUMBER item. If you are adding to a file that you have already been using, the name of that file remains in the FILE NAME item. FILE assumes you are working on the same file until you enter a new name by typing over the old name.

For example, if you have just designed and stored the form for the STAFF file in Chapter 1, your screen should look like this:

```
PFS:FILE MAIN MENU
-----

1  DESIGN FILE      5  PRINT
2  ADD              6  REMOVE
3  COPY             7  SET UP PRINTER
4  SEARCH/UPDATE    8  EXIT

SELECTION NUMBER: 2
FILE NAME: STAFF

F10-Continue
```

To add to a different file, enter its name in the FILE NAME item, including a drive name if the disk that contains the file is not in the default drive.

When you have filled in the menu, press the F10 key. FILE begins the ADD function by displaying the form from the file. For example, if you were using the STAFF file, your screen would look like this:

The screenshot shows a form titled 'STAFF' with various input fields. The fields are arranged in a grid-like fashion. The first row contains 'Employee #' and 'Hired:'. The second row contains 'Name:', 'Address:', and 'City:'. The third row contains 'State:' and 'Zip:'. The fourth row contains 'Job Title:' and 'Salary:'. At the bottom of the form, there is a dashed line followed by a message area. The message area contains the following text: 'File: STAFF FORM 1 Page 1', 'F2-Print F3-Remove F5-Delete F6-Time', and 'F10-Continue'.

Employee #:	Hired:	
Name:	Address:	City:
State:	Zip:	
Job Title:	Salary:	

File: STAFF FORM 1 Page 1
F2-Print F3-Remove F5-Delete F6-Time F10-Continue

You fill in this form with the information you want to store. Notice that the item names are highlighted (dark characters on a light background) to easily distinguish them from the information you enter. They are also protected, so you cannot inadvertently write over and destroy them.

FILE uses the message area at the bottom of the screen to tell you:

- the file to which you are adding forms (STAFF)
 - the form you are adding to the file (FORM 1)
 - the page number (1)
 - the function keys currently available, and what they do (F2-Print, etc.)
-

Filling in a Form

Use the TAB key or SHIFT TAB to move the cursor from item to item when filling out each form. As you are filling in the forms, follow these guidelines:

- If you know that your data will require more than one diskette, presort it into groups according to your needs. For example, if you will want to sort your forms by zip codes, make sure that all forms from one zip code are in the same file; e.g., make sure that all forms with zip codes beginning with 0 are in one file, and all those beginning with 1 are in another, etc.
- Enter last names first to have FILE search your files or sort and print them in alphabetical order by last names. See Chapter 5 for details.
- Enter first names first if you want to keep your files in a standard address format—for printing mailing labels, for example.
- Enter dates in the format yy/mm/dd (year/month/day, with two digits for each part of the date) so FILE can search for them properly. For example, suppose you want FILE to search for forms dated between December 15, 1981 and January 1, 1982. This is the correct format:

= 81/12/15..82/01/01

When searching, FILE ignores the slashes and looks at the dates as numeric values. It sees 811,215..820,101 and can find the forms you want.

FILE can automatically enter the current date in the recommended format. Just move the cursor to the date item and press F5.

- Enter times in a 24-hour format, hh:mm, as in 13:45 for 1:45 p.m. It is necessary that minutes be two digits, but not necessary for hours.

FILE can also enter the time in the recommended format. Just move the cursor to the time item and press F6.

- Enter numbers so that they are all the same length if you want FILE to sort by them. For example, if your highest numbers will be in the thousands, enter 9 as 0009. When sorting, FILE looks at numbers as simple character strings; thus, 1,000 would be sorted before 9 and after 0009.
-

Multiple Page Forms

You can move through a multiple page form using the PG DN key to bring up the next page of the form, and the PG UP key to recall the previous page. You can review the information on previous pages and make changes if you wish. When adding forms, however, you can also use these special keys to add and move through attachment pages.

Attachment pages appear after the last page of your form. You can add attachment pages to a form until you run out of room on the diskette. This feature allows you to append information to any form. If you need to add some special information to a particular form, the information can be entered on an attachment page. If you forgot to include some item when you originally designed a form, however, use the Change Design option of DESIGN FILE to add it (see Chapter 9).

Correcting Mistakes

If you make a mistake while entering data into a form, you can easily correct it. If the mistake is in the same item as the cursor, simply use the BACKSPACE key to erase the last few characters and retype the correct information.

If the mistake is in another item (or on another page), use the TAB key or cursor control keys (or PG DN and PG UP keys) to move the cursor to that item, then overwrite with the correct information. You can also use the INSERT key to insert characters, or the DELETE key to delete them.

If you want to re-enter all the items on a particular page, press F4. This erases all the information entered on the current page and returns the cursor to the first item. Information on other pages is unaffected and item names are not erased. For example, you might be entering information in a form and suddenly realize that you already entered it.

Storing the Filled-In Forms

When you have entered all your information and are ready to add the filled-in form to your file, press F10. The current form (all pages) is stored in the file. A new form (blank) appears on the screen, with the next form number listed in the message area, and you are ready to fill it in. You can add forms in any order you like—FILE finds the desired information when you need it.

Back up your file frequently when adding forms to it to prevent the loss of information. (See our backup recommendations in *Protecting Your PFS Data Files* which follows the Preface.)

Leaving the ADD Function

You may press ESC at any time to terminate the ADD function, but if you do it before storing your form, the information you entered into that form is not saved. When you finish saving the last form, press ESC to return to the Main Menu. FILE is now ready to accept another function selection.

WARNING

You must complete the ADD function and return to the Main Menu before putting in another data diskette. If you change diskettes while still in the ADD function, you may damage the data on your diskette.

Example of Adding to a File:

Let's add information to the STAFF file. Return to the Main Menu (press ESC, if necessary) and enter a

2

in the SELECTION NUMBER item. If you have been working with the example file, STAFF should remain in FILE NAME. If it does not, enter it. Your screen should look like this:

```
PFS:FILE MAIN MENU
-----

1 DESIGN FILE      5 PRINT
2 ADD              6 REMOVE
3 COPY            7 SET UP PRINTER
4 SEARCH/UPDATE   8 EXIT

SELECTION NUMBER: 2
FILE NAME: STAFF

F10-Continue
```

Make sure that the STAFF diskette is in the correct drive and press F10. The form from the STAFF file should appear on the screen, with FORM 1 in the message area. Starting where the cursor positions itself in each item, type in the information contained on the following screen:

Employee #:	09883	Hired:	78/04/15
Name:	Jeff Stribling		
Address:	437 Oak Street		
City:	Palo Alto	State:	CA
		Zip:	94301
Job Title:	Engineer		
Salary:	\$2500.00		

File: STAFF	FORM 1	Page 1
F2-Print F3-Remove F5-Delete F6-Time	F10-Continue	

Press F10 to store the form in the STAFF file. A new form (FORM 2) should appear on your screen:

Employee #:		Hired:	
Name:			
Address:			
City:		State:	
		Zip:	
Job Title:			
Salary:			

File: STAFF	FORM 2	Page 1
F2-Print F3-Remove F5-Delete F6-Time	F10-Continue	

Fill in the second form with the information shown here:

Employee #: 16445	Hired: 00/08/12
Name: Jennifer Young	
Address: 2421 Broadway	
City: Boston	State: MA Zip: 02109
Job Title: Salesperson-East	
Salary: \$1950	

File: STAFF	FORM 2	Page 1
F2-Print F3-Remove F5-Delete F6-Time		F10-Continue

For this form, there is some additional information to store. Since the STAFF form only contains one page, add an attachment page for this information. Press PG DN and the following screen appears:

Attachment:

File: STAFF	FORM 2	Page 2
F2-Print F3-Remove F5-Delete F6-Time		F10-Continue

Type in the additional information. The screen should look like this:

Attachment: Has had two years of European experience.

File: STAFF FORM 2 Page 2
F2-Print F3-Remove F5-Delete F6-Time F10-Continue

If you want to review the information entered on the previous page, you can press the PG UP key to return to Page 1, although you can store the filled-in form regardless of which page is displayed on the screen. Go ahead and press PG UP, and notice that there is an asterisk to the right of the page number to indicate that this form has an additional page.

Now press F10, and both pages of FORM 2 are stored in the STAFF file. The STAFF form reappears with FORM 3 in the message area, and you are ready to fill in the next form. Using the information provided here, fill in four more STAFF forms and store them on the diskette.

FORM 3: Employee #: 01623 Hired: 77/06/14

 Name: Anne Williams

 Address: 67 Westlake Drive

 City: Los Altos State: CA Zip: 94022

 Job Title: Manager

 Salary: \$3500.00

FORM 4:	Employee #: 13029	Hired: 80/02/01
	Name: Mike Cooper	
	Address: 907 Sunset Court	
	City: Portland	State: OR Zip: 97208
	Job Title: Salesperson-West	
	Salary: \$1900.00	
FORM 5:	Employee #: 07531	Hired: 77/06/29
	Name: Sara Brown	
	Address: 1552 Bay Road	
	City: Menlo Park	State: CA Zip: 94025
	Job Title: Secretary	
	Salary: \$1200.00	
FORM 6:	Employee #: 10764	Hired: 79/10/23
	Name: John Andrews	
	Address: 6811 Cypress Lane	
	City: Dayton	State: OH Zip: 45401
	Job Title: Salesperson-Midwest	
	Salary: \$1850.00	

After you fill in and save the last form, the following screen should appear:

```

Employee #:          Hired:

Name:
Address:
City:                State:                Zip:

Job Title:
Salary:
  
```

Now press ESC. FILE returns to the Main Menu, ready to accept another function selection.

Printing a Copy of a Single Form

You can print a copy of a single form when using the ADD function by pressing the F2 key while the form is on the screen. You might want to use this option to print a copy of your blank form, or to print a copy of each form that you fill in and add to an already established file. When FILE displays the print options, press F10 and FILE begins printing the form, using the default values for those options. (See Chapter 5 for a description of the print options.)

Summary

- Use the ADD function to store information in a file.
 - You enter data in a file by filling in the form that you designed when you created the file.
 - Item names are protected from overwriting.
 - Attachment pages allow you to add one or more pages to a particular form.
 - Back up your files frequently to prevent the loss of information.
 - moves the cursor to the next item on the form. With SHIFT, moves to the previous item.
 - erases all the information entered on the displayed page, but not the item names.
 - displays the next page of the form, or an attachment page if the last page is on the screen.
 - displays the previous page of the form.
 - prints a copy of the displayed form.
 - returns to the Main Menu. If you press ESC before you store a filled-in form, the information entered into that form will be lost.
-

WARNING

You must complete the ADD function and return to the Main Menu before putting in another data diskette. If you change diskettes while still in the ADD function, you may damage the data on your diskette.

3:

copy

Once you create a file and have information in it, you can copy part of the file or just the form design. Using COPY, you can start a new file with the same form design, split one large file into two smaller files, or merge two files into one.

The COPY function has two options:

- COPY DESIGN ONLY allows you to copy just the form design from the file.
- COPY SELECTED FORMS allows you to choose among the filled-in forms in your file and copy these selected forms to another file. This option does not copy the form design.

Selecting COPY

To select the COPY function, return to the Main Menu (press ESC, if necessary). Enter a 3 in SELECTION NUMBER and the name of the PFS file you want to copy in FILE NAME.

Make sure the file you want to copy is in the default drive. Press F10, and the Copy Function Menu appears:

```
COPY FUNCTION MENU

1 COPY DESIGN ONLY
2 COPY SELECTED FORMS

SELECTION NUMBER:
NEW FILE NAME:

F10-Continue
```

At this point, you can select between the two COPY functions.

The Copy Design Only Option

With Copy Design Only, you can copy just the form design of an existing file to a new file. You use this function when your file becomes full, and you want to start a new file that uses the same form design. You also use it to provide a file with a form design before copying selected filled-in forms to it. Note that the Copy Design Only option destroys any information that exists in the destination file.

To select Copy Design Only, enter a 1 in SELECTION NUMBER on the Copy Function Menu. Put the diskette containing the file from which you want to copy the design in the default drive, and the diskette to which you want to copy the design in another drive (unless, of course, you want to copy the design to a new file on the same drive). Enter a name that is different from the original file name in NEW FILE NAME, and don't forget to use the drive name. Press F10, and FILE copies the design from the original file to a new file that it creates on the specified disk, then returns to the Main Menu.

