CREATIVE
FILER™

A complete electronic
filing system
for less than the cost
of a filing cabinet.
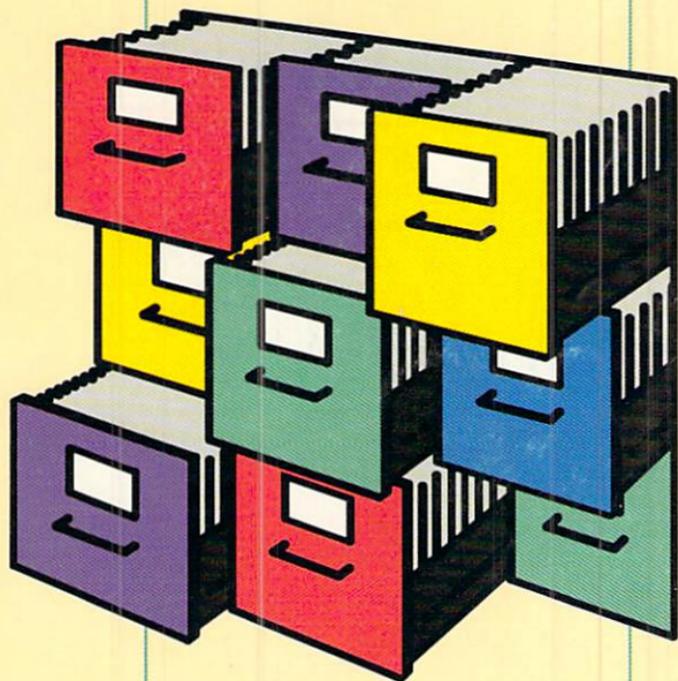
FILE MANAGER

Integrates with Creative Writer.

CREATIVE SOFTWARE

CREATIVE FILER
TABLE OF CONTENTS

CHAPTER 3

Recalling Records

CHAPTER 4

Writing Reports

Creative Filer
INTRODUCTION

Congratulations! You have just purchased the most complete home and personal electronic filing program available for your Commodore 64 computer. By using this program you will be able to handle all sorts of information in ways that were not possible manually.

HARDWARE NEEDED TO RUN THIS PACKAGE

The Creative Filer program and a sample file are on the diskette you received with this manual. Additionally, you'll need a single disk drive and formatted disks to store the data files you create.

If you have a VIC 1525 printer, you can print your data record forms and reports. However, a printer is NOT required and the program will run just fine if you don't have one. If you have a printer and interface other than a 1525, it is up to you to insure compatibility!

Creative Filer lets you manage information simply and electronically. You do this by creating a file that organizes the data in the file as a series of "records" much like the cards in an index file; each piece of data on these index cards is a "field." Once created, you can have the computer search the file and get the record you want. You can view these records on the screen or print them. You can add, delete, or modify information in the file at any time. You can also control how the information is displayed or printed.

Creative Filer is very easy to use. You simply select the operation you want to do from a menu. The program guides you through each step and "Help" screens are available. After just a little experience, you will seldom need this manual.

CAPACITIES AND LIMITATIONS

The amount of information you can store on a disk is limited to the capacity of a disk. This is about 170,000 characters, which is equal to about 85 typewritten pages. Each record can contain 98 rows of 40 columns each, for a total of 3920 characters. This is slightly more than the number of characters on a single-spaced typewritten page. NOTE: Creative Filer stores only the data, not the entire screen, each time a record is saved. This means only a small percent of the 98 rows of 40 columns is actually saved, and leaves much more room on the disk for your data.

File names can be up to 12 characters long. You can have as many as 127 fields in a record and use as many as 255 characters for a title or name of a field. There is no limitation to how much data you can type into each field.

USING THIS MANUAL

This manual is written in a very specific way. It assumes that you are familiar with the Commodore 64 computer, know how to turn on the computer, load programs from the disk drive, and know the common functions of the keyboard. The manual will lead you through all the menu options, step by step, with specific examples. These examples are stored on disk for later use in the manual. If you follow the manual carefully, you'll have prepared a useful data file and should be able to create your own files and reports.

