



Elite

Elite·FileTM

Elite Software

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* COLOR COMPUTER DATA BASE MANAGER *

Elite·File™

INSTRUCTION MANUAL



E L I T E * F I L E ©

* Color Computer Data Base Manager *

by Bruce M. Cook

INSTRUCTION MANUAL

Revision 1

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ELITE*FILE®

INTRODUCTION -- Congratulations! You've purchased a very powerful program for your Color Computer. ELITE*FILE is a full featured, all machine language, Data Base Manager that has been specifically designed for the Color Computer. ELITE*FILE will help you create records, manipulate information, and prepare custom reports. ELITE*FILE is a very powerful tool for serious Color Computer applications.

While you may want to use this software right away, please take the time to read the entire manual. It will familiarize you with the full potential of this software and help to prevent costly, time consuming, errors during your use of the program.

LOADING AND RUNNING

ELITE*FILE requires a Color Computer with a minimum of 32K RAM and one Disk Drive. ELITE*FILE will fully support users with multiple Disk Drives. There is no difference in program operation for Color Computers with 64K RAM.

Your ELITE*FILE program disk can be copied using the Color Computer BACKUP command. We recommend, before you go further, that you BACKUP the original program disk and then store it in a safe place. If you need more information for proper use of the BACKUP command, refer to the Color Computer Disk System Owner's Manual & Programming Guide which came with your Disk Drive #0

To load ELITE*FILE first make sure that your computer is in a "cold start" condition, i.e. reset it by turning the power off and back on. Now place a disk containing a copy of the software in Drive #0. Type RUN"FILE"<ENTER>. The program will be transferred into your computer's

memory. That's all there is to it! You are now ready to start using ELITE*FILE. Once ELITE*FILE has been loaded into the computer's memory, the program disk may be removed from drive #0 and replaced with a data disk. The ELITE*FILE program is totally memory resident and no further disk reads of the program are necessary.

GETTING STARTED

What is a FILE program? In the most basic terms a File program is one which is designed to remember things. A File program also provides the user with a method for rapid information retrieval.

ELITE*FILE is a full Data Base Manager. In addition to remembering items, this software will perform a number of user desired data manipulations. ELITE*FILE has so much power and flexibility that no single example can convey all commands, and their options, to the user. For this reason, the Instruction Manual has been structured for three levels of users; General, Advanced and Expert.

All ELITE*FILE users, regardless of previous experience with other programs, should begin at the General level. This level, in addition to performing filing tasks of considerable value, serves to train the user with the overall software command structure. You can't "fake" your way through ELITE*FILE! While this program has been carefully designed to be very user-friendly, its command structure must be learned for effective performance. Once this understanding has been achieved, each user can then move to the level which is sufficient to meet his/her needs. We believe most of our users will apply the program at the Advanced User level.

Before we proceed, it is necessary to define a few terms. Study these definitions carefully. We've worked

very hard to simplify our program instructions, but a common understanding of a few terms is required.

What is a FIELD? A Field is an item that you wish the program to remember. Fields can be given names like CITY, STATE or PHONE NUMBER, etc.

What is a RECORD? A Record is a group of Fields. For example, your Record could be composed of Fields with names like... NAME, STREET, CITY, STATE, and ZIP CODE.

What is a KEY? A Key is a Field name, or list of Field names, by which you would like all Records arranged when they are stored on disk. This concept will be discussed in greater detail later. For now, just remember that ELITE*FILE will store your Records in order by Field Name(s) which you specify.

What is a FILE? In data management terms, a File is a collection or group of Records.

That's all the definitions we need to get started. You might want to study these definitions again if you are having difficulty understanding the terms involved. We know, for a new user, this wording might seem a little tricky. Also, if you are having difficulty with this new subject, there are many good books on Data Bases available at Computer Stores. When you feel confident with these definitions, it's time to proceed.

THE GENRAL USER

This section of the Manual will show you how to create Records, Display/Edit them, and prepare printed output which is customized to your desired format. It is HIGHLY recommended that you become thoroughly familiar with all ELITE*FILE commands that are discussed in this section before you begin to create and store your own Records.

Don't rush to type your 2,000 record Data Base. Take the time to thoroughly understand each command and then TRY each command with a small, sample, File of five or six Records. When you have demonstrated to yourself that ELITE*FILE can perform your desired functions, then enter your entire Data Base.

MAIN MENU DESCRIPTION -- If you have previously followed the procedure for Loading & Running the program, the Main Menu for ELITE*FILE should now be on the screen.

MAIN MENU

1. DEFINE RECORD STRUCTURE
2. COPY FILE DEFINITION
3. VIEW FILE DEFINITION
4. ADD RECORDS
5. EDIT RECORDS
6. SCAN RECORDS
7. LOAD ASCII FILE
8. GENERATE REPORT
9. RUN FORMAT FILE
0. QUIT (RETURN TO BASIC)

SELECT: _

Before we begin to use the Main Menu, each of its items will be further described. While some of their functions seem obvious, it is important to have a common definition for each Menu item.

1. DEFINE RECORD STRUCTURE -- Use this Menu item to setup, or define, your Record for ELITE*FILE. We will talk much more about this later. For now, be aware that ELITE*FILE requires a pre-planned structure for your Records.

2. COPY FILE DEFINITION -- Use this Menu item when you wish to copy Record Structures that have been previously defined for other Files via Menu item #1. ELITE*FILE recognizes that some user Record structures may be very complex. In this case, we have made the provision for a user to open a new File and COPY the definition of Records which have been used for another File. This feature, in some cases, will save the user considerable time.

3. VIEW FILE DEFINITION -- Once a File structure has been defined, using Menu item #1 or #2, use this Menu item to later display all Defined Field names and their lengths.

4. ADD RECORDS -- Once a File structure has been defined, using Menu item #1 or #2, use this Menu item to begin entering Records or to add more Records to an existing File.

5. EDIT RECORDS -- Once individual Records have been entered, using Menu item #4, use this Menu item to Edit or change the contents of any Record within the File.

6. SCAN RECORDS -- Use this Menu item to select and

display the contents of any Record within a File. With this feature you can move through a File with great ease. In addition, this feature DOES NOT permit the changing of Record contents. This additional feature allows the ELITE*FILE owner to permit other users (clerks, technicians, etc.) to have access to a given Data Base and prevents accidental change while scanning Record contents.

7. LOAD ASCII FILE -- Use this Menu item when Record contents are to be entered from a computer file generated by another program. This feature is to be used when Record information is being transferred from ELITE*WORD or ELITE*CALC data files. These programs have cross-file compatability with ELITE*FILE.

8. GENERATE REPORT -- Use this Menu item when you wish to display or prepare a printed report using your stored data.

9. RUN FORMAT FILE -- Before you can generate a printed report with ELITE*FILE, you must specify a Report Format. This will normally be done via Menu item #8. However, you may prepare your Report Format as an ELITE*WORD file and call that file using this Main Menu item. This feature will mainly be used when you desire to prepare repetitive reports that will always use the same Report Format.

0. QUIT (RETURN TO BASIC) -- Select this Menu item when you wish to exit ELITE*FILE and return to Basic. After you select this Menu item you will be prompted with "Are you sure?". If you press "Y", ELITE*FILE will be erased from memory and you will be returned to Basic. Pressing any key other than "Y" will abort this command and you will return to the Main Menu.

CREATING A SAMPLE FILE -- Now that you have some knowledge of the Main Menu, let's try an example. A very good application for a File program is to build a Data Base of names, addresses, and phone numbers. The following will describe how ELITE*FILE will accept this information, and what you can do with it once it's stored.

>>> DEFINING RECORD STRUCTURE (#1, Main Menu)

First, with the Main Menu displayed, press #1 so you may define your Record structure. After pressing Menu item #1 you will be prompted for a File NAME. For our example, type PEOPLE<ENTER>. You can use up to 8 characters for a File name plus an optional 3 character extension. If no extension is given, ELITE*FILE will assign /FIL as the extension.

After the File name is entered, ELITE*FILE will display the Define Menu:

```
                                DEFINE:PEOPLE/FIL  
FIELD:0      LEVEL:0      LENGTH:0
```

DEFINE FIELDS: _

To complete this Menu requires some careful planning. At this point you must specifically define the Name and character length for each Field that will be in your Record. Let's consider our example, and show you how to do this.

In our PEOPLE example we want ELITE*FILE to remember the Name, Street address, City, State, Zip Code, and Phone Number for every person. Each of these items is called a Field. Therefore, we can say that each of our Records will be composed of six Fields.

Now that we defined the Fields which are in each Record, the next task is to specify the character LENGTH for each Field. For our example let's specify the following Field names and lengths:

Name	30 characters
Street	30
City	20
State	4
Zip Code	7
Phone	12

NOTE: Field Names can only be composed of capital letters, numbers, and spaces between words if desired. No other keyboard characters are permitted. A Field Name must begin with a capital letter, spaces and numbers cannot be used as the first character. Field Name length should not exceed 125 characters. For more practical screen display purposes, Field Name length should be 32 characters or less.

NOTE: Defining Field Names and Lengths is like pouring concrete. Once it's done and set, it's difficult to change. After you have Defined a Record structure, and entered several hundred pieces of data, that is not the time to realize that each record should have contained one more Field of information. While ELITE*FILE does provide the flexibility to alter Record structure after data has been entered, it cannot be done at the General User level. For this reason, give careful thought and planning to this area before you Define your Record Structure.

With the Define Menu displayed, let's enter each of our Field Names and Lengths. To do this, type the following EXACTLY:

NAME:30<ENTER>

STREET:30<ENTER>
CITY:25<ENTER>
STATE:4<ENTER>
ZIP CODE:7<ENTER>
PHONE:12<ENTER>
(Wait here!)

Why did we choose these Field lengths? Well we picked 30 for Name and Street because computer Mailing Labels are 32 characters across. Since City and State will be on the same line at printout, their combined total is less than 32 characters. Also, even though the United States has two letter state abbreviations, Canada does not. That's why we picked a four character length for the State Field. Again, we have a five digit Zip Code, and the Canadian Field would require seven spaces. Phone numbers, with area codes, require a 12 space Field. Fourteen spaces would be required if the area code is to be in parentheses. We did this entire exercise to show you the degree of planning that must go into selecting Field lengths.

Moving to another subject, notice how the Define Menu keeps track of the total number of Fields and the total length for all Fields. The Define Menu item called "Level" will be discussed later in the Advanced User Section of this Manual.

With the above information displayed, press <ENTER> one more time. ELITE*FILE will now ask for your Primary Key. The Primary Key is the Field, or Fields (up to eight), that determines the order by which your Records will be stored on the disk. Generally, you should pick a Primary Key that will state the "topic" of the Record, in other words, who or what the data in the Record is about. You will be able to rearrange your Records into any sequence in a report regardless of the Primary Key picked. For our PEOPLE example, type NAME<ENTER>. The disk will come "on", your

Record Definition will be stored, and you will be returned to the Main Menu.

With a Primary Key of NAME, all Records will be stored in alphabetical order on the disk, by the contents of the NAME Field. Actually, any Record can be accessed at any time, but later search speed may be optimized by careful choice of Primary Key.

