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FCM™

Commodore 64 Version

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Printing 10, 9, 8, 7, 6, 5, 4, 3, 2, 1

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1 INTRODUCTION

IMPORTANT HARDWARE NOTES

Some computers are manufactured without the same cooling capability of some more expensive equipment. For equipment of this type it is important to consider the temperature in the area where the computer is located.

When such computers are operated in a cool environment, usually no precautions need be taken. However, if the area is very warm, it is advisable to let the computer cool down before performing tasks that require a long period of steady disk access (e.g. copy a diskette, Search/Edit or print reports with over 25 categories).

Disk drives also vary in design. Some of the less expensive machines use a serial type of information exchange that generally is slower than that found on more expensive computers. This is reflected in longer delays while running *FCM,* awaiting information to be stored to, or retrieved from the diskettes.

Finally, the more expensive systems directly support various interface cards for both parallel or serial printers. On other machines, only a few printers may be supported directly, with other printers requiring non-standard interface cards and/or printer driver software.

> IMPORTANT: If you wish to copy diskettes using Commodore's "1541 BACKUP" program, and you have a printer connected through the cassette interface, you may find that the computer will stop without completing the backup copy. If, after asking you to insert the destination disk, the colored bar does not change length within a minute, you must turn off the computer units and remove the cable connecting the printer from the computer before copying. Remember to re-connect the printer cable before continuing with *FCM.*

If you experience problems when entering a large number of transactions at one sitting, or if you wish to guard against power failure or other problems, it is HIGHLY recommended that you exit Transactions and return to the Main Menu every fifteen or twenty entries. This will save your data and close the file. You may then re-select Transactions from the Main Menu and continue.

> **NOTE:** You may also type over the default date or check number if you wish.

INTRODUCTION

Congratulations on purchasing *FCM!* You own one of the finest products available on the Commodore 64 computer for:

- Mailing list applications
- General purpose filing and cataloging

FCM stands for Filing, Cataloging, and Mailing. It is all of these capabilities combined into a single, easy-to-use program.

As a *mailing program, FCM* enables you to:

- Set up lists of names and addresses, and store them on floppy diskettes.
- Print out all or part of a list, in an order which you specify. Printing can be onto envelopes, labels, or ordinary paper, in a wide choice of convenient formats.
- Update mailing lists which were entered previously.

As a *filing and cataloging* program, *FCM* turns your computer into a powerful electronic filing system. You can:

- Define the kind of information that you want to file, and the format in which the information is to be stored.
- Store, retrieve, and update information at electronic speeds.
- Search the file for all of the information under a desired heading, and print out the information in an order which you specify.
- Create separate, customized files, for different kinds of information.

When you use *FCM* for filing and cataloging, it is almost as simple to use as a box of file cards — but a lot more convenient! Some examples of possible uses:

- Maintain membership rosters
- Keep records of business or vacation trips
- Organize social engagements
- Log phone messages

- Keep customer lists (including special memos for birthdays, anniversaries, etc.)
- Plan and maintain lists of dinner menus and guests
- Organize and record lists of libraries and collections (such as video tapes, photographs, valuables, or computer software programs — great for insurance purposes!)
- Make up pricing labels
- Maintain a wine cellar listing, with comments
- Monitor baseball cards and trades
- Keep greeting card lists (birthdays, holidays, anniversaries, etc.)
- Plan and organize wedding invitations, parties, thank you notes
- Create a plant and garden watering and feeding schedule

THE *FCM* PACKAGE

In this package you should have the following:

1. This User's Guide.
2. The *FCM* program disk.
3. Your *FCM* warranty card (on the inside front cover).
4. A Continental Software customer questionnaire.

It is very important that you fill out the warranty card and register your purchase of *FCM* with Continental Software.

HARDWARE REQUIREMENTS

To operate *FCM,* you will need:

1. A Commodore 64 computer.
2. A video display screen.

3. At least one Commodore VIC 1541 disk drive.

4. A Commodore VIC 1525 printer or other 80-column or 132-column printer with suitable interface.

5. An 80-column or 132-column printer with either a standard Apple parallel or serial interface card.

In addition to the *FCM* program disk, you will need at least one blank diskette to be used as your "data disk," even if you are using a one-drive system. It is a good idea to always make back-up copies of your data disk.

WHAT YOU NEED TO KNOW

Though this instruction manual is designed for beginners, you have to start somewhere. It is assumed that your computer, video display, drive(s), and printer are connected and ready to go. If your hardware is still in boxes, please refer to the instruction manuals which accompany each system component, or ask your dealer for assistance.

You need to know how to turn on the computer, the video screen, and the printer. Remember to turn on the printer last. Each piece of equipment has its own power supply, therefore, turning on the video screen will not turn on the computer, or vice versa. (You'll have to turn them off separately as well.)

You will need to know what kind of printer interface you are using. You will also need to know if your printer interface is parallel or serial. Check the manual that came with your printer or ask your dealer if you are not sure which type you have.

HOW TO USE THIS GUIDE

This User's Guide will tell you everything you need to know to use *FCM.* The guide has the following sections:

OVERVIEW	A brief survey of the entire *FCM* system, to help you to get the "big picture" of what *FCM* is and what it can do for you.
SETTING UP THE SYSTEM	Step-by-step instructions on setting up the *FCM* system so that is is ready to use.
INTRODUCTORY TOUR	A "guided tour" of *FCM* that shows you step-by-step how to begin using *FCM* and acquaints you with its principal features.
REFERENCE	Detailed descriptions of all features *FCM* to answer questions that may arise as you are using the system.
APPENDICES	Additional helpful reference materials.

Even if you're a very experienced Commodore user, we strongly recommend you take time to read this guide thoroughly *before* you start entering your own data. You'll find many useful suggestions and tips on how to make *FCM* perform to its maximum potential.

Please be aware of these important points:

DO's

1. DO spend some time studying the manual before you try operating *FCM.*

2. DO read *in advance* the notes and advice given in the Troubleshooting Guide.

3. DO format extra disks to become the backup copy for your data disk. Having backup copies of disks is your only protection against having the original damaged or lost.

4. DO backup your data at regular intervals! Make a back-up of your data diskette each time you exit from the program to protect your valuable work. To do this use the diskette that comes with your Commodore Disk Bonus Pack. Insert the diskette:

   a. Type LOAD "1541 BACKUP", 8 (press RETURN)
      RUN (press RETURN)
      D (press RETURN)

   You may next enter a name and initials for the diskette:

   b. Type (diskname) (press RETURN)
      (ID) (press RETURN)

Follow the remaining directions that will appear on the screen. This procedure will take 10-30 minutes, depending on the amount of data to be transferred.

5. DO read #4 AGAIN!

6. DO be sure to follow the warranty registration procedures which accompany your Continental Software Warranty Registration card. We will not be able to assist you and keep you updated about program enhancements if you are not a registered *FCM* customer.

7. DO remember you will not need to press RETURN after most single character menu selections. However, RETURN is usually required after entering new information. If your system just sits idle for a long time, you probably forgot to complete your entry with RETURN.

8. DO remember to exit the program properly by selecting option #6 EXIT from the Main Menu.

9. DO see IMPORTANT HARDWARE NOTES.

DO NOT's

1. DO NOT exit from the *FCM* program except as directed.

2. DO NOT open the disk drive door or turn off the power at any time during the operation of the program. DO NOT remove any diskette except as directed. Doing any of these may result in losing data or in "crashing" a disk. Having backup copies of your data disks is your only protection.

3. DO NOT use a "write protect" tab on either your *FCM* program diskette or on your data diskette. A write-protect tab prevents you from writing any information onto a particular disk, and as you set up your system, you will need to give *FCM* some information about your hardware. This information will be written and stored on the program disk.

4. DO NOT exit *FCM* by pulling a disk out of a drive when the red light is on! This can inflict serious, unpredictable damage to both your data, and even to the disk drive itself. We will probably be unable to help you to recover from the damage that results from this circumstance.

5. DO NOT fail to back up your data! (Have we mentioned that? It's a very important safeguard.)

2 FCM SYSTEM OVERVIEW

PURPOSES

The overall purpose of *FCM* is twofold:

First, to enable a user to set up, maintain, and print out mailing lists.

Second, to enable a user to perform general purpose filing and cataloging.

To carry out these purposes, *FCM* is divided into 4 modules, shown in Figure 1—System Overview Chart. Here is a summary of each module.

RECORD/EDIT/PRINT ENTRIES Module

The module enables you to:

- Record new entries in a mailing list, or other kinds of lists.
- Revise or delete existing entries in a list.
- Print out lists in a variety of arrangements and formats.

To help you to enter data more quickly, we've included two kinds of "default input" features which allow you to select one or more lines of each entry to be added automatically (that is, "by default").

If you are recording a large number of entries which repeatedly include the same information for a field, such as a state, company name, zip code (or even part of a zip code), you can instruct *FCM* to include this information automatically in each entry. The first type of default feature includes the same data for each entry on the list. The second, called a "repeat default," tells the computer to default to the last information entered.

Of course, you may change defaulted information at any time. But if you need to save time on repeated typing, default inputs can really speed things up.

The Record/Edit/Print Entries Module also contains the *FCM* print functions. You may print labels, envelopes, master lists, or specially sorted lists through this module. When you are printing lists, you are able to define formats which are appropriate for labels, envelopes, or master lists. Duplicate printouts may be requested if desired.

SORT ENTRIES MODULE

The module will sort (alphabetize) a list into an order which you specify. For instance, you can sort a mailing list by name, by company, by zip code, or any other field, or combination of fields. After a file has been sorted, you can print labels, envelopes, or master lists in sorted sequence. You can also perform a visual scan of your list in sorted sequence.

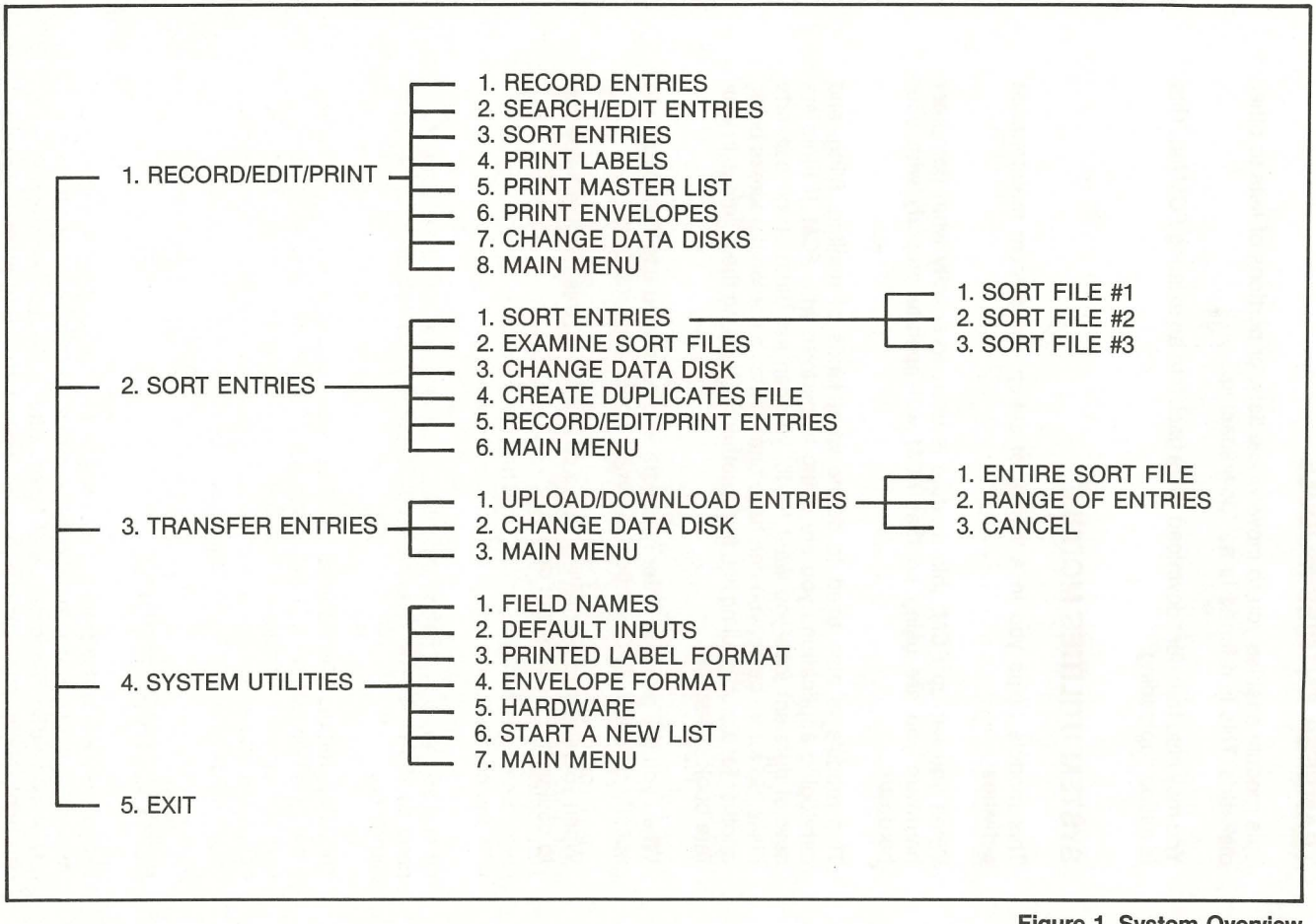

Figure 1. System Overview

TRANSFER ENTRIES MODULE

This module enables you to move whole lists, or portions of lists to other diskettes. This is referred to as "downloading."

You may also transfer "download" lists back into an existing *FCM* list. This is called "uploading."

SYSTEM UTILITIES MODULE

This module helps you in a variety of set-up and system maintenance activities.

When you set up *FCM,* this module is used to specify what computer hardware you are using so that *FCM* will operate properly with your hardware.