If you enter the name of an existing file in the NEW FILE NAME item, FILE displays the following message:



THE FILE ALREADY EXISTS

Press ESC to abandon this operation

Press F10 to delete it and continue

If you press ESC, you return to the Main Menu and can start over with another name. If you press F10, FILE replaces the existing file with a new file containing the form design you are copying.

Example of Copying the Form Design:

Let's make a copy of only the form design from the STAFF file. Return to the Main Menu (press ESC, if necessary) and enter a

3

in the SELECTION NUMBER item. If you have been working with the example file, STAFF should still be in FILE NAME. If it is not, enter it. Your screen should look like this:

```
PFS:FILE MAIN MENU
-----

1  DESIGN FILE      5  PRINT
2  ADD              6  REMOVE
3  COPY             7  SET UP PRINTER
4  SEARCH/UPDATE   8  EXIT

SELECTION NUMBER: 3
FILE NAME: STAFF

F10-Continue
```

Make sure the STAFF file is in the default drive, and place another diskette in drive B, then press F10. The Copy Function Menu appears. Enter

1

in SELECTION NUMBER and

B:Staff1

in NEW FILE NAME (or another drive name if you want to create the new file on another drive). The screen should look like this:



Press F10 again, and FILE copies the STAFF form design to a new file that it creates on the diskette in drive B, named STAFF1, and returns to the Main Menu. The cursor is positioned in SELECTION NUMBER, and STAFF remains in FILE NAME. FILE is ready to accept another function selection.

The Copy Selected Forms Option

The Copy Selected Forms option allows you to choose among the filled-in forms in your file and copy selected ones to another file. You might want to use this option when a file becomes too large and you want to split it into two files, or you might want to split off a special interest group of forms to a new file. Also, you can use Copy Selected Forms to merge parts of several different files into one new file.

To select Copy Selected Forms, enter a 2 in the SELECTION NUMBER item on the Copy Function Menu. Put the diskette containing the file from which you are copying forms (the source file) in the default drive, and the diskette containing the file to which you are copying forms (the destination file) in another drive.

Selected forms must be copied to an existing file containing a form design. (You can create a new file by copying the form design using Copy Design Only first, or you can copy the selected forms to a partially-full file.) Enter the name of the destination file in NEW FILE NAME (don't forget the drive name).

The layout of the forms from the source file and the destination file need not be identical (the items can be arranged differently), but the item names must be identical in order for information to be copied. For example, if your source file has an item called **EMPLOYEE NAME**, and the equivalent item in the destination file is called **NAME OF EMPLOYEE**, the names of the employees will not be copied.

When you fill in the items on the Copy Function Menu and put the diskettes in their proper drives, press F10, and a form from the source file (in the default drive) appears on the screen. Using the **STAFF** file as an example, the screen looks like this:

The screenshot shows a form titled "RETRIEVE SPEC" for the file "STAFF". The form contains several input fields for employee information: "Employee #:", "Hired:", "Name:", "Address:", "City:", "State:", "Zip:", "Job Title:", and "Salary:". At the bottom of the form, there is a dashed line followed by the text "File: STAFF", "RETRIEVE SPEC", and "Page 1". Below this, there are function key instructions: "F1-Help", "F5-Date", "F6-Time", and "F10-Continue".

Notice that the message area at the bottom of the screen contains the words **RETRIEVE SPEC**. When you fill in items on a retrieve spec form, you describe information that you want **FILE** to find. **FILE** uses this description to search your file and find the forms you want. In **COPY**, **FILE** then copies these forms. If you leave the retrieve spec form blank, **FILE** copies all the forms. For a complete description of using retrieve spec forms, see Chapter 4.

After entering the information in your retrieve spec form, press F10, and **FILE** copies the selected forms, renumbering the forms as it copies them. A screen appears telling you how many forms were copied. After you press F10 again, **FILE** returns to the Main Menu, ready to accept another function selection.

Example of Copying Selected Forms:

Let's copy some forms from STAFF to the file named STAFF1 that you created earlier in this chapter using the Copy Design Only option.

Return to the Main Menu (press ESC, if necessary) and enter

3

in the SELECTION NUMBER item and

Staff

in the FILE NAME item, if necessary. Then press F10. When the Copy Function Menu appears, enter

2

in SELECTION NUMBER and

B:Staff1

in NEW FILE NAME. Your screen should look like this:

COPY FUNCTION MENU

1 COPY DESIGN ONLY

2 COPY SELECTED FORMS

SELECTION NUMBER: 2

NEW FILE NAME: B:STAFF1

F10-Continue

Make sure the diskette containing STAFF is in the default drive, and put the diskette containing STAFF1 in drive B. Press F10, and the retrieve spec form from STAFF (the source file) appears on the screen. You are now ready to indicate which forms you want copied. Suppose you want to create a separate file for your California office, so you want to copy the forms for these employees to STAFF1. Enter

CA

in the STATE item. Your screen should look like this:

Employee #: Hired:

Name:
Address:
City: State: CA Zip:

Job Title:
Salary:

File: STAFF RETRIEVE SPEC Page 1
F1-Help F5-Date F6-Time F10-Continue

Press F10, and FILE copies the appropriate forms from STAFF to STAFF1. Then, the following screen appears:



Press F10 again, and FILE returns to the Main Menu.

Splitting a File

When a file has grown in size, you may want to split off part of it to form a new file. Or, you may want to separate a special interest group of forms to a new file.

To split a file, follow these guidelines:

1. Copy the form design (using Copy Design Only) to a new file.
2. If you change the design of the form in the new file, remember to keep the item names identical (FILE only copies information for items that have identical names).
3. Use Copy Selected Forms to select and copy the filled-in forms you want into your new file.
4. Select the REMOVE function from the Main Menu and use the same retrieve specification to delete the copied forms from the original file (see Chapter 6).

Merging Files

At some time, you may want to combine two PFS files into one file, or parts of two or more files into one new file. For example, suppose you have two customer files (A to L and M to Z). You want to form a new file containing information for customers that have not made any purchases for the last 3 months. You can copy the form design from your present customer file, or design a new form that uses only some items from the present file. (Items that you do not use are not copied.) Then, you can copy the filled-in forms (and the items) you want into the new file from the other two files.

To merge files, follow these guidelines:

1. Use a file that already has a form design, or create a new file by copying a form design or designing a new form. If you do not want some items to be copied to your new file, do not include the names of those items in the new form design. Make sure that item names are identical for items that you do want copied.
2. Use Copy Selected Forms to select and copy the filled-in forms you want into your new file.
3. Before merging files, make sure you estimate their combined size so that you do not exceed the storage capacity of the diskette used (see Appendix C).

Leaving the COPY Function

If at any time you want to terminate the COPY function, press ESC. If you do so while FILE is copying, however, the destination file receives only the information transferred from the source file before you pressed ESC.

Summary

- COPY has two options:

1. Use Copy Design Only to copy the form design of a file to a new file.
2. Use Copy Selected Forms to copy selected filled-in forms from a file; this option is particularly useful for splitting or merging files.

- Items must have identical names to be copied from one file to another, but they do not have to be in the same location on the two forms.

- Before merging files, estimate their combined size so you will not exceed the storage capacity of the diskette (see Appendix C).

- Selected forms must be copied to an existing file containing a form design. The file can contain existing forms as well as the design.

- With Copy Selected Forms, you select forms to be copied based on the filled-in information.

- | |
|-----|
| ESC |
|-----|

 returns to the Main Menu. The file is copied only to the point where ESC was pressed.

4: *search/update*

After you store information in a file, you can use the SEARCH/UPDATE function to search through your file and find forms that are of interest to you. FILE can search for forms based on the contents of any page, including attachment pages. Once you find a particular form, you can review it, update it, print it, or remove it from the file.

Selecting SEARCH/UPDATE

To select SEARCH/UPDATE, return to the FILE Main Menu (press ESC, if necessary). Enter a 4 in SELECTION NUMBER and the name of the file you wish to search through in FILE NAME (include the drive name if the file is not in the default drive).

Make sure the file you named in FILE NAME is in the default drive (or another specified drive). Press F10, and a form from this file appears with the words RETRIEVE SPEC in the message area at the bottom. This form is referred to as the retrieve spec form. The STAFF file retrieve spec form looks like this:

Employee #: Hired:

Name: Address: State: Zip:

City: Job Title: Salary:

File: STAFF RETRIEVE SPEC Page 1

F1-Help F5-Date F6-Time F10-Continue

Using Retrieve Specifications

With SEARCH/UPDATE, you describe the forms you want FILE to find by filling in items on the retrieve spec form. The items that you enter on this form are called "retrieve specifications". You can enter a retrieve specification in as many items of the form as you wish. Only those forms in the file meeting all the specifications are found. If no retrieve specifications are entered, FILE retrieves every form in the file.

There are five categories of retrieve specifications: the full item match, partial item matches, numeric item matches, the numeric range match, and the "not" match. The following sections describe these five categories.

1. Full item match

For the fastest possible retrieval, use this type of retrieve specification. If you use a full item match in the first item of your form, any form can be found in 3-5 seconds.

In a full item match, FILE looks for forms on which the characters in an item exactly match the characters that you entered in the same item on the retrieve spec. (A character can be a letter, a number, or a punctuation mark.) To determine whether there is a match, FILE uses the following rules:

- FILE ignores spaces before the first character and after the last character.
- FILE treats multiple spaces within the items as a single space.
- FILE ignores the difference between upper and lower case.

For example, suppose you want to recall the John Andrews form of the STAFF file to the screen. If you enter this retrieve specification,

Employee #: Hired:

Name: John Andrews
Address:
City: State: Zip:

Job Title:
Salary:

File: STAFF RETRIEVE SPEC Page 1
F1-Help F5-Date F6-Time F10-Continue

NAME: John Andrews	will be a match.
NAME: John Andrews	will be a match.
NAME: JOHN ANDREWS	will be a match.
NAME: Mr. John Andrews	will not be a match.
NAME: John Andrews Jr.	will not be a match.
NAME: John	will not be a match.
NAME: Andrews, John	will not be a match.
NAME: JohnAndrews	will not be a match.

2. Partial item matches

Use a partial item match if you do not remember exactly how an item of information is entered in a file, or if you want to find occurrences of specific pieces of information in your files. There are two kinds of partial item matches: the `..match..` and the `? match`.

The `..match..` uses either two or four dots with a word or group of words (number or group of numbers) to search for an occurrence of certain information within an item. It works like this:

- `..Word` tells FILE to ignore whatever characters occur before Word.
- `Word..` tells FILE to ignore whatever characters occur after Word.
- `..Word..` tells FILE to ignore whatever characters occur before or after Word; i.e., to look for Word anywhere in the item.
- `..` tells FILE to find all forms with any characters in this item.

For example, suppose you want to recall Jeff Stribling's personnel form to the screen. Jeff's full name is Jeffrey Stribling, Jr. and you don't know exactly how the name was entered in the file. Using the `..match..`, there are three ways you can find Jeff's form. If you enter this retrieve specification,

The screenshot shows a personnel form with the following fields and values:

Employee #:	Hired:
Name: Jeff..	
Address:	
City:	State: Zip:
Job Title:	
Salary:	

At the bottom of the screen, there is a dashed line followed by the following text:

File: STAFF RETRIEVE SPEC Page 1
F1-Help F5-Date F6-Time F10-Continue

NAME: Jeff	will be a match.
NAME: JEFF STRIBLING	will be a match.
NAME: Jeffrey Stribling Jr.	will be a match.
NAME: Jeff Warner	will be a match.
NAME: Mr. Jeff Stribling	will not be a match.

If you enter this retrieve specification,

Employee #: Hired:

Name: ..Stribling

Address:

City: State: Zip:

Job Title:

Salary:

File: STAFF RETRIEVE SPEC Page 1

F1-Help F5-Date F6-Time F10-Continue

NAME: Mr. Stribling	will be a match.
NAME: J. STRIBLING	will be a match.
NAME: Mr. Jeff Stribling	will be a match.
NAME: Sara Stribling	will be a match.
NAME: Jeff Stribling Jr.	will not be a match.

If you enter this retrieve specification,

Employee #: Hired:

Name: ..Stribling..
Address:
City: State: Zip:

Job Title:
Salary:

File: STAFF RETRIEVE SPEC Page 1
F1-Help F5-Date F6-Time F10-Continue

NAME: Mr. Jeff Stribling Jr.

NAME: JEFFREY STRIBLING

NAME: Tom Stribling Jr.

} will all be matches.

Now suppose you want to look at the forms of all the employees who have work experience in Europe. You know that this information was entered as an attachment page. If you enter this retrieve specification,

Attachment: ..Europe..