You may specify more than one Field in the Primary Key. For example, we could have typed: ZIP CODE,NAME<ENTER>. Up to eight Fields, can be typed separated by commas. In this example our Records would be numerically ordered by ZIP CODE and, within each ZIP CODE all NAMES would be ordered alphabetically.

The first method, using NAME as a Primary Key, would greatly shorten later search time for any person when the search is by NAME. The second method would take a little longer to find a person by NAME. However, if your need was to produce mailing labels already pre-sorted for the postal system, the second example for Primary Key would be preferred.

Before we proceed, let's try to answer some questions that you might have thought about:

1. How many Fields can be in a Record? 255
2. How many characters can be in a Field? 255
3. What is the maximum number of characters per Record? 2,000
4. How many Records will fit on a File? A File is limited to a single disk. One empty disk can hold 156,000 characters. Divide that by the number of characters in your Record Definition, and that's the answer. There is a limit of 4,000 Records per File, but you can have more than one File on a disk and

ELITE*FILE is able to retrieve Records from more than one File (up to 16) at the same time.

With this additional information now behind us, let's continue with our example and input some Records to the File we just defined. To do this, we will use item #4 of the Main Menu.

>>> ADDING/ENTERING RECORDS (#4, Main Menu)

Press #4 at the Main Menu to begin entering our Records. You will first be prompted for a File Name? If the desired File Name is shown as a default, press <ENTER>. If not, type the File Name which you desire. ELITE*FILE will load the Record Structure for this File Name and it will be displayed on the screen. The cursor will be positioned for you to type your first Field entry. Type the following:

```
JOHN DOE<ENTER>
123 ANYSTREET<ENTER>
EVERYTOWN<ENTER>
USA<ENTER>
12345<ENTER>
123 555-1234 (Wait here!)
```

For this example we used all capital letters. However, you can use both upper and lower case letters by first typing <SHIFT><ZERO>. This converts the keyboard to respond with upper and lower case characters.

Did you notice how the cursor automatically moves from one Field to the next everytime you pressed <ENTER>? You can also use the UP and DOWN ARROW keys to move the cursor to any Field which has been Defined within the Record. You can also use the LEFT and RIGHT ARROW keys to position the cursor anywhere within a given Field. At anytime you can "type over" existing characters within a Field for changes.

NOTE: WHEN ALL FIELDS HAVE BEEN COMPLETED THE WAY YOU DESIRE (IF YOU WISH, SOME MAY BE LEFT BLANK), PRESS <CLEAR> OR POSITION THE CURSOR PAST THE LAST CHARACTER OF THE LAST FIELD (OR THE LAST POSITION IN THE LAST FIELD) AND PRESS <ENTER>.

At this point in our example, press <ENTER> and ELITE*FILE will display a new "Field Page" to complete. Fill in the Fields as shown below and play with some of the Edit features which have been described.

```
ELITE SOFTWARE<ENTER>
BOX 11224<ENTER>
PITTSBURGH<ENTER>
PA<ENTER>
15238<ENTER>
412 795-8492<ENTER>
```

Before we finish this exercise, enter one more Record by completing the last "Field Page" with the following information:

```
RAINBOW MAGAZINE<ENTER>
BOX 209<ENTER>
PROSPECT<ENTER>
KY<ENTER>
40059<ENTER>
502 228-4492<ENTER>
```

The screen should be displaying another blank Field Page. Notice how ELITE*FILE keeps track of the total number of Records which have been stored. At this point, exit the Record Entry Mode by pressing <BREAK>. NOTE: If you ever press <BREAK> with a partially completed Field Page, THAT Record will NOT be saved on disk.

Now that we are back at the Main Menu, let's talk more about the Primary Key as it relates to Record storage time.

When you specify a Primary Key for a File, that specifies the ORDER in which Records will be stored on the disk. If you are typing Records for a large file, you will begin to notice ELITE*FILE taking a longer time to store a Record. This is because ELITE*FILE is first locating where the Record belongs according to order, then it "pushes" the remaining Records down to make room for the new one. NOTE: You can speed-up the Record entry process greatly if your Records can be entered in the SAME order as the Primary Key. For example, if your Primary Key is Name, your Record entry time can be improved if you could arrange your Records in alphabetical order, by Name, before typing. This may not always be possible, but some "entry efficiency" can be gained if you keep this in mind.

ELITE*FILE stores Records this way in order to save time when Records are to be retrieved, or sorted. The entire process is a design trade-off. If you already know the way you will most often recall Records when you select the Primary Key, ELITE*FILE will take advantage of that fact when they are entered.

>>> SCANNING RECORDS (#6, Main Menu)

Now that we have created our Records, and stored them on disk, it's now time to see how they can be recalled.

To use the SCAN feature, press #6 at the Main Menu. After you press #6, ELITE*FILE will prompt you for a File Name. If the desired File Name is shown as a default, press <ENTER>. If it is not, type the name of the File you want. For our example, use PEOPLE.

Next, ELITE*FILE will load our sample File. Once the File is loaded, the Scan Menu will appear, along with the

contents of the first Record. Notice how the Scan Menu displays the total number of Records stored in that File, and the File Name that you are working with. In addition, this Menu also displays the Record number which is being displayed.

Once a Record has been displayed, you can use the <UP ARROW> or <DOWN ARROW> keys to "scroll" through the entire Record and Scan its contents. However, these keys will not function with our example File (PEOPLE) because we are using less than one screen display for all Record contents. Nevertheless, keep this feature in mind for future use.

The cursor is now positioned to the left of the command alternatives which you have in the Scan mode. The letters shown on the screen stand for the following:

- N -- Display NEXT Record
- P -- Display PREVIOUS Record
- R -- RETRIEVE Record by specified number
- F -- FIND Record with specified text
- A -- Find (AGAIN) next occurrence of text
- K -- KEY search for specified text

Press the N key to view Record #2. Press it again to view Record #3. Now press R. ELITE*FILE will prompt you for a specific Record number. Press 1<ENTER> and Record #1 will be displayed. That's all there is to it!

Using the N and P keys, you can step through your entire File. In fact, for large Files, just hold the N or P key down and watch your Records flash by on the the screen.

Since ELITE*FILE reorders Records when new ones are entered, remember that numbers which have been previously assigned will change if that Record has been moved to make room for new ones.

With Record #1 displayed, press the F key. ELITE*FILE will prompt you for a Search String. At this point you can type any string and ELITE*FILE will attempt to find a match within any Field of your entire File. With the first match that is found, ELITE*FILE will retrieve and display that Record. NOTE: THE "FIND" COMMAND BEGINS ITS SEARCH FROM THE RECORD NUMBER WHICH IS DISPLAYED. To move back to the top of the File, Retrieve Record #1 with the R key.

For our "Find" example, we will search for a particular state. Type KY for the Search String. See how ELITE*FILE returned Record #3 which has the State, KY. Any string segment within any Field may be given for a Search String. If no (exact) match is found, the "pointer" is left at the same Record as before the Find command.

Like the Find command, the K, or KEY search command is used to locate a specific Record in the File. However, there are significant differences. The K command ONLY searches the contents of the first Field specified in the Primary Key (whose Name will be used as the "prompt" for the text string input). A binary searching technique is used with this feature, and it's VERY fast. The search is performed on the entire File, from the first to the last Record regardless of the pointer at the time of the command. If an exact match is not found, the pointer is left where that Record would have been, so this command can be used to get close to a given Record in a hurry. Since the Primary Key will in general identify a unique Record, or at most a few Records about the same topic, the K search will be used most often to located specific File entries, whereas the F command will be used to locate Records that contain some known contents in a Field that is not the Primary Key. The K command, because of its speed, will prove to be a great value to users with a large number of Records (200 or more) in a given File.

*Search argument must contain beginning of field.
(for "K" option)*

"CARRY"
Search = "CAR"

With the SCAN feature, you can move through any File with great ease. In addition, this feature DOES NOT permit the changing of Record contents. This allows others to have access to your Data Base and prevents accidental change to Record contents.

When you have finished using the SCAN feature, press <BREAK>, and you will return to the Main Menu.

>>> EDITING RECORDS (#5, Main Menu)

To use the EDIT feature, press #5 at the Main Menu. After you press #5, ELITE*FILE will prompt you for a File Name. Press <ENTER> for the default File Name, or type the desired File Name. Again, for our example, use PEOPLE.

Next, ELITE*FILE will load our sample File. Once the File is loaded, the Edit Menu will appear.

EDIT MENU

1. EDIT CURRENT RECORD
2. EDIT NEXT RECORD
3. EDIT PREVIOUS RECORD
4. EDIT RECORD NUMBER
5. FIND RECORD WITH TEXT
6. FIND NEXT OCCURANCE
7. DELETE CURRENT RECORD

<BREAK> GO TO MAIN MENU

SELECT: _

Before we begin to use the Edit Menu, each of its items will be discussed. While most of their functions appear obvious, it is important to have a common understanding for each Edit Menu item.

1. EDIT CURRENT RECORD -- Use this Menu item to

display and edit the present Record. When you first enter the Edit mode, the current Record is #1.

2. EDIT NEXT RECORD -- Use this Menu item to display and edit the next Record in the File. Actually, you are always in the Edit mode. This Menu item is used to move forward through the File.

3. EDIT PREVIOUS RECORD -- Use this Menu item to display and edit the previous Record in the File. Actually, you are always in the Edit mode. This Menu item is used to move backward through the File.

4. EDIT RECORD NUMBER -- Use this Menu item to edit a specific Record number. Press #4 and you will be prompted for a Record number. Enter your number, and that Record will be retrieved for edit.

5. FIND RECORD WITH TEXT -- Use this Menu item to locate a specific text string within any Record Field. Press #5 and you will be prompted for a Search String. Enter the text string you want to find and ELITE*FILE will search for that Record. The first match found will be retrieved for edit. NOTE: THE "FIND" EDIT BEGINS ITS SEARCH FROM THE CURRENT RECORD NUMBER. To move back to the top of the File, Retrieve Record #1 by using Edit Menu item #4.

6. FIND NEXT OCCURANCE -- Use this Menu item to re-execute the FIND command (Menu item #5) with the last search string given, AGAIN, from the current Record Number position within the File.

7. DELETE CURRENT RECORD -- Use this Menu item to delete the present Record. Before this command is executed, you will be prompted with "Are You Sure?". Press "Y" to Delete the Record. Also, notice that the

display Menu will decrease the total File size by one when this Menu item is used.

<BREAK> GO TO MAIN MENU -- Select this Menu item when your editing is finished and you want to return to the Main Menu.

For our example, press #1 to edit the current Record. After you press #1, ELITE*FILE will retrieve that Record (in this case Record #1) and wait for your edit commands.

The four ARROW keys give you access to any portion of the Record for editing. Once a Record has been displayed, you can use the <UP ARROW> or <DOWN ARROW> keys to position the cursor in any desired Field. In addition, you can use the <LEFT ARROW> and <RIGHT ARROW> keys to move the cursor to the left or right within any given Field. If you hold an ARROW key down it will continue to move the cursor the selected direction. Practice moving the cursor within the contents of the first Record.