This module is also used to define what kinds of mailing, filing, and cataloging applications you are going to perform with *FCM.* If there are several different jobs you want to do, you can set them up on separate disks. So for instance, you can have one disk as a personal address book, another for a club mailing list, and another for tracking the holdings in your rare book collection.

When you are going to enter new data into a list, you use this module to specify defaults, as described earlier, to speed up data entry.

When you are printing mailing labels or envelopes, this module helps you to design the formats you desire.

EXIT MODULE

This module is used whenever you are finished with a session with *FCM.* It is essential that you always use this module when you are finished with *FCM!* Failure to use the EXIT Module can result in damage to your data.

FCM CAPABILITIES SUMMARY

Definition of Terms

Because the following terms are used quite frequently throughout this manual, it is important that you have a clear definition of each *before* you proceed with using the program.

Field: A line of information such as a name, address, or phone number. A field may be up to 24 characters in length.

Field name: The title of a given field, such as NAME, ZIP CODE, or COMMENT. Field names are limited to 10 characters.

Entry: A combination of fields. An entry may contain a maximum of 10 fields. A field may be up to 24 characters in length, but an entry may not contain more than 132 characters total. An entry is sometimes also referred to as a **record.**

List: A string of entries which use the same field names. Lists are stored on separate "data disks." A data disk is capable of holding up to 750 entries. You may only create one list per data disk, but you may expand the list over multiple disks. (You will have to print and sort each disk separately.)

Data Disk: A diskette which contains the data which makes up an *FCM* list.

Capabilities

A field may be up to 24 characters in length. A field name may be up to 10 characters in length.

An entry may consist of up to 10 fields. The sum of the lengths of the fields may not exceed 132 characters.

A list of up to 750 entries may be held on a single diskette. Longer lists may be accommodated by storing sections of the list on multiple diskettes.

Only 1 list is allowed per disk. In addition to that list, up to 3 sorted versions of that list can also be held on the same disk. (These sorted versions are known as "sort files.")

3 SETTING UP THE SYSTEM

Getting Started

The following instructions will take you step-by-step through the tasks that are required to set up your *FCM* system. After these tasks have been completed, your system is ready to use, and you are ready to begin the next section, INTRODUCTORY TOUR of *FCM.*

Four tasks are required to set up *FCM:*

1. Formatting a data diskette.
2. Starting *FCM.*
3. Giving *FCM* information on the computer hardware you are using.
4. Preparing a diskette to hold a list.

In what follows, you will be guided through these four tasks step-by-step.

Initializing A Data Diskette (Formatting)

You will need to prepare a separate, blank disk to become your data diskette, even if you are only using one drive. The process of preparing a disk to receive information which can be read by the computer is called "formatting."

Make sure your computer equipment is turned on. Lift open the door to the disk drive. Holding the disk with the label side up, and with your thumb on the label, carefully slide the diskette "feet first" into the drive. Close the door until it clicks shut.

a. Type: OPEN 15, 8, 15 (press RETURN)
PRINT #15, "NØ: DISCNAME, DS" (press RETURN)

The system will whir and hum, and the red light on the disk drive will go on, indicating the drive is engaged. In a minute or two, the light will go out and the whirring will stop.

b. Type: CLOSE 15 (press RETURN)

Now you have a formatted disk which is ready to receive data. Formatting completely erases a disk, so be careful not to format a disk which may contain information you will need later.

Starting *FCM*

If you are using a one-drive system, remove the newly initialized disk and replace it with the *FCM* program disk.

NO SPACE

a. Type: LOAD "HELLO 2", 8 (press RETURN)
RUN (press RETURN)

As the Commodore 64 "boots up", you will see the Continental Software logo. Then the following screen will appear:

THE *FCM* PROGRAM
FILING, CATALOGING, MAILING

UNAUTHORIZED REPRODUCTION OF
THIS PROGRAM OR ITS ACCOMPANYING
MANUAL IS STRICTLY FORBIDDEN

Apple Version
Written By

STEPHEN POLLACK
ROBERT SCHOENBURG

C-64 Modification By
ERIK GUNDERSON
and
PAUL F. SCHATZ

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Screen 1—Title and Copyright Page

This screen will be followed quickly by Screen 2—The Main Menu.

The Main Menu

```
** FCM **
MAIN MENU

1. RECORD/EDIT/PRINT ENTRIES
2. SORT ENTRIES
3. TRANSFER ENTRIES
4. SYSTEM UTILITIES
5. EXIT

ENTER SELECTION (1-5)
```

Screen 2—The Main Menu

Study Screen 2—The Main Menu. The options should look familiar to you as they are the *FCM* modules which are described in Section 1, *FCM* SYSTEM OVERVIEW.

When you are using *FCM* for the first time, or when starting a new *FCM* list, you will first need to go into the System Utilities module. Remember, this is where you give *FCM* information about your hardware configuration, and where you prepare a diskette to hold a list.

a. Select Option 4—System Utilities by typing the number 4.

b. Confirm this selection by pressing R to RUN the module.

You could also cancel the selection by pressing **X.**

You will not need to press the **Return** key after you type **R.**

The System Utilities Module will be loaded, (you will receive a message to that effect) and in a few seconds, Screen 3—The System Utilities Menu will appear.

```
** FCM **
SYSTEM UTILITIES

1. FIELD NAMES
2. DEFAULT INPUTS
3. PRINTED LABEL FORMAT
4. ENVELOPE FORMAT
5. HARDWARE
6. START A NEW LIST
7. MAIN MENU

ENTER SELECTION (1-7)
```

Screen 3—System Utilities Menu

Study the System utilities Menu for a few moments. The options are listed in the order they are most commonly used. However, the procedure for starting a new *FCM* system is as follows:

a. Option 5—HARDWARE CONFIGURATION

b. Option 6—START NEW LIST

Telling *FCM* The Hardware Configuration You are Using

If you are using *FCM* for the first time, you will need to enter some information about the hardware you are using. Should you ever change your hardware after starting an *FCM* system, you will need to change the information stored here.

To enter hardware information:

a. Type the number 5 to select Option 5—HARDWARE from Screen 3—System Utilities Menu.

You will not need to press **Return.** Screen 4—The Hardware Configuration Page will appear.

```
** FCM **
HARDWARE CONFIGURATION

A PRINTER V)IC O)THER N)ONE V
B INTERFACE CTRL CHARACTER 6
C SEND LINE FEED N

ASCII CODE(S) FOR 132-COLUMN FORMAT

D 15    E 0    F 0    G 0    H 0

ASCII CODE(S) FOR 80-COLUMN FORMAT

I 15    J 0    K 0    L 0    M 0

N NUMBER OF DRIVES IN SYSTEM? 1

O COLOR FORE 1 BACK 11

LETTER TO EDIT (A-O)
(X) CANCEL (P) PRINT (R) RECORD
ENTER SELECTION
```

Screen 4—Hardware Configuration Page

NOTE: Version 1.0 is configured for a one disk drive system and was tested with the Commodore Interface. Other printers will work, but non-standard interfaces may require you to supply your own printer driver routines.

Screen 4—The Hardware Configuration Page shows the configuration information for the Commodore VIC 1525 printer and a one-drive system. The cursor will be at the bottom of the screen after the words ENTER SELECTION.

> **NOTE:** The VIC 1525 and some other printers cannot print 132-columns. This will cause the lines on certain reports to either be truncated or "wrap-around" to the next line.

Field A: This field is asking whether your printer interface card is the standard VIC (or Commodore) interface, if it is some other type of interface, or if there is no printer attached to the system.

Field B: This is asking for the interface control character. See your computer manuals for a discussion of control registers and their numbering. For the Commodore VIC 1525 printer, this number is 6.

Field C: This is asking if you need to have *FCM* refrain from sending a line feed signal after a carriage return. If your printer does not execute a line feed after receiving a carriage return, then you would answer "N" for NO, so that *FCM* would issue the line feed. The usual answer is NO. If reports are printed with double spacing, change your answer to YES.

Fields D through M: This is where you need to enter the proper "ASCII codes" for your particular printer. Please refer to the chart in Figure 2 for the correct responses. Pressing **Return** is the same as entering a zero. If your printer is not listed, here are some guidelines:

a. If you are using a letter-quality daisy wheel printer, enter codes for printing 10 characters per inch (CPI) in fields D through M.

b. You may select either 8.5" or 14" paper width. If you wish to specify 14" wide paper, enter the codes for printing 10 characters per inch in fields D through M.

You may refer to your printer manual for help in selecting the right codes, but wait until you try the simple print test below.

Field N: This field is asking how many drives you are using (1 or 2). This version of *FCM* only works with one drive.

b. Study screen 4—The Hardware Configuration Page and determine which fields need to be changed for your particular system.

c. Type the letter of the first field you wish to edit.

The cursor will move to that field.

d. Type the new information and complete the entry by pressing Return.

The cursor will return to the bottom of the screen. You may now select another field to edit by typing its letter.

	132-column Format					80-column Format				
	F	G	H	I	J	K	L	M	N	O
IBM Printer	15	0	0	0	0	18	0	0	0	0
EPSON MX 100	15	0	0	0	0	18	0	0	0	0
EPSON MX-70	0	0	0	0	0	18	0	0	0	0
TI 810/820	27	55	0	0	0	27	54	0	0	0
IDS 445	31	0	0	0	0	29	0	0	0	0
IDS 460	31	0	0	0	0	29	0	0	0	0
IDS 560	31	0	0	0	0	29	0	0	0	0
ANADEX 9501	24	20	0	0	0	24	18	0	0	0
NEC 8023A	27	B1	0	0	0	27	78	0	0	0
OKIDATA M-80	29	0	0	0	0	30	0	0	0	0

The numbers in Fields F-O are ASCII values, e.g. 27 = "ESC", 15 = "CTRL-O," and 55 = "7."

Figure 2—ASCII Codes for Various Printers

Use the **Delete** key to correct any typing mistakes you make before you press **Return.** If you notice a mistake after you press **Return** just edit the field again. When all the information is correct for your system, you will need to record this new data. However, before you press **R** for Record, try a simple print test.

e. Turn on your printer and type the letter P.

This instructs your printer to print what's on the screen. If all goes well, your printer should generate a "hard copy" of Screen 4.

If the entire screen is over-printed on a single line, you probably answered field C incorrectly. If you answered **Y** in field C, change your answer to **N** and try again.

If nothing happens, or if the screen is not properly printed, consult your printer manual to see if you have entered the correct ASCII codes in fields D through M. Also, check to see that you have properly indicated the type of printer interface card you are using (parallel or serial).

Remember, if you are not using a printer, enter a ~~zero~~ N as the printer slot number in field A.

When the hardware configuration entries are correct:

f. Type the letter R to record the information.

The computer will whirr for a few seconds and Screen 3—The System Utilities Menu will appear.

Field O: Allows you to change the background and foreground colors of the *FCM* screens. If you select O, each time you press the F~~8~~5 key the color of the text will change, and the indicated number will be incremented by one.

Pressing F7 will perform the same function on the background color of the screen. When you have selected desireable screen colors, press return and the cursor will return to the Enter Selection line.

Preparing a Diskette to Hold a List

```
** FCM **
SYSTEM UTILITIES

1. FIELD NAMES
2. DEFAULT INPUTS
3. PRINTED LABEL FORMAT
4. ENVELOPE FORMAT
5. HARDWARE
6. START A NEW LIST
7. MAIN MENU

ENTER SELECTION (1-7)
```

Screen 3—System Utilities Menu

Now we must tell the computer to prepare our data diskette to hold a list.

a. Select Option 6—START NEW LIST by typing the number 6.

You will be asked:

```
*****************************************************************
DO YOU WISH TO START A NEW SYSTEM?
*****************************************************************
```

b. Type Y for yes.

Then you will be asked:

```
*****************************************************************
ARE YOU SURE YOU WANT TO DO THIS?
*****************************************************************
```

c. Type Y for yes.

Then you will be asked:

```
*****************************************************************
DO YOU HAVE A FORMATTED DISK?
*****************************************************************
```

d. Type Y for "yes."

You will be instructed to:

```
*************************************************************
          REMOVE ANY DISK FROM DRIVE #X
          AND INSERT BLANK FORMATTED DISK
          PRESS ANY KEY WHEN READY

          PRESS <<F1>> TO ABORT PROCEDURE
*************************************************************
```

If you are using a one-drive system:

e. Remove the *FCM* program disk from Drive 1 and replace it with your blank, initialized data disk.

If you are using a two-drive system:

e. Leave the *FCM* program disk in Drive 1 and place your blank, initialized disk in Drive 2.

> **NOTE:** This message will flash at other times during the program, especially if you are using a one-drive system. When you see it, insert the proper disk(s) in the proper drive(s) as directed and continue with the program.

Make sure you insert a *completely* blank, initialized disk into the proper drive. If the data disk contains any *FCM* data files the above message will keep flashing. If this happens, remove the data disk, re-initialize it, and try again.

f. Press any key to continue.

When you press any key to continue, *FCM* will then proceed with preparing your *FCM* data disk. When the disk is prepared, Screen 3—The System Utilities Menu will reappear.

Your system is now set up and ready to use. Let's go back to the Main Menu (Screen 2).

h. Press 7 to return to the Main Menu.

Screen 2—Main Menu will now reappear. You are now ready to begin Part 3, INTRODUCTORY TOUR.

4 INTRODUCTOR TOUR

Introductory Tour

In this part of the User's Guide, we will take you on a "guided tour" of *FCM.* You will learn how to begin using *FCM,* and you will become acquainted with some of its principal features. When you have finished this tour, you will be ready to begin using *FCM* on your own.

As we proceed on this tour, you will discover that *FCM* has a number of advanced capabilities for more experienced users. You do not have to understand all of these capabilities right now. When you would like to learn about them, they are discussed in the REFERENCE section of this Guide.