File: STAFF

RETRIEVE SPEC

Page 2

F1-Help F5-Date F6-Time

F10-Continue

both of the following will match:

ATTACHMENT: Has had two years of European experience.

ATTACHMENT: Worked in Europe for two years.

The ? match uses the question mark as a "wild-card" character to search for items that are almost an exact match. This symbol can be entered in the retrieve spec form to represent any single character. When FILE searches, it accepts any character in that same position as a match.

For example, suppose the second digit of a part number indicates its color and you want to retrieve all forms for a certain part regardless of its color:

PART NUMBER: 3?711

will retrieve all forms listing the part.

As another example, suppose you know that there are two people in the STAFF file who were hired in June of 1977, and you want to find their forms. You would use the following retrieve specifications:

Employee #:	Hired: 77/06/??
Name:	
Address:	
City:	State: Zip:
Job Title:	
Salary:	

File: STAFF RETRIEVE SPEC Page 1
F1-Help F5-Date F6-Time F10-Continue

3. Numeric item matches

There are two ways to use numbers as information. One way is to use the number as a set of characters that identifies an item. In this case, the number has no numeric value—one number is not typically thought of as larger or smaller than any other. Phone numbers, part numbers, and social security numbers are examples of numbers used as identifiers. FILE treats the numbers as it would treat a word or any string of identifying letters. You use either a full item match or one of the partial item matches to look for such a number.

For example, if you want to search through the STAFF file for employee number 13029, the retrieve specification would look like this:

Employee #:	13029	Hired:	
Name:			
Address:			
City:		State:	Zip:
Job Title:			
Salary:			

File: STAFF RETRIEVE SPEC Page 1
F1-Help F5-Date F6-Time F10-Continue

The other way is to use the number to represent a numeric value—something that has a meaning of larger or smaller associated with it. Numbers associated with quantity or cost are examples of numbers used to represent arithmetic values. When searching through forms for such a number, it is possible to look for all items less than, greater than, or equal to that given number. The retrieve specification consists of one of three special symbols (<, >, and =) followed by the desired number. In determining the value of a number, FILE uses the following rules:

- FILE ignores all characters other than -,.,0,1,2,3,4,5, 6,7,8,9. (Be sure to use the number 1 rather than lower case l, and the number 0 not the letter o.)
- A minus sign (-) appearing before the first digit or after the last makes the value negative. FILE ignores multiple minus signs.
- If FILE encounters multiple decimal points (.), it ignores all but the first.

Below are some examples of how FILE assigns an arithmetic value to a number which follows one of these symbols (<, >, or =):

Item	Value	
\$1,706.22	1706.22	FILE ignores the \$ and ,
13 MAY 1980	131980	FILE ignores MAY
70-06-29	700629	to be negative, a minus sign must appear before the first digit or after the last. (This is a convenient way to numerically represent dates.)
20:45	2045	FILE ignores the colon. (This is a convenient way to numerically represent times.)
FIVE	0	FILE ignores letters. If no digits are found, the value is zero.

For example, suppose you want to search through the STAFF file for all the employees with salaries greater than \$2000.00. The retrieve specification should look like this:

Employee #:

Hired:

Name:

Address:

City:

State:

Zip:

Job Title:

Salary: >2000.00

File: STAFF RETRIEVE SPEC Page 1
F1-Help F5-Date F6-Time F10-Continue

4. Numeric Range Match

The numeric range match allows you to search for numeric values within a certain range. To do this, use an equals sign followed by the lowest of the numeric values, two dots, and then the highest numeric value. The dot-dot with the equals sign means "through".

For example, to find all the employees in the STAFF file hired between January 1, 1978 and December 31, 1979, the retrieve specification should look like this:

The screenshot shows a search interface with several input fields. The 'Hired:' field contains the date range '78/01/01..79/12/31'. Other fields include 'Employee #:', 'Name:', 'Address:', 'City:', 'State:', 'Zip:', 'Job Title:', and 'Salary:'. At the bottom, a dashed line separates the header from the footer. The footer contains the file name 'STAFF', the command 'RETRIEVE SPEC', the page number 'Page 1', and navigation instructions 'F1-Help FS-Date F6-Time F10-Continue'.

Employee #:	Hired: 78/01/01..79/12/31
Name:	
Address:	
City:	State: Zip:
Job Title:	
Salary:	

File: STAFF RETRIEVE SPEC Page 1
F1-Help FS-Date F6-Time F10-Continue

NOTE: You can put spaces anywhere except between the dots.

5. The "Not" Match

Any of the different types of retrieve specifications can have its intent reversed by preceding it with a slash (/). For example,

/=3.1	Finds all those values which are NOT equal to 3.1.
/JOHN	Finds all those items that are NOT "JOHN".
/B..	Finds all those items that do NOT begin with "B".
/..er	Finds all those items that do NOT end with "er".
/=31..100	Finds all those items less than 31 or greater than 100.
/..	Finds all those items that are blank.

For example, suppose you want to search through the STAFF file for all employees with salaries less than \$1500.00 or more than \$2000.00. The retrieve specification would look like this:

Employee #: Hired:

Name:
Address:
City: State: Zip:

Job Title:
Salary: /*1500..2000

File: STAFF RETRIEVE SPEC Page 1
F1-Help F5-Date F6-Time F10-Continue

Starting the Search

When you have entered all retrieve specifications, press F10, and FILE searches for the desired forms, starting with the most recent form added. While FILE is searching, the screen is blank except for the message area at the bottom where the form numbers change as FILE checks each form in the file.

When FILE finds a form meeting the retrieve specifications, it displays it on the screen and pauses. You can do any of the following:

1. Update the Form.

You can make any changes to information stored in the form by positioning the cursor in the item you want to change and entering new information. Then, press F10, and FILE stores the updated form in the file and continues its search.

2. Review the Form.

You can browse through the form, using the PG DN and PG UP keys if you have multiple pages. When you finish, press F10 and FILE continues its search.

3. Print the Form.

You can print the form (all pages) by pressing F2. After reviewing a form, press F2, and the print options form appears. Press F10, and FILE prints a copy of the form, using the default values in the print options. (See Chapter 5 for a description of the print options.)

4. Remove the Form.

You can remove the form (all pages) from the file by pressing F3. Before the form is removed, the following screen appears:



CURRENT FORM ABOUT TO BE REMOVED

Press SPACE to keep the form

Press F10 to remove the form

If you do not want to remove this form (you may have pressed F3 by mistake), press the space bar, and FILE returns the form to the screen. If you want to remove the form, press F10, and FILE removes the form and continues its search. (See Chapter 6 for other removal capabilities.)

Example of Searching through a File:

Suppose you want to search through the STAFF file for all employees in sales with salaries more than \$1850.00. There are two items you are interested in: JOB TITLE and SALARY.

First, return to the Main Menu (press ESC or load the program if necessary) and enter

4

in SELECTION NUMBER. If you have been working with the example file, STAFF should remain in FILE NAME. If it does not, enter it. Your screen should look like this:

```
PFS:FILE MAIN MENU
-----

1  DESIGN FILE      5  PRINT
2  ADD              6  REMOVE
3  COPY             7  SET UP PRINTER
4  SEARCH/UPDATE    8  EXIT

SELECTION NUMBER: 4
FILE NAME: STAFF

F10-Continue
```

Press the F10 key, and the retrieve spec from STAFF appears on your screen. Use the TAB key to move the cursor to the JOB TITLE item. Since you want any person in sales, enter

Sales..

and FILE will ignore any characters after the word sales when searching. Move the cursor to the SALARY item, and enter

>1850.00

Your screen should look like this:

The screenshot shows a database search interface. At the top, there are two input fields: "Employee #:" and "Hired:". Below these, there are three input fields: "Name:", "Address:", and "City:". To the right of "City:" are two more input fields: "State:" and "Zip:". Below these fields, there are two lines of text: "Job Title: Sales.." and "Salary: >1850.00". At the bottom of the screen, there is a dashed line followed by three lines of text: "File: STAFF", "F1-Help F5-Date F6-Time", and "RETRIEVE SPEC". To the right of this text, it says "Page 1" and "F10-Continue".

```
Employee #:      Hired:

Name:
Address:
City:           State:      Zip:

Job Title: Sales..
Salary: >1850.00

-----
File: STAFF      RETRIEVE SPEC      Page 1
F1-Help F5-Date F6-Time      F10-Continue
```

Press F10 again, and FILE begins searching. There are two employees in sales who earn more than \$1,850.00. As the first of the forms is found, FILE displays it:

Employee #: 13029	Hired: 90/02/01
Name: Mike Cooper	
Address: 907 Sunset Court	
City: Portland	State: OR
	Zip: 97208
Job Title: Salesperson-West	
Salary: \$1900.00	

File: STAFF FORM 4 Page 1
F2-Print R3-Remove F5-Date F6-Time F10-Continue

Assume there is an error in the date that Mike Cooper was hired. It should be FEB 7, not FEB 1. You can update it here. Press TAB to move the cursor to the HIRED item, then press the right arrow key seven times to move the cursor over to the 1 without destroying any of the correct characters. Type

7

to change the date, then press F10. The updated form is stored, and FILE continues its search.

The next form that meets the retrieve specification appears:

Employee #: 16445 Hired: 09/06/12

Name: Jennifer Young
Address: 2421 Broadway
City: Boston State: MA Zip: 02109

Job Title: Salesperson-East
Salary: \$1950

File: STAFF FORM 2 Page 1*
F2-Print F3-Remove F5-Delete F6-Time F10-Continue

The asterisk (*) after the page number indicates there are more pages in this form. To see the second page, press the PG DN key. After you review this form, press F10, and the following screen appears:

Forms Found: 2

Press F10 to continue

Press F10 once more, and FILE returns to the Main Menu. The cursor is positioned in SELECTION NUMBER, and STAFF remains in FILE NAME. FILE is ready to accept another function selection.

Leaving the SEARCH/UPDATE Function

You can terminate SEARCH/UPDATE at any time by pressing ESC. FILE returns to the Main Menu. If you are updating a form when you press ESC, however, the changes to the form may not be recorded in the file.

In SEARCH/UPDATE, any changes you make to a form are actually written in the file when the updated page disappears from the screen; that is, when you press either PG DN, PG UP, or F10. If you make changes to a form, but press ESC before the page disappears, those updates are not written in the file.

Summary

- Use the SEARCH/UPDATE function to search through files, find desired forms, and display them on the screen.
- You tell FILE what forms you want to find by filling in a form called a retrieve spec.
- FILE can search for forms based on retrieve specifications you enter in any combination of items on any page of the retrieve spec form.
- Retrieve specifications must be constructed as follows:

characters (letters or numbers)	FULL ITEM MATCH
..characters	PARTIAL ITEM MATCH-ignore beginning
characters..	ignore end
..characters..	ignore both
..	matches any filled-in item
?	matches any single non-blank character
<number	NUMERIC ITEM MATCH-less than
>number	greater than
=number	equal to

=number1..number2

NUMERIC RANGE MATCH-inclusive

/retrieve spec

NOT MATCH-not equal to retrieve spec

/..

matches blank items

- For fastest possible retrieval, use a full item match in the first item of your form.
 - If no retrieve specifications are entered, FILE finds and displays every form in the file.
 - To update a form, enter any changes when the form is found. Then press F10 to store the changes and search for the next form.
 - | |
|----|
| F2 |
|----|

 prints a copy of the displayed form.
 - | |
|----|
| F3 |
|----|

 removes the displayed form from the file.
 - | |
|-----|
| ESC |
|-----|

 returns to the Main Menu. Any updates not yet saved are lost.
-

5:

print

FILE gives you the ability to print selected forms or portions of forms from a PFS file according to a format that you specify. (This format might include printing the forms in sorted order; for example, in alphabetical order for an item called CITY.) You can also store a format for printing to use at a later time.

With the PRINT function, you indicate which forms you are interested in, which items of the form you are interested in, and how you want these items printed. FILE searches through the file, automatically printing all selected information.

Selecting PRINT

To select PRINT, return to the Main Menu (press ESC, if necessary). Enter a 5 in SELECTION NUMBER and the name of your file in FILE NAME.

Check to make sure the diskette containing your file is in the correct drive. Then press F10, and the Print Menu appears:

```
PRINT MENU

1 PRINT FORMS
2 DEFINE PRINT SPEC

SELECTION NUMBER:

F10-Continue
```

At this point, you can select from the two PRINT options: Print Forms and Define Print Spec.

The Print Forms Option

Print Forms lets you choose which forms you want to print, which items from each form you want to print, and how you want to print these items. You supply this information by filling in three forms.