Now let's try a sample edit. Position the cursor at the Field named Street. We now want to change Box 11224 to Box 123. First, use the <RIGHT ARROW> to position the cursor over the first 1. Now just type 123. ELITE*FILE uses a "type over" or "exchange" edit technique. The 123 replace the 112 in the old text. Also notice that our new text is shorter than our old text. That doesn't matter. After you type 123, press <ENTER> and ELITE*FILE will end the new text at that cursor position. The remainder of the old text will be "blanked-out".

Here is a more complicated edit procedure. Suppose you want to insert the words POST OFFICE in front of BOX 123 in the Street Field. First, position the cursor at the beginning of the Street Field. Next press, and hold down, the <SHIFT> key while you press the <RIGHT ARROW> key 12

times. Notice the Field "open up" to accept the new text. Now just type POST OFFICE.

Yes, this procedure also works backwards. Position the cursor at the beginning of the Field, press and hold <SHIFT>, while also pressing the <LEFT ARROW> key and text will be deleted, one character at a time.

For both of the above cases you do not have to press <ENTER> when finished. Just move the cursor to the next Field when finished.

NOTE: WHEN ALL FIELDS HAVE BEEN EDITED THE WAY YOU DESIRE (IF YOU WISH, SOME MAY BE LEFT BLANK), PRESS <CLEAR> TO SAVE THE EDITED RECORD AND RETURN TO THE EDIT MENU. IF YOU PRESS <BREAK>, NO CHANGES WILL BE MADE TO THAT RECORD. YOU MAY ALSO USE <SHIFT><CLEAR>. THIS WILL SAVE THE EDITED RECORD AND ALSO LEAVE THE UNEDITED RECORD IN THE SAME FILE. THIS PERMITS YOU TO COPY A RECORD OR CREATE A NEW RECORD THAT IS CLOSE IN CONTENT TO ONE THAT ALREADY EXISTS IN THE FILE.

You can now practice other Edit Menu functions if you wish. However, try to leave the sample Records intact before you PRESS <BREAK> (TO RETURN TO THE MAIN MENU). We will continue to use these Records for other examples.

>>> DISK DRIVE CONTROLS

ELITE*FILE will support from 1 to 4 disk drives. The user has full control over all drives. At any prompt for a File Name, type:

? -- For a Disk Directory from the default Drive
?1 -- Disk Directory for Drive Number specified
:1 -- Change default Drive to number specified
/[FILE NAME] -- To KILL (delete) specified File

>>> PRINTING A SAMPLE FILE (#8, Main Menu)

ELITE*FILE provides the user with some very powerful printed output capability. In the most general terms, you can print anything, anywhere on the page with ELITE*FILE. Along with this total flexibility, there are more commands. This section will show you how to master the print output commands of ELITE*FILE.

With the ELITE*FILE Main Menu on the screen, press #8 (GENERATE REPORT) to begin. The following Report Menu will be displayed.

REPORT MENU

- A. OPEN MAIN FILE
 - B. OPEN SUB FILE
 - C. CALCULATE FIELDS
 - D. SELECT RECORDS
 - E. GLOBAL FIELD CHANGE
 - F. SORT RECORDS
 - G. SET OUTPUT DEVICE
 - H. PRINT FORMAT
 - I. OUTPUT RECORDS
 - J. OUTPUT TOTALS
 - K. REFILE RECORDS
- <BREAK> GO TO MAIN MENU
SELECT: _

Before we begin to use the Report Menu, each of its items will be further described. Many of the Report Menu items will be further discussed in the ADVANCED USER section. However, a brief summary of all Menu items is presented here.

A. OPEN MAIN FILE -- Use this Menu item to Name the File(s) which ELITE*FILE is to use for this Report session. ELITE*FILE can have up to 16 Main Files open at one time for Record processing. These Files may be

on the same disk or on separate disks and drives (all four drives are supported), but they MUST have identical Record Structure Definitions. This requirement is met by using the COPY FILE DEFINITION command (item #2) in the Main Menu.

B. OPEN SUB FILE -- Use this Menu item to Name the File(s) which the Main File(s) are permitted to call on for further Report information during this Report session. Up to four Sub Files can be open at one time for additional reference by open Main Files. This powerful feature of ELITE*FILE will be explored in more detail in the Advanced User section of this manual.

C. CALCULATE FIELDS -- Use this Menu item to define Report Output Fields which do not exist in the Data Base Records but are to be calculated from information contained within the Records.

D. SELECT RECORDS -- Use this Menu item to collect specified groups of Records for further processing.

E. GLOBAL FIELD CHANGE -- Use this Menu item to replace the contents in any specified Field with new information. This Global Field Change will occur within all active Records at the time of command execution.

F. SORT RECORDS -- Use this Menu item to specify the order of Records for the Report Output.

G. SET OUTPUT DEVICE -- Use this Menu item to specify where Report Output information is to be sent; Screen, Printer, Disk File.

H. PRINT FORMAT -- Use this Menu item to define

printer and Output page parameters.

I. OUTPUT RECORDS -- Use this Menu item to begin data output.

J. OUTPUT TOTALS -- Use this Menu item to define totals of Calculated Fields in a user specified format.

K. REFILE RECORDS -- Use this Menu item when you want to store previous Records with new Record Definitions.

<BREAK> GO TO MAIN MENU -- Use this Menu item when you wish to end a Report Output session.

When using the Report Menu, you must first Open the File(s) which you intend to use. Do this by using Menu items A or B. You are then free to use any of the remaining Menu items in any order, and as many times as you wish, before you call for output information. NOTE: WHEN YOU LEAVE THE REPORT MENU, AND RETURN TO THE MAIN MENU, ALL FILES ARE CLOSED AND ALL REPORT MENU ITEMS ARE RESET TO THEIR DEFAULT VALUES.

Before we use the Report Menu to prepare printed output, we should talk about printer Baud Rate. ELITE*FILE is supplied with the printer Baud Rate set to 600. To change the program to another default Baud Rate, first LOAD"FILE", edit line #130 to your desired Baud Rate, then re-save with SAVE"FILE". The Baud Rate may also be changed from the "PRINT FORMAT" selection (item H) on the Report Menu.

>>> SAMPLE OUTPUT SESSION

With the Report Menu on the screen, press A (OPEN MAIN FILE) to begin the session. After pressing A, ELITE*FILE will prompt you for a File Name. At this point we will use

our sample File, PEOPLE. Type PEOPLE<ENTER>.

After we enter the File Name PEOPLE, ELITE*FILE will return to the Report Menu. If we would have had more than one Main File, we could return to Menu item A again. ELITE*FILE can have up to 16 Main Files open for information processing at one time.

Now, with the Report Menu on the screen, press G to set our output device. ELITE*FILE will prompt us for Screen, Printer, or Disk File. Press S and we will send our first output to the screen. Actually, the default setting is for Screen, but this exercise did show you how to use this Menu item.

With the Report Menu on the screen, press "I" to specify our output Format. ELITE*FILE will now display a Format Page for you to enter your desired Format. This Format can not exceed 445 characters in length. You can use any of the following items, seperated by commas, in your Format definition:

[FIELD NAME] - Names of any defined Record Fields may be used.

[FIELD NAME](#) - The specified number of characters from the Field are output. If the number is zero then the whole Field is output except that all trailing spaces in the Field will be suppressed.

[FIELD NAME]("##") - Specifies the format of the output Field according to the "PRINT USING" feature of EXTENDED BASIC. Whether the Field has been defined as a Text Field or Numeric Field (see Advanced User section), the "##" portion of this definition can use a Print Using Format. For an example, PRICE("\$##.##"), or QUANTITY("###"). NOTE: Only the

Print-Using NUMERIC command formats can be used with this ELITE*FILE command. Also, they must be enclosed within parentheses and quotes as shown.

"[TEXT]" - Any free form text that you desire.

CR - A Format reserved word for Carriage Return.

PAGE - A Format reserved word for go to the top of the next page and print the Title specified in item H of the Report Menu.

TAB(#) - A Format reserved word which means move the print position to the line column number specified.

VTAB(#) - A Format reserved word which means move vertically to the specified line number (and reset line position to column 1).

\$AAAAAAAA - Output any Hex Codes directly to the printer.

At first these new terms are difficult to understand. Continuing with our example will quickly show you how they are used. With the Format Page displayed, let's Output something simple first.

In our sample File, one of our Record Fields was called NAME. Just type NAME<ENTER>.

Notice how ELITE*FILE went through all of the Records, pulled the NAME Field from each Record, and placed its contents on the screen. Now press <BREAK> to return to the Report Menu.

When you are typing Output Formats, the four ARROW keys give you access to any portion of the Format for editing.

You can use the <UP ARROW> or <DOWN ARROW> keys to position the cursor in any desired screen line. In addition, you can use the <LEFT ARROW> and <RIGHT ARROW> keys to move the cursor to the left or right within any given line. If you hold an ARROW key down it will move the cursor continuously in the selected direction.

ELITE*FILE uses a "type over" or "exchange" edit technique. Position the cursor over the character where you want the change to begin and just type. If your new text is shorter than our old text, press <ENTER> and ELITE*FILE will end the new text at that cursor position. The remainder of the old text will be deleted. *Otherwise, you must move the cursor to the end of the line to save all of the text.*

If you want to insert words in the text, first position the cursor where you want the insert to occur. Next press, and hold down, the <SHIFT> key while you press the <RIGHT ARROW> key several times. Notice the line "open up" to accept the new text. Now move the cursor to the beginning of the space and just type.

Yes, this procedure also works backwards for deleting characters. Position the cursor where you want to delete text, press and hold <SHIFT>, while also pressing the <LEFT ARROW> key and text will be deleted.

ELITE*FILE always saves the last Print Format instruction (or until you use some other Report Menu feature like Select, Sort, or Print Format). This feature is designed to save you time when you want to make minor corrections to a Format instruction and get another printout. If you no longer want the Format which is displayed, type your new Format over the old one and press <ENTER>.

Press "I" again and type the following EXACTLY:
NAME,CR,STREET,CR,CITY,STATE,CR<ENTER>

This time we get something that begins to look closer to mailing labels. Notice how far the STATE Field is away from the CITY. That's because we originally specified a CITY Field length of 25 when we structured the Record.

To move the STATE closer to the CITY, re-enter the Output Format Page and type:

```
NAME,CR,STREET,CR,CITY(15),STATE,CR<ENTER>
```

This time we limited the CITY Field to 15 and that moved over the STATE Field. If we would have used CITY(0), this specifies no defined width to the CITY Field, and the STATE Field would begin exactly where the CONTENTS of the CITY Field ends. This is very good for addresses and we will use it later in an example.

Now try this:

```
NAME(18),PHONE,CR,CR<ENTER>
```

How's that for a quick display of everybody and their phone number!

Now return to the Report Menu and press G (SET OUTPUT DEVICE). Select P for printer, and we will try some printed output.

Now press "I" and specify this mail label Output Format:

```
NAME,CR,STREET,CR,CITY(0)," ",STATE,CR,ZIP CODE,CR,CR<ENTER>
```

This should have generated mailing labels for all your Record contents.