BEFORE BEGINNING THIS TOUR, YOU MUST HAVE COMPLETED ALL OF THE TASKS DESCRIBED IN SECTION 2, SETTING UP THE SYSTEM! Those tasks are necessary to the proper operation of *FCM.*

Enter a Group of Names and Addresses

In this section, we will find out how to enter names and addresses into the computer.

a. Make sure that the Main Menu is now on your screen. If it is not, follow the instructions on page 17 to bring it on your screen.

```
** FCM **
MAIN MENU

1. RECORD/EDIT/PRINT ENTRIES
2. SORT ENTRIES
3. TRANSFER ENTRIES
4. SYSTEM UTILITIES
5. EXIT

ENTER SELECTION (1-5)
```

Screen 2—The Main Menu

This is the "table of contents" for *FCM.* It lists 5 options, which are the 5 modules of *FCM* described in the SYSTEM OVERVIEW (Section 1).

Take special note of Option 5—EXIT. This is used to turn off *FCM* when you are done using it. It is essential that you always use this module when you are finished with *FCM!*

Right now, let's go ahead and enter some names and addresses.

b. Press the number 1 to tell the computer that you want to select Option 1—RECORD/EDIT/PRINT/ENTRIES.

Option 1 on your screen will now be highlighted, and at the bottom of your screen, you will see this message:

```
*************************************************************
PRESS 'R' TO RUN OR 'X' TO CANCEL
*************************************************************
```

If you press **R** the computer will go ahead and run your selection. If you were to press **X,** the computer would cancel your selection. Let's go ahead and have the computer run your selection.

c. Press R to tell the computer to go ahead and run your selection.

There will be a delay of about 30 seconds, while the computer is getting ready for the RECORD/EDIT/PRINT ENTRIES Module. You will hear your disk drives whirring, and you will see the following messages on your screen:

```
*************************************************************
                    NOW LOADING
              RECORD/EDIT/PRINT ENTRIES
*************************************************************
```

and then:

```
*************************************************************
                   READING FILES
              PLEASE DO NOT INTERRUPT
*************************************************************
```

The Screen 5—Record/Edit/Print Entries Menu will appear.

```
                  ** FCM **
          RECORD/EDIT/PRINT ENTRIES

          0 ENTRIES ON THIS DISKETTE

     1. RECORD ENTRIES
     2. SEARCH/EDIT ENTRIES
     3. SORT ENTRIES
     4. PRINT LABELS
     5. PRINT MASTER LIST
     6. PRINT ENVELOPES
     7. CHANGE DATA DISKS
     8. MAIN MENU

          ENTER SELECTION (1-8)
```

Screen 5—Record/Edit/Print Entries Menu

This Menu shows you your various options for recording, editing (revising), and printing entries. We want to *record* some entries, so we will select Option 1.

d. Press 1 to select Option 1—RECORD ENTRIES.

Screen 6—Record Entries will now appear.

The computer is asking you to record some name and address information. In the middle of your screen are 10 items:

A FIRST NAME
B LAST NAME
C COMPANY
D ADDRESS
E CITY
F STATE
G ZIP CODE
H TELEPHONE
I SPECIAL #1
J SPECIAL #2

These are the 10 fields of information which the computer wants you to enter. The fields are labeled A, B, C... J.

To enter this information, you type it in much as you would with an ordinary typewriter. However, there are two special features to keep in mind.

If you make a mistake while typing in a line of information, you can use the **Delete** key (located in the upper right corner) to back up for retyping.

After entering a line of information, you must press the **Return** key to tell the computer that you have finished entering that line of information.

Now, let's enter the name and address information into the computer, step-by-step.

The first item of information which the computer wants is FIRST NAME.

e. Type the four letters: JOHN.

Your screen should now look like this:

```
** FCM **
RECORD ENTRIES

PROCESSING ENTRY #1

A FIRST NAME        JOHN
B LAST NAME
C COMPANY
D ADDRESS
E CITY
F STATE
G ZIP CODE
H TELEPHONE
I SPECIAL #1
J SPECIAL #2

LETTER TO EDIT (A-J)
(X) CANCEL (P) PRINT (R) RECORD
ENTER SELECTION
```

Screen 6A—Record Entries

If you made any typing mistakes, use the **Delete** key to back up, and retype.

f. Press Return to tell the computer that you have finished entering the FIRST NAME.

The computer will now ask you to enter LAST NAME. We will enter "DOE" as the last name.

g. Type the three letters: DOE.

As before, if you made any typing mistakes, use the **Delete** key to back up, and then re-type.

h. Press Return to tell the computer you have finished entering the LAST NAME.

The computer will now ask you to enter COMPANY, ADDRESS, CITY, STATE, ZIP CODE, TELEPHONE, SPECIAL #1, and SPECIAL #2. (The two fields SPECIAL #1 and SPECIAL #2 are "wild cards." They can be used to hold whatever information is desired. In our examples, we will use SPECIAL #1 for spouse's name, and SPECIAL #2 for number of children.)

The computer is presently asking you to enter COMPANY.

i. Type: DOE CLEANERS and press Return to enter COMPANY.

Now let's enter the rest of the information.

j. Type: 244 FIFTH ST and press Return, to enter the ADDRESS.

k. Type: HAWTHORNE and press Return to enter the CITY.

l. Type: CA and press Return to enter STATE.

m. Type: 90019 and press Return to enter ZIP CODE.

n. Type: 213-555-1212 and press Return to enter TELEPHONE.

o. Type: SARAH and press Return to enter SPECIAL #1.

p. Type: 2 and press Return to enter SPECIAL #2.

Your screen should now look like this:

```
                    ** FCM **
                 RECORD ENTRIES

PROCESSING ENTRY #1

A  FIRST NAME        JOHN
B  LAST NAME         DOE
C  COMPANY           DOE CLEANERS
D  ADDRESS           1244 FIFTH ST
E  CITY              HAWTHORNE
F  STATE             CA
G  ZIP CODE          90019
H  TELEPHONE         213-555-1212
I  SPECIAL #1        SARAH
J  SPECIAL #2        2

          LETTER TO EDIT (A-J)
     (X) CANCEL (P) PRINT (R) RECORD
          ENTER SELECTION
```

Screen 6B—Record Entr

If there are any errors in what you have entered, just continue with this exercise. Later we will find out how to go back and correct mistakes.

Notice the blinking cursor at the bottom of the screen, next to the words ENTER SELECTION. This means the computer is waiting for you to select what to do next. Each selection is assigned a letter A-J, X, P, and M. The meanings of these selections are as follows:

A-J To revise the information in any of the fields A-J. (This is known as "editing" what you have entered.)

X To cancel your entry and clear the screen of everything that you typed in.

P To print an exact image of what is on the screen.

R To record your entry on your diskette.

Let's try out some of these options. First, let's print an exact image of what is on the screen.

Make sure that your printer is turned on. If the printer has a "Select" button, an "On-Line" button, or a similar button for activating the printer, make sure this button is properly activated.

q. Type the letter P. This tells the computer that you want Option P—print an exact image of the screen.

The printer will now print an exact image of your screen.

If the printer did not print anything, or if the output does not look like what is on your screen, then:

1. Check to see that your printer is properly connected to your computer. Also make sure that the printer is turned on, and selected for printing.

2. Double-check the information on your printer that you entered during Hardware Configuration when you set up *FCM* (Section 2).

3. If your printer is still not performing properly, get assistance from an experienced operator.

Now, let's edit one of the fields that you entered. We will edit field G. It is presently set to 90019, we will change it to 90021.

r. Type G to tell the computer that you want to edit field G (ZIP CODE).

Your screen will now appear as follows:

```
                    ** FCM **
                 RECORD ENTRIES

PROCESSING ENTRY #1

A  FIRST NAME        JOHN
B  LAST NAME         DOE
C  COMPANY           DOE CLEANERS
D  ADDRESS           1244 FIFTH ST
E  CITY              HAWTHORNE
F  STATE             CA
G  ZIP CODE          _ _ _ _ _ _ _ _ _
H  TELEPHONE         213-555-1212
I  SPECIAL #1        SARAH
J  SPECIAL #2        2
                     90019

          LETTER TO EDIT (A-J)
     (X) CANCEL (P) PRINT (R) RECORD
          ENTER SELECTION
```

Screen 6C—Record Entries

This shows the computer is ready for you to re-enter item G, ZIP CODE.

s. Type: 90021 and press Return to re-enter item G (ZIP CODE).

Your screen will now look like this:

```
                    ** FCM **
                RECORD ENTRIES

PROCESSING ENTRY #1

A  FIRST NAME        JOHN
B  LAST NAME         DOE
C  COMPANY           DOE CLEANERS
D  ADDRESS           1244 FIFTH ST
E  CITY              HAWTHORNE
F  STATE             CA
G  ZIP CODE          90021
H  TELEPHONE         213-555-1212
I  SPECIAL #1        SARAH
J  SPECIAL #2        2

          LETTER TO EDIT (A-J)
     (X) CANCEL (P) PRINT (R) RECORD
          ENTER SELECTION
```

Screen 6D—Record Entries

If you made any mistakes in typing any fields, correct them now in the same manner as you changed ZIP CODE. For instance, if you wanted to edit the field H, TELEPHONE you would:

t. Press H.

u. Enter the telephone number desired.

v. Press Return.

Now let's record your entry on to your diskette.

w. Type R to tell the computer to record your entry.

You will hear your disk drive whirring, as the information is recorded on your diskette. Then the following screen will appear:

```
                    ** FCM **
                RECORD ENTRIES

PROCESSING ENTRY #2      END FOR MENU

A  FIRST NAME            _ _ _ _ _ _ _ _
B  LAST NAME
C  COMPANY
D  ADDRESS
E  CITY
F  STATE
G  ZIP CODE
H  TELEPHONE
I  SPECIAL #1
J  SPECIAL #2

            LETTER TO EDIT (A-J)
        (X) CANCEL (P) PRINT (R) RECORD
              ENTER SELECTION
```

Screen 6E—Record Entries

This means that your entry was recorded, and the computer is ready to accept a new entry. Note the message near the top of the screen:

```
*************************************************************
                PROCESSING ENTRY #2
*************************************************************
```

This means that the computer is ready for entry #2.

Let's type in another entry.

x. **Type in the following entry. Enter it in the same way as you did with the first entry.**

FIRST NAME	SIDNEY
LAST NAME	CARPENTER
COMPANY	APOLLO SECURITY CO.
ADDRESS	1401 WILSHIRE
CITY	MANHATTAN
STATE	TX
ZIP CODE	40123
TELEPHONE	512-555-1212
SPECIAL #1	JANICE
SPECIAL #2	3

Enter this information just as before:

For each field, type in the information desired, using the **Delete** key to help you to correct any typing mistakes. Then press **Return.**

After you have entered information into all 10 fields, check your work. If any items need to be edited, select the appropriate letter A-J to edit the item.

When the information in all 10 fields is OK, press **R** to record your entry.

After you have finished, your screen will appear as follows:

```
                    ** FCM **
                RECORD ENTRIES

PROCESSING ENTRY #3     END FOR MENU

A  FIRST NAME           _ _ _ _ _ _ _ _
B  LAST NAME
C  COMPANY
D  ADDRESS
E  CITY
F  STATE
G  ZIP CODE
H  TELEPHONE
I  SPECIAL #1
J  SPECIAL #2

          LETTER TO EDIT (A-J)
     (X) CANCEL (P) PRINT (R) RECORD
              ENTER SELECTION
```

Screen 6F—Record Entries

This means that the computer is ready for ENTRY #3. Let's enter one more name and address set.

y. Enter the following information for Entry #3.

FIRST NAME	TINA
LAST NAME	GODFREY
COMPANY	APOLLO SECURITY CO.
ADDRESS	1401 WILSHIRE
CITY	MANHATTAN
STATE	TX
ZIP CODE	40123
TELEPHONE	512-555-1212
SPECIAL #1	FRED
SPECIAL #2	1

After you have finished this entry, the computer will tell you that it is ready for Entry #4. Let's tell the computer that we are finished recording entries. This is done by entering **END** into field A.

Type: END and press Return to tell the computer you are finished.

Screen 5—Record/Edit/Print Entries Menu will now appear again.

```
                    ** FCM **
        RECORD/EDIT/PRINT ENTRIES
        3 ENTRIES ON THIS DISKETTE

   1. RECORD ENTRIES
   2. SEARCH/EDIT ENTRIES
   3. SORT ENTRIES
   4. PRINT LABELS
   5. PRINT MASTER LIST
   6. PRINT ENVELOPES
   7. CHANGE DATA DISK
   8. MAIN MENU

        ENTER SELECTION (1-8)
```

Screen 5—Record/Edit/Print Entries Menu

Notice that this time the screen says that 3 entries are on the diskette.

Printing
Names and Addresses

In this section, we will find out how to print names and addresses that have been recorded on your diskette.

Make sure that Screen 5—Record/Edit/Print Entries Menu is displayed. If it is not, select Option 1—RECORD/EDIT/PRINT ENTRIES from the Main Menu (Screen 2).

a. Press 5 to tell the computer that you want to select Option 5—PRINT MASTER LIST.

The following message will appear on your screen:

```
*************************************************************
                INSERT PLAIN PAPER
          AND SET PRINTER TO TOP OF FORM
             PRESS ANY KEY WHEN READY
*************************************************************
```

Make sure that your printer has paper in it, and that it is set to begin printing at the top of a new page. Then:

b. Press any key on your keyboard to tell the computer to proceed.

Screen 7—Print Master List will appear:

```
                    ** FCM **

                PRINT MASTER LIST

A  FIRST NAME
B  LAST NAME
C  COMPANY
D  ADDRESS
E  CITY
F  STATE
G  ZIP CODE
H  TELEPHONE
I  SPECIAL #1
J  SPECIAL #2
K  ENTRY #                1-     3
L  SORT FILE              NONE SELECTED

            LETTER TO EDIT (A-L)

(X) CANCEL                (P) PRINT
(U) MENU                  ENTER SELECTION
```

Screen 7—Print Master List

The items A-L on the screen enable you to print subsets of the entire list, or to print out the entries in a certain order. We will find out more about this later.