To select the Print Forms option, enter a 1 in the SELECTION NUMBER item on the Print Menu. Press F10, and the first form, the retrieve spec, appears. The STAFF file retrieve spec form looks like this:

The screenshot shows a form titled "STAFF" with various input fields for employee information. The fields are arranged in a grid-like fashion. At the bottom, there is a dashed line separating the form fields from the footer information.

Employee #:	Hired:
Name:	
Address:	
City:	State: Zip:
Job Title:	
Salary:	

File: STAFF RETRIEVE SPEC Page 1
F1-Help F5-Date F6-Time F10-Continue

Filling in the Retrieve Spec

You indicate which forms to print by filling in the retrieve spec form with specifications just as you did in the SEARCH/UPDATE function. (See Chapter 4 for a detailed description of retrieve specifications.) If no retrieve specifications are entered, FILE retrieves and prints every form in the file.

When you finish filling in the retrieve spec, press F10, and the second form, the print options form, appears:

```
PRINT OPTIONS

PRE-DEFINED PRINT SPEC:
PRINT ITEM NAMES (Y/N): Y
PRINT TO: PRN:
NUMBER OF COPIES: 1
LINES PER PAGE: 66
PAUSE BETWEEN PAGES (Y/N): N

F10-Continue
```

Filling in the Print Options

This screen appears whenever FILE is about to start printing something. It allows you to control the format. Type the desired value for each option over the default value shown on the screen, or press F10 to print your form using the default values.

PRE-DEFINED PRINT SPEC: (Optional) If you previously defined a print specification and stored it, you can enter its name here, and FILE begins printing immediately using this specification. If you do not have a pre-defined print specification, leave this item blank.

PRINT ITEM NAMES (Y/N): This item specifies whether or not the item names are to be printed along with the information in the items. If you do not want the item names printed, type N over the Y.

PRINT TO: This item allows you to choose the device to which the output is sent. Enter PRN: for a parallel printer, AUX: for a serial printer, or the name of a disk file.

NUMBER OF COPIES: This specifies how many copies FILE prints of each form. If you specify more than one copy, FILE prints all copies of the first form, then all copies of the second form, etc.

LINES PER PAGE: This item specifies how many lines you want to have between the first line of one form and first line of the next form. The default value of 66 is the full size of a normal printer page. You can adjust this value to accommodate the size of your printer paper, the size of your form, and the number of lines you want to have between forms.

For example, if you want to print one form per printer page, and have printer paper with 66 lines, leave the lines per page at 66. If you want two forms per printer page, change the lines per page to 33. The number you enter should divide evenly into the total number of lines on your printer page, or you will print over the perforation.

PAUSE BETWEEN PAGES (Y/N): If you enter Y for this item, FILE pauses after printing each pageful of information (as defined by LINES PER PAGE) so you can insert a new sheet of paper. This allows you to print forms on single sheet stationery, or print mailing addresses on individual envelopes.

FILE temporarily stores any changes that you make in the print options. The next time you start the program, the default values will again be in effect. The print options can be updated at any time.

When you finish with your print options, press F10, and the third form to fill in appears with the words PRINT SPEC in the message area at the bottom. This form is referred to as the print spec form. The STAFF file print spec form looks like this:

Employee #: Hired:

Name: Address: State: Zip:

City: Job Title: Salary:

File: STAFF PRINT SPEC Page 1
F1-Help F5-Date F6-Time F10-Continue

Filling in the Print Spec

On the print spec form, you choose which items you want to print and how you want to arrange them (on the same line, or different lines, etc.). If you leave this form blank, each form is printed exactly as it appears on the screen, using the print options you just selected. To select items for printing, use these two characters:

- X print this item, then advance the printer to the next line.
- + print this item, but do not advance the printer to the next line after printing it—skip 2 spaces instead. (This allows you to print more than one item per line.)

In addition, you can print the forms in a particular order by combining the following character with the X or the +:

- S sort the printout based on this item. Using the first ten characters in this item, FILE sorts the printout into ascending order. You can sort on one item only.

Letter sorts: If FILE sorts an item that consists of letters, the forms are printed out in alphabetical order according to that item. For example, if you place an S next to an X or a + in the CITY item of your STAFF file, the forms are printed out alphabetically by city. The CITY item does not appear first on the forms, however; the items in each form are always printed in the order in which they appear on the screen.

Number sorts: FILE treats numbers as characters strings for the purposes of sorting. Just as AZ is sorted before Z, 19 will be sorted before 9. For this reason, sorting the printout into numerical sequence is not feasible unless all the numbers are the same length, as with zip codes. To sort numbers of different lengths, enter zeros to the left of the numbers to make them the same length. For example, 09 will be sorted before 19 not after.

NOTE: Remember, an S does not automatically cause an item to be printed. It must be used with an X or a +.

Example of Printing Mailing Labels from Forms:

Let's use the PRINT function to generate mailing labels for everyone in the STAFF file.

To begin, return to the Main Menu (press ESC, if necessary), and enter

5

in the SELECTION NUMBER item. If you have been working with the example file, STAFF should still be in FILE NAME. If it is not, enter it. Your screen should look like this:

```
PFS:FILE MAIN MENU
-----

1 DESIGN FILE      5 PRINT
2 ADD              6 REMOVE
3 COPY             7 SET UP PRINTER
4 SEARCH/UPDATE    8 EXIT

SELECTION NUMBER: 5
FILE NAME: STAFF

F10-Continue
```

Press F10, and the Print Menu appears. Enter

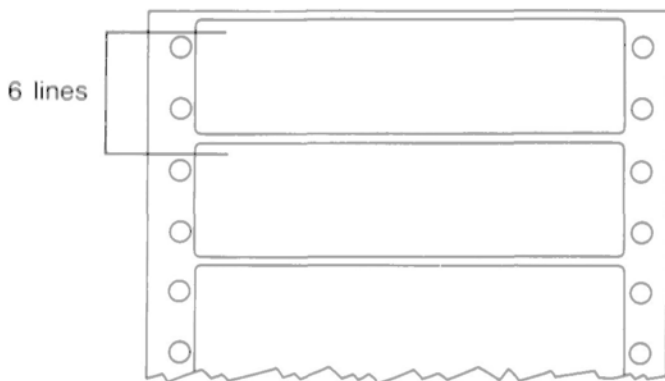
1

in SELECTION NUMBER. Your screen should look like this:



Press F10 again, and the retrieve spec appears. Since you want a label for each employee in the file, leave the retrieve spec blank. Press F10, and FILE displays the print options for you to fill in. (The options show the current default values.)

To select the desired print options, press TAB and skip the PRE-DEFINED PRINT SPEC item. Then move the cursor to the PRINT ITEM NAMES item. Since you would not want item names on mailing labels, change the Y to N. Press TAB again, and enter the device name for your printer. Move to the next item. At this point, you need to determine the spacing between the mailing labels and make sure the labels are properly inserted in the printer. (If you have questions about loading paper or mailing labels, refer to the printer manual or see your dealer.) To determine the proper spacing, count the number of lines between the top of one mailing label and the top of the next. This is the number you want to enter in the LINES PER PAGE item.



For the mailing labels in this example, there are 6 lines from the start of one label to the start of the next. Type

6

and a space to write over the default value of 66. Leave NUMBER OF COPIES and PAUSE BETWEEN PAGES as they are, unless you want to print more than one copy. Your screen should look like this:



PRINT OPTIONS

Pre-Defined Print Spec:	
Print Item Names (Y/N):	N
Print To:	PRN:
Number of Copies:	1
Lines Per Page:	6
Pause Between Pages (Y/N):	N

When you finish entering your print options, press F10, and the print spec form appears. The items that you want to select for printing your mailing labels are NAME, ADDRESS, CITY, STATE, and ZIP. Use the TAB key to move the cursor to NAME and enter

X

Also enter

X

in ADDRESS. The CITY and STATE items each receive a + sign to put them on the same line. Move the cursor to ZIP and enter

SX

(The mailing labels will be sorted by zip codes.) When you are finished, the print spec form looks like this:

Employee #: Hired:

Name: X
Address: X
City: + State: + Zip: SX

Job Title:
Salary:

File: STAFF PRINT SPEC Page 1
F1-Help F5-Data F6-Time F10-Continue

Press F10 again, and FILE prints the mailing labels. They look like this:

Jennifer Young
2421 Broadway
Boston MA 02109

John Andrews
6811 Cypress Lane
Dayton OH 45401

Anne Williams
67 Westlake Dr.
Los Altos CA 94022

After the last form is printed, the following message appears:



Press F10 one more time. FILE returns to the Main Menu, ready to accept another function selection.

The Define Print Spec Option

The Define Print Spec option allows you to specify the way you want to print forms from a particular file, give a name to that set of specifications, and repeatedly use the specifications to print forms by simply referencing the name. You can store eight print specs in a file at one time.

To select Define Print Spec, enter a 2 in the SELECTION NUMBER item on the Print Menu and press F10. The following screen appears:

CURRENT PRE-DEFINED PRINT SPECS

(None)

PRINT SPEC NAME:

F10-Continue

Enter a name (one to ten characters) for the print specification that you want to define. Press F10, and a print spec form from your file appears. Indicate the items you want printed by filling them in with an X or a +. Also, enter an S if you want to sort your printout.

When you finish, press F10. The print specification and its name are stored in the file to use for future printings. FILE then returns to the Main Menu, ready for a new function selection.

Example of Defining and Using a Print Spec:

Let's define a print specification for doing mailing labels and call it MAILABEL.

First, return to the Main Menu (press ESC, if necessary) and enter

5

in SELECTION NUMBER. Enter

STAFF

in the FILE NAME item, if necessary. Press F10, and the Print Menu appears. Enter

2

in SELECTION NUMBER and press F10 again.

The screen indicating the current pre-defined print specs appears. Enter Mailabel in the PRINT SPEC NAME item, as shown below:

CURRENT PRE-DEFINED PRINT SPECS

(None)

PRINT SPEC NAME: MAILABEL

F10-Continue

Press F10, and the print spec form from your STAFF file appears. Indicate the items you want printed by filling in this form to look like this:

Employee #: Hired:

Name: X State: * Zip: SX

Address: X

City: *

Job Title:

Salary:

File: STAFF PRINT SPEC 'Mailabel' Page 1

F1-Help F2-Print F3-Remove F5-Date F6-Time F10-Continue

Press F10 one more time, and the print specification and its name are stored in the STAFF file to use for future printings. FILE returns to the Main Menu.

Now let's try using MAILABEL. You are in the Main Menu, so enter a

5

in SELECTION NUMBER and press F10 to return to the Print Menu. Enter a

1

to select the Print Forms option, and press F10. When the retrieve spec form appears, again press F10 since you want all the forms in the file. The print options form appears next. Enter

MAILABEL

in the PRE-DEFINED PRINT SPEC item. The other items on the form should already be correct, providing you have not restarted the program, since the changes you entered in the print options are still stored in FILE:

A screenshot of a terminal window showing a 'PRINT OPTIONS' form. The form contains several fields with labels and values. The labels are in all caps and some are underlined. The values are in a monospaced font. The fields are: PRE-DEFINED PRINT SPEC: MAILABEL, PRINT ITEM NAMES (Y/N): N, PRINT TO: PRN:, NUMBER OF COPIES: 1, LINES PER PAGE: 6, and PAUSE BETWEEN PAGES (Y/N): N. At the bottom right of the form, it says 'F10-Continue'.

```
PRINT OPTIONS

PRE-DEFINED PRINT SPEC: MAILABEL
PRINT ITEM NAMES (Y/N): N
PRINT TO: PRN:
NUMBER OF COPIES: 1
LINES PER PAGE: 6
PAUSE BETWEEN PAGES (Y/N): N

F10-Continue
```

Press F10, and FILE immediately begins printing the mailing labels, without displaying the print spec form, since the print specifications are defined by MAILABEL. After it finishes, the following message appears:



Press F10 again, and FILE returns to the Main Menu. The cursor is positioned in SELECTION NUMBER and STAFF remains in FILE NAME. FILE is ready for another function selection.