NOTE: IF YOU WISH TO REUSE AN EXISTING OUTPUT FORMAT (OR ONE WHICH YOU HAVE MODIFIED SLIGHTLY), PRESS "I" FOR OUTPUT FORMAT, THEN POSITION THE CURSOR ANY NUMBER OF SPACES PAST

THE END OF THE LAST CHARACTER (USE THE <DOWN ARROW> KEY)
AND PRESS <ENTER>

NOTE: IF YOU LEAVE THE REPORT MENU AND RETURN TO THE MAIN
MENU, ALL FILES ARE CLOSED. UPON RE-ENTERING THE REPORT
MENU, SELECT "A" TO RE-OPEN YOUR MAIN FILES.

Now type this Output Format as one continuous line:
PAGE,"THIS IS A TEST",VTAB(20),"NAME: ",NAME,CR,"TELE-
PHONE: ",PHONE<ENTER>

This Format will type a sample line at the top of the
Page, move to page line #20, print the NAME and PHONE
Fields, then go to the top of the next page for the next
Record.

The entire Print Format option for ELITE*FILE only uses
8 commands. However, these commands allow you to print or
display any stored information anywhere on a printed page
or screen.

While the list of possible applications for these
features is endless, they were created with two objectives
in mind. First, they provide you with considerable
flexibility when printing your custom reports. Second, you
can also output Record information on preprinted forms
(invoices, purchase orders, etc.) for business
applications.

*** GENERAL USER HINTS ***

Now that we have presented all the instructions for the General User Section, please read the following before beginning serious work using ELITE*FILE.

Since we are a supplier of many powerful utility programs, we also deal with many, and varied, user application problems. Many application problems can be avoided by following these simple rules:

1. Use disks of the highest quality for serious work. This will help to avoid I/O errors when you least want them.
2. Read this Manual carefully and understand all of your command options.
3. Practice all program commands before you use them for serious work.
4. Create a sample file of only five or six Records to test your Record definition, then generate sample Output using every command feature you will need. If the sample file does what you want, then enter all your Records.
5. Make BACKUP copies of your information disks FREQUENTLY. Treat your important files seriously... make BACKUP's.

THE ADVANCED USER

This section of the Manual will introduce you to additional concepts which ELITE*FILE offers during Record Definition, faster ways to use ELITE*FILE's Menus, and much more program capability when generating Output Reports. Do not proceed until you understand all of the commands and concepts that were discussed in the General User section of this Manual. The style of this section will shift from that of the General User. Before, the features of ELITE*FILE were not discussed completely and extensive examples were used to convey general concepts where they could not be expressed in simple terms. In this section, the "missing" features are filled in, although in some cases, extra effort will probably be required to gain understanding. Examples are kept to a minimum so that you can spend more time at your keyboard and less time reading. For a complete but concise description of all ELITE*FILE commands, a Reference Summary has been included at the end of this manual. It may help to read the appropriate portions of that summary in parallel to the reading of this Advanced User section for diverse angles on a given concept.

>>> SINGLE KEY COMMANDS (Main & Edit Menus)

For Advanced Users ELITE*FILE offers a faster way to use both the Main and Edit Menus that dispenses with the need to read the items displayed on these Menus. When these Menus are displayed, you do not have to press a number to select a program function. Rather, press the first letter which corresponds to the function that you want to perform.

For the MAIN MENU, press (D)efine, (C)opy, (V)iew, (A)dd, (E)dit, (S)can, (L)oad, (R)eport, (F)ormat, or (Q)uit. When using the EDIT MENU, press (C)urrent, (N)ext, (P)revious, (R)ecord, (F)ind, (A)gain, or (D)elete. Using

this features permits ELITE*FILE to respond with less user effort. This type of "first letter" command is not provided on the Report Menu because the number of items on that Menu required the use of letters rather than digits, and there are too many conflicts for the obvious letter choices (e.g. Sub-file, Select and Sort).

>>> DEFINING NUMBER FIELDS (#1, Main Menu)

When defining Fields in the General User section, we only talked about Field Name and length. If the Field Name which you specify will contain numbers, a different approach might be needed. If the numbers you intend to use are Zip Codes, Phone Numbers, Street Addresses, etc., then continue to use the procedures which we discussed in the General User section. However, if your Field contents will be Quantities, Prices, Amounts, etc., then you may define that Field as a Numeric Field which stores number values in BASIC's standard Floating Point format. This may save File space since a Numeric Field uses only five bytes to store any floating point number. Also, using this feature will permit ELITE*FILE to properly compare and correctly sort Numeric Field contents with proper alignment of the decimal point.

When the Field contents will be a number, Define the Field with, [FIELD NAME]:N (numeric field). For example, QUANTITY:N

NOTE: A Numeric Field should not be specified as a Primary Key Field. Also, do not define a Sub-Field (see below) as a Numeric Field because if that Field is recalled by a "higher" level name, its contents would be treated as text.

>>> SUB-FIELDS AND THE LEVEL CONCEPT (#1, Main Menu)

With the ELITE*FILE Main Menu on the screen, press #1 to Define a Record Structure. When you are prompted for a File Name, use TEST.

Remember, in the previous discussion of Record Structure, we did not discuss LEVEL in the Define Menu display. LEVEL permits the grouping of Fields. It works this way:

1. At the DEFINE FIELDS: prompt, type CUSTOMER:<UP ARROW><ENTER>

2. Notice that LEVEL now indicates 1. Anything that we define now will be a Sub-Field of the CUSTOMER Field.

3. Now type, FIRST NAME:15<ENTER>

4. And type, LAST NAME:15<ENTER>

5. The concept of Sub-Field should become clearer now. So far we have defined a Field called CUSTOMER which is composed of two Sub-Fields... FIRST NAME and LAST NAME.

6. Press <ENTER> and notice that LEVEL now returns to zero. This indicates that we have returned to the top level again.

7. Now type, ADDRESS:<UP ARROW><ENTER>

8. Level now returns to 1.

9. Type, STREET:30<ENTER>
CITY:20<ENTER>
STATE:4<ENTER>
ZIP CODE:7<ENTER>

10. All of the above are now Sub-Fields of a Field called ADDRESS. Press <ENTER> to return to the top

level.

11. Now press <ENTER> again and ELITE*FILE will prompt for a Primary Key.

12. At this point type, LAST NAME,FIRST NAME<ENTER>

With the Primary Key defined in this way, all Records will be stored in alphabetical order by LAST NAME, then by FIRST NAME. Also, you will see later that when you want to output LAST NAME and FIRST NAME... all you have to do is ask ELITE*FILE for CUSTOMER and the entire group will be returned. Nice features, aren't they! NOTE: Sub Levels may be nested to any depth, subject to two restrictions, first, no more than 255 total Field Names may be defined and second, the total length of the Sub-Fields under any given Field cannot exceed 255 characters.

>>> COPYING FILE DEFINITIONS (#2, Main Menu)

ELITE*FILE permits the copying of one File definition to another File. This feature is helpful when you are storing Records on a periodic basis. For example, suppose that you are storing January customer orders in a File named INVOICES.JAN. Now it is the end of the month and you want to switch to a new File named INVOICES.FEB, and so on. Every month you would have to create a new Record Structure Definition that would be indetical to the previous month's. However, with the Copy File Definition feature the user can create new Files with the same Definition very easily.

To use this feature, press #2 at the Main Menu. ELITE*FILE will prompt you with, "Copy from File Name?". At this point type the Name of the File which has the Definition that you wish to be copied. ELITE*FILE will assume a default extension of /FIL if none is given. After

you enter this File Name, ELITE*FILE will prompt with, "To File Name?". Now type the File Name that you want the previous File Definition copied to. Again, if you do not specify an extension, /FIL will be assigned by ELITE*FILE.

NOTE: By copying a File Definition to itself, all Records can be deleted without losing the original Record Structure Definition.

>>> VIEWING FILE DEFINITION (#3, Main Menu)

ELITE*FILE permits the viewing of any File Definition. This feature is helpful when you want to see how a File was originally defined.

To use this feature, press #3 at the Main Menu. ELITE*FILE will prompt you with, "View File Name?". Press <ENTER> if the File Name you desire is shown as a default. Otherwise, type the File Name you desire.

ELITE*FILE will then prompt you with "Hard Copy (Y/N)?". If you press Y, for Yes, the File Definition will be sent to your printer. A No answer will display the File Definition on the screen.

The View display (either screen or printer) will indicate:

1. NF -- Number of Fields
2. RL -- Record Length (total characters)
3. OF -- Offset (see EXPERT USER section)
4. NR -- Number of Records in File
5. All Field Names and their lengths
6. Fields in Primary Key indicated with their priority

If the Record Definition extends over one screen page, press any key to display the next page. To exit the View mode, press <BREAK>.

>>> LOADING ASCII FILES (#7, Main Menu)

ELITE*FILE permits the loading of ASCII data files from other programs like ELITE*CALC and ELITE*WORD. This permits the user to take advantage of other program features before moving data to ELITE*FILE. ELITE*CALC users can use the more powerful calculating features of ELITE*CALC and then save their worksheet in ASCII for later transfer to ELITE*FILE.

Data files can also serve a double purpose. For example, addresses can be typed in ASCII (on ELITE*WORD) to be merged as Variable Text within form letters using ELITE*WORD. However, the same file information can then be loaded on ELITE*FILE, as part of an overall data base, without having to retype all the information.

To use this feature, press #7 at the Main Menu. ELITE*FILE will prompt you for the ASCII file name. You can type the ASCII file name and drive number as you would in Color Disk Basic. If no file name extension is used, /TXT is the default extension. Make sure the disk containing the data has been inserted into the proper drive before you type the file name. After the file name is entered, ELITE*FILE will test to make sure that data file exists before you can proceed.

Next, you will be prompted for the ELITE*FILE Record File name which is to load the ASCII data. Make sure the disk containing that File has been inserted into the proper drive before you type the File Name. After the File Name is entered, ELITE*FILE will test to make sure that File exists before you can proceed.

ELITE*FILE will then prompt you for a data entry FORMAT. The Format to be used is very similar to the one which you learned for Output Format in the General User section. Two Format techniques can be used.

First, if the ASCII data is short single lines (like addresses from ELITE*WORD), where each line is to be an entire Field contents, then use this Format: [Field Name],CR,[Field Name],CR,[Field Name] etc. A further example might look like, NAME,CR,STREET,CR,CITY etc.

Second, if the ASCII data is in long lines (like rows from and ELITE*CALC worksheet), where many Fields will come from one line, then use this Format: [Field Name](#),[Field Name](#),[Field Name](#) etc. The # sign represents the number of spaces within the ASCII data line that are devoted to this Field; ELITE*CALC column widths.

ELITE*FILE inputs a line (all characters up to the next carriage return) and passes the data to the Fields as specified in the Format that you defined. For each Field specified, the number of characters indicated in parentheses are used. If no length is specified, then the Field length is taken from the File Definition. In addition to the above, you can control the pointer in the ASCII input line by using the TAB(#) and SKIP(#) format commands. TAB(#) means move to the ASCII line position number specified. SKIP(#) means ignore the next specified number of ASCII characters. The CR format command causes a new ASCII input line to be read and continues to scan the format from that point on, thus it is used when one File Record will be made up of multiple lines from the ASCII File. There is no way to have multiple Records generated from a single ASCII input line.