The selections at the bottom of the screen have the following meanings:

X CANCEL—Clear the screen of any information you have entered in A-L.

U RETURN to the Record/Edit/Print Entries Menu.

P PRINT—Begin to print the Master List.

Let's print the Master List.

c. Press P to tell the computer to select Option P—PRINT Master List.

The computer will now ask you what date to print on the printout. On your screen you will see:

****

REPORT DATE _____

****

This is the date which the computer will use on the report, unless you edit this date. Let's change it to 01/07/83. To do this, we merely type in the six digits: **010783.** The computer will fill in the slash marks for you.

d. Type: 010783 and press Return to set the report date.

The printer will now print a Master List of the entries which you recorded on the disk. While it is being printed, you will see the following message on your screen:

****

PRINTING MASTER LIST
PRESS <<F1>> TO ABORT
SPACE BAR TO HALT, RETURN TO RESUME

****

This tells you that while the report is being printed, you can abort the report by pressing **F1,** or you can stop and start it with the **Space** bar and **Return** key.

After the printout is finished, you will see the following message on the screen:

****

3 ENTRIES WERE PRINTED ON THIS RUN
PRESS ANY KEY TO CONTINUE

****

e. Press any key, to tell the computer to continue.

The printout is now finished. It will look like this:

REPORT DATE 01/07/83 SYSTEM NAME PAGE 1

	ENTRY # 1	**ENTRY # 2**	**ENTRY # 3**
A	JOHN	SIDNEY	TINA
B	DOE	CARPENTER	GODFREY
C	DOE CLEANERS	APOLLO SECURITY CO.	APOLLO SECURITY CO.
D	1244 FIFTH ST	1401 WILSHIRE	1401 WILSHIRE
E	HAWTHORNE	MANHATTAN	MANHATTAN
F	CA	TX	TX
G	90021	40123	40123
H	213-555-1212	512-555-1212	512-555-1212
I	SARAH	JANICE	FRED
J	2	3	1

A NAME B LAST NAME C COMPANY D ADDRESS E CITY
F STATE G ZIP CODE H TELEPHONE I SPECIAL #1 J SPECIAL #2

The three entries on this printout are the three entries that you had recorded previously.

Sometimes you will not want to print out all of the entries in a list. That is why there are the items A-L on your screen. These are called "match fields," and if you fill in any of them, then the computer will only print those entries which "match". For instance, if you set field F to TX, then the computer will only print out those entries where the STATE field in the entry is TX. Let's try this.

f. Press F to tell the computer that you want to type something into the match field STATE.

g. Type: TX and press Return to set the match field to TX.

Your screen will now look like this:

```
                    ** FCM **

                PRINT MASTER LIST

A  FIRST NAME
B  LAST NAME
C  COMPANY
D  ADDRESS
E  CITY
F  STATE                    TX
G  ZIP CODE
H  TELEPHONE
I  SPECIAL #1
J  SPECIAL #2
K  ENTRY #                  1-     3
L  SORT FILE                NONE SELECTED

            LETTER TO EDIT (A-L)

(X) CANCEL                  (P) PRINT
(U) MENU                    ENTER SELECTION
```

Screen 7A—Print Master List

The computer will now print only those entries where STATE is TX. Let's demonstrate this.

h. Press P to tell the computer to print a master list again.

As before, the computer will ask you for the date to use on the report—enter a date of your choosing, and press **Return.** The computer then will print the Master List, and when it is finished, it will ask you to press a key on the keyboard—do this.

This time the Master List will show only the two entries where the STATE is TX.

Now let's go back to the Record/Edit/Print Entries Menu.

i. Press U to tell the computer to return to the Record/Edit/Print Entries Menu (Screen 5).

SUMMARY

You have now learned how to record entries on your diskette, and how to print out information which has been recorded. You are also quickly becoming familiar with the mechanics of operating *FCM.* The various modules of *FCM* are designed in a unified style, so that once you become proficient with just a few modules of *FCM,* it is very easy to learn how to operate the remaining modules. Let's summarize some important points about the operation of *FCM.*

FCM is designed to operate in a simple, common sense manner. You don't have to be a computer expert to use *FCM.*

When you are using *FCM,* the screen tells you "where you are" in the system, and what your range of options are. Generally it is self-evident what the various options mean; but if you are ever unsure, all options are explained in the REFERENCE section of this Guide. After you know what option you want, you select it by pressing a single key at the keyboard—either a letter or a number.

To enter information into the system, you type much as you would with an ordinary typewriter. However, you can use the **Delete** key to help you to correct mistakes. When you have finished entering an item, you usually need to press the **Return** key to tell the computer that you have finished typing that item.

The modules of *FCM* are linked together by means of "menus." There is a Main Menu, and then a menu for each of the main modules of *FCM.* You can "get around" *FCM* by moving from menu to menu.

FCM provides you with numerous opportunities to check and double-check the accuracy of your work, and it provides you easy ways of correcting mistakes and making changes. This means that as you are using *FCM,* you can R E L A X —just about any mistake you make is easily reversible. Just make sure that you pay attention to the DO's and DON'Ts listed in the first part of this guide.

To help you in managing large quantities of data, *FCM* frequently makes use of "match fields," such as you saw in the PRINT MASTER LIST Module. Match fields enable you to restrict the computer's attention to just the data you are interested in.

The best way to learn about *FCM* is to try some things out with it. In fact, right now we recommend that you try out some work on your own with the two modules we have already used. Once you are completely proficient with these two modules, it will be much easier for you to learn the rest of *FCM.*

a. Go back to the RECORD ENTRIES module and enter 3-6 more name and address sets of your own. Try out all of the options available in that module.

Don't be afraid to experiment—you can't break anything! Experiment with all of the features until you feel comfortable with them. Then:

b. Go into the PRINT MASTER LIST Module and print out some of the entries in your list. Try out all of the options in that module, and make sure you feel comfortable with them.

Here are a couple of special features of this module to try out:

1. If you fill in a match field with a short string of letters, the computer will process all entries which match those few letters. (e.g., if you set the LAST NAME field to SM, the computer will process all whose last name begin with SM—for instance, SMITH, SMYTHES, SMACKLES, etc.

2. Field K is used to specify a range of entry-numbers. For instance, if you fill in that field with the number 3, the computer will print entries 3, 4, 5, to the end of the list.

After you have finished practicing with the RECORD ENTRIES Module and the PRINT MASTER LIST Module, you are ready to continue with your tour of *FCM.*

Scanning Through a List and Making Revisions

Once you have recorded a group of entries on your disk, you may want to come back later to scan through the list and make revisions. This is accomplished through the SEARCH/EDIT ENTRIES Module. It enables you to examine all or part of a list, entry-by-entry, and to make revisions or deletions as desired. Let's practice using this module.

Make sure that Screen 5—Record/Edit/Print Entries Menu is displayed. If it is not, select Option 1—RECORD ENTRIES from the Main Menu (Screen 2).

a. Press 2 to tell the computer that you want to select Option 2—SEARCH/EDIT ENTRIES.

Screen 8—Search/Edit Entries will appear.

```
                    ** FCM **
              SEARCH/EDIT ENTRIES

PROCESSING ENTRY #

A  FIRST NAME
B  LAST NAME
C  COMPANY
D  ADDRESS
E  CITY
F  STATE
G  ZIP CODE
H  TELEPHONE
I  SPECIAL #1
J  SPECIAL #2
K  ENTRY #                1-     3
L  SORT FILE              NONE SELECTED

            LETTER TO EDIT (A-L)

        (X) CANCEL (P) PRINT (R) RECORD
(U) MENU      ENTER SELECTION      (S) SEARCH
```

Screen 8—Search/Edit Entries

This is the screen you use to set up the search through your list.

Items A-K are provided in case you want to limit your scan to only certain entries in the list. These function like the match fields that you used in the PRINT MASTER LIST Module. If you leave all of the fields A-K blank, the computer will display *all* entries in your list. If you fill in one or more of the fields, the computer will display only those entries which "match." Let's tell the computer to display only those entries with the state code TX.

b. Press F to tell the computer you want to fill in match field F. Then type TX and press Return to set this field to TX.

The computer will now display only those entries with state code TX.

Now, let's start the search.

c. Press S to start the search.

The computer will now search for the first entry which matches, and then it will display it. Your screen will look like this:

```
                    ** FCM **
              SEARCH/EDIT ENTRIES

PROCESSING ENTRY #2

A  FIRST NAME        SIDNEY
B  LAST NAME         CARPENTER
C  COMPANY           APOLLO SECURITY CO.
D  ADDRESS           1401 WILSHIRE
E  CITY              MANHATTAN
F  STATE             TX
G  ZIP CODE          40123
H  TELEPHONE         512-555-1212
I  SPECIAL #1        JANICE
J  SPECIAL #2        3
K  ENTRY #           1-     3
L  SORT FILE         NONE SELECTED

          LETTER TO EDIT (A-L)
     (X) CANCEL (P) PRINT (R) RECORD
(U) MENU     ENTER SELECTION     (S) SEARCH
```

Screen 9—Search Entry Display

This is the first entry that you recorded on disk in which the state code is TX.

We can now edit any of the fields in this entry. This is done in the same way as in the RECORD ENTRIES Module. Let's change TELEPHONE to 512-555-1111.

d. Edit the TELEPHONE field. To do this, press H to specify that you want to edit field H. Then type 512-555-1111. Press Return.

Now, let's record the entry with its updated telephone number.

e. Press R to record the updated entry.

The computer will replace the old version of the entry with the new version, with its updated telephone. Then the computer will immediately scan for the next entry which "matches," and it will display that entry. You may edit it, or pass on to the next entry by pressing **R.**

You may also delete an entry that is currently displayed on the screen. To do this, you press **Z.** Let's delete the entry that is currently displayed on the screen.

f. Press Z to delete the entry currently displayed on the screen.

You will be asked:

```
*************************************************************
                    ARE YOU SURE Y/N?
*************************************************************
```

If you answer **N,** the entry will remain intact. When you answer **Y,** *FCM* will delete the entry from the list.

g. Press Y to tell the computer you are sure you want to delete the entry from the list.

The computer will delete the entry from the list.

Then the computer will continue searching for more entries which match your search criteria. When no more matches are found, Screen 8—Search/Edit Entries will reappear.

```
                    ** FCM **
              SEARCH/EDIT ENTRIES

PROCESSING ENTRY #

A  FIRST NAME
B  LAST NAME
C  COMPANY
D  ADDRESS
E  CITY
F  STATE
G  ZIP CODE
H  TELEPHONE
I  SPECIAL #1
J  SPECIAL #2
K  ENTRY #                1-     3
L  SORT FILE              NONE SELECTED

              LETTER TO EDIT (A-L)

          (X) CANCEL (P) PRINT (R) RECORD
(U) MENU      ENTER SELECTION      (S) SEARCH
```

Screen 8—Search/Edit Entries

You may now specify more search criteria and search, edit, or delete more entries. Remember, you may designate more than one field as a match field. The more match fields you use, the narrower the range of possible matches.

If you want to exit from the SEARCH/EDIT ENTRIES module, select **U.** Let's do this.

h. Press U to tell the computer you want to exit this module, and return to the Record/Edit/Print Entries Menu (Screen 5).

Sorting a List

Sometimes you will want to print or display a list alphabetically (e.g. by LAST NAME or by ZIP CODE). The SORT ENTRIES Module enables you to do this. It does this by creating a sorted verison of your original list, and storing that sorted version on your diskette for future use. This sorted version of your list is called a "sort file." A sort file may be referenced in other modules, when you want your list to be processed in an alphabetical order. For instance, when you are printing a Master List, you can tell the computer to use a sort file to determine the order in which entries are printed out.

In the following example, we will create a sort file which alphabetizes our list by STATE, and within state by LAST NAME. Then we will print a Master List, using this sort file.

a. Select Option 3—SORT ENTRIES from the Record/Edit/Print Entries Menu (Screen 5).

Alternatively, you could have selected Option 2—SORT ENTRIES from the Main Menu (Screen 2).

Screen 10—Sort Entries will appear.

```
** FCM **
SYSTEM NAME
SORT ENTRIES

1. SORT ENTRIES
2. EXAMINE SORT FILES
3. CHANGE DATA DISK
4. CREATE DUPLICATES FILE
5. RECORD/EDIT/PRINT ENTRIES
6. MAIN MENU

ENTER SELECTION (1-6)
```

Screen 10—Sort Entries Menu

This menu shows the various options that may be needed when sorting a list. The option that actually sorts a list is Option 1—SORT ENTRIES.

b. Select Option 1—SORT ENTRIES.

You will be asked:

```
*************************************************************
ENTER NAME OF NEW SORT FILE _____________________________
*************************************************************
```

The computer is asking for you to assign a name to the sort file that it is going to create from your list.

c. Type: STATESORT and press Return, to assign the name STATESORT to the sort file.

Screen 11—Sort Entries will reappear looking like this:

```
                    ** FCM **
                 SORT ENTRIES

PROCESSING ENTRY #        OF 3
            = MEANS ALL

A  NAME
B  LAST NAME
C  COMPANY
D  ADDRESS
E  CITY
F  STATE
G  ZIP CODE
H  TELEPHONE
I  SPECIAL #1
J  SPECIAL #2
                          SORT FILE

              LETTER TO EDIT (A-J)
              (X) CANCEL (P) PRINT
(U) MENU       ENTER SELECTION      (S) SORT
```

Screen 11—Sort Entries

This screen closely resembles Screen 8—Search/Edit Entries.

You use this screen to specify the sort criteria for your list.

To specify the order in which entries will be sorted, you type = into one or more of the fields A-J. We will type = into the STATE field, followed by the LAST NAME field. This signifies that we want entries alphabetized by state; and whenever there is more than one entry from the same state, we want those entries alphabetized by last name.

d. Type the letter F to tell the computer you want to type something into field F.

e. Press = and then press Return. This will designate field F (STATE) as a sort field.