You should prepare to spend anywhere from one to two hours going through the manual and trying out all the features the first time. Probably the best way to learn Creative Filer is to do each step on the computer as you are reading the manual.

CHAPTER ONE
Designing a Form

Run the Creative Filer program the same way you run any BASIC program. Turn on the computer. Insert the Creative Filer diskette in the disk drive. BASIC will then display READY. Type **LOAD "*",8** and press **RETURN**. The computer will load your program and then display READY. Type **RUN** and press **RETURN**. The disk drive will run for about a minute while the rest of the Creative Filer program loads into memory. The screen will then display:

<div align="center">

Creative Software Presents
Creative Filer
Options:

</div>

1..Design Form	**5..Erase Form**
2..Add Data	**6..Catalog**
3..Browse/Modify	**7..Exit**
4..Write Report	

===================

<div align="center">

Enter Option
File name: *
Copyright 1984 By Creative Software

</div>

This is the main menu. Should you wish to return to the main menu at any time, just hit the function key f 7. Options 1 through 4 form the heart of Creative Filer. Options 5 and 6 are useful utilities, and option 7 lets you exit Creative Filer and return to BASIC. In the following pages we'll use each of these options to create and then use a mailing list file.

DATA BASE FILE, RECORDS, AND FIELDS

Before we begin let's introduce a little computer jargon that will help you understand Creative Filer and similar programs.

Files containing information that can be handled easily by computers are called "data bases." The programs used to create and handle data bases are called "data base management" programs. Creative Filer does not have all the features of data base management programs that are run on large computers. However, it does contain some of the most important ones. It's also a lot easier to use.

As previously mentioned, data base files are divided into records. Each record contains all the data associated with some subject of your choice. In our example, the subject will be a person's last name. This subject is called the "primary key." All the data stored in the record is associated with the primary key. In our example the data associated with a person's last name will include the following: person's full name, address, city, state, zip code, birthdate, hobbies, and comments.

The individual pieces of data within a record are called "fields." Each field is given a name that should describe the data to be entered in that field. For example, we will name a field "Address" and later enter address data such as "122 Easy St." into that field.

In addition to the primary key field, Creative Filer allows you to select a "secondary key field." Just how these keys are used will be explained as we go through the example. That's all the jargon you're going to need. Now let's see what each of the main menu options does.

Option 1 is used to design a form. Designing a form simply means starting with a blank screen and naming the fields. You must do this before you can enter any data.

Option 2 is used to enter data into records and save them on the disk.

Option 3 allows you to browse through the records and modify the data if you wish.

Option 4 lets you write reports using the data stored in the file of records.

Option 5 lets you erase a form from the computer's memory.

Option 6 is a useful catalog utility. You may have several data base files on the disk. This option makes it easy for you to load or delete a data base file.

Option 7 clears the computer memory and exits to BASIC.

Now let's learn how to design a form.

DESIGNING A FORM

Let's go back to the Main Menu, on the screen. The cursor is positioned one space after Enter Option and Creative Filer is waiting for you to select the option you want. Type 1. Option 1 changes to reverse video and the cursor jumps down to a position one space after File Name:. You can now type any file name you wish. A file name can be up to 12 characters long. You can use letters of the alphabet, numerical digits, period(s) or spaces in the file name. All other characters are invalid.

We are going to enter the name of the sample data file in just a minute, but first do a little experimenting. Press **RETURN** and see what happens.

The cursor jumps back to Enter Option. Now type a 2, and "Add Data" changes to reverse video. You get the idea. Pressing **RETURN** toggles the cursor between Enter Option and File Name:. After you've experimented enough to know how this works, select option 1 and try entering a file name that is more than 12 characters long. Notice that the asterisk (*) stays put. Creative Filer just won't allow more than 12 characters for a file name. To change the file name, just press the DEL key to back up and erase.