After you have finished typing your Format, press <ENTER> and the ASCII file data will be loaded into ELITE*FILE. You can verify that the data has been entered by using the Record Scan feature (item #6 on the Main Menu) to read the Records after the Input is done.

NOTE: Large ASCII files may take some time (minutes) to load on ELITE*FILE. This will be particularly true if they are not arranged in the approximate order of the Primary Key. For example, a file of addresses, not in order by Primary Key, will transfer at the rate of 6 seconds per Record. If possible, the ASCII file should be arranged in the same order as the Primary Key. If this is not possible then break-up your ASCII file contents into several smaller ASCII files and load them one at a time. Multiple Drive users can improve data transfer speed if the ASCII file is being read from another disk drive. Regardless, before data transfer, review your ASCII file (with ELITE*WORD) and remove text like Titles and Section Headings that should not be transferred to ELITE*FILE.

>>> RUNNING FORMAT FILES (#9, Main Menu)

When you desire printed output from ELITE*FILE you will have to specify an Output Format. This is normally done via Report Menu item "I". If the Report that will be generated will be used over and over again, then there is a way that these reports can be produced without retyping an Output Format every time which would be a tedious task indeed. This way is to prepare a Format File with ELITE*WORD, this Format File containing all of the Report Menu commands that you would have previously entered manually from the keyboard. The Format File is then "Run" by using item #9 on the Main Menu.

The Format File feature has two advantages. First, you can specify (and save) your report format as an ELITE*WORD file. This will allow you to develop elaborate report formats like entire Order Forms, Invoices, etc. Using this feature you can also develop report formats that will permit ELITE*FILE to prepare reports on pre-printed computer forms; a valuable feature for business users.

Second, once detailed report formats are developed,

entire (complex) reports can be prepared by non-skilled users. All the non-skilled user has to do is load and run ELITE*FILE, place the correct disk(s) in the drive(s), press #9 on the Main Menu, type the report format File Name and ELITE*FILE does the rest.

Although it is possible to create a Format File without the use of ELITE*WORD (see the Expert User section for details), it will be far easier if you have this powerful Text/Word Processing tool. To create a Format File, first Load and Run ELITE*WORD. Enter the text Insert mode and you are now ready to begin typing your Report Format. Each command in the Format File will consist of a "string" of characters (up to 800) followed by a carriage return. The syntax of a Format File command is a Keyword, followed by a colon (:) and a parameter that would have been the typed input if you were generating the Report manually. You have the following Key Word commands to choose from:

- OPENMN:[File Name]
- OPENSB:[File Name]
- CALC:[Calc Field Name]=[Formula]
- SELECT:[Select Relations]
- GLOBAL:[Field Name]=[New Contents]
- SORT:[Field Name List]
- DEVICE:[S, P, or A,Field Name]
- FORMAT:[List of Print Formats]
- OUTPUT:[Output Format]
- TOTALS:[Output Format]
- REFILE:[File Name]

These commands will be "executed" as they are encountered in the File, and may be repeated as necessary to achieve the desired results, within the limitations of ELITE*FILE. The proper use of these Key Word commands is quickly shown with an example. With ELITE*WORD in the Insert mode, and the cursor in line position one, suppose you typed the following:

```
OPENMN:DEALERS.DEC<ENTER>
OPENMN:DEALERS.JAN<ENTER>
SELECT:SALESMAN="JD"<ENTER>
SORT:LAST ORDER DATE<ENTER>
FORMAT:TL="Salesman Report",TM=0,BM=0<ENTER>
DEVICE:P<ENTER>
OUTPUT:NAME,CR,COMPANY,CR,PHONE,CR,"Last Order Date: ",LAST
ORDER DATE,"NOTES: ",CR,CR,CR<ENTER>
```

Make sure that each line ends with a carriage return. Let's say we saved the file with the Name, SALESRPT.JD. The ELITE*WORD file must be saved in the Binary Format. Do not end the File Name with a semi-colon or comma.

With the above file saved, Load and Run ELITE*FILE (you will find it more efficient to prepare a disk that contains both ELITE*WORD and ELITE*FILE). Now select item #9 on the Main Menu. ELITE*FILE will prompt you for the Format File Name. Have your printer ready, the disk(s) in the proper drives, type the File Name SALESRPT.JD and press <ENTER>.

Our File Name stands for Sales Report, John Doe. When ELITE*FILE reads the ELITE*WORD file it will first Open the Main File DEALERS.DEC (Dealer orders for December). ELITE*FILE will then Open a second Main File DEALERS.JAN (Dealer orders for January).

Next, ELITE*FILE will SELECT only the Dealer orders from these two files where the salesman was JD (John Doe). Then ELITE*FILE will arrange those orders in ascending order by the contents of the LAST ORDER DATE Field.

Finally, a new Printer Format is specified. The printer is selected as an output Device, and the Output Format is specified.

ELITE*FILE will perform all of the above automatically

after the Format File Name is given under item #9 of the Main Menu.

Often, a Report Format File would be the same with the exception that the File Name, or perhaps Select parameter, would be different. Of course, you could use ELITE*WORD's edit features to change the Format File before each use, however, there is a way to input these differences from the keyboard at the time that the Format File is Run. This will be done by using the Variable Text feature of ELITE*WORD. For example, the SELECT line in our ELITE*WORD file could have been typed: SELECT:SALESMAN="<CLEAR>V". Variable Text markers can be inserted anywhere in your ELITE*WORD file (except to replace Format Key Words) and any number can be used. When the "Variable Text" marker is encountered in the Format File, that command is displayed on the screen with the cursor flashing at the point where the Variable input is required. Type in the desired parameter and press <ENTER>, ELITE*FILE will then continue to process the Format File.

If we would run the above Format File, with the Variable Text marker, ELITE*FILE would perform the same operations as before. However, when it got to SELECT, ELITE*FILE would stop and wait for further input from the keyboard. At this point you could type JD, or any other salesmen's initials that you wish. Using the Variable Text feature makes the Format File much more general, and powerful.

>>> MULTIPLE MAIN FILES ("A", Report Menu)

In the examples of the General User section, the Main File was opened by Report Menu item A as the first step to generating a Report. ELITE*FILE can have more than one Main File (up to sixteen) open at a time in the Report Menu. This capability is provided for several reasons.

First, there will be users that will have a File size that exceeds the capacity of one disk. Using multiple main files, that user can "continue" his file on another disk and drive. Large data base users can now have, in effect, one large file spread across four disk drives and ELITE*FILE will provide direct access to any Record any time by opening more than one Main File.

Second, some users may wish to store their data in defined blocks, and later prepare reports from several blocks at the same time. An excellent example is financial information. Some users may wish to keep monthly Record files. When they wish to do a quarterly or yearly Report, they will open more than one Main File. Main Files that are opened at the same time must have identical Record Structure Definitions.

To open more than one Main File, just re-use item A of the Report Menu. Each time give a new File Name. ELITE*FILE will permit 16 Files to be open at any one time. If the Files are contained on more disks than there are drives available, append each File Name in the OPEN command with ",P". ELITE*FILE will then PAUSE and PROMPT you to insert each disk prior to its being used.

>>> SUB FILES ("B", Report Menu)

Item B of the Report Menu is "OPEN SUB-FILE". Using this item, up to four Sub-Files can be opened. These Sub-Files make ELITE*FILE into a "relational" Data Base Manager. Everytime a Record is accessed from the Main File, corresponding Records are "joined" to it from the open Sub-Files. This means that the Sub-File will be searched for a Record whose Primary Key Fields contain the same data as Fields with the same Name in the Main File. While it is the Primary Key of the Sub-File that determines the join function, it is not necessary that the matching Fields be in the Primary Key of the Main File.

This process is best illustrated with an example. Suppose that we have defined a Main-File of INVOICES that have the following Record Definition:

INVOICE NUMBER:6
DATE:6
NAME:30
QUANTITY:2
PRODUCT CODE:4
PRICE:10

The Primary Key for this File is INVOICE NUMBER. Assume that Records pertaining to several sales have been entered into this File.

Now, we would like to print out an invoice that includes the above data, plus the address of the customer. This latter data can be obtained from the PEOPLE File of our previous example by opening it as a Sub-File. The Primary Key of this Sub-File is the Field NAME. When an invoice Record is retrieved from the Main File, the field NAME in that Record will contain some data, say "John Doe". ELITE*FILE will then search the PEOPLE File, automatically, for the Record which contains "John Doe" in the NAME Field. When it is found, ELITE*FILE will then load the Fields STREET, CITY, STATE, ZIP CODE and PHONE. Any of these Fields can now be included with Fields from the INVOICE File in Print Formats, Selects, or Sort commands, etc. NOTE: FOR THE RELATIONAL PROCESS TO WORK, THE REFERENCE, OR COMMON FIELD (i.e. NAME), MUST HAVE BEEN A PRIMARY KEY OF THE SUB-FILE. ALSO, ALL FIELDS THAT HAVE BEEN SPECIFIED AS THE PRIMARY KEY OF THE SUB FILES MUST BE CONTAINED WITHIN THE DEFINITION OF THE MAIN FILE (BUT NOT NECESSARILY ITS PRIMARY KEY).

>>> CALCULATING FIELDS ("C", Report Menu)

Use this feature when you wish to define Fields whose contents is to be Calculated using the contents of other Fields within the Record. The use of this feature is best shown with an example.

Suppose every Record in your File has a Field Named QUANTITY and a Field Named UNIT PRICE. When you print this information, you would like to show QUANTITY, UNIT PRICE, and define a new Field called TOTAL. The TOTAL Field does not exist in the Record, but is the product of the contents of the QUANTITY and UNIT PRICE Fields.

The TOTAL Field is called a Calculated Field. It can be defined by selecting "C" on the Report Menu. ELITE*FILE will prompt you for a Calculate Format. At this point type, TOTAL=QUANTITY*PRICE<ENTER>. The Field that is defined by the Calcuate command will be Numeric, however, the Fields referenced in the Formula may be either Numeric or Text. In the case of the latter, ELITE*FILE uses BASIC's VAL function to determine the Numeric value to be used. You can now use the Field Name TOTAL in your Output Format (Report Menu item "I") and it will be calculated when needed for output.

Calculated Fields may reference other Calculated Fields. However, they are calculated in the same order in which they were defined; watch for "forward" references. NOTE: CALCULATED FIELDS CAN ONLY BE DEFINED USING +,-,*,/ FUNCTIONS. IF A COMBINATION OF FUNCTIONS ARE USED, ELITE*FILE WILL EXECUTE THE EQUATION FROM LEFT TO RIGHT. NO PRIORITY IS ASSIGNED TO ONE FUNCTION OVER ANOTHER. PARENTHESES MAY BE USED TO GROUP FUNCTIONS FOR DESIRED CALCULATION ORDER. "TEXT" FIELDS MAY ALSO BE REFERENCED IN WHICH CASE THE VAL FUNCTION WILL BE USED.