Now let's designate field B—LAST NAME as our next sort field.

f. Type the letter B to tell the computer you want to type something into field B.

g. Press = and then press Return. This will designate field B (LAST NAME) as a sort field.

Since field B was selected after F had already been selected, the computer will sort first by STATE (field F); and then within state, it will sort by LAST NAME (field B).

Note the message near the bottom of the screen:

```
*************************************************************
                    SORT ORDER F B
*************************************************************
```

This tells us that the computer will sort first by field F (STATE), and then within that criterion by field B (LAST NAME).

Sometimes you may want to sort only a subset of an entire file. For instance, we might want the sort file to include only those entries where the addressee has no children. To do this, we type "match criteria" into appropriate fields. For instance, if we entered HOLIDAY INN into field C (COMPANY), then the sort file would be restricted to only those entries where the company is HOLIDAY INN.

Let's begin the sorting operation.

h. Press S to begin the sort.

The sorting operation will take 20 seconds or more, depending on the size of the list being sorted.

When the sort is complete, you will be informed of how many entries were written to the sort file. The computer will ask you to hit any key to continue.

i. Hit any key to continue.

Screen 10—Sort Entries will reappear.

Now, let's use our sort file STATESORT to generate an alphabetized Master List.

j. Go to the Record/Edit/Print Entries Menu, and select Option 5—PRINT MASTER LIST.

Screen 7—Print Master List will appear.

```
                    ** FCM **
                PRINT MASTER LIST

A  FIRST NAME
B  LAST NAME
C  COMPANY
D  ADDRESS
E  CITY
F  STATE                    TX
G  ZIP CODE
H  TELEPHONE
I  SPECIAL #1
J  SPECIAL #2
K  ENTRY #                  1-     3
L  SORT FILE                NONE SELECTED

            LETTER TO EDIT (A-L)

(X) CANCEL                  (P) PRINT
(U) MENU                    ENTER SELECTION
```

Screen 7—Print Master List

Let's tell the computer to use our sort file in generating the Master List printout. To do this we press **L.**

k. Press L to tell the computer that you want to use a sort file.

You will see STATESORT appear in row L of your screen. STATESORT is the sort file that we want.

l. Press Return to tell the computer that STATESORT is the sort file which you want to use for your Master List report.

By selecting STATESORT for field L, you have told the computer to use the sort file STATESORT to determine the order in which entries will be printed.

m. Press P to tell the computer to print the Master List.

When the computer asks you to enter a date, enter one of your own choosing.

The computer will produce a Master List in which the entries are alphabetized by state, and within state by last name.

Using FCM On Your Own

Congratulations! You have now finished your INTRODUCTORY TOUR of *FCM.* You are now ready to start using *FCM* on your own.

As you begin to use *FCM,* here are some tips that will make your work more successful and enjoyable.

1. Go back and re-read the Introduction, and the System Overview. Now that you have "hands on" experience, the discussions in those sections will be more meaningful to you.

2. Re-read the DO's and DON'Ts in the Introduction. These are important guidelines, which if followed, will greatly promote your success and minimize headaches.

3. Before starting to use *FCM* on your own, read the rest of the Guide, so that you can become acquainted with all of the features and options of *FCM.* You probably will not use them all right now, but you should know what they are, so that you make use of them later on.

4. Set aside a special data disk as a "test disk" for practice and for experiments. When you want to learn new features of *FCM,* try them out first on your test disk. This is the best way to solidify your understanding and to develop proficiency with *FCM.*

The INTRODUCTORY TOUR is now finished. However, to help you master the advanced capabilities of *FCM,* another excursion is now presented: USING *FCM* FOR GENERAL FILING AND CATALOGING.

You may want to take this excursion now, or come back to it later. It is recommended that you at least glance through it right now, so that you can become acquainted with the important capabilities of *FCM* which are discussed.

Using *FCM* For General Filing and Cataloging

The following example will illustrate step-by-step how to set up *FCM* for custom-designed filing and cataloging applications. In our example, we will set up *FCM* to track the wines in a personal wine cellar.

In this example, we imagine that the *FCM* user has a large personal wine cellar. For each wine, he wants to track the location in the cellar where the wine is stored; the name of the wine; the vintage; the country; the number of bottles owned; and some tasting notes on the wine. To set up *FCM* to track this data, we proceed as follows.

The first step is to set up a separate data disk for tracking the wine cellar. This involves the same process as you used for setting up a data disk in Section 2, SETTING UP THE SYSTEM.

a. Obtain a new diskette for this example. Format it, using the procedure explained under Initializing a Data Diskette (Formatting).

b. Set up the diskette to hold a new list, by using Option 6—START A NEW LIST from Screen 3—System Utilities Menu.

Your data disk is now ready to hold information on the wine cellar. Our next step is to tell *FCM* what this information will be like. To do this, we use Option 1—FIELD NAMES from Screen 3—System Utilities Menu.

c. Select the FIELD NAMES option from the System Utilities Menu.

The following screen will appear:

```
                    ** FCM **
                 FIELD NAMES

A LIST NAME      SYSTEM NAME

FIELD NAME                CHARACTER LIMIT

B  FIRST NAME     C  10
D  LAST NAME      E  15
F  COMPANY        G  20
H  ADDRESS        I  24
J  CITY           K  20
L  STATE          M   2
N  ZIP CODE       O  10 TOTAL CHARACTERS
P  TELEPHONE      Q  12 _ _ _ _ _ _ _ _
R  SPECIAL #1     S   8 USED      127
T  SPECIAL #2     U   6 LEFT        5

          LETTER TO EDIT (A-U)
     (X) CANCEL (Y) PRINT (Z) RECORD

              ENTER SELECTION
```

Screen 12—Field Names

This shows the field names and the field lengths for the mailing list application that we have been using so far. The field names FIRST NAME, LAST NAME, COMPANY, etc. are listed in the left-hand column of the screen. The field lengths (i.e. the maximum number of characters that may be held in a given field) are listed down the center of the screen. For instance, the field length for FIRST NAME is 10, the field length for STATE is 2.

We are going to redefine these field names to look like this:

```
                    ** FCM **
                 FIELD NAMES

A LIST NAME      WINE LIST

FIELD NAME                 CHARACTER LIMIT

B  BIN NUMBER    C   4
D  WINE NAME     E  24
F  YEAR          G   4
H  COUNTRY       I  20
J  NO. BTLS      K   3
L  RATING        M   2
N  NOTES-1       O  24 TOTAL CHARACTERS
P  NOTES-2       Q  24 _ _ _ _ _ _ _ _
R  NOTES-3       S  24 USED      129
T  INACTIVE      U   0 LEFT        3

          LETTER TO EDIT (A-U)
     (X) CANCEL (Y) PRINT (Z) RECORD
          ENTER SELECTION
```

Screen 13—Sample Field Name Changes

To get the screen to look like this, we simply edit fields A-U in the standard manner.

c. Edit fields A-U to get your scren to look like the illustration on this page. To do this, just edit the A-U one at a time, in the standard manner.

d. Press Z to tell the computer to record what you have entered.

The computer is now ready to accept information on your wine cellar. Let's see how this works.

e. Select Option 1—RECORD ENTRIES from Screen 5—Record/Edit/Print Entries Menu.

Your screen will look like this:

```
                    ** FCM **
                RECORD ENTRIES

A  BIN NUMBER          _ _ _ _ _ _ _ _
B  WINE NAME
C  YEAR
D  COUNTRY
E  NO. BTLS
F  RATING
G  NOTES-1
H  NOTES-2
I  NOTES-3
J  INACTIVE

          LETTER TO EDIT (A-U)
     (X) CANCEL (P) PRINT (R) RECORD
              ENTER SELECTION
```

Screen 14—Record Entries (Wine Cellar)

Instead of asking you for mailing list information as it used to, the module is now asking you to enter wine cellar information. The field names which you see, and the field lengths, are the ones that you specified in the FIELD NAMES option.

You will find out that all of the other *FCM* options will also now be geared to wine cellar information instead of mailing list information. The details of operation will be the same, but the field names and field lengths will be the ones you defined for a wine cellar. For instance, if you entered some wine cellar data, and then ran a Master List, it would look like this:

```
REPORT DATE      01/07/83                    SYSTEM NAME                    PAGE 1
-------------------------------------------------------------------------------------
-------------------------------------------------------------------------------------

    **ENTRY # 1**                **ENTRY # 2**                **ENTRY # 3**
A   S31                          R19                          R15
B   GRAACHER HIMMELREICH         LATOUR                       LAFITTE ROTHSCHILD
C   1959                         1959                         1966
D   GERMANY                      FRANCE                       FRANCE
E   2                            10                           4
F   20                           18                           19
G   PAGE GOLD--FABULOUS!         '79 SPOILED--BAD CORD        '71 NEEDS 5 YEARS
H                                '80 MATURE                   '79 TANNIC
I                                NICE COLOR
J

A BIN NUMBER    B WINE NAME    C YEAR         D COUNTRY      E NO. BTLS
F RATING        G NOTES-1      H NOTES-2      I NOTES-3      J INACTIVE
```

If you want to return to doing mailing list applications, just put your mailing list disk back into your disk drive. (Remember to use the CHANGE DISK option when you do this.) The computer will use the set of field names and field lengths that was defined for that disk.

5 REFERENCE

General Reference

This section provides detailed descriptions of all modules of *FCM.*

Before using this section, you should go through the earlier parts of this Guide, which acquaint you with terminology and conventions which are presupposed in what follows.

The Main Menu

PURPOSE: Provides access to the 5 main modules of *FCM,* as described in Section 1, SYSTEM OVERVIEW.

OPTIONS: Enter 1-5 to select one of the following modules:

1 RECORD/EDIT/PRINT ENTRIES

2 SORT ENTRIES

3 TRANSFER ENTRIES

4 SYSTEM UTILITIES

5 EXIT

After an entry has been selected, press **R** to continue, or **X** to cancel the entry.

> **NOTE:** Whenever you are finished with *FCM* you must use Option 5—EXIT to terminate your session. Otherwise there may be damage to the data on your disks!

```
** FCM **
MAIN MENU

1. RECORD/EDIT/PRINT ENTRIES
2. SORT ENTRIES
3. TRANSFER ENTRIES
4. SYSTEM UTILITIES
5. EXIT

ENTER SELECTION (1-5)
```

Screen 2—Main Menu

Record/Edit/Print Entries Module

PURPOSE: Provides access to the options of *FCM* used to record, edit, and print entries.

OPTIONS: Enter 1-9 to select one of the following:

1 RECORD ENTRIES
Used to record new entries on disk.

2 SEARCH/EDIT ENTRIES
Used to scan through entries on disk, and make revisions or deletions as desired.

3 SORT ENTRIES
Provides entry to the SORT ENTRIES Module without going back through the Main Menu.

4 PRINT LABELS

5 PRINT MASTER LIST

6 PRINT ENVELOPES

7 CHANGE DATA DISK

8 MAIN MENU
Returns to MAIN MENU.

NOTE: Message on Line 4 of the screen shows how many entries are presently on the disk.

Most of the time you spend with *FCM* will be in this module, and once you have set up your system, it is really the core of the *FCM* program. This is why it is conveniently placed as the first option on the Main Menu.

```
** FCM **
RECORD/EDIT/PRINT ENTRIES
0 ENTRIES ON THIS DISKETTE

1. RECORD ENTRIES
2. SEARCH/EDIT ENTRIES
3. SORT ENTRIES
4. PRINT LABELS
5. PRINT MASTER LIST
6. PRINT ENVELOPES
7. CHANGE DATA DISK
8. MAIN MENU

ENTER SELECTION (1-8)
```

Screen 5—Record/Edit/Print Entries Menu

RECORD ENTRIES OPTION

PURPOSE: Used to record new entries on disk.

OPERATION: Computer guides operator in entering data fields A-J.

Any of the fields A-J may then be edited.

When all fields are as desired, press **R** to record the entry on disk.

OPTIONS: If **END** is entered in field A, computer will exit to the Record/Edit/Print Entries Menu (Screen 5).

After fields A-J have been entered, the following selections are available:

A-J Re-enter fields A-J respectively.

X Cancel entire entry.

P Print an exact image of the screen.

R Record entry on disk.

NOTE: Message on Line 4 of the screen shows the number of the current entry.

```
                    ** FCM **
                RECORD ENTRIES

PROCESSING ENTRY #1        END FOR MENU

A FIRST NAME               JOHN
B LAST NAME                DOE
C COMPANY                  DOE CLEANERS
D ADDRESS                  1244 FIFTH ST
E CITY                     HAWTHORNE
F STATE                    CA
G ZIP CODE                 90019
H TELEPHONE                213-555-1212
I SPECIAL #1               SARAH
J SPECIAL #2               2

            LETTER TO EDIT (A-J)
      (X) CANCEL (P) PRINT (R) RECORD
            ENTER SELECTION
```

Screen 6—Record Entries

SEARCH/EDIT ENTRIES OPTION

PURPOSE: Scan all entries on a disk. Scan selected entries on a disk. Edit selected entries. Delete one or more entries from disk.

OPERATION: If the operator desires to examine only selected entries, then enter appropriate match criteria in fields A-K.

If the operator wishes to have a sort file guide the order in which entries are displayed, indicate the sort file in field L. For instance, if the operator indicates a sort file which is alphabetized by LAST NAME, then entries will be displayed on the screen one at a time alphabetically by last name.

To begin scanning, select **S.** Entries will be displayed on screen, one at a time.

While an entry is on the screen, the following options are available:

- Press **R** to go on to next entry.
- Edit selected fields A-J in the entry. Then press **R** to record the revised entry and proceed to next entry.
- Press **Z** to delete entry.
- Press **U** to return to Record/Edit/Print Entries Menu.

After all entries have been scanned, the screen will return to the display originally seen upon selecting this option.