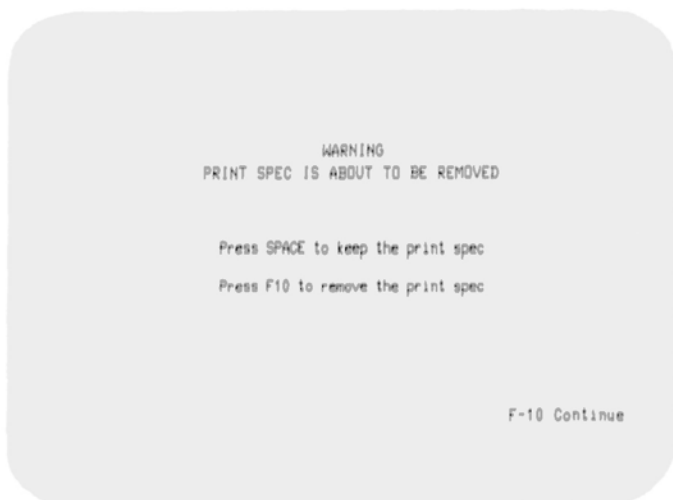
Changing or Removing a Pre-Defined Print Spec

To change or remove a pre-defined print spec, you select Define Print Spec from the Print Menu. The screen that displays the names of any print specs that you have already designed appears:



To change a pre-defined print spec, enter its name in the PRINT SPEC NAME item. Press F10, and FILE displays the stored print specifications on the screen. You can make changes by typing over any entries on the form, or you can press F4 to erase all the entries on that page of the print spec and start over.

To remove the print spec from the file, enter its name in the PRINT SPEC NAME item. Press F10, and when FILE displays the stored print specifications on the screen, press F3. A warning screen appears, giving you an opportunity to change your mind:



If you change your mind and want to keep the print spec, press the space bar. The print spec appears on the screen again. Now press F10, and FILE returns to the Main Menu. The print spec remains in your file.

If you want to remove the print spec, press F10. FILE removes the print spec from your file and returns to the Main Menu.

Reviewing Forms before Printing

If you wish to review each form before printing it, use the SEARCH/UPDATE function (see Chapter 4). When printing with SEARCH/UPDATE, all items on the form are printed, unless you have pre-defined a print spec that selects certain items, and have entered that print spec name in the print options form. In that case, only the selected items will be printed.

Leaving the PRINT Function

If at any time you want to terminate the PRINT function, press ESC to return to the Main Menu. If you press ESC while FILE is in the middle of printing a form, it finishes printing that form before it leaves the function.

Summary

- Use the PRINT function to copy some or all of your information to a printer or disk file.
 - PRINT has two options:
 1. Use Print Forms to print a copy of all or part of a form.
 2. Use Define Print Spec to create a set of print specifications and store them for repeated use (maximum eight print specs per file).
 - To print a form, follow these three steps:
 1. Fill in the retrieve spec form to tell FILE which forms in the file you want printed. (See Chapter 4 for a detailed description of retrieve specifications.)
 2. Fill in the print options form to tell FILE how you want the information printed. If you enter the name of a pre-defined print spec in the print options form, the print spec form (step 3) does not appear.
-

3. Fill in the print spec form to tell FILE which items in the form to print, whether to put items on the same or a different line, or whether to sort the forms according to a certain item.
- Use these characters to fill in the print spec form:
 - X print this item and advance the printer to the next line.
 - + print this item but do not advance the printer to the next line - skip 2 spaces instead.
 - S sort printout based on this item.
 - If you do not enter any print specifications, FILE prints forms just as they appear on the screen.
 - FILE always prints items in the same relative order in which they appear on the form.
 - To review a form before printing it, use the SEARCH/UPDATE function with the F2 option.
 - removes the currently displayed pre-defined print spec
 - returns to the Main Menu after FILE finishes printing the form it is currently printing.
-

6:

remove

With the REMOVE function, you can delete forms you no longer need from your file. You indicate which forms you no longer want, and then FILE searches through the file, automatically removing all appropriate forms. (If you want to see each form before it is removed, use the SEARCH/UPDATE function and the F3 key, as explained in Chapter 4.)

Selecting the REMOVE Function

To select the REMOVE function, return to the Main Menu (press ESC, if necessary). Enter a 6 in SELECTION NUMBER and the name of the file from which you want to remove forms in FILE NAME.

Make sure the diskette containing the file is inserted in the drive indicated in the file name. Press F10, and a retrieve spec form from this file appears on the screen.

Removing Selected Forms from a File

You are now ready to indicate which forms you want to remove from the file by filling in the retrieve spec form with retrieve specifications. (See Chapter 4 for a detailed description of retrieve specifications.) When all retrieve specifications are entered, press F10. Removing a form involves erasing information from your file. Before FILE removes any forms, it displays the following screen, giving you the opportunity to change your mind:

SELECTED FORMS ABOUT TO BE REMOVED

Press ESC to abandon this operation

Press F10 to continue

You have two choices here. If you press ESC, FILE returns to the Main Menu. No forms are removed. If you press F10, FILE removes all forms meeting your retrieve specifications, displaying each form as it removes it. After the last form is removed, FILE displays the following message, indicating the number of forms that have been removed:

Forms Removed: 2

Press F10 to continue

Press F10 again. FILE returns to the Main Menu, ready to accept another function selection.

Once a form is removed, the disk space previously occupied by the form is automatically re-used as soon as FILE stores another form. However, the form number is never used again. If you want to renumber the remaining forms in your file so they are numbered consecutively, use the Change Design option of DESIGN FILE (see Chapter 9).

Example of Removing Selected Forms:

Let's suppose you have created a separate file for the Ohio sales office, and now you want to remove any Ohio employees from the STAFF file. First, return to the Main Menu (press ESC, if necessary) and enter

6

in SELECTION NUMBER. Enter

Staff

in the FILE NAME item, if necessary, and make sure the diskette containing STAFF is in the default drive. Your screen should look like this:

```
PFS:FILE MAIN MENU
-----

1 DESIGN FILE      5 PRINT
2 ADD              6 REMOVE
3 COPY             7 SET UP PRINTER
4 SEARCH/UPDATE    8 EXIT

SELECTION NUMBER: 6
FILE NAME: STAFF

F10-Continue
```

Press F10, and the retrieve spec form from STAFF appears on your screen. Using the TAB key, move the cursor to the STATE item. Enter OH to identify which employee forms you want to remove. The screen should look like this:

Employee #: Hired:

Name: Address: State: OH Zip:

City: Job Title: Salary:

File: STAFF RETRIEVE SPEC Page 1
F1-Help F5-Date F6-Time F10-Continue

Press F10, and FILE displays the following screen, giving you the opportunity to change your mind before it removes any forms:

SELECTED FORMS ABOUT TO BE REMOVED

Press ESC to abandon this operation

Press F10 to continue

Press F10 again to proceed with the function, and FILE removes all forms with OH in the STATE item. When it finishes, FILE displays the following message:



Forms Removed: 1

Press F10 to continue

Now press F10 one more time, and FILE returns to the Main Menu.

Removing All Forms from a File

If you want to remove all the forms from a file, leave the retrieve spec blank. Press F10, and the following message appears:



WARNING

ALL FORMS ARE ABOUT TO BE REMOVED

Press ESC to abandon this operation

Press F10 to continue

If you change your mind at this point, press ESC to return to the Main Menu. Otherwise, press F10, and FILE removes all the filled-in forms, leaving only the form design.

Note that even if you remove all the forms from a file, the file remains on the disk, occupying as much space empty as it did when full. To remove the file, exit from PFS:FILE and use the MS-DOS ERASE command. See your MS-DOS manual for details.

Leaving the REMOVE Function

If at any time you want to terminate the REMOVE function, press ESC, and FILE returns to the Main Menu. If you press ESC while FILE is in the middle of removing a form, it finishes removing that form before returning to the Main Menu.

Summary

- Use the REMOVE function to remove any unwanted forms from a file.
- Indicate which forms you want to remove by filling in a retrieve spec form with retrieve specifications.
- To remove all forms from a file, leave the retrieve spec form blank.
- If you want to see each form before it is removed, use SEARCH/UPDATE and the F3 key (see Chapter 4).
- | |
|-----|
| ESC |
|-----|

 returns to the Main Menu after FILE finishes with the form it is currently removing.

7: *set up printer*

You use the SET UP PRINTER function to send special characters or codes to your printer to initiate or terminate special printing modes. For example, you might want to print your forms in condensed or bold type, if your printer supports these special modes.

If your printer supports any special printing modes, they will be listed in the Operations Manual for the printer. Typically, the manual either instructs you to send special characters (such as ESC CTRL-T) or the ASCII number that corresponds to those characters (such as the number 15). The SET UP PRINTER function accommodates both; characters and ASCII numbers.

Selecting SET UP PRINTER

First, return to the Main Menu (press ESC if necessary), and enter a 7 in SELECTION NUMBER. You do not need to enter a file name in the FILE NAME item. The screen looks like this:

```
PFS:FILE MAIN MENU
.....

1 DESIGN FILE      5 PRINT
2 ADD              6 REMOVE
3 COPY             7 SET UP PRINTER
4 SEARCH/UPDATE   8 EXIT

SELECTION NUMBER: 7
FILE NAME:

F10-Continue
```

Press F10, and FILE displays an instruction screen with an area for you to enter the characters or ASCII numbers that you want to send to your printer.

Entering Characters

To enter a character, simply press the key on the keyboard that corresponds to the desired character. FILE echoes the character on the screen, so you can verify that you pressed the correct key. If you need to enter a control character, such as CTRL-B, press CTRL and, while holding it down, press B. The cursor automatically moves to the next line on the screen as soon as you press a key. To send several characters in a row, just press the keys in the correct sequence. When you have entered all the characters, press F10 to store the characters and return to the Main Menu. FILE sends the stored characters to the printer just prior to printing forms the next time.

NOTE: FILE sends the characters to the default printer or the printer whose name you entered last in the PRINT TO item of the print options screen.

If you should enter a wrong character by mistake, press F6 to return to the Main Menu without storing any characters, then start again.

Example of Sending a Control Character:

For example, let's send the characters necessary to set the DMP-500 into condensed mode. The required character sequence is ESC, then CTRL-T. First, return to the Main Menu (press ESC, if necessary) and enter

7

for SELECTION NUMBER. Press F10, and FILE displays the instruction screen, with a colon next to which you enter the first character. That screen looks like this:

Enter any special characters that you want to send to your printer. You can enter up to 20 characters. Press F10 to send the entered characters. If you make a mistake, press F6 and start again.

:

Now, to enter the ESC character, just press the ESC key. Then, to enter the CTRL-T, press the CTRL key and, while holding it down, press T. Notice that FILE echoes the characters on the screen:

Enter any special characters that you want to send to your printer. You can enter up to 20 characters. Press F10 to send the entered characters. If you make a mistake, press F6 and start again.

: Escape
: Ctrl-T

Since those are the only characters needed for this example, press F10, and FILE stores the characters and returns to the Main Menu.

Sending ASCII Numbers

If your printer manual lists ASCII (decimal) numbers rather than control characters, you can enter those instead. Just precede the number with a left parenthesis, (, and press ENTER to indicate the end of the number. If you wish, you can enter a combination of control characters and ASCII numbers.

Example of Sending an ASCII Number:

Let's send the ASCII numbers that correspond to ESC CTRL-T, again setting the DMP-500 into condensed type. Return to the Main Menu and select SET UP PRINTER as before. When the instruction screen appears, type a

(

then type

27

(the ASCII number corresponding to ESC), and press ENTER. Repeat that sequence but this time type

20

(the ASCII number corresponding to CTRL-T) instead. Notice that, for each number, FILE places parentheses around the number to remind you that it is an ASCII number:

Enter any special characters that you want to send to your printer.
You can enter up to 20 characters. Press F10 to send the entered
characters. If you make a mistake, press F6 and start again.

:(27)
:(20)

Terminating Special Printing Modes

To terminate a special printing mode, you can either send the character or ASCII number that turns off the printing mode or, more simply, just turn your printer off and back on.

Leaving SET UP PRINTER

You can leave the SET UP PRINTER function at any time to return to the Main Menu by pressing F6. However, any characters or ASCII numbers that you have entered will not be stored and later sent. To store the characters, you must press F10 to complete the function.

Summary

- SET UP PRINTER allows you to send special characters or the corresponding ASCII number to your printer to initiate or terminate special printing modes.
 - To enter a character, press the corresponding key.
 - To enter an ASCII number, type a left parenthesis, then type the number. Press ENTER after typing the number.
-

8:

exit

When you are finished using the FILE program, or when you want to leave FILE to perform MS-DOS commands, you use the EXIT function.