Now try using some of the other characters, such as a + sign in the file name. Nothing happens when you use invalid characters. Don't be afraid to experiment. Creative Filer does its best to prevent errors. It can't prevent all possible errors, but it tries.

Now use the DEL key to erase whatever you have as a file name and type **MAILING LIST** and press **RETURN**. The line "Is this a new file? (Y/N):" is added to the screen. "MAILING LIST" is the name of the sample file provided on your disk, so it's not a new file. Type **N**. The screen will display:

Design   MAILING LIST   Row 01 Col 01
<u>**Mailing List**</u>

Name (last, first):
Address:
City: **State:**
Zip Code:

————————————————————————

Birthdate:
Hobbies:
Comments:

   Spouse's name:

The cursor is in the upper left corner. There are several things to notice. The words "Mailing List" are a title. You can put titles in your form anywhere you like. All the words followed by a colon, such as "Address" and "City" are field names. Creative Filer only recognizes field names by these colons. They are very important.

PRIMARY AND SECONDARY KEYS

The first field name is "Name (last, first):." Creative Filer always uses the first field in the form as the primary key. Notice that "Spouse's name" has a diamond shape as the first

6

character. This identifies that field as the secondary key. When you're creating a new form, you type CTRL K to get the diamond character, and can have only one of these in any form you design.

What makes the primary and secondary keys different from the other fields is the way in which data entered into these fields is stored. Creative Filer places the data from the primary and secondary keys into ascending order. "Ascending order" means from lowest to highest, such as from A to Z. This is exactly how you would alphabetize an index card file with those names on each card.

Each time a new record is added to the file on the disk, it is put in the proper ascending order by its primary key. The new data in the secondary key of the new record is also put in its proper place in ascending order. When you want to search for records you have entered, Creative Filer can find records much faster when you use the primary and secondary keys. You will understand this better when you get to Chapter 3.

Since you can only enter characters after a colon and in front of the next field, you control the field length by the spacing between field names. Notice that you can have more than one field name on the same line. The length of a field is the number of spaces between the colon and the start of the next field name.

There are 17 spaces between the colon following the field name "City" and the letter "S" in file name "State." The length of the City field is 17. The length of the Name field is 60 because there are 20 spaces following the colon on the same line and 40 more spaces on the following blank line.

> When you are initially creating a new form, make sure you leave at least one space just after the colon. Otherwise you would create a field of zero length! You wouldn't be able to enter any data at all although you can go back later and correct this form if you've inadvertently done this.

You can move the cursor with the CRSR (cursor) keys. Try moving it and notice that the Row and Col numbers change to keep track of cursor position. Move the cursor down as far as it will go. Row 98 is the limit. Pressing the HOME key will move the cursor to the upper left corner of the screen. Pressing the CLR will move the cursor to the lower left of the screen. Try it!

INSERTING AND DELETING LINES

Now we'll do some more experimenting. Put the cursor anywhere and type **CTRL I**. (Hold **CTRL** key down and simultaneously press **I**.) As you can see, this inserts a blank line and moves the line the cursor was on and all the lines below it down one line. You can insert as many lines as you like with one restriction. When the last line containing characters is in Row 98 no more lines can be inserted. This prevents you from accidentally losing any part of the form.

Now put the cursor anywhere on a blank line and type **CTRL D**. This deletes a line. Next try deleting one of the field names. You can't. Creative Filer won't let you delete a field from a form once it has been written on the disk. However, you can change the field name. When you initially create a new form, you *can* delete field names up until the time you save the form on the disk.

CORRECTING TYPING ERRORS

Correcting typing errors and changing the form is easy. You can use the DEL key to back up and erase typing errors and then type them correctly. You can use the CRSR keys to change things. First move the cursor to wherever you want to make a change. Whatever you type will overwrite what is there. If you need to insert characters, use the INST (SHIFT-DEL) key to insert as many spaces as you need. Each press of the INST key inserts one space. You can then type over the spaces you have inserted.