OPTIONS: Upon entry, the following selections are available:

A-K	Fill in match fields A-K, to determine which records on disk will be displayed.
L	Designate a sort file, which will control the order in which the computer presents the list.
X	Cancel what has been entered in fields A-J.
P	Print an exact image of the screen.
U	Return to the RECORD/EDIT/PRINT ENTRIES MENU.
S	Begin scan through entries on disk.

Once the scanning function has been initiated, and an entry is on the screen, the following selections are available:

A-J	Edit fields A-J of the entry.
X	Cancel edits and redisplay entry.
P	Print an exact image of the screen.
R	Resave current entry on disk, and proceed to next entry.
U	Return to Record/Edit/Print Entries Menu.
Z	Delete the entry.

```
                    ** FCM **
              SEARCH/EDIT ENTRIES

PROCESSING ENTRY #

A  FIRST NAME
B  LAST NAME
C  COMPANY
D  ADDRESS
E  CITY
F  STATE
G  ZIP CODE
H  TELEPHONE
I  SPECIAL #1
J  SPECIAL #2
K  ENTRY #                1-     3
SORT FILE

              LETTER TO EDIT (A-L)
        (X) CANCEL (P) PRINT (R) RECORD
(U) MENU      ENTER SELECTION      (S) SEARCH
```

Screen 8—Search/Edit Entries

Screen 8—Search/Edit Entries shows where the operator may enter match criteria. This restricts the entries shown to those which match the criteria selected.

Screen 9—Search Entry Display shows what an entry looks like when it is displayed.

```
                    ** FCM **
              SEARCH/EDIT ENTRIES

PROCESSING ENTRY #2

A  FIRST NAME        SIDNEY
B  LAST NAME         CARPENTER
C  COMPANY           APOLLO SECURITY CO.
D  ADDRESS           1401 WILSHIRE
E  CITY              MANHATTAN
F  STATE             TX
G  ZIP CODE          40123
H  TELEPHONE         512-555-1212
I  SPECIAL #1        JANICE
J  SPECIAL #2        3
K  ENTRY #           1-     3
SORT FILE            NONE SELECTED

              LETTER TO EDIT (A-L)
         (X) CANCEL (P) PRINT (R) RECORD
(U) MENU      ENTER SELECTION      (S) SEARCH
```

Screen 9—Search Entry Display

PRINT LABELS OPTION

PURPOSE: Prints mailing labels.

OPERATION: Before using this option the operator must use the PRINTED LABEL FORMAT option (see the System Utilities Menu) to specify the desired format for the printing of the mailing labels.

When the PRINT LABELS option is selected, a message will come on the screen, reminding the operator to insert labels in the printer.

Next the operator is given the option of printing 1 or more test labels.

Next the operator is given the opportunity to specify which entries from disk are to be printed, and in what order. This is done by entering appropriate match criteria, and by optionally referencing a sort file—exactly as in the PRINT MASTER LIST option. The operator may also specify how many sets of labels are to be printed.

Labels are then printed. Printing can be aborted or halted by pressing **F1** to abort or the **Space** bar to halt.

After printing is completed, operator is given the opportunity to print more labels, or to return to the Record/Edit/Print Entries Menu (Screen 5).

```
                    ** FCM **
                 PRINT LABELS

A  FIRST NAME
B  LAST NAME
C  COMPANY
D  ADDRESS
E  CITY
F  STATE
G  ZIP CODE
H  TELEPHONE
I  SPECIAL #1
J  SPECIAL #2
K  ENTRY #              1-     3
L  SORT FILE            NONE SELECTED
M  HOW MANY?            1

            LETTER TO EDIT (A-M)
              ENTER SELECTION

            CANCEL (X) PRINT (P)
        (U) MENU     ENTER SELECTION
```

Screen 19—Print Labels

PRINT MASTER LIST OPTION

PURPOSE: Prints all entries on disk, or selected entries.

OPTIONS: The following selections are available:

A-K Operator may fill in fields A-K with match criteria, to indicate which entries from the file are to be printed. If A-K are left blank, then all entries are printed. If any of A-K are filled in, then only those entries from disk which "match" will be printed.

L Operator may use this field to reference a sort file, which then determines the order in which entries will be printed.

X Cancels whatever has been entered in A-L.

U Return to Record/Edit/Print Entries Menu.

P Initiates printing.

<<F1>> Aborts printout in progress.

SPACE BAR Suspends a printout in progress, until **Return** is pressed, telling the computer to resume printing.

```
                    ** FCM **
                PRINT MASTER LIST

A  LAST NAME
B  FIRST NAME
C  COMPANY
D  ADDRESS
E  CITY
F  STATE
G  ZIP CODE
H  TELEPHONE
I  SPECIAL #1
J  SPECIAL #2
K  ENTRY #                1-     3
L  SORT FILE              NONE SELECTED

            LETTER TO EDIT (A-L)

(X) CANCEL                (P) PRINT
(U) MENU                  ENTER SELECTION
```

Screen 7—Print Master List

REPORT DATE	*01/07/83*	*SYSTEM NAME*	*PAGE 1*

	ENTRY # 1	**ENTRY # 2**	**ENTRY # 3**
A	JOHN	SIDNEY	TINA
B	DOE	CARPENTER	GODFREY
C	DOE CLEANERS	APOLLO SECURITY CO.	APOLLO SECURITY CO.
D	1244 FIFTH ST	1401 WILSHIRE	1401 WILSHIRE
E	HAWTHORNE	MANHATTAN	MANHATTAN
F	CA	TX	TX
G	90021	40123	40123
H	213-555-1212	512-555-1212	512-555-1212
I	SARAH	JANICE	FRED
J	2	3	1

A NAME	B LAST NAME	C COMPANY	D ADDRESS	E CITY
F STATE	G ZIP CODE	H TELEPHONE	I SPECIAL #1	J SPECIAL #2

PRINT ENVELOPES OPTION

PURPOSE: Prints envelopes.

OPERATION: Identical to PRINT LABELS, with the following exceptions:

Before using this option the operator must use the ENVELOPE FORMAT option (see System Utilities Menu) to specify the format of the information to be printed on the envelopes.

An Option Q is provided which enables the operator to specify a Return Address, which then will be printed on the upper left-hand corner of each envelope.

Screen 20—Print Envelopes shows what the screen looks like before you select your match criteria. Here the operator may limit the entries to be printed by entering match criteria in any field. Only those entries which match the criteria entered will be printed.

A sample envelop printout showing a return address is also provided on the opposite page.

```
** FCM **
PRINT ENVELOPES

A FIRST NAME
B LAST NAME
C COMPANY
D ADDRESS
E CITY
F STATE
G ZIP CODE
H TELEPHONE
I SPECIAL #1
J SPECIAL #2
K ENTRY #          1-    3
L SORT FILE        NONE SELECTED
M HOW MANY?        1

LETTER TO EDIT (A-M)
ENTER SELECTION

CANCEL (X) PRINT (P) (Q) RET. ADDRESS
(U) MENU     ENTER SELECTION
```

Screen 20—Print Envelopes

```
CONTINENTAL SOFTWARE
11223 S. HINDRY
LOS ANGELES, CA 90045

                    JOHN DOE
                    DOE CLEANERS
                    1244 FIFTH ST
                    HAWTHORNE, CA 90019
```

Sort Entries Module

PURPOSE: Provides access to the *FCM* routines used for sorting files.

OPTIONS: Enter 1-6 to select one of the following:

1 SORT ENTRIES
Used to sort entries.

2 EXAMINE SORT FILES
Used to verify what sort files are on disk, and to delete old sort files from disk.

3 CHANGE DATA DISK
Used whenever a different data disk is to be placed in drive 2.

4 CREATE DUPLICATES FILE
Used to identify duplicate entries that reside on disk.

5 RECORD/EDIT/PRINT ENTRIES
Provides entry to the RECORD/EDIT/PRINT ENTRIES module without going back through MAIN MENU.

6 MAIN MENU
Returns to MAIN MENU.

```
** FCM **
SYSTEM NAME
SORT ENTRIES

1. SORT ENTRIES
2. EXAMINE SORT FILES
3. CHANGE DATA DISK
4. CREATE DUPLICATES FILE
5. RECORD/EDIT/PRINT ENTRIES
6. MAIN MENU

ENTER SELECTION (1-6)
```

Screen 10—Sort Entries Menu

SORT ENTRIES OPTION

PURPOSE: Creates a "sort file" which is derived from the list on disk. A sort file is an alphabetized arrangement of all the entries in the list, or of a selected subset. It is stored on the same data disk as the original list. Up to 3 sort files may be stored on one disk. A sort file may be referenced in other modules to create alphabetized printouts and screen displays.

OPERATION: Upon entering the module, the operator is asked to specify a name which will be assigned to the sort file about to be created.

Next, a screen appears which enables the operator to specify the order in which items are to be sorted; and whether the entire list is to be sorted, or only a subset. The order of the sort is indicated by typing = into appropriate fields A-J. (See the screen on the following page.) If it is desired to sort only a subset of the entire list, this is indicated by filling in appropriate fields A-J with match criteria. See the accompanying example.

The sorting operation is initiated by selecting **S.** After the sort has been completed, a message will appear on the screen, indicating the number of entries which were sorted.

OPTIONS: The following selections are available:

A-J	Fill a field with = symbols to indicate sort sequence, or with match criteria to indicate which entries are to be sorted.
P	Print an exact image of the screen.
M	Return to the SORT ENTRIES MENU.
S	Initiate sorting operation.

EXAMPLE: The following sample screen illustrates how a sort is defined. The = sign has been entered into the fields, ZIP CODE and LAST NAME. This means that entries will be sorted by zip code, and then within zip code by last name. This is indicated on the line of the screen which says: SORT ORDER G B.

The sort order is G B (LAST NAME within ZIP CODE) rather than B G (ZIP CODE within last LAST NAME) because the operator entered = into field G before entering = into field B. The lesson to be learned from this is that the order in which the = symbols are entered will affect the order in which the list is sorted.

OH has been entered into the STATE field. This means that only those entries from the state of Ohio (OH) will be processed into the sort file.

```
                    ** FCM **
                 SORT ENTRIES

PROCESSING ENTRY #      OF 3
          = MEANS ALL

A NAME
B LAST NAME              =
C COMPANY
D ADDRESS
E CITY
F STATE                 OH
G ZIP CODE               =
H TELEPHONE
I SPECIAL #1
J SPECIAL #2
SORT ORDER              G B

            LETTER TO EDIT (A-J)
            (X) CANCEL (P) PRINT
(M) MENU     ENTER SELECTION      (S) SORT
```

Screen 21—Sample Sort Designations

EXAMINE SORT FILES OPTION

PURPOSE: Used to verify what sort files are on disk, and to delete old sort files from disk.

OPERATION: The computer will display the names of the sort files which are on disk.

The operator may delete any of the sort files A-C from disk with the following sequence of operations:

1. Press and hold the **CTRL** key while typing the appropriate letter **A-C.**
2. Press **Return** to complete the delete operation and return to the Sort Files Menu.

Whether or not it is desired to delete a sort file, this module is exited by selecting **R,** which returns the computer to the Sort Entries Menu.

OPTIONS: The following selections are available:

CTRL - A Delete sort file A
CTRL - B Delete sort file B
CTRL - C Delete sort file C

X Cancel delete operations.

R Return to Sort Entries Menu.

NOTE: Any delete operations which are requested, are not actually performed until the operator selects **R** to return to the Sort Entries Menu (Screen 10). Prior to returning to the Sort Entries Menu all delete request may be cancelled by selecting **X.**

```
** FCM **
EXAMINE SORT FILES

A. ALPHASORT *1*
B. NOT SORTED
C. NOT SORTED

(R) RETURN (X) CANCEL
CTRL (A-C) DELETE FILE
ENTER SELECTION
```

Screen 22—Examine Sort Files

CHANGE DATA DISK OPTION

PURPOSE: This option must be used whenever the operator desires to change data disks. By using this option for the disk change operation, the operator gives the computer a chance to "identify" what data disk is now in use. If data disks are changed without using this option, the computer will become "confused" concerning what kind of data is currently in use, and the data on your disks may become damaged.

OPERATION: The computer displays a message on the screen telling the operator to change the data disk in Drive #1 or #2 (whichever is in use). The operator then presses any key to continue and the Sort Entries Menu will reappear.

```
*************************************************************
REMOVE ANY DISK FROM DRIVE #X
REPLACE WITH ** FCM *¢ DATA DISK
PRESS ANY KEY WHEN READY
*************************************************************
```

CREATE DUPLICATES FILE OPTION

PURPOSE: This module is used to identify entries on disk which are identical in certain respects. The operator specifies the criteria which the computer is to use for identifying duplicate entries. The computer scans the disk for all entries meeting the required criteria, and stores these entries in a special sort file called DUPLICATES. The operator may then examine this file on the screen or print it, using the Record/Edit/Print Entries Module.

OPERATION: The mechanics of operating this module are very similar to the SORT ENTRIES module.

The computer begins by asking the operator to specify the name of the sort file to be created.

Next a screen will appear which is nearly identical with the main screen for SORT ENTRIES.

The operator fills in one or more of fields A-J with an = sign. The computer will then create a file consisting of entries where the first four letters of fields marked with the = sign are identical.

The operator may also use some for the fields as match fields, in which case the computer will examine only those entries which meet the match criteria.

EXAMPLE: To create a duplicates file consisting of all entries for the company GENERAL MOTORS, where the first four letters of the last name and the first four letters of the address are identical, the operator would enter **GENERAL MOTORS** into the COMPANY field, and an = sign in the LAST NAME and ADDRESS fields. For instance, the following two entries would go into the duplicates file:

STEVEN	HAROLD
GOODWIN	GOODMAN
1424 HILLSIDE	14245 AVE N
GENERAL MOTORS	GENERAL MOTORS

The reason these would both go into the duplicates file is that: first, they are both from General Motors; second, the first four letters of each last name is GOOD; and third, the first four characters of each address is 1424.