One calculation per line unless separated by a colon ":".

>>> SELECTING CERTAIN RECORDS ("D", Report Menu)

When you open the Main File(s) all of the Records contained in those Files are "Active" Records, i.e. they will appear in the Report through the Output Menu Item. You may reduce the number of "Active" Records by using the "D" item on the Report Menu to collect a certain group of Records from the Main File(s) for further processing by ELITE*FILE. First, open your Main File(s) by using Menu item "A". To use this feature, press "D" on the Report Menu. ELITE*FILE will then prompt for a Format. The following general structure should be used:

[Field Name]<logical operator>"[Field Name Contents]"

NOTE: THE [FIELD NAME CONTENTS] SHOULD NOT BE PLACED WITHIN QUOTES (") IF IT HAS BEEN DEFINED AS A NUMERIC FIELD.

For example, if you had our PEOPLE File opened, you could then type:

NAME="ELITE SOFTWARE"

This command would select only those Records from the Main File(s) that had a Field Name Contents of ELITE SOFTWARE for further processing. Take special note that the Field Name contents are specified in quotes (") when using this command.

Notice how the number of "Active" Records is displayed each time ELITE*FILE returns to the Report Menu. SELECT can be used again and again to further reduce the number of "Active" Records. You can RESET the number of Active Records back to the full Main File size by pressing "D" for SELECT, then typing @<ENTER>. This is a SELECT Reset. It tells ELITE*FILE that ALL of the Records are to be searched when the NEXT Select command is given.

Another example:

NAME<>"ELITE SOFTWARE"*ZIP CODE="15238"

This command would cause ELITE*FILE to select only those Records from the Main File(s) where the NAME Field contents WAS NOT ELITE SOFTWARE AND the contents of the ZIP CODE Field WAS 15238. Note that the AND logical operator was specified with an asterisk (*). Further, note that no spaces appear on either side of the asterisk. An OR function is also available, and is specified with a plus sign (+). More complex logical operations may be grouped in parenthesis.

You could have also performed the above example in a two-step approach. First, press "D" for SELECT. Next RESET the Active Records by typing @<ENTER>. Now press "D" again. This time type NAME<>"ELITE SOFTWARE"<ENTER>. ELITE*FILE would find all Records without ELITE SOFTWARE in the NAME Field. Next, press "D" again. Then type ZIP CODE="15238"<ENTER>. ELITE*FILE would further select only the Records with 15238 Zip Codes from the remaining group.

Here's another example (do a Select RESET first):

```
NAME<"ELITE SOFTWARE"
```

With this Select command, ELITE*FILE will collect all Records from the Main File(s) where the contents of the NAME Field is alphabetically before ELITE SOFTWARE.

When using the ELITE*FILE SELECT feature, the contents of the Select Field must be an EXACT Field match or ELITE*FILE will not Select the Record. For the example "ELITE SOFTWARE", that must be the entire contents of the NAME Field. If there is an extra character, ELITE*FILE would have passed the Record.

There is another method to Select Records from Main File(s). You may have a large File and wish to work with only a few Records. In that case follow this format when you type "D" for a Select: #<=10 (This means Select all Records with a Record Number less than or equal to 10).

It's the same as saying, "Give me the first 10 Records in the File." Notice, in this case, the number was not in quotes. Also, any relational operator could have been used (<, >, =, =>, =<).

You can also ask for specific Records, by number, from the Main File by typing the following at the Select Page: #=5+#=7+#=3. In simple terms, this statement says retrieve all Records whose Record Number is 5, or 7, or 3 from the Data Base. Note: This type of SELECT, i.e. by Record Number should only be used to Select Records from a single Main File, multiple Files are not allowed to be opened.

>>> GLOBAL FIELD CHANGES ("E", Report Menu)

Use this feature when you want to directly replace the contents of one Field in all Active Records with one command. Let's consider an example.

Suppose you have a File of 100 Records that represent your customers. Further, your 100 customers are serviced by 4 salesman (about 25 customers per salesman). You have a Field in each Record called SALESMAN. In this Field you have entered the salesman's initials that service that customer. What do you do when a salesman leaves (say John Doe), and you want to re-assign his customers (to Harry Doe)?

First, you would load the Customer file via Report Menu item A. Active Records will indicate 100. Then you would use Report Menu item "D" for a Select. Type at Select Format, SALESMAN="JD". ELITE*FILE will now Select all of John Doe's customers. When finished, Active Records will indicate 25. Now press "E" for the GLOBAL Field Change. Type at the Global Format, SALESMAN="HD". ELITE*FILE will now replace the contents of the SALESMAN Field for all Active Records with HD. All customer Records are now re-assigned.

A few notes. If the Field Name that you wish to change has been Defined as a Numeric Field, DO NOT place the NEW field contents in quotes (""). Also, the Global Field Change command works with Main Files only. Having Sub-Files Open won't hurt, but they will not be modified by the command. This command is the only one in the Report Menu that actually alters the contents of the disk File. These changes are permanent and do not "go away" when you leave the Report Menu. This command was included on this Menu so that the powerful Select command can be used to determine which Records will be changed.

>>> SORTING RECORDS ("F", Report Menu)

This feature is used when you want to change the order of the Records before you call for Output. The order may be determined by any Field and may be in ascending or descending sequence. To use this feature, press "F" on the Report Menu. ELITE*FILE will first display the maximum "Key Length", which is the combined length of the Fields that are specified for the Sort order. ELITE*FILE will next prompt you for a Sort Field List with a flashing cursor. At this point type the Field Name by which you want its contents Sorted. After you press <ENTER>, ELITE*FILE will do an ascending order sort. If you desire a sort in descending order, precede the Field Name with an asterisk. For example, *NAME<ENTER> will cause ELITE*FILE to sort the contents of the Field NAME in descending alphabetical order. NOTE: Multiple Fields (separated by commas) may be specified from the highest to the lowest priority. Ascending or descending sorting of Fields may be mixed freely.

The maximum Key Length is determined by the number of Active Records to be Sorted and the amount of memory available at the time of the Sort command. There will be times when you want to Sort by multiple Fields, but the

first Field Length is greater than the maximum Key Length. To get around this problem, you may limit the length of each Field used for Sorting by following the Field Name with a number in parentheses: Ex. NAME(10). This will leave some of the limited Key Length for other Sort Fields.

>>> PRINT FORMAT ("H", Report Menu)

This feature lets the user pre-set certain printer format parameters before data is sent to the printer. The following two letter codes (shown with their default values) are used.

LF=0 (Line feeds sent with each Carriage Return)

TL="ELITE*FILE" (Page Header Title) *Max. 50 char.*

BR=600 (Baud Rate)

Note: Select from 110, 150, 300, 600, 1200, 2400, 4800 or 9600.

PL=66 (Page Length)

Note: Setting Page Length to zero turns off Paging all together. If you set PL to another number, set FF=0.

TM=6 (Top Margin)

Note: If TM=0 then the Page Header (TL) will not be printed. *change in BASIC driver to '0' to merge with ELITE WORD - 142 POKER & HID51, & HO*

BM=6 (Bottom Margin)

LL=255 (Line Length)

Note: A carriage return will be automatically output when the Line Length is exceeded.

PP=0 (Page Pause "off")

SU=0000 (Set Up Code)

Note: The specified Hex codes will be sent to the printer which must already have been selected as the output device.

FF=1 (Form Feed=CHR\$(12))

Note: After ELITE*FILE has filled a page with Records, or when the PAGE function is used, it will send your printer a Form Feed to go to the top of a new page. That code will be an ASCII 12. If your printer does not respond to a CHR\$(12) then set FF=0. In this case ELITE*FILE will count carriage returns and send the proper number to advance paper to top-of-form at the end of output. Also, if you ever change PL to any number other than 66, set FF=0.

Any of these parameters can be changed (in any order). For example, you could type at the Print Format prompt:

SU=1B4C3132,TL="",TM=4,LF=1,BR=2400,PL=44,PP=1 etc.

The above Format line will do the following:

1. Output the Set Up Code. The HEX numbers 1B, 4C, 31, and 32 would be sent to the printer immediately, before any other Output. This feature could be used to turn "on" Condensed type or Emphasized type (send the appropriate Hex Codes for your printer). NOTE: For Set-up to work, the proper device (printer) must already have been selected by Report Menu item "G".
2. Delete the Title Header. No specific title will be printed at the top of each page.
3. Set the Top Margin to four lines.
4. Set the Line Feeds for Double spacing (or to give a line feed with each carriage return for those printers that require this).
5. Reset the Baud Rate to 2400.

6. Set the Page length to 44 lines per page.

7. Turn "on" Page Pause. ELITE*FILE will now stop output after every 44 lines of printout for the user to manually change single sheets of paper. Output can be resumed by pressing <ENTER>. Or any other key except <BREAK> which will abort the printout.

>>> ADDITIONAL OUTPUT FORMAT OPTIONS ("I", Report Menu)

One additional Print Format option has been provided for grouping Records that are related by the contents of the Field(s) by which they are Sorted. Use this command along with all the commands discussed in the Sample Output Session. This option prints common information only ONCE for each group of Records. For example, you might want to print a date, then follow it with all the Records that pertain to that date.

To use this option, type the word DIFF followed by a list of Field Names, or other Print Format comands, enclosed in parentheses. This list of Fields will only be output when NEW Record information is DIFFerent than in the previous Record. For example, the Output Format:

```
DIFF(CR,MONTH,"/",DAY,"/",YEAR,CR,CR)...
```

will cause the date to be printed above a group of Records that pertain to the same date. The DIFF Format option may only be used once within a given Print Format statement. All Output controls (e.g. TAB, VTAB, PAGE, etc.) may be enclosed within the DIFF command.

>>> OUTPUT TOTALS ("J", Report Menu)

Every time you specify a Calculated Field (using Report Menu item C), ELITE*FILE will automatically keep a running total for that Field Name in each output. For example, suppose we defined a Calculate Field: TOTAL=QUANTITY*PRICE.

After we Output all our Records via Report Menu item "I", we can retrieve the total for ALL Records by pressing "J" for Output Totals. ELITE*FILE will prompt for the Output Format to be used, however, for convenience, the Format just used in Output is listed for editing. Any references to Fields that are not Calculated Fields will be output as blanks (zero for Numeric Fields). ELITE*FILE calculates the Running Totals during the process of Outputting Active Records, therefore it is necessary to do this Output first.

When ELITE*FILE prompts for a Format. Use the same Format commands as for Output Records (see the General User section) to position the information anywhere on the page. This time, when you refer to a Calculated Field Name (i.e. TOTAL), ELITE*FILE will print the running total it calculated for that Field Name after all Records were output. This feature is handy for preparing a summary report based on all Record information.

>>> REFILING RECORDS ("K", Report Menu)

Refiling Records allows the user to merge the Active Records onto another File. This feature has many uses, the most obvious of which is to create a new File that contains a subset of the Records on a larger File. Also, this feature is used if you want to ADD MORE FIELDS to an existing File Definition or to change the Primary Key. More, you can use this feature to CHANGE THE NAMES of previously defined Fields within existing Files. These last two uses are distinct features. You cannot use Refile to make both types of changes at the same time. Let's consider an example for each feature.