Try your hand at form design by modifying the form now on the screen. Use all the editing keys. Don't worry about messing up the form. It's still safely stored on the disk. You will just be changing the form presently stored in the computer's memory.

Remember there is one thing that makes modifying a form different from creating a new form: when modifying a form you can add (see below) but can't delete any fields. More specifically this means that you can't erase or overwrite a colon on the sample form.

ADDING NEW FIELDS

You can add new fields when modifying a form. However, there are some restrictions. When modifying a form you can't add a new field preceding the primary field. As we explained before, Creative Filer considers the first field the primary key and treats it differently from the rest. Creative Filer won't let you change the primary key once the form is stored on the disk, although you can, of course, alter the data in that field at any time. Nor can you add a new secondary key once a form has been stored on the disk.

Try adding a new field between two of the fields that are already there. You will find that you can't type a colon. Instead of a colon, type **CTRL N**. This will put a large dot on the screen instead of a colon, indicating that you've just added a new field to an old form. Creative Filer will change it to a colon when the modified form is stored on the disk.

Do a lot of experimenting now to fix these procedures in your mind while they are still fresh. See what you can and can't do.

THE DESIGN HELP MENU

You may have forgotten some of what we've covered so far. You don't have to go back over what you've read. Hit the **f 3**

key to see the Design Help screen. After getting the help you need, you can hit **f 4** to return to the Design screen, or hit **f 7** to return to the Main Menu screen.

Try both options. Notice that when you go back to the main menu, MAILING LIST is still there as the file name. Type a **1** after Enter Option and you are back to the design screen.

SAVING THE FORM

Now here's an important point. Read it carefully. You loaded this form into the computer's memory from the disk. You have seen that you can alter the form. You can also save the altered MAILING LIST form back onto the disk by hitting **f 1,** *but don't do it.* Doing so will overwrite the MAILING LIST form stored on the disk and make the rest of this tutorial inaccurate. We just wanted to show you that you can alter a form even after it has been stored and used. This is an important feature.

Remember, you save a new or altered form by pressing f 1.

PRINTING THE FORM

You can print the form displayed on the screen by hitting the **f 8** key. You can try this now even if you don't have a printer. After hitting **f 8,** the screen will display:

> **Is this a Commodore VIC-1525**
> **printer or an interface/printer**
> **that can emulate a VIC-1525**
> **printer (Y/N)?**

If you press "N," Creative Filer will assume you have a standard ASCII printer.

CHAPTER TWO
Entering Data

In this chapter you will enter data into the MAILING LIST file. Load Creative Filer as you did before. There are two ways you can proceed after Creative Filer displays the Main Menu. One way is to select option 2 and enter MAILING LIST as the file name. Another way is to use the catalog feature by selecting option 6. Let's use the catalog feature to see how that works.

USING THE CATALOG UTILITY

Enter **6**. The disk drive will whir and after a brief delay, Creative Filer will display the Catalog screen. The top line reads:

Catalog   f 7-Menu

This tells you that pressing function key **f 7** will return you to the main menu. The cursor on the second line is twelve characters long. You will see MAILING LIST on the third line. If there were other data files on the disk, their file names would be displayed as well. The bottom line of the display reads:

Place cursor   Press L-Load D-Destroy

This tells you to first place the cursor on the file name, and then either press L to load the file, or press D to destroy the file. Option 6 gives you a quick way to see which files you have on the disk and either load or get rid of files.

Use the CRSR keys to move the cursor over the words "MAILING LIST," and then press L. Notice that the bottom line now reads:

LOAD   Press RETURN

This tells you that Creative Filer will load the file when you press RETURN. If you had pressed D, the bottom line would read:

DESTROY   Press RETURN

In either case, you can cancel the action by pressing **f 7**. Doing so will return you to the Main Menu. Assuming you did the right thing and Creative Filer is ready to load MAILING LIST, press **RETURN**.