Transfer Entries Module

PURPOSE: Provides access to the *FCM* routines used for transferring entries from one disk to another.

OPTIONS: Enter 1-3 to select one of the following options:

1 TRANSFER ENTRIES
Performs the actual transfer of entries from one disk to another.

2 CHANGE DATA DISK
Used whenever it is necessary to change the data disk in Drive #2. This is exactly the same as the CHANGE DATA DISK program in the SORT ENTRIES MENU.

3 MAIN MENU
Returns to MAIN MENU.

```
** FCM **
TRANSFER ENTRIES

1. TRANSFER ENTRIES

2. CHANGE DATA DISK

3. MAIN MENU

ENTER SELECTION (1-3)
```

Screen 23—Transfer Entries Menu

TRANSFER ENTRIES OPTION

PURPOSE: Transfers entries, in the form of a sort file, from one disk to another disk. The operator may transfer an entire sort file, or a selected subset of a sort file. Thus this module can be used for two purposes: either to make back-up copies of entries; or to extract subsets of a list (e.g. all entries for the state of NY).

OPERATION: The computer begins by displaying a list of the current sort files, and asking which of the files is to be transferred to another disk.

Then the following screen will appear:

```
** FCM **
TRANSFER
ALPHASORT
METHOD OF TRANSFER

1. ENTIRE SORT FILE
2. RANGE OF ENTRIES
3. CANCEL

ENTER SELECTION
```

Screen 24—Method of Transfer

If **1** is selected, then the entire sort file will be transferred. If **2** is selected, then the operator will be given the opportunity to specify a subset of the entire sort file, and just that subset will be transferred. If **3** is selected, then the computer will return to Screen 23—Transfer Entries Menu.

If Option 2—RANGE OF ENTRIES is selected, then Screen 25—Range of Entries will appear. This is where the operator may define the characteristics of the entries to be transferred from the sort file. This is done as follows:

1. The operator must select exactly one of the fields A-J as the transfer criterion. The operator then types in the letter of that field. (For example **H** for STATE.)

2. The words SORT KEY will appear in the field selected. The cursor will then drop to field K LOW ENTRY. Fields K and L are where the operator specifies the range of entry numbers to be transferred. Fields K and L must be filled in. In the example shown, the operator has designated all entries 1 to 3 be included in the transfer, and that Field F RATING will be the sort key.

3. While fields A-L are being filled in, the operator may erase all fields by selecting **X.**

4. To begin the actual transfer, the operator selects **T.**

```
                    ** FCM **
              TRANSFER ENTRIES
                 ALPHASORT

A  BIN NUMBER
B  WINE NAME
C  YEAR
D  COUNTRY
E  NO. BTLS
F  RATING                SORT KEY
G  NOTES-1
H  NOTES-2
I  NOTES-3
J  INACTIVE
K  LOW ENTRY             1
L  HIGH ENTRY            3

          LETTER TO EDIT (A-L)
        (X) CANCEL (T) TRANSFER
     (M) MENU      ENTER SELECTION
```

Screen 25—Range of Entries

The remainder of the transfer process is the same, regardless of whether the operator selected Option 1—ENTIRE SORT FILE, or Option 2—RANGE OF ENTRIES. The sequence of events is as follows:

1. The computer asks the operator if he wants to transfer the CUSTOM FILE. The operator selects **Y,** to continue the transfer procedure, or **N** to abort the procedure and return to the Transfer Entries Menu (Screen 23).

2. If **Y** is selected, then the following message appears on the screen:

```
*************************************************************
        REMOVE ANY DISKETTE FROM DRIVE #1 AND
              INSERT ** FCM **

                TARGET DISK

          PRESS ANY KEY WHEN READY.
       PRESS <<F1>>  FOR MAIN MENU
*************************************************************
```

The operator then removes any diskette from Drive 1, and replaces it with the diskette which is to receive the data to be transferred.

The operator then presses any key to continue.

System Utilities Module

PURPOSE: Provides access to the System Utility options described below.

OPTIONS: Enter 1-7 to select one of the following modules.

1 FIELD NAMES
Enables the user to redefine field names and field lengths for entries to be stored on disk. This enables the user to define customized mailing list applications, as well as other kinds of custom filing and cataloging applications (e.g. wine cellar tracking).

2 DEFAULT NAMES
Enables the user to tell the computer to automatically supply data items which occur repeatedly in a large number of entries.

3 PRINTED LABEL FORMAT
Used to define the printed format for mailing labels.

4 ENVELOPE FORMAT
Used to define the format for envelopes that are to be printed.

5 HARDWARE
Used to specify the computer hardware configuration being used.

6 START A NEW LIST
Used to set up a diskette to hold a list.

7 MAIN MENU
Returns to MAIN MENU.

A sample of Screen 3—System Utilities Menu may be found on page 23.

FIELD NAMES OPTION

PURPOSE: Enables user to define customized mailing list applications, and customized filing and cataloging applications. This is accomplished by redefining the field names and field lengths for entries.

OPERATION: The computer will display the LIST NAME, and the field names and field lengths as currently defined. The operator may redefine any of these items by selecting A-J.

Up to 10 fields may be defined. If fewer than 10 fields are needed, the "leftover" fields on the screen should be labeled INACTIVE.

The sum of the lengths of all data fields may not exceed 132 characters.

After all field definitions are as desired, the operator selects **R** to record the definition, and return to the System Utilities Menu (Screen 3).

```
                    ** FCM **
                 FIELD NAMES

A LIST NAME      SYSTEM NAME

FIELD NAME                CHARACTER LIMIT

B  FIRST NAME     C  10
D  LAST NAME      E  15
F  COMPANY        G  20
H  ADDRESS        I  24
J  CITY           K  20
L  STATE          M   2
N  ZIP CODE       O  10 TOTAL CHARACTERS
P  TELEPHONE      Q  12 _ _ _ _ _ _ _ _
R  SPECIAL #1     S   8 USED      127
T  SPECIAL #2     U   6 LEFT      5

          LETTER TO EDIT (A-U)
     (X) CANCEL (Y) PRINT (Z) RECORD

          ENTER SELECTION
```

Screen 26—Sample Field Name Changes

OPTIONS: The following options are available:

A Define the LIST NAME.

B-U Define field names, field lengths.

X Cancel whatever the operator has entered onto the screen.

Y Print an exact image of the screen.

Z Record the information that has been entered, and return to the System Utilities Menu.

NOTE: Different *FCM* data diskettes may each have a different set of field name definitions. Thus it is possible, for instance, to have one diskette for mailing list applications, another for tracking one's wine cellar, another for tracking birthdays, and so on. The following illustration is for a wine cellar application.

DEFAULT NAMES OPTION

PURPOSE: When a number of entries are being added to a list, some of them may have identical information in certain fields. For instance, many of the entries may have the same state code or company. The DEFAULT NAME option can be used to minimize repetitious typing in these circumstances. It enables the user to define one or more "defaults." These are data items which will be automatically supplied by the computer, unless overridden by the operator.

Two kinds of defaults are available:

1. A "fixed default" is a data item which will automatically be supplied in every entry, and which can be overridden only when the entry is being edited. For instance, if an operator were about to enter a large number of names and addresses all for the state of TX, it would be desirable to assign TX as a fixed default for the STATE field.

2. A "repeat default" is a data item which is a repeat of whatever was entered in the field in the previous entry. For instance, if the operator were entering lists of families, many family members would share the same last name, and it would be desirable to specify a repeat default for LAST NAME.

OPERATION: A screen will appear which allows the user to specify either a fixed default or a repeat default for each of the fields A-J.

If a fixed default is desired, the default is entered into the appropriate field. In the example on the facing page, a fixed default of CA has been specified for the STATE field. This means that whenever entries are being added to the list, the computer will automatically fill in the STATE field with CA for each entry.

If a repeat default is desired, an asterisk (*) is entered into the appropriate field. In the following example, a repeat default has been specified for the LAST NAME field. This means that whenever entries are being added to the list, the computer will automatically fill in the LAST NAME field with whatever was in the LAST NAME field of the previous entry.

After the operator has specified the defaults desired, select **R** to record the information and return to the System Utilities Menu (Screen 3).

OPTIONS: The following options are available:

A-J Specify defaults for fields A-J.

X Cancel all information entered.

P Print an exact image of the screen.

R Record the information which has been entered, and return to SYSTEM UTILITIES MENU.

NOTES: When new entries are being added to a list, the operator always has the option of overriding default items during the edit phase of the data entry.

```
                    ** FCM **

              DEFAULT INPUTS
        TYPE * FOR REPEAT FEATURE

LABEL                DEFAULT INPUT

A NAME
B LAST NAME                *
C COMPANY
D ADDRESS
E CITY
F STATE                    CA
G ZIP CODE
H TELEPHONE
I SPECIAL #1
J SPECIAL #2

              ENTER SELECTION
           LETTER TO EDIT (A-J)

      (X) CANCEL (P) PRINT (R) RECORD
              ENTER SELECTION
```

Screen 27—Default Names

PRINTED LABEL FORMAT OPTION

PURPOSE: Used to define the printed format for mailing labels.

OPERATION: The following screen will appear:

```
                    ** FCM **

              PRINTED LABEL FORMAT

A LABEL WIDTH 35        B LABEL HEIGHT 6
C HOW MANY LABELS ACROSS? 1
D MESSAGE

LINE # POSITION 1 P POSITION 2 P POSITION 3

1 FIRST NAME            LAST NAME
2 COMPANY
3 ADDRESS
4 CITY        ,         STATE        ZIP
5
6
7
8
9

   <<F1>>  FOR SCREEN LABEL LETTERS
        ITEM TO EDIT (A-O or 1-9)
     (X) CANCEL (P) PRINT (R) RECORD
           ENTER SELECTION
```

Screen 28—Printed Label Format

This screen is used to make a "picture" of the format of printed labels, and to indicate other format information.

A label may be as many as 9 lines up-and-down. These 9 lines are numbered 1-9 on the screen. Each line can have up to 5 fields across. These 5 fields are marked POSITION 1, P, POSITION 2, P, and POSITION 3 on the screen. The two fields marked P are intended primarily to hold punctuation to separate the fields POSITION 1, POSITION 2, and POSITION 3. The P fields can also be used for certain other purposes, which we will discuss later.

To design a label format, the operator fills in information in fields A, B, C, and D; and also fills in information into any of the 5 fields in lines 1-9. The mechanics of entering this information is as in other *FCM* modules; the operator selects A-D or 1-9 to obtain the desired data field, types in the required information, and presses **Return.** However there is one exception to the usual mechanics. When field names, such as FIRST NAME, LAST NAME, or COMPANY, are to be entered in lines 1-9, the operator indicates these names by entering one-letter codes. These codes are listed in a chart which may be called up by pressing the **F1** key. The cart looks like this:

```
                    ** FCM **
                SYSTEM NAME
            PRINTED LABEL FORMAT

A LIST NAME      SYSTEM NAME

FIELD NAME                CHARACTER LIMIT

B  BIN NUMBER     C   4
D  WINE NAME      E  24
F  YEAR           G   4
H  COUNTRY        I  20
J  NO. BTLS       K   3
L  RATING         M   2
N  NOTES-1        O  24 TOTAL CHARACTERS
P  NOTES-2        Q  24 _ _ _ _ _ _ _ _
R  NOTES-3        S  24 USED      129
T  INACTIVE       U   0 LEFT      3

          LETTER TO EDIT (A-U)
     (X) CANCEL (Y) PRINT (Z) RECORD
            ENTER SELECTION
```

Screen 29—Field Name Codes for Printed Label Format

The operator may return to the original screen by selecting **Z.** Before doing this, the user is advised to obtain a printout of the codes by selecting **P.**

Returning to the first screen, here is an explanation of the fields A-D.

Field A—LABEL WIDTH: Defines the width of a label. If labels are mounted on the paper several across, then LABEL WIDTH is defined to include the space between labels as well. For instance, if the label itself is 40 characters wide, and there are 6 characters of space between labels, the LABEL WIDTH is defined as 46.

Field B—LABEL HEIGHT: Defines the height of th label itself plus the vertical space between labels. For instance, if the label itself is 4 lines high, and there are three empty lines between labels vertically, then LABEL HEIGHT is defined as 7.

Field C—HOW MANY LABELS ACROSS: Defines how many labels are mounted horizontally on the same line.

Field D—MESSAGE: May be filled in with a message such as "MERRY XMAS," which will then be printed on every label. To specify the position of the message on the labels, the operator inputs **CTRL-A** (done by holding down the **CTRL** key while pressing **A**) into one of the Punctuation fields. The message will then begin at that position.

If the user has a printer which is capable of "special effects," such as underlining, boldface, multi-font, and so on, these effects may be obtained by placing appropriate printer control codes in CHR fields. These control codes vary from one printer to the next, and the user must consult the manual which comes with his printer. Special printing effects can also sometimes be obtained by temporarily modifying printer parameters in the HARDWARE option from the System Utilities Menu.

ENVELOPE FORMAT

PURPOSE: Used to define the format for envelopes that are to be printed.

OPERATION: The operator specifies the following information in fields A-E.

PRINT RETURN ADDRESS? (Y/N): If answer is Y, then a return address is printed in the upper left-hand corner of each envelope. The return address itself is specified by the operator in the PRINT ENVELOPES module.

SINGLE OR CONTINUOUS? (S/C): If **S** is specified, then the computer will pause between printing of the individual envelopes, and wait for an input from the operator before going on to the next envelope.

LEFT MARGIN FOR ADDRESS: The operator must input a number to indicate the left margin of the address.

ENVELOPE HEIGHT IN LINES: This is defined as the height of the envelope itself plus the number of lines between envelopes, if the envelope itself is 20 lines high, and there are 3 lines between envelopes, then ENVELOPE HEIGHT IN LINES is defined as 23.

LINES: RETURN ADDRESS TO ADDRESS: This number tells the computer how many lines to space down, after printing the return address, before printing the first line of the main address.