Selecting EXIT

To select EXIT, return to the Main Menu (press ESC, if necessary) and enter 8 in the SELECTION NUMBER item. You need not enter a file name in the FILE NAME item. The screen should look like this:

```
PFS:FILE MAIN MENU
-----

1  DESIGN FILE      5  PRINT
2  ADD              6  REMOVE
3  COPY             7  SET UP PRINTER
4  SEARCH/UPDATE    8  EXIT

SELECTION NUMBER: 8
FILE NAME:

F10-Continue
```

Press F10 and the screen clears. If the message "Insert COMMAND.COM disk in drive A" appears, insert the program (or the MS-DOS) diskette and strike any key. You are now out of the FILE program and under MS-DOS control. The MS-DOS prompt appears on the screen.

To avoid wearing out the FILE diskette, you can at this point insert an MS-DOS diskette to perform any commands you wish. (See Appendix D for instructions on the MS-DOS commands you are most likely to use while using FILE.)

To return to the FILE program after using MS-DOS, you would insert the FILE program diskette in drive A again, type FILE, and press the ENTER key. You could also insert PFS:REPORT or another program diskette. Simply type in the name of the new program, and press ENTER.

Summary

- EXIT allows you to leave the FILE program and return to MS-DOS.
- You do not need any entry in the FILE NAME item of the Main Menu when you select EXIT.
- To return to the FILE program from MS-DOS, simply type FILE when the MS-DOS prompt is on the screen and press ENTER.

9: *change design*

After you have created and used your file, you may want to redesign the form to suit your needs better. With the Change Design option of the DESIGN FILE function, you can add more items, delete some items, or rearrange the items on your form, whether your file is empty or contains data. Always be sure to make a backup copy of your file before beginning.

Selecting Change Design

To select Change Design, return to the FILE Main Menu (press ESC, if necessary). First, enter a 1 in SELECTION NUMBER to select DESIGN FILE. Then, enter the name of your file in FILE NAME, and make sure the diskette containing your file is in drive A. Press F10, and the Design File Menu appears. Enter a 2 in the SELECTION NUMBER item on this menu to select Change Design.

Using Change Design with a File Containing No Data

If your file does not contain data, simply insert the diskette that contains it in the specified drive. When you select Change Design from the Design File Menu and press F10, the form appears immediately for you to edit.

The item names are no longer in inverse video and protected from overwriting. You can type in new items, delete items by typing spaces over them, or move items by removing them from their original locations and typing them into new locations. Using the cursor control keys (see Appendix E) to move the cursor around the screen, make all the desired changes in the form. Press F10, and FILE stores the redesigned form in the file and returns to the Main Menu.

Using Change Design with a File Containing Data

When you change the design of a form from a file that contains data, FILE assumes that it will find temporary work space on the disk in drive B. If you want to use a disk other than the one in drive B for this temporary work space, run the SETUP utility program found on the FILE program diskette (see Appendix B for instructions).

When changing the design of a form from a file that contains data, there are several things you need to know:

1. First make a backup copy of your file (use the MS-DOS DISKCOPY or COPY command) in case you change your mind later, or inadvertently damage the file during the redesign process.
2. Insert a blank, formatted diskette in drive B for FILE to use as temporary storage space during the Change Design process.
3. The item names in the old and new designs of the form must match exactly in order for the data to be copied. If they do not, FILE does not transfer the data belonging to the item to the redesigned form, and that data is permanently lost. For example, if the NAME item on the patient's form mentioned in Chapter 1 is moved to a new location during the redesign process, the line of dashes which is a part of the item name must also be moved, or the data belonging to that item will not be transferred. (FILE ignores leading and trailing blanks when matching names, and treats more than one blank between words as a single blank. See Chapter 1 for a complete explanation of item names.)
4. You can move items to different places on the form, without affecting the data for those items (as long as the names match exactly).
5. The redesigned form can have more or fewer items than the original form. When you delete items from the form, however, the data for those items is not copied. It is permanently lost from the file.
6. Leave enough space for the information in the item on the original form to fit into the item on the redesigned form. (See *When the Data Doesn't Fit into the New Design* in this chapter.)
7. Only four pages (maximum) can be redesigned at one time. (See *Changing Forms with Multiple Pages* in this chapter.)
8. It may take a long time for FILE to reorganize your files. Depending on the complexity of the file and the amount of data in it, the reorganization can take from 5 minutes to a few hours.
9. The forms in your file are renumbered in reverse order during the redesign process.

After you select Change Design from the Design File Menu and press F10, the following screen appears:

WARNING

THE CONTENTS OF THE FILE WILL
BE CHANGED BY THIS OPERATION. MAKE
A BACKUP OF THE FILE BEFORE CONTINUING

Press ESC to abandon this operation

Press F10 to continue

If you press ESC, FILE returns to the Main Menu. To continue, insert a diskette in drive B and press F10. FILE continues with the Change Design process and displays the form from your file as you originally designed it. The item names are no longer in inverse video and protected from overwriting. You can type in new items, delete items by typing spaces over them, or move items by removing them from their original locations and typing them into new locations (you must type the item names exactly as they originally appeared). Use the cursor control keys (see Appendix E) to move the cursor around the screen.

When you have made all the desired changes, press F10 and FILE changes the design on all the filled-in forms, briefly showing each form in its original format. FILE then stores all the changes in the file and returns to the Main Menu, ready for another function selection.

Example of Changing the Form Design:

Let's change the STAFF form to include an EXPERIENCE item and to delete the SALARY item. Before you begin, make a backup copy of STAFF, if you have not already done so. You might also want to enter another form for John Andrews, since you deleted his form while using the REMOVE function.

First return to the Main Menu (press ESC, if necessary) and enter

1

in the SELECTION NUMBER item. Enter

Staff

in the FILE NAME item, if necessary, and make sure the diskette containing STAFF is in drive A. Your screen should look like this:

```
PFS:FILE MAIN MENU
-----

1  DESIGN FILE      5  PRINT
2  ADD              6  REMOVE
3  COPY             7  SET UP PRINTER
4  SEARCH/UPDATE   8  EXIT

SELECTION NUMBER: 1
FILE NAME: STAFF

F10-Continue
```

Press F10, and the Design File Menu appears. Enter

2

in the SELECTION NUMBER item. Press F10 and, when the warning screen appears, insert a diskette with available space in drive B and press F10 again. FILE displays the form from the STAFF file as you originally designed it:

Employee #: Hired:

Name:

Address:

City: State: Zip:

Job Title:

Salary:

File: STAFF DESIGN Page 1
F1-Help F5-Data F6-Time F10-Continue

To change the STAFF form, use the down arrow key or ENTER to move the cursor down the screen to the SALARY item. Replace it with EXPERIENCE. Since you are not making any further changes, press F10, and FILE changes all the forms and stores the changes in the file.

Using Change Design to Renumber Forms

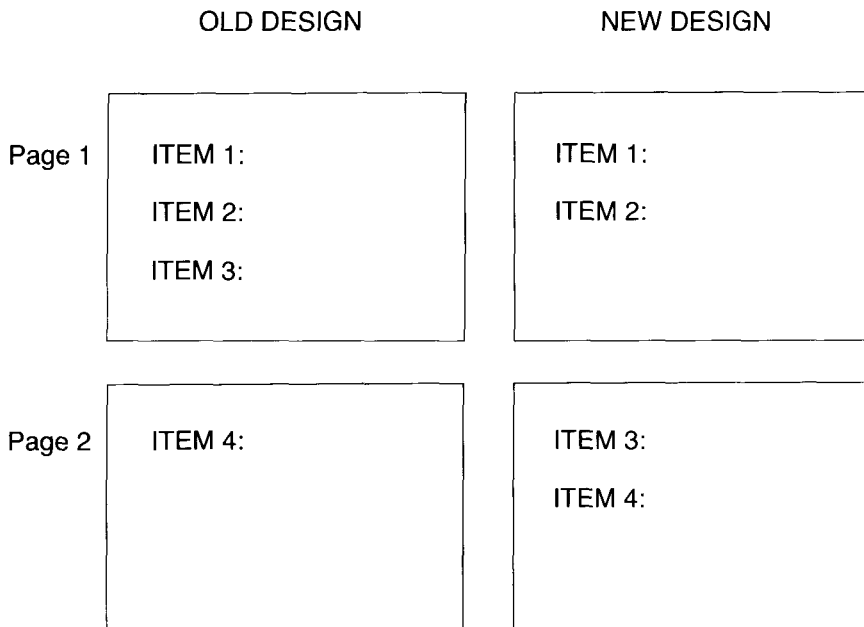
When you remove a form from your file, its form number is never used again, although the disk space occupied by the form is automatically re-used as soon as FILE stores another form. If you have removed a number of forms from a file and want to renumber the remaining forms consecutively, use the Change Design option. When FILE displays the form from your file for you to redesign, press F10 without making any changes. FILE recopies the forms in your file and rennumbers them in consecutive order.

Since FILE recopies the forms starting with the last form entered in the file, using Change Design to renumber forms reverses their order in the file. If this is not acceptable for some reason (perhaps you search the most recently entered forms most often, and having them at the beginning of the file slows down the search process), use Change Design to renumber them again. This will get them back in their original order.

Changing Forms with Multiple Pages

You can change only four pages of a multiple-page form at any one time. Thus, if you want to change six pages, you have to change four of them first, complete the Change Design function, then repeat the operation for the other two pages.

When transferring data, FILE looks for the item name first on the equivalent page of the new form, then on the other pages consecutively, so the data is transferred regardless of the page the item appears on. For example, in the redesign shown in the diagram below, the data in ITEM 3 now appears on the second page of the new form, while the data in ITEM 1 and ITEM 2 remains on the first page.

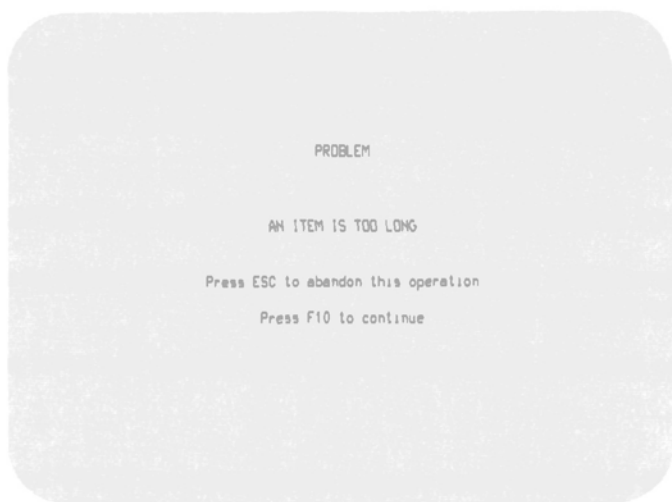


Using Change Design to Remove a Blank Page

When designing or redesigning a form, if you remove all the item names from a page, the page (now blank) continues to exist. To remove the blank page, use Change Design and retype the items from pages following the blank page so they fill up the empty space. (If the blank page is the last page in the form, FILE removes it automatically during the Change Design process.)

When the Data Doesn't Fit into the New Design

When transferring data from the original form to the redesigned form, if the information in an item does not fit into the space for that item on the redesigned form, FILE stops and displays the following message:



You have two choices. If only one form has an item that is too long, it is probably better to shorten the information in that item so that it fits in the new design (or, if the form is not vital to the new file, delete it).

If you press F10, the form with the overlong data item appears with the cursor located at the first character that does not fit into the redesigned form. You can then edit the information in the overlong item. When you finish, press F10 again to continue transferring data.

If many of the forms in the file have an item that is too long for the redesigned form, you might want to cancel the operation and redesign the form again to accommodate the data. When you press ESC, you return to the Main Menu. FILE does not save the redesigned form. The file remains in its original state, and you must begin again.

Entering Data in Redesigned Forms

You can use the SEARCH/UPDATE function to enter information in an item that you added to a form in the redesign process.

After entering SEARCH/UPDATE, leave the retrieve spec form blank so that FILE retrieves every form in the file. As each form appears on the screen, enter the new information into the new item and press F10 to store the updated form in the file.

Repeat this procedure until every form in the file has been updated. After you store the last form, FILE displays a screen to tell you how many forms it found. Press F10 one more time. FILE returns to the Main Menu, ready for another function selection.

Example of Entering Data in a Redesigned Form:

Let's add information in the EXPERIENCE item you added when you redesigned the form for the STAFF file.

First, return to the Main Menu (press ESC, if necessary) and enter a

4

in SELECTION NUMBER. Since you just redesigned your STAFF form, STAFF should still be in FILE NAME, and the diskette containing STAFF should still be in drive A. Press F10, and the retrieve spec from STAFF appears:

The screenshot shows a form titled "STAFF" with the following fields:

- Employee #:
- Hired:
- Name:
- Address:
- City:
- State:
- Zip:
- Job Title:
- Experience:

At the bottom of the form, there is a dashed line and the following text:

File: STAFF RETRIEVE SPEC Page 1
F1-Help F5-Date F6-Time F10-Continue

Since you have information to enter in the EXPERIENCE item of each STAFF form, you want to leave the retrieve spec blank. Press F10 again, and the first of your STAFF forms appears on the screen. Use TAB to move the cursor to the EXPERIENCE item, and enter the appropriate information from the list below. After you finish with each form, press F10, and the next form appears. Continue entering information until you have updated all the forms.