Suppose you have previously Defined a Record structure and have already entered about 50 Records into this File. Now, as a result of using this information, you would like to add two new Fields to each Record. To do this, first go to the Main Menu and press #1. At this point type the File

Name for your NEW File. Now type the structure for your NEW File. Use the same Field Names (you may change lengths) that existed in your OLD File and also type your new Field Names. If you forget the exact structure of your OLD File, abort this procedure with <BREAK> and use Main Menu item #3 to View your OLD File Definition.

After you have completed a NEW File Definition, press #8 on the Main Menu to display the Report Menu. Now press "A" on the Report Menu to Open your OLD File Name. Next press "K" to Refile. ELITE*FILE will prompt you with "Refile to:". At this point type your NEW File Name. ELITE*FILE will now prompt you with "Match by Field Name?". Press Y, for Yes, and ELITE*FILE will now Refile all your OLD Records in the NEW File. As indicated, the Refile will take place by Field Name. This means ELITE*FILE will only move the contents of every OLD Record Field to the NEW Record IF THE SAME FIELD NAME EXISTS IN THE NEW RECORD. Field Names which exist in the NEW Record Definition, for which no contents can be found in the OLD Record, will be left blank.

Suppose you have previously Defined a Record structure and have already entered about 50 Records into this File. Now, as a result of using this information, you would like to change two existing Field Names of the Record Definition. To do this, first go to the Main Menu and press #1. At this point type the File Name for your NEW File. Now type the structure for your NEW File. Use the same Field Names (you may change lengths) that existed in your OLD File and also type your revised Field Names. If you forget the exact structure of your OLD File, abort this procedure with <BREAK> and use Main Menu item #3 to View your OLD File Definition.

After you have completed a NEW File Definition, press #8 on the Main Menu to display the Report Menu. Now press

"A" on the Report Menu to Open your OLD File Name. Next press "K" to Refile. ELITE*FILE will prompt you with "Refile to:". At this point type your NEW File Name. ELITE*FILE will now prompt you with "Match by Field Name?". Press N, for No, and ELITE*FILE will now Refile all your OLD Records in the NEW File. This time the Refile will take place by direct Field replacement. This means ELITE*FILE will move the contents of first OLD Record Field to the first NEW Record Field, and so on, REGARDLESS OF FIELD NAME. For this reason, the structure of the NEW File must be EXACTLY the same as the OLD File (no Sub-Level changes, etc.).

After the process of Refile is complete, you can return to the Main Menu and access your newly created File. The same data will be contained in the NEW File, however, your new Field Names will now be in place.

Another use of REFILE is to merge the Records from two or more smaller Files of the same Definition to create one large file. To do this, first use the Copy Definition command from the Main Menu to create a File that will be used as the destination of the merge. Then go to the Report Menu and open each small source File by using the "A" command, once for each File. Then press "K" and input the File Name of the destination File. It does not matter if you select to Match by Name or not since the Definitions are identical. Now stand back and watch your disks spin. All of the records from the small Files are being copied to the large File. This may take some time, since space must be opened for each Record to ensure proper order by the Primary Key. It will help if the destination File is on a different drive from the source Files. This process does not change the small Files, they will be the same as they were before the merge.

*** ADVANCED USER HINTS ***

Now that we have finished the Advanced User Section, please read the following before beginning serious work.

1. ELITE*FILE, in Advance User applications, will exercise your disks like no other program. Use high quality disks to avoid I/O errors.

2. Serious users of ELITE*FILE will be making frequent changes to their Data Base Files. Make BACKUP copies of your disks. At ELITE Software we make BACKUPS of some Files every 24 hours. Treat all important data with respect.

3. ELITE*FILE users that are creating large Files (hundreds of Records) should devote an entire disk to such a File. If that is not possible, make sure the largest File is the FIRST file stored on a disk after the DISKINI command. Otherwise, considerable time will be lost due to the disk operating system constantly searching for where it stored data.

4. Do Selects before Sorts! Sorts will take time on some Data Bases. If you can eliminate some Records from the Sort by Selecting certain Records, do that first.

THE EXPERT USER

By now you have been given enough instruction to allow you to do more with your Color Computer and ELITE*FILE than you probably ever dreamed that you would be able to. This section of the manual is for those users who want to go beyond the powerful capabilities contained within ELITE*FILE to use their Files in other ways. It is not necessary that the majority of users even try to understand the concepts presented here.

>>> CREATING VARIABLE TEXT FILES FOR ELITE*WORD

ELITE*WORD, which is a "sister" program to ELITE*FILE, is an extremely powerful Word Processor. One of it's features that contributes to it's power is the ability to merge a "form letter" style with an ASCII File that contains the "Variable Text" portions to be inserted. More detail of this feature can be found in the ELITE*WORD manual. For the user that is fortunate enough to own both ELITE*WORD and ELITE*FILE, the capability to maintain mailing lists on random access files and then select certain records to be processed into form letters gives him the ultimate capability for "automatic" correspondence generation.

*Must specify for
"PRINT FORMAT"
"PL=0" or TM=0
(see p.48)*

To make a Variable Text File from the Records contained in an ELITE*FILE File, use the Report Menu item "G" to set the Output Device to an ASCII File. Then SELECT the Records you desire. Finally, Output the Records using Report Menu item "I". The Format you specify will be the Field, or combination of Fields, that correspond to each occurrence of the Variable Text Marker you place in your ELITE*WORD form letter file. Follow each entry with the control CR. You may refer to any Field as many times as is appropriate for your particular form. If the insertion will be in the middle of text, specify a length of zero (e.g. NAME(0)) and ELITE*FILE will delete the trailing

spaces in that Field which will allow ELITE*WORD to maintain Justification, and give the form letter the appearance of being individually typed. While this link between ELITE*FILE and ELITE*WORD will be used mostly for the above purpose, we're sure that any user who has progressed to this point of the manual can come up with other powerful uses for this capability.

>>> CREATING FORMAT FILES

Previously in the manual the procedure for creating FORMAT FILES, to produce repetitive reports, was discussed. The method suggested at that time was to use ELITE*WORD and this is by far the easiest way to proceed. However, it is possible to create FORMAT FILES by other means, as long as the format of the file is strictly adhered to. ELITE*WORD stores its files by executing a SAVEM command in the BASIC ROM. This causes five bytes to be written to the disk file which contain the load address, block length and a flag that indicates the final block. These are followed by the memory contents of ELITE*WORD's buffer. The first 32 bytes of that buffer contain print parameters, etc. and are not important to ELITE*FILE. Therefore, a FORMAT FILE is simply a file containing ASCII characters, the first 37 of which are ignored. Each command in the FORMAT FILE is a string of ASCII characters that is terminated by a carriage return (\$OD). The first characters are the command word, taken from the following list:

OPENMN, OPENSF, CALC, SELECT, GLOBAL, SORT, DEVICE, FORMAT, OUTPUT, TOTALS or REFILE

This command word is followed by any convenient non-alpha character, such as ":". Next comes the input that would be required from the keyboard if you were generating a report "manually" (the only exception being that for REFILE, the "MATCH BY FIELD NAME" response is not included in a FORMAT FILE as "YES" is automatically selected). No extra spaces or other characters may be included in these command lines. In order to request keyboard input from the FORMAT FILE,

the "Variable Text Insert" feature of ELITE*WORD is used. This is a single character with the hex value \$05 (ASCII ENQ). This will temporarily divert the input stream from the FORMAT FILE to the keyboard until a carriage return is input. These may be used freely anywhere in the FORMAT FILE command lines, except for the command words themselves, and are useful to specify file names, select parameters, etc. The order of the commands in the file directly determines the order in which the actions will be carried out and any order that makes sense logically may be used except that a REFILE command may only be used at the end of the FORMAT FILE.

>>> ACCESSING ELITE*FILE FILES FROM BASIC PROGRAMS

The files created by ELITE*FILE are "DIRECT ACCESS" files as defined in your Color Computer Disk System Manual. For this reason, they may be easily accessed from any BASIC program. One may wish to do this to perform a more complex report generator program or to provide custom user reports. To do this, two parameters must be determined by using the VIEW FILE DEFINITION selection from the Main Menu of ELITE*FILE. These parameters are the Record Length <RL> and the Offset <OF>. This last parameter is the number of records that must be skipped in order to get past the Definition portion of the file. To open the file, use the BASIC statement:

```
OPEN "D",#1,"filename",RL
```

Individual fields may be defined in the BASIC program by using the FIELD statement as defined in the Disk BASIC Manual. To retrieve a specific record from the file use the statement:

```
GET #1,NR+OF
```

where NR is the desired record number and OF is the Offset. The total number of records stored in the file can be determined by LOF(1)-OF. Fields that had been defined as "numeric" are stored in standard BASIC floating point

format and should be accessed with the CVN function.

In addition to generating reports from BASIC programs you may also alter the contents of the file, however, extreme care must be taken. No changes should be made in the actual record numbers 1 through OF, to do so will make the file inaccessible from ELITE*FILE.

REFERENCE SUMMARY

This section describes all of the features of ELITE*FILE in as concise terms as is possible. It is intended for use by the experienced user who needs to refresh his memory from time to time.

I. General

FILE NAMES: 1 to 8 Alphanumeric characters plus extension of 3 characters (. or / may be used to separate extension from name)

Default Extensions: .FIL for data base files
.TXT for ASCII input or output files
.BIN for Format Files

Drive number may be added to file name, that number being preceded by a colon, ie. :1

If a default file name is displayed at the "FILE NAME?" prompt, that file may be selected by pressing <ENTER>.

OTHER DISK FUNCTIONS: At any "FILE NAME?" prompt, the following disk functions may be performed by typing the indicated input:

:1 - change default drive number
?1 - list directory of indicated drive number
! - toggle verify on/off
/filename - delete file name

LIMITATIONS:

A record may have up to 255 field names defined.
Each field may be up to 255 characters in length.
A record may be up to 2000 characters in length.

A file may contain a maximum of 4000 records.

The product of record length and number of records (including offset) must be less than the space available on a single diskette (156,672 on a "clean" disk).

Up to 16 main-files may be "opened" at a time.

Up to 4 sub-files may be opened.

The combined record lengths of a main-file and all sub-files opened at a given time must be less than or equal to 2000 characters.

II. MAIN MENU

	single key
1. DEFINE RECORD STRUCTURE	D
2. COPY FILE DEFINITION	C
3. VIEW FILE DEFINITION	V
4. ADD RECORDS	A
5. EDIT RECORDS	E
6. SCAN RECORDS	S
7. LOAD ASCII FILE	L
8. GENERATE REPORT	R
9. RUN FORMAT FILE	F
0. QUIT (RETURN TO BASIC)	Q

1. DEFINE RECORD STRUCTURE

Field names - any reasonable number of alphanumeric or space characters the first of which must be alpha.

<field name>:nn - text field nn characters long, 1<=nn<=255.

<field name>:N - numeric field, 5 bytes used, standard floating point format, should not be a subfield.