OPTIONS: The following options are available:

Edit information fields A-E described above.

Prints an exact image of the screen.

Records the information, and returns to the System Utilities Menu.

Cancels all information that was entered.

HARDWARE OPTION

PURPOSE: Used to specify the computer hardware configuration being used.

OPERATION: Refer to section 2, SETTING UP THE SYSTEM for details of the operation of this option.

START A NEW LIST OPTION

PURPOSE: Used to set up a diskette to hold a list.

OPERATION: For details of operation, see Section 2, SETTING UP THE SYSTEM.

> **NOTE:** Separate lists may be maintained on up to 20 different diskettes. Before a list can be stored on a disk, the disk must first be processed through this option.

EXIT OPTION

PURPOSE: Used to turn off the system when the operator is finished with a session of *FCM.*

OPERATION: Press 5 on the Main Menu (Screen 2) to select EXIT. The computer will exit to Commodore Basic. The message READY will appear followed by the flashing cursor, signifying that the exit has been completed.

This is the only legitimate way to exit from *FCM*. Failure to use EXIT can result in unpredictable damage to the data on the user's disks.

TROUBLESHOOTING GUIDE

FCM is designed to give you a great deal of power and flexibility, while being an extremely easy program to use. To make sure that all goes smoothly as you use *FCM,* please keep in mind the following troubleshooting topics as you use the program.

1. Make Back-up Copies Of Your Data Disks—One of the most frustrating experiences known to computer users is occasional loss of data. It happens to everybody! Your only protection against a data disk crashing due to a power surge or outage, a home accident (coffee spills, dog chewing), or some other kind of disaster, is to keep current back-up copies of your data. We cannot emphasize this point strongly enough.

2. Re-sort Files After Adding, Editing, or Deleting Data—Whenever you change the data in an *FCM* list it is a good idea to re-sort your sort files. This will ensure that all entries are placed in the correct sequence.

3. Handle Diskettes Properly—A floppy disk is an extremely sensitive piece of magnetically encodable mylar plastic which revolves in the disk drive at upwards of 300 rpm. Inside the black plastic jacket, the disk is usually coated with a dry lubricant to minimize abrasive wear. Even so, a diskette has a finite life span—roughly 40 hours of read/write time. (The drive's read/write head is usually in contact with the disk for only a few seconds, so each disk has a long life in practical terms.)

The diskette is written to and read from when the drive's read/write head contacts the spinning surface of the diskette. Dust, smoke, scratches, lint, holes, folds, or any other obstructions can degrade the reading and writing process. Protect your disks from such hazards by keeping them in their jackets, stored in a safe place away from temperature extremes, direct sunlight, or magnetic fields (e.g., TV sets, CB radio transmitters, monitor screens, electric motors, microwave ovens, etc.)

5. Document Errors—*FCM* has been thoroughly tested and error-trapped for dependability. However, even under the best of circumstances, the worst occasionally happens.

In the event your *FCM* program crashes, Continental Software stands by ready to assist you in any way possible. To help Continental's Customer Support Group give you the kind of service you need, please try to report excactly the steps you took which produced the problem. Before you call, write down what you were doing when the error occurred.

6. Error Message Screens—*FCM* has certain protective schemes built into it. When it tries to execute a command and finds something wrong, it will interrupt the routine and flash an error-checking message on the screen. For example, if you have inserted a data diskette but have forgotten to close the drive hatch, or you have put in a disk with a write protect tab, you will get the following message:

```
*************************************************************
                CHECK FOR WRITE PROTECT TAB AND
                     PROPER DOOR CLOSURE.
                  PRESS ANY KEY WHEN READY.
*************************************************************
```

Error checking messages like this are straightforward and generally self-explanatory. For this reason, we have not included all these messages here. When a message appears, correct on the "error" listed and proceed with the routine normally.

7. Starting New Lists—When you want to start a list on a new data diskette, remember that there are 2 preliminary steps: First, you must format the diskette with the Commodore commands. This clears the diskette of any previous data, and prepares the diskette so that your Commodore 64 computer can store information on it. Second, you must go into the *FCM* module START A NEW LIST. This module starts up the data files that will hold the information which you want to enter. Both of these steps are necessary for *FCM* to be able to store entries on your disks.

8. Punctuation—Do not enter commas or colons into data fields unless specifically permitted. In most cases, a comma or a colon will erase everything to the right of it. For instance if for COMPANY NAME you enter WHITNEY, BARNEY AND CO. the computer would interpret this as WHITNEY—the remainder of the company name would be erased. If you need punctuation when printing labels or envelopes, you can specify this in the Printed Label Format and Envelope Format options from the System Utilities Menu (/Screen 3).

GLOSSARY

ASCII Code: A decimal code assigned to each key (and several combinations of keys) on the Commodore keyboard.

Automatic Line Feed: An automatic carriage return on a printer.

Boot and Boot Up: This means to load your program into the computer and start the system. (It comes from the phrase "to pull oneself up by one's own bootstraps.")

Cold Start: Starting the computer by actually turning on the power.

Cursor: The flashing square of light which marks where the next character you type will appear on the screen.

Data Diskette: A diskette which contains data files. These data files are manipulated by a program diskette.

Downloading: The process of transferring an *FCM* list or part of a list to other diskettes.

Edit: To Revise. *FCM* provides you many ways of editing data that has already been entered. This enables you to correct mistakes and make updates.

Entry: A combination of fields. An entry may contain a maximum of 10 fields. A field may be up to 24 characters in length, but an entry may not contain more than 132 characters total. An entry is sometimes also referred to as a **record.**

Field: A line of information such as a name, address, or phone number. A field may be up to 24 characters in length.

Field name: The title of a given field, such as NAME, ZIP CODE, or COMMENT. Field names are limited to 10 characters.

File: A collection of entries (records). In *FCM,* you have two main kinds of files—a list; and a sort file.

Hard Copy: A paper-printed version of a file or screen.

List: A string of entries which use the same field names. Lists are stored on separate "data disks." A data disk is capable of holding up to 750 entries. You may only create one list per data disk, but you may extend the list over multiple disks., (You will have to print and sort each disk separately.)

Match field: Match fields help you when you want to process only a subset of all the entries in a list. In many *FCM* modules, you may fill in certain match fields as desired, and then the computer will process only those entries which "match." (See for instance the Option, PRINT MASTER LIST.)

Menu: A list of selections or choices available at certain points in the program.

Sort file: A sorted (alphabetized) version of a list. A sort file is stored on the same disk as your list. A sort file can be referenced in various *FCM* routines to control the order in which entries are processed or printed. Up to 3 sort files can be held on a disk.

Uploading: The procesing transferring "downloaded" *FCM* lists back to an existing *FCM* list.

Write protect: Placing a piece of tape over the square notch on the side of a diskette so that it cannot be written on or changed.

ASCII CHARACTER CODE

DEC = ASCII decimal code HEX = ASCII hexadecimal code CHAR = ASCII character na
CTRL = depression of control key while striking character indicated.

DEC	HEX	CHAR	WHAT TO TYPE	DEC	HEX	CHAR	WHAT TO TYPE
0	00	NULL	CTRL-@	49	31	1	1
1	01	SOH	CTRL-A	50	32	2	2
2	02	STX	CTRL-B	51	33	3	3
3	03	ETX	CTRL-C	52	34	4	4
4	04	ET	CTRL-D	53	35	5	5
5	05	ENQ	CTRL-E	54	36	6	6
6	06	ACK	CTRL-F	55	37	7	7
7	07	BEL	CTRL-G	56	38	8	8
8	08	BS	CTRL-H or	57	39	9	9
9	09	HT	CTRL-I	58	3A	:	:
10	0A	LF	CTRL-J	59	3B	;	;
11	0B	VT	CTRL-K	60	3C		
12	0C	FF	CTRL-L	61	3D	=	=
13	0D	CR	CTRL-M or RETURN	62	3E		
14	0E	SO	CTRL-N	63	3F	?	?
15	0F	SI	CTRL-O	64	40	@	@
16	10	DLE	CTRL-P	65	41	A	A
17	11	DC1	CTRL-Q	66	42	B	B
18	12	DC2	CTRL-R	67	43	C	C
19	13	DC3	CTRL-S	68	44	D	D
20	14	DC4	CTRL-T	69	45	E	E
21	15	NAK	CTRL-U or -	70	46	F	F
22	16	SYN	CTRL-V	71	47	G	G
23	17	ETB	CTRL-W	72	48	H	H
24	18	CAN	CTRL-X	73	49	I	I
25	19	EM	CTRL-Y	74	4A	J	J
26	1A	SUB	CTRL-Z	75	4B	K	K
27	1B	ESCAPE	N/A	76	4C	L	L
28	1C	FS	N/A	77	4D	M	M
29	1D	GS	N/A	78	4E	N	N
30	1E	RS	N/A	79	4F	O	O
31	1F	US	N/A	80	50	P	P
32	20	SPACE	SPACE	81	51	Q	Q
33	21	!	!	82	52	R	R
34	22	”	”	83	53	S	S
35	23	#	#	84	54	T	T
36	24	$	$	85	55	U	U
37	25	%	%	86	56	V	V

DEC	HEX	CHAR	WHAT TO TYPE	DEC	HEX	CHAR	WHAT TO TYPE
38	26	&	&	87	57	W	W
39	27	'	'	88	58	X	X
40	28	(	(	89	59	Y	Y
41	29	)	)	90	5A	Z	Z
42	2A	*	*	91	5B	[	N/A
43	2B	+	+	92	5C	N/A	
44	2C	,	,	93	5D	]	] (Shift M)
45	2D	-	-	94	5E	^	↑
46	2E	.	.	95	5F	_	←
47	2F	/	/				
48	2G	0	0				

TATE ABBREVIATIONS

AK	ALASKA	KY	KENTUCKY	NY	NEW YORK
AL	ALABAMA	LA	LOUISIANA	OH	OHIO
AR	ARKANSAS	MA	MASSACHUSETTS	OK	OKLAHOMA
AZ	ARIZONA	MD	MARYLAND	OR	OREGON
CA	CALIFORNIA	ME	MAINE	PA	PENNSYLVANIA
CO	COLORADO	MI	MICHIGAN	RI	RHODE ISLAND
CT	CONNECTICUT	MN	MINNESOTA	SC	SOUTH CAROLINA
DC	WASH, DC	MO	MISSOURI	SD	SOUTH DAKOTA
DE	DELAWARE	MS	MISSISSIPPI	TN	TENNESSEE
FL	FLORIDA	MT	MONTANA	TX	TEXAS
GA	GEORGIA	NC	NORTH CAROLINA	UT	UTAH
HI	HAWAII	ND	NORTH DAKOTA	VA	VIRGINIA
IA	IOWA	NE	NEBRASKA	WA	WASHINGTON
ID	IDAHO	NH	NEW HAMPSHIRE	WI	WISCONSIN
IL	ILLINOIS	NJ	NEW JERSEY	WV	WEST VIRGINIA
IN	INDIANA	NM	NEW MEXICO	WY	WYOMING
KS	KANSAS	NV	NEVADA		

INDE

CONTINENTAL SOFTWARE'S WARRANTY REGISTRATION

Please complete and send in your Warranty Card within 10 days of purchase to register your ownership of this product, along with the requested registration fee of $20.00 (plus applicable sales taxes).

Following the Warranty Registration procedure entitles you to several important bonuses. Continental Software will guarantee your program diskette beyond the normal 90-day period of coverage, to a full year from the date of purchase. Should something happen to destroy your program diskette and program backups during this time, we will replace it for you. More important, this fee entitles you to one full year of service from our Customer Support Group, should you have questions or problems concerning this product. Finally, it also entitles you to one full year's worth of program updates.

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It is *very* important that you register your ownership of the program with us. Service from our Customer Support Group, the authorized supply of program update diskettes, and program enhancement and error-correction services all depend upon this registration. We cannot assist you if we do not know you purchased this program.

WARRANTY CARD

IMPORTANT: In order to obtain service from our Customer Support Department and be advised of any enhancements or program changes, this card must be completed and immediately returned to Continental Software with $20.

WARRANTY REGISTRATION PROVIDES YOU WITH THESE IMPORTANT BENEFITS:

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We cannot accept telephone calls if you are not registered under our warranty program. However, if you do have a problem and have not yet registered, you may do so over the phone with your VISA or MasterCard.

2) IMPROVEMENTS AND ENHANCEMENTS. Continental Software continually strives for software perfection. Therefore, improvements and enhancements that will benefit the user will be available, to registered owners only, at no extra cost.

3) FREE REPLACEMENT DISK. In event that your program disk becomes defective after the initial 90 day warranty period, you will be entitled to receive a free replacement disk for up to one year. If you are not covered under our warranty program, a replacement disk will cost $17.50.

NAME _____

ADDRESS _____

CITY _____

PHONE _____

NAME AND ADDRESS OF STORE WHERE PURCHASED

_____

CALIFORNIA RESIDENTS IN ALAMEDA, CONTRA COSTA, SAN FRANCISCO, SANTA CLARA, SANTA CRUZ, LOS ANGELES AND SAN MATEO COUNTIES, PLEASE ADD 6.5% SALES TAX ($1.30). ALL OTHERS PLEASE ADD 6% ($1.20) SALES TAX.

☐ *CHECK ENCLOSED* ☐ MASTERCARD OR ☐ VISA

_____ EXP. DATE _____

SIGNATURE _____

HOW DID YOU HEAR ABOUT THIS PRODUCT (check one)

☐ Dealer recommendation ☐ Business associate ☐ Friend

☐ Magazine (which one?)

MAGAZINES YOU READ (check applicable ones)

☐ Softalk (Apple or IBM) ☐ Popular Computing ☐ PC Magazine

☐ Compute! ☐ Personal Computing ☐ PC World

☐ Creative Computing ☐ Byte ☐ 80 Micro

☐ Other (please specify)

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