NAME	EXPERIENCE
Jeff Stribling	Metal fusion
Jennifer Young	Electronic parts, International Sales
Anne Williams	Division Management
Mike Cooper	Machine tools
Sara Brown	Executive
John Andrews	Computer terminals, time sharing

When you finish the last form and press F10, the following screen appears:



Press F10 one more time, and FILE returns to the Main Menu.

Leaving the Change Design Option

If at any time you want to terminate the Change Design option, press ESC to return to the Main Menu. If you press ESC, however, FILE does not save the redesigned form. The form remains in its original state.

Summary

- Use the Change Design option to change the design of the form from a file.
 - You can change the form of an empty file or of a file that contains data.
 - If changing the form of a file that contains data, remember these guidelines:
 1. Make a backup copy before you change the form.
 2. Insert a formatted diskette in drive B for FILE to use for temporary work space. (To use another drive for this work space, run the SETUP program to change the work drive from drive B.)
 3. Item names in the redesigned form must match exactly the item names in the original form, but can be in different places on the forms.
 4. Leave enough space for the information in an item on the original form to fit into the item on the redesigned form, or edit the information to fit.
 5. Only four pages of a multiple-page form can be changed at one time.
 6. Forms are renumbered in reverse order.
 - | |
|-----|
| ESC |
|-----|

 returns to the Main Menu. FILE does not save the redesigned form. The form remains in its original state.
-

A:

appendix

Messages

FILE displays a message whenever it encounters an error condition. Certain errors are the result of mistakes made when you enter information (filling in the Main Menu items, PRINT or COPY functions, or retrieve specifications). These messages are displayed in the message area at the bottom of the screen:

The screenshot shows a terminal window with a menu titled "PFS:FILE MAIN MENU". The menu lists eight options: 1 DESIGN FILE, 2 ADD, 3 COPY, 4 SEARCH/UPDATE, 5 PRINT, 6 REMOVE, 7 SET UP PRINTER, and 8 EXIT. Below the menu, the user has entered "4" for the selection number and "Sample" for the file name. An error message "CAN'T FIND FILE" is displayed at the bottom. The prompt "F10-Continue" is visible in the bottom right corner.

```
PFS:FILE MAIN MENU
-----

1 DESIGN FILE      5 PRINT
2 ADD              6 REMOVE
3 COPY             7 SET UP PRINTER
4 SEARCH/UPDATE    8 EXIT

SELECTION NUMBER: 4
FILE NAME: Sample

CAN'T FIND FILE

F10-Continue
```

Other errors are the result of physical limitations or problems with certain elements of your computer system. These messages are displayed on a separate screen that looks like this:



When you encounter one of these messages, simply locate the message in the following list and follow the instructions in the Corrective Action column. To restart normal FILE operation, press ESC. Following is the list of FILE error messages, arranged in alphabetical order:

MESSAGE	DESCRIPTION	CORRECTIVE ACTION
BAD FILE NAME	You entered an illegal file name.	Make sure the file name begins with a letter and does not contain spaces (see the Introduction or your Model 1000 Owner's Manual for details).
CAN'T FIND FILE	FILE searches for files in the default drive unless you include the drive name as part of the file name.	Check to make sure you entered the name of the file correctly in the FILE NAME item. If the file you want to use is in a drive other than the default drive, the file name must be preceded by a drive name. Also make sure the diskette that contains the file is in the correct drive.

MESSAGE	DESCRIPTION	CORRECTIVE ACTION
CAN'T FIND FILE (Continued)	The disk in the drive is not formatted.	Format the diskette before attempting to use it.
	The file name you entered is not the name of a file created by PFS:FILE.	Enter the name of a PFS file and try again.
CAN'T FIND PRINT SPEC	There is no pre-defined print spec with that name.	Check to make sure you entered the name correctly.
DIRECTORY IS FULL	You have too many files in the directory on the diskette.	If you have some unnecessary files in the directory, use the MS-DOS ERASE command to remove them. Or, use another directory or disk.
DISK HAS BEEN CHANGED	The diskette containing the PFS file has been removed from the drive.	Re-insert the diskette with the PFS file.
DISK IS FULL	FILE attempted to write some information on a diskette and found that there was no room left.	<p>If you have some unnecessary forms in the file, you can create some space by removing them (see Chapter 6). If the diskette has an unneeded file, you could use the MS-DOS COPY command to copy it to another diskette, or remove it using the MS-DOS ERASE command.</p> <p>You can also use the COPY function to copy the form design from the current file to a second file, then continue adding information to that new file.</p>

MESSAGE	DESCRIPTION	CORRECTIVE ACTION
DISK IS WRITE-PROTECTED	FILE cannot use diskettes that are write-protected. FILE uses certain areas of the diskette to store temporary information, even when you select a retrieve function.	Remove the write-protect tab. To protect the data that could now be over-written, use the MS-DOS COPY command to make a backup copy of your file.
DRIVE ISN'T READY	The disk drive door is open.	Close the door.
FILE CAN'T PRINT TO THE CONSOLE	You have entered CON: on the print option form in the PRINT TO item.	Either use the default PRN:, which sends the output to a parallel printer, enter AUX: to send the output to a serial printer, or enter the name of a diskette file (see Chapter 5).
INVALID SELECTION NUMBER	You entered a number for the SELECTION NUMBER item of a menu that is invalid.	Re-enter a number that is shown on the menu.
I/O ERROR	There is a physical problem with either the disk drive, the disk controller, or the diskette. Some possible causes are:	
	Disk drive door open.	Close the door.
	Malfunction.	DO NOT USE THIS DISKETTE AGAIN. Make a copy of your backup disk, then use that copy. If I/O ERROR persists, take the disk drive to your dealer for testing.
	Diskette inserted incorrectly.	Remove the disk, then re-insert it properly.

MESSAGE	DESCRIPTION	CORRECTIVE ACTION
	Unformatted diskette.	You must format the diskette using the MS-DOS FORMAT command before using it with FILE.
	Worn out diskettes.	After 40-50 hours of use, the diskette may need replacing. Try using a different diskette.
MUST GIVE A FILE NAME	You have left the FILE NAME item of the Main Menu blank. Every FILE function, except EXIT and SET UP PRINTER, requires a file name in this item.	Enter the name of the file you want to use.
MUST GIVE A PRINT SPEC NAME	You have tried to define or modify a pre-defined print specification but have not entered a name.	Enter a new name or one of the names listed on the screen.
NEW FILE MUST HAVE A DIFFERENT NAME	The NEW FILE NAME item of the COPY Function Menu contains the same name as the FILE NAME item of the Main Menu.	Re-enter a different file name.
ONLY 4 PAGES CAN BE CHANGED	You have tried to change the form design on more than four pages of the form at one time.	Complete the Change Design process for no more than four pages of a form design at one time. Repeat the process for each additional four pages.
ONLY 8 PRINT SPECS ARE ALLOWED	You have already defined eight print specs for the file.	Remove one of the print specs, then define the new one.
PRINT SPECS CAN HAVE ONLY 10 CHARACTERS	You entered a name that is longer than 10 characters.	Re-enter a name with 1 to 10 characters.

MESSAGE	DESCRIPTION	CORRECTIVE ACTION
PRINTER ISN'T READY	FILE cannot access the printer you named in the PRINT TO item.	Check to make sure your printer is plugged in, turned on, on-line, and has paper.
SEARCH LIST TOO LONG	The retrieve specifications will not fit in FILE's internal storage area.	Specify fewer requests in the retrieve specifications.

B: *appendix*

Setting Up the PFS:FILE Program

Sometimes you will need to give FILE special instructions, depending on the exact configuration of your computer system. These special instructions fall into three categories:

- selecting a work drive
- configuring FILE to work with a serial printer
- installing FILE on your hard disk

The FILE program diskette includes a utility program named SETUP that you can use as needed to give FILE these special instructions. This appendix describes this program.

Starting the SETUP Program

To use the SETUP Program, remove the write-protect tab from the FILE program diskette, insert the diskette in drive A, and exit from whatever program you have been using. When the MS-DOS prompt appears on the screen, type SETUP and press the ENTER key. The following menu is displayed:

```
PFS: Software Series SETUP Program
Copyright 1984 Software Publishing Corporation
```

- ```
1 Select a work drive
2 Set up serial printer
3 Install program on hard disk
4 Exit this program
```

```
Selection:
```

---

You have 4 options: select a work drive, set up a serial printer, install the program on a hard disk, and exit from the SETUP program. Each procedure prompts you for the information it needs. If you make a mistake while using SETUP, press the ESC key to return to the SETUP menu. You can then either try again or exit SETUP.

Type the number of the option you want (for detailed instructions for each option, see the appropriate section in this appendix). When you are done with the SETUP program, remove the FILE program diskette from the drive and put a write-protect tab back on the diskette.

## Selecting the Work Drive

When you change the design of a form that contains data, or when you sort forms while printing, FILE needs temporary workspace at least as large as the size of the file. Unless you indicate otherwise by selecting another drive with this function, FILE assumes that the diskette in drive B is to be used for this purpose. If you want to use another drive, select this function before starting FILE.

To change the work drive, enter 1 for Selection and press ENTER to continue. SETUP asks you for the name of the drive you want to use:

Work drive name:

Enter the drive name and press ENTER to return to the SETUP Menu.

## Using a Serial Printer

If you have a serial printer, you will need to give information about its settings before FILE can print correctly to that printer. SETUP stores the information on the FILE program diskette and FILE uses it whenever you choose the PRINT function. If you change to a different serial printer, run SETUP again to enter the new information.

To set up your serial printer, enter 2 for Selection and press ENTER to continue. SETUP displays the following prompts, one at a time:

Baud rate  
(110, 150, 300, 600, 1200, 2400, 4800, 9600):

Parity (odd/even/none):

---

Byte Length (7 or 8):

Number of Stop Bits (1 or 2):

XON/XOFF Protocol (Y or N):

Check your printer manual for the correct values for these prompts. When you have entered the correct information, press ENTER to return to the SETUP Menu.

## Installing FILE on a Hard Disk

You can run FILE from the hard disk if it has already been installed using SETUP; if you use the MS-DOS COPY or DISKCOPY command, the program will not run. Also, you are only allowed to install the program five times; after the fifth time, if you attempt to install the program again, an error message will be displayed.

To install FILE, select option 3 from the SETUP Menu, then press the ENTER key. SETUP displays some instructions, and asks you for the drive name of your hard disk. Type the drive name for your hard disk drive or the drive and directory name for the part of the hard disk where you want the program located (for example, C: or C:\PROGRAMS). To install FILE in a subdirectory, you must type the complete name of the subdirectory, starting at the root directory.

After typing the drive or directory name, press ENTER. Both the FILE program and the SETUP program are copied to the drive or directory you specified. You see the OK message and then the SETUP Menu again.

## Leaving the SETUP Program

When you have finished with SETUP, enter 4 in Selection and press ENTER to exit from the SETUP program and return to MS-DOS.

---



# C:

# appendix

## Diskette Storage Capacity

A standard diskette can hold up to 2500 very simple forms, assuming there is only one file on the diskette. The actual number depends on how many pages there are in the form, how many items there are per page, and how much data is entered in each item. For example, the form for an average mailing list would only allow about 1250 forms on one diskette, assuming the PFS file was the only file on the diskette.

A file is divided into blocks of 128 bytes (characters) per block. Some of these are used to store the form design, directory information and other internal FILE data structures. 2500 of these 128-byte blocks are used to store data on a standard diskette.

Each page of every form stored in a PFS file uses at least one 128-byte block, even if the page is blank. The actual number of forms that you can fit into one of your files is a function of how much data is entered in each individual form.

Use the following rules to estimate how many bytes are used by a page of a form:

- FILE uses the first 14 bytes of every page.
- Each item name entered on a page takes 5 bytes (FILE internal parameters).
- Each character entered in an item takes one byte.
- Each blank space in a filled-in item takes one byte, but no blanks are counted at the beginning or end of an item.
- A string of 3 or more blanks inside a filled-in item takes 3 bytes.