The screen will now display the Main Menu. Notice that MAILING LIST is now shown as the file name. Creative Filer has loaded the MAILING LIST form into the computer's memory. Enter a **2**. The Add screen is instantly displayed. The title and field names are in reverse character mode and the cursor is positioned just after the first field.

ENTERING DATA

You can now enter data into the form. Type in a friend's name, in the order: Last name, first name and press **RETURN**. The cursor jumps to the next field. You can proceed in this way to enter data in all the fields. You can edit using INST and DEL as you've done before. You can also use the right and left CRSR keys to move the cursor within a field.

The up CRSR key moves the cursor to the previous field, and the down CRSR key moves it to the next field. The HOME key moves the cursor to the first field. The CLR key clears all data entries.

After entering data in the form, press the **f 1** key if you want to save the record on the disk. You *must enter data in the primary field.* If you don't, Creative Filer will return to the Main Menu when you press the **f 1** key.

You can leave any other fields blank and the record will be saved. After saving a record, the data fields are blanked and the cursor is positioned at the first field.

You can continue to enter data and save records until there is no more room on the disk. When the disk is full, the error message:

DISK FULL 0000
PRESS ANY KEY TO CONTINUE

will be displayed. You'll have to start a fresh disk if you need to enter more names. However, those names on the new disk won't intermingle with the names on the old disk—this is a limitation of the size of the diskette storage that you'll just have to live with.

Some records have already been stored in the MAILING LIST for use in the next chapter. Enter some records of your own to fix the procedures in your mind. When you are done practicing, press f 7 to return to the main menu.

WARNING: DO NOT EVER TURN OFF
THE COMPUTER OR THE DISK DRIVE WHILE
IN THE ADD DATA OR BROWSE/MODIFY
OPTIONS. DATA CAN BE LOST OR
MODIFIED BY DOING THIS.

CHAPTER THREE
Recalling Records

Once you have created a data base file you will want to look at your records. You might just want to get some of the information or print selected records. You will also need to update record entries as time goes. You may even want to delete unneeded records entirely. Option 3 Browse/Modify lets you do all of these things easily.

The sample data file MAILING LIST contained four records we created. You may have added more records to the file as you read in Chapter Two. We'll use this file now to learn how to browse through the records, modify data, and delete and print any record you wish. If the program isn't loaded, load it now, select option 3, enter MAILING LIST as the file name, and press **RETURN**. The screen displays:

Browse/Modify   **MAILING LIST**
                    Mailing List

Name (last, first):
Address:
City: **State:**
Zip Code:

_____

. **Birthdate:**
Hobbies:
Comments:

◇**Spouse's name:**

This is the blank form you used to enter data in Chapter 2. The cursor is positioned at the first field.

ENTERING CRITERIA

To display records, you first enter search criteria in one or more of the fields and then press the **f 5** key. The search criteria tells Creative Filer what to look for as it searches through the file. When Creative Filer finds a record that matches the search criteria, it displays it on the screen. You can then:

- modify the data using the editing keys, and store the modified data
- record on disk by pressing the **f 1** key
- print the record by pressing the **f 8** key
- delete the record by pressing the **CTRL D** key
- continue the search without re-saving the record by pressing the **f 5** key

First let's see how you tell Creative Filer which records to look for. If you leave all the fields blank, Creative Filer will just display all the records in ascending order each time you press **f 5**. A blank field is called a "wild card" because it matches anything.

If you enter an equal sign followed by text, then only those records with text in that field *that exactly matches the criteria* will be displayed. To see this, enter =Jackson, Henry in the "Name" field and press **f 5**. You will hear the disk whir, the screen will blank briefly several times, and the record for Henry Jackson should appear. This record was included in the sample, so Creative Filer should find it.

You may see the following instead.

There are no more records for given criteria.

HIT ANY KEY TO CONTINUE

< Matches data that is "less than" the criteria.