<field name>:<UP ARROW> - following fields are subfields of this field, combined length of subfields not to exceed

255 characters.

<enter> - end current level of subfield definitions.

PRIMARY KEY - one to eight field names separated by commas, determines storage order of records on file and also selects records from sub-files.

2. COPY FILE DEFINITION

This command is used to generate additional files of the same structure. By copying a file definition to itself, all records are deleted without losing the file definition.

3. VIEW FILE DEFINITION

HARDCOPY (Y/N)? sends output to printer at last baud rate specified by REPORT MENU or default.

4. ADD RECORDS

See EDIT keys below.

5. EDIT RECORDS

EDIT MENU

	single key
1. EDIT CURRENT RECORD	C
2. EDIT NEXT RECORD	N
3. EDIT PREVIOUS RECORD	P
4. EDIT RECORD NUMBER...	R
5. FIND RECORD WITH TEXT...	F
6. FIND NEXT OCCURANCE	A

7. DELETE CURRENT RECORD

D

Find will find the occurrence of the specified text anywhere in the record without regard to field boundaries. The search begins with the current record and proceeds towards the end of the file until a match is found. Item #6 ("A") will find the next occurrence of the text.

EDIT KEYS:

type over editing of fields.

left, right arrows move cursor.

up, down arrows move to new fields.

<shift>left arrow deletes character.

<shift>right arrow creates space.

<enter> blanks to end of field, proceeds to next.

<clear> put edited record on file.

<shift><clear> put edited record on file without deleting source record (ie copy record).

<break> returns to edit menu without updating record.

6. SCAN RECORDS

N - next record

P - previous record

R - specify record number

F - find text...

A - next occurrence of text

K - seek record by content of Primary Key.

Note that a seek by primary key will be much faster than a search for text in large files.

7. LOAD ASCII FILE

Specify field names to be filled from ASCII file line, separated by commas.

<field name> - uses defined length for field

<field name>(nn) - uses nn as length

SKIP(x) - skip over x characters

TAB(y) - position input pointer to column y

CR - get a new line from ASCII file.

The length of a "line" of the ASCII file may not exceed 255 characters. Generally, one line of the ASCII file will generate one record of the FILE except as controlled by CR's in the format specification. Not all fields need to be specified, those that aren't will be filled with blanks.

8. GENERATE REPORT

See REPORT MENU below.

9. RUN FORMAT FILE

Format file create by ELITE*WORD (or to identical format).

Command syntax:

<command>:<parameter>

OPENMN - open main file, parameter is file name, follow by "P" to pause for disk load. (repeat up to 16 times)

OPENSUB - open sub file, parameter is file name. (repeat up to four times)

CALC - define calculated field, parameter is <field name>=<formula>. (unlimited repeat)

SELECT - select records, parameter is logic combinations of field vs. constant relations.

GLOBAL - change field contents, parameter is <field name>=<new contents>

SORT - determine order of records in report, parameter is

list of sort fields

DEVICE - select output device, parameter is S, P or A

FORMAT - set printer formats, parameter is list of format items

OUTPUT - output records to device selected, parameter is format specification

TOTALS - output running totals of calculated fields, parameter is format specification

REFILE - place records on new file, parameter is file name

The input stream may be temporarily diverted from the FORMAT FILE to the keyboard by inserting the ELITE*WORD Variable Text control (ASCII ENQ, \$05) into the file. Input will resume from the format file when <enter> is pressed.

III. REPORT MENU

- A. OPEN MAIN FILE
- B. OPEN SUB FILE
- C. CALCULATE FIELDS
- D. SELECT RECORDS
- E. GLOBAL FIELD CHANGE
- F. SORT RECORDS
- G. SET OUTPUT DEVICE
- H. PRINT FORMAT
- I. OUTPUT RECORDS
- J. OUTPUT TOTALS
- K. REFILE RECORDS

A. OPEN MAIN FILE

Specify file name. Follow name by ",P" to cause a prompt to load disk if number of files exceeds number of drives available. Up to 16 main files may be opened, they will be accessed sequentially, all must have identical record

structures defined.

B. OPEN SUB FILE

Specify file name. Up to four sub-files may be opened. Sub-files may have different definitions, if two contain the same field name definition then information will be taken from the first file defined that matches on the contents of its primary key. All fields defined in the primary key of a sub-file must be contained in the main file or previously opened sub-files.

C. CALCULATE FIELD

Specify field name (unique) = formula. Use + - * / in formula. Operations will be performed from left to right without preference of multiply over add. Use parentheses to group terms to get desired results. If text fields are used in the formula their value will be determined according to the BASIC VAL function. Any number of Calculated fields may be specified, subject to memory limitations.

D. SELECT RECORDS

Reduces number of "active" records that will appear in report. Format is:

<relation><logic op><relation>...

where <relation> is

<field name><rel op><constant> or

<field name><rel op><field name>

<rel op> is <, >, =, <=, =>, or <>

<constant> is in quotes (" ") for text fields

may be substituted for <field name> to select specific records by number

<logic op> is * for AND, + for OR

If the first character of the select parameter is "@" then

all records become active once again and the remainder of the parameter string is ignored.

A text field is "equal" if the characters are an exact match to the length of the sorter string and the longer contains spaces from that point on. A null string ("") only exists if it is a field of a sub-file for which a match on primary key could not be made.

Selects may be repeated without limit, each successive call reducing the number of "active" records.

E. GLOBAL FIELD CHANGE

Format is <field name>=<new contents>. The new contents should be in quotes for text fields. This command actually changes the main file contents, unlike other report commands. It is included on this menu so that the power of the select command can be used to limited the extent of the records changed.

F. SORT RECORDS

Specify the fields by which the records are to be ordered in the report. Any number of fields may be specified (limited by the format specification screen) separated by commas, highest priority to lowest. If a field name is preceded by an asterisk (*) the order on that field alone will be descending. If a field name is followed by a number in parenthesis, only the first n characters of that field will be used. This is used to restrict the length of the sort key. The maximum permissible length of the sort key is determined by available memory and the number of "active" records.

G. SET OUTPUT DEVICE

Specify S, P or A for screen, printer or ASCII file respectively. In the case of the latter, the file name will also be specified, i.e. A,<File Name>.

H. PRINT FORMAT

Sets parameters for output format. Any combination, in any order may be specified, separated by commas. Values shown indicate format as well as default values.

Title: TL="ELITE*FILE"
Page length: PL=66
Top Margin: TM=6
Bottom Margin: BM=6
Line length: LL=255
Line Feeds: LF=0
Form Feed: FF=1
Page pause: PP=0
Baud rate: BR=600
Setup: SU=0000

Notes: The hex values specified by the setup control are sent immediately, therefore, the printer must have already been selected. If the page length is set to zero then no paging will occur.

I. OUTPUT RECORDS

Format is list of field names or controls (see below) separated by commas.

<field name> - print contents of field in width defined for field.

<field name>(n) - print contents of field in width of n

<field name>(0) - print field, delete trailing spaces

<field name>("#####") - print field using format

sets the field of a number

- . formats a decimal point
- , formats a comma every third number
- ** fills leading spaces with asterisks
- \$ places \$ ahead of number
- \$\$ floating dollar sign
- + always print sign
- print minus sign after negative numbers

PAGE - go to top of next page

CR - go to next line

TAB(x) - set position to column x

VTAB(y) - go to line number y

"text" - print constant text

\$0000 - output hex codes

J. OUTPUT TOTALS

Outputs the running totals of calculated fields as specified by a format similar to above. Totals are calculated during the output function, therefore it is necessary to output the records first.

K. REFILE REOCRDS

Merges "active" records onto specified file. Match by field name is used to change record structure definition, e.g. to add fields, one to one correspondence not required. A No response to "Match by Field Name?" causes direct replacement, field by field, without regard to name, may be used to change name spellings, field lengths or text to numeric, requires one to one correlation of fields.

To refile sorted records, new definition must have primary key same as sort keys.

Elite•File™

THIS IS IT! ELITE•FILE is the full featured, all machine language, Data Base Manager, that Color Computer users have been waiting for. From the same author that brought you ELITE•CALC, ELITE•FILE is for everyone who needs to store and recall information. You specify what to store, and what to retrieve. ELITE•FILE gives you total flexibility. ELITE•FILE is a relational Data Base Manager

with all the editing and repeat formatting features that are typically found only on much larger computer systems, but priced for Color Computer users. It's "user friendly" command structure makes it simple to use even for those who don't write computer programs. ELITE•FILE is waiting to work for you.

Features include:

- Compatible with ELITE•CALC and ELITE•WORD ASCII files
- User friendly combination of Menu driven input and single key commands
- Up to 255 named fields per record
- Up to 255 characters per field
- Up to 2000 characters per record
- Up to 4000 records per file
- Supports multiple drives
- Nested subfield definitions
- Up to eight fields in primary key
- Copy record definition from file to file
- View record definition
- Input records with easy to use field name format display
- Edit records with full screen "type over" editor
- Copy records to repeat identical data
- Scan mode for quick data retrieval
- Locate any record by field contents
- Load ELITE•CALC spread sheets into random access data files
- User setable print formats
- TAB, VTAB, CR, PAGE, text, hex print controls
- Join up to four subfile records to extend data record for print
- Create "Variable Text Insert" files for ELITE•WORD
- Produce repetitive reports with Retrieval Programs written on ELITE•WORD
- Refile data into new record structures

- ★ ALL MACHINE LANGUAGE
- ★ FLEXIBLE, USER DEFINED DATA RECORD STRUCTURES
- ★ 16 FILES CAN BE HANDLED AT THE SAME TIME FOR 64K RECORD CAPACITY!
- ★ EDIT, SCAN, SORT, SELECT RECORDS
- ★ OUTPUT REPORTS TO SCREEN, PRINTER, OR ASCII DISK FILE
- ★ PLACE DATA BY FIELD NAME, WITH CUSTOM TEXT, ANYWHERE ON THE PRINTED PAGE
- ★ COMPATIBLE WITH ALL PRINTERS
- ★ COMPREHENSIVE MANUAL
- ★ HANDSOME VINYL BINDER

- Thousands of applications:
 - Mailing List
 - Inventory
 - Record Collection Index
 - Phone Number Reference
 - Order Entry/Invoice
 - Expense Records
 - Recipe Files
 - Study Note Retrieval
 - Customer Files
 - Check Book Register
 - Library Catalog
 - Appointment Calendar
 - Yours
- Data, field definitions, indices stored on a single file
- List disk directories, change default drive and "kill" files without leaving ELITE•FILE
- Memory resident, no program overlays from disk
- Minimum 32K, Disk Basic required
- Single program performs all features
- Data files accessible from BASIC programs
- Project any subset of fields in any order for the printed output
- Select specific records by field content with full logic combination capabilities
- Sort records in ascending or descending order by any field
- Calculate values from combinations of field contents
- Math operators: +, -, *, /, (,)
- Display or print column totals

THE BEST FOR ONLY

\$74.50

- Disk Only
- Shipping NOW
- Add \$2.50 Shipping
- PA residents add 6% sales tax
- Dealer inquiries invited



Elite Software

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