Example:      NAME:    Jeff   Stribling            1970  
 Length =            5        +4+1   +9            +3    +4        = 26 characters

- A blank item takes 6 bytes (5 for the FILE internal parameters plus 1 blank character).

After figuring the total number of bytes used by each page of a form, use these steps to estimate how many forms will fit in a file:

1. Divide the total number of bytes for a page by 128.
2. Round up to the next largest whole number. (This gives you the number of 128-byte blocks used by the page.)
3. Add the number of blocks for all pages of the form to give you the total number of blocks required for an average form.
4. Divide 2500 by the total number of blocks required by one form to arrive at the approximate number of forms you can fit on your diskette.

It is necessary to figure page by page because FILE uses space on a per-page basis. For example, if you use 30 bytes on a page, FILE assigns 128 bytes to that page in that file, and those 98 empty bytes are not used anywhere else. Estimating an entire form at once, instead of each page individually, will cause you to think that you have more empty space in your file than you actually do.

## Example:

Let's figure the number of bytes used by the following example of a telephone directory form:

Name: Michael Badagliacca  
Home Phone: 408-258-0841  
Business Phone:  
Address: 19502 Foot Hill Av  
City: San Jose State: CA Zip: 95132

-----  
File: PHONE# FORM 1 Page 1  
F2-Print F3-Remove F5-Delete F6-Time F10-Continue

14—FILE uses the first 14 bytes on a page

35—7 items using 5 bytes each (FILE internal parameters)

19—Michael Badagliacca = 18 characters, 1 space

12—408-258-0841 = 12 characters, 0 spaces

1—BUSINESS PHONE: empty item = 1 space

18—19502 Foot Hill Av = 15 characters, 3 spaces

8—San Jose = 7 characters, 1 space

2—CA = 2 characters, 0 spaces

5—95132 = 5 characters, 0 spaces

---

114 TOTAL number of bytes used by this completed form

114 / 128 = .89      Step 1. The total number of bytes for the page divided by 128.

.89 = 1      Step 2. Round .89 up to the next largest whole number, which is 1.

1      Step 3. Since this form has only one page, there is nothing to add to the 1. This form will require one storage block.

2500/1 = 2500      Step 4. Since one form requires only one storage block, you can probably fit 2500 of these forms in one file.

If you put more than one PFS file on a diskette, they will compete with each other for space until the diskette is full. When a file is initially built, it takes 128 blocks of 128 bytes each, for a total of 16384 bytes. When that space is used, it takes space 64 blocks at a time, as it needs more room. To find out how much space is available on a diskette:

---

1. Insert the MS-DOS diskette in drive A, and the diskette that contains your PFS file in drive B.
2. Exit from PFS:FILE. When the MS-DOS prompt appears, type

CHKDSK B:

and press the ENTER key.

MS-DOS displays a summary of how many files currently exist on the diskette, the space occupied by those files, and the amount of free space available in bytes.

## Hard Disk Storage Capacity

The maximum size of a PFS data file on a hard disk is 4 megabytes, or the amount of available space, whichever is smaller. Also, there cannot be more than 32,000 forms in the file.

The calculations explained in the previous section will also work for a hard disk. To arrive at the approximate number of forms you can fit on your disk, divide 32,000 by the total number of blocks.

**Note:** If you have a large file on your hard disk, and you want to sort all of the forms for printing, you need to have free space available on your disk at least equal to the size of the file.

# **D:**

# *appendix*

## Useful MS-DOS Commands

There are three MS-DOS commands that you might want to use when working with the FILE program. These commands are:

|          |                                 |
|----------|---------------------------------|
| FORMAT   | for preparing diskettes for use |
| DISKCOPY | for copying one disk to another |
| DIR      | for listing files on a disk     |

This appendix describes how to issue each of these commands.

## Formatting Diskettes

You must format new diskettes before they can be used in the computer. Formatting makes magnetic tracks on the diskette that will store the data later. We recommend formatting a supply of diskettes at one time and marking them on the label so you know they have been formatted.

To format a diskette, use the following steps.

Single-diskette drive:

1. Exit from FILE and insert the MS-DOS diskette in the drive.
2. When the MS-DOS prompt appears on the screen, type

**format**

and press the ENTER key.

3. When MS-DOS displays the following message:

Insert new diskette for drive A:  
and strike any key when ready

remove the system diskette, insert a blank diskette in the drive, and press any key.

4. A series of dashes appears on the screen. These dashes change to dots as the diskette is formatted. When complete, you are prompted:

Format another (Y/N)?

5. Remove the diskette from the drive. You can go on to format other diskettes or type N to return to the MS-DOS prompt.

Double-diskette drive:

1. Exit from FILE and insert the MS-DOS diskette in drive A.
2. When the MS-DOS prompt appears on the screen, type

**format B:**

and press the ENTER key.

3. When MS-DOS displays the message:

Insert new diskette for drive B  
and strike any key when ready

insert the diskette you want to format in drive B and press a key. The screen will display a message while it is formatting (Formatting..) and then this message when formatting is complete:

Formatting..Format complete  
Format another (Y/N)?

4. Remove the diskette from drive B. You can go on to format other diskettes, or type N to return to the MS-DOS prompt.

## Copying One Diskette to Another Diskette

To copy a diskette to another diskette, you need a blank formatted diskette and the source diskette (the diskette you wish to copy).

Single-diskette drive:

1. Exit from FILE and insert the MS-DOS diskette in drive A.
  2. When the MS-DOS prompt appears on the screen, type
-

### **diskcopy**

and press the ENTER key.

3. Insert the source diskette in drive A and press any key to begin the copying. Then insert the target (blank formatted) diskette when instructed. You will be prompted to switch the source and the blank diskette a number of times. Do so when instructed, until the entire content of the source diskette is copied to the blank diskette.
4. When the copying is finished, the following prompt appears:

Copy complete  
Copy another (Y/N)?

5. Press N to end the session or Y to make more copies.

Double-diskette drive:

1. Exit from FILE and insert the MS-DOS diskette in drive A.
2. When the MS-DOS prompt appears, type

### **diskcopy A: B:**

and press the ENTER key.

3. Insert the source diskette in drive A and the blank formatted diskette in drive B. Press any key to begin the copying.
4. When the copying is complete, the following prompt appears

Copy complete  
Copy another (Y/N)?

5. Press N to end the session or Y to make more copies.
-

## Listing Files

There are times when you want to see a list of the files stored on a particular disk. The DIR command gives you such a list, including the file name (and extension, if applicable), the size of the file (in bytes), and the date the file was last updated.

To list your files on a diskette, follow these steps:

1. Exit from FILE and insert the MS-DOS diskette in drive A.
2. When the MS-DOS prompt appears on the screen, replace it with the diskette whose files you want to list.
3. Type

**dir**

and press ENTER.

The screen displays the names of the files you have on the diskette, plus their extensions (if any), and the last time and date they were updated. The MS-DOS prompt will appear below the last entry in the list. At this point, you may enter another command, reload FILE, or run another program.







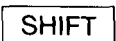

---

# **E:**



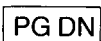
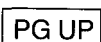





# *appendix*

## Special Control Keys

### Cursor Control Keys

|                                                                                                                                                                     |                                                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
|                                                                                    | Move the cursor to the left one space.                         |
|                                                                                    | Move the cursor to the right one space.                        |
|                                                                                    | Move the cursor up one line.                                   |
|                                                                                    | Move the cursor down one line.                                 |
|                                                                                    | Move the cursor to the beginning of the next line.             |
|                                                                                    | Move the cursor forward to the next item on the form or menu.  |
|   | Move the cursor back to the previous item on the form or menu. |

### FILE Control Keys

|                                                                                     |                                                                       |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
|    | Display a help screen appropriate to the function you are performing. |
|  | Begin or continue with the specified function.                        |
|  | Display the next page of the form.                                    |
|  | Display the previous page of the form.                                |
|  | Erase all entries from the currently displayed page.                  |
|  | Print the currently displayed form (all pages).                       |
|  | Remove the currently displayed form.                                  |
|  | Enter the current date at the current cursor location.                |
|  | Enter the current time at the current cursor location.                |

ESC

Return to the FILE Main Menu.

INSERT

Switches between normal and insert mode. When in insert mode, a typed character is inserted at the cursor location, moving other characters on the line one location to the right to make room.

DELETE

Delete the character at the cursor location.

---

# ***F:***

# *appendix*

---

## Configuring Your Printer to Work with Your Tandy 1000

Before you run the PFS:FILE program, you must configure your printer to work with your Tandy 1000. If your printer is IBM compatible, it is already set up to work with your computer. If, however, your printer is not IBM compatible (listed below), you must set it to work with your computer as shown below.

If your printer is one of the following:

LPVIII  
DMP120  
DMP200  
DMP400  
DMP420  
DMP500  
DMP2100

set the NL/CR switch on your printer to CR.

If your printer is one of the following:

DWP11  
DWP11b  
DWP410  
DWP210

run the LPINST program as shown below:

1. Make sure the MS-DOS diskette is in drive A and the A> prompt is on the screen.
-

## 2. Type

### **LPINST**

and press ENTER. The program asks you

Does your printer automatically linefeed  
after a carriage return?

## 3. Type Y.

The MS-DOS prompt appears on the screen. Now, each time you turn on or reset the computer and run FILE, the printer will automatically be configured to work with your computer.

Note that besides the four daisy wheel printers listed above (DWPII, DWPIIb, DWP410, and DWP210), there may be other printers that automatically linefeed after a carriage return. If this is the case with your printer, run the LPINST program as shown above, to make the printer work with your computer.

## Configuring Your Printer Each Time You Run FILE

Running the LPINST program (see above) creates a file that automatically configures your printer to work with your computer each time you turn your computer on, or each time you reset it. There are times, however, when you may want to configure your printer each time you run FILE.

For instance, you may want to print a rough draft of your data file on a dot matrix printer (the DMP series listed above) for review, and then print the final draft on a letter quality daisy wheel printer (the DWP series).

If you use the LPINST program (explained above) to do this, you would have to go through the following procedure each time you want to print your file on a different type of printer.

First, you have to run the LPINST program. This means that you have to type **LPINST** and press ENTER. Then type **Y** for daisy wheel and **N** for dot matrix printers when the prompt

Does your printer automatically linefeed  
after a carriage return?

comes up on the screen. Finally, you have to reset the computer.

---

An easier method of doing the same thing would be to use the mode command as shown below.

1. Exit from REPORT.
2. Type **LF** and press ENTER.
3. Do one of the following:
  - Type **mode lfoff** (for line feed **off**) to use a printer that does automatic linefeed (the DWP series listed above).
  - Type **mode lfon** (for line feed **on**) to use a printer that does not do automatic linefeed (the IBM compatible and the DMP series listed above).

and press the ENTER key.

The mode command sets your printer up to work with your computer as you specified, until you turn off or reset the system. At this point your printer goes back to its configuration before you used the mode command.

---



# G:

# *glossary*

---

|               |                                                                                                                                                                                                                                                  |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| byte          | the space taken up by one character in a computer's memory or in a diskette storage area.                                                                                                                                                        |
| character     | a letter, number, or symbol                                                                                                                                                                                                                      |
| cursor        | a marker on the screen, in the form of a blinking rectangle or an underline character, that indicates where the next character typed will appear.                                                                                                |
| default value | a value that is automatically assigned to something if no other value is chosen to replace it.                                                                                                                                                   |
| disk/diskette | a removable magnetic recording media used to store information. Diskettes can contain programs (the PFS:FILE program diskette) or data (your PFS files). Diskettes should be treated with care.                                                  |
| file          | a collection of forms that are of the same type. (In FILE, it is the form you design, along with all the forms that you fill in with data.)                                                                                                      |
| form          | any combination of items arranged in a chosen order, and created to store information about one particular thing, person, or subject area. (In FILE, you design a form then use it to store and retrieve information. Forms are kept in a file.) |
| format        | the general layout or arrangement of something, such as the design of a form.                                                                                                                                                                    |
| inverse video | the reverse of the normal display of characters on the computer video monitor. Usually, characters are light on a dark background. In inverse video, the characters are dark on a light background.                                              |
| item          | the basic element of a form. An item consists of a name and a colon, highlighted on the screen (in inverse video), and followed by an area where information is entered.                                                                         |

---

|               |                                                                                                                                         |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| load          | the process of transferring a program from a diskette into the computer's memory.                                                       |
| menu          | the list of functions that you can choose at a given time. (The Main Menu appears when you first load the FILE program.)                |
| write-protect | to prevent a diskette from being written on. A diskette is write-protected by placing an adhesive tab over the small notch on its side. |

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