> Matches data that is "greater than" the criteria.

<> Matches data that is "not equal" to the criteria.

& When placed in front of characters, matches data that contains the criteria text anywhere in the field.

When greater-than and less-than signs are used with alphabetic criteria, alphabetic order determines which records are found. For example, suppose you want the records for all those in the list whose names are in the A through D range. Enter <E in the name field and press f 5. You should get a display of Henry Adams' record with this criteria. Use f 5 to go through the entire file.

When greater-than and less-than signs are used with numerical criteria, then numerical order determines which records are found. Let's check this out on the ZIP CODE field.

SELECTING A FIELD

You can use the RETURN, up and down CRSR, and HOME keys to move the cursor to different fields. RETURN and down CRSR keys move the cursor to the next field down. The up CRSR key moves the cursor to the previous field. The HOME key moves the cursor to the first field.

USING LESS-THAN AND GREATER-THAN

Move the cursor to the ZIP CODE field, enter <20000 and use f 5 to browse through the file. This will find all records having ZIP CODES less than 20000. The records for both Henry Jackson and Henry Adams should be found. If you wanted all the records with ZIP CODES greater than 20000 you would enter >20000.

USING EQUAL WITH LESS-THAN AND GREATER-THAN

You can combine the equal sign with either the greater-than or less-than sign. For example, entering > =M in the name field would find all the records of those whose names begin with M through Z. The entry >M would not get those beginning with M. Try these out to see which records are found.

USING THE AMPERSAND

The ampersand (&) is similar to the equal sign, but much more general. A match will be found if the criteria text appears anywhere in the field. For example, enter **&Jack** and browse through the file. Again, the record for Henry Jackson will be found.

STOPPING A SEARCH

Whenever a record is being displayed during a search through the file, you can end the search by pressing the CLR key. Doing so will clear the fields and set things up to start another search at the beginning of the file.

MODIFYING A RECORD

Whenever a record is being displayed you can modify the data and save the modified record. You edit data within a field just the same as you did when entering data. You then press the **f 1** key to save the updated record. After saving the updated record, Creative Filer automatically searches for the next record meeting the search critiera.

Get John Adams' record on the screen by using some suitable search criteria and change one of the fields other than the Name field. Save it, and then get it on the screen again to verify that the changes were actually recorded.

Pressing the **f 1** will save the displayed record whether it is modified or not. When you are just stepping through records,

the results you see are the same for both the **f 1** and **f 5**. However, the effects are not the same. Only use the **f 1** key to save records. You will risk accidentally altering records if you use the **f 1** key to browse.

PRINTING RECORDS

Whenever a record is being displayed you can print the record by pressing the **f 8** key. The record will be printed just as it appears on the screen. If you don't have a printer attached the error message "DEVICE NOT FOUND" will be displayed.

DELETING A RECORD

Whenever a record is being displayed, you can delete it from the file by pressing CTRL D. Try this out by deleting John Adams' record. Step through the file to verify that the record was deleted.

BROWSE/MODIFY HELP

You can get help at any time while using Option 3 by pressing **f 3**. To return to Option 3, press **f 4**. To return to the main menu, press **f 7**.

CHAPTER FOUR
Writing Reports

Using the REPORT option is where all your effort really pays off. In this chapter you will learn how to get Creative Filer to print reports using the data you have stored in the data base file. You'll find out how to add new fields in the report, called "derived fields." Derived fields combine data from other fields. You will learn how to format the report, date it, put in a report title, a header line, and number the pages. You will also learn how to write (save) the format to disk for later use.

You do four major steps to create a report, using four screens.

1. Decide which fields you want to include in the report and in what order you want them printed—INCLUDE FIELDS screen. Type **CTRL 2** to reach this screen from any other.

2. Create any derived fields you want for the report—DERIVED FIELDS screen. Type **CTRL 1** to reach this screen.

3. Decide which records you want included, and whether you want primary or secondary key order—BROWSE screen. Type **CTRL 4** to access this screen.

4. Enter a report title and header line, tell Creative Writer what the page size is and whether you want page numbers and the date printed—REPORT PARAMETERS screen. Type **CTRL 3** to get this screen.

We'll be using MAILIST again to illustrate some of the points as we go along. With Creative Filer running and MAILIST loaded, select OPTION 4, REPORT. This takes you to the IN-CLUDE FIELDS screen.

INCLUDE FIELDS SCREEN

This screen shows a list of all the field names. They are in the same order as they appear in your form. To the right of this list are three columns labeled Include, Size, and Tot. The cursor is positioned in the Include column at the first field name.

The entries in the Include column tell Creative Filer which fields you want to include, the order in which you want them printed, and how you want to separate each field from the next field printed. An entry in this column consists of a number followed by a plus sign (+) or a minus sign (−) and possibly another number. A blank in this column for a field leaves that field out of the report.

The first number is the order. For example, a 3 in the In-clude column after the "State" field means you want this field to be the third field printed. Enter a minus sign after the number if you *don't* want a carriage return after the field data is printed. Enter a plus sign if you do want a carriage return.

You don't have to enter an order number. If you enter just a plus or minus sign, Creative Filer will automatically supply the order number for you. In this case the next higher number is supplied. This saves you keystrokes.

If you want more than one carriage return following the field, you can enter a number following the plus sign. For example, +3 means: print three carriage returns after printing the data in this field.

You can edit within a column in the normal manner: the left and right cursor keys move the cursor one space to the left and right. The INST/DEL keys work as they normally do. The

up and down cursor keys move the cursor up and down whatever column you are in. You can use these keys to skip fields or go back up to change an entry.

Press **ENTER** to complete the entry and advance to the Size column. You can specify the amount of data that is printed by entering a number in the Size column. Creative Filer leaves the last column in the print field blank. This is to insure at least a one-space separation between printed data.

For example, if the longest data item for a particular field is 35 characters, and you enter 26 in the Size column, any characters beyond 25 just won't get printed. This is called truncating.

If you insist, Creative Filer will print in the last character position if you put a slash (/) after the number. For example, if you enter 26/, all 26 spaces will be used for printing the data item.

There's one more thing you can add in the Size field: if you enter an R after the field size number, the data will be printed right justified. This means that the data item will be printed on the right side within the print field instead of on the left side, as it normally is. You should use this for numerical fields so columns of numbers line up properly.

If the Size column is left blank, the entire data in the field will be printed with one trailing space. If you're creating a columnar report, *every included field should have a specific size*, if you want the columns to line up.

The Tot (Total) column applies to numerical fields only. Also, you should only use this feature if you format your report so that all the data from each record is printed on the same line. If you enter a Y in this column, Creative Filer will add up the numbers as the records are printed and print a total after the

proper column and prints the total below the line. This is a very useful feature.

Finally, if you want your report listed in secondary key order, rather than primary key order, you must specify this while you're in the INCLUDE screen. By typing CTRL P, you'll toggle back and forth between P(rimary) and S(econdary) order, as indicated by the P or S in the upper part of the screen.

If you want to clear all your entries in this screen, type CLR/HOME. Be careful, though, since doing so will also clear all the REPORT PARAMETERS (explained later). For numerical data you aren't limited to just the data you have in the file. You can have Creative Filer combine numerical data according to formulas you make up. This brings us to the derived fields step. Pressing CTRL 1 takes you to the derived field screen.

DERIVED FIELDS SCREEN

A "derived field" is a field created (or derived) from the arithmetic combination of other fields. The DERIVED FIELDS screen is separated into two areas. In the first area, you enter a name for the derived field; in the second area, you enter the formula which defines that field. You can have up to eight (8) derived fields.

To create a derived field, first create a new name for the derived field, type it, and press RETURN. The cursor will move to the next area. Now type in the formula. The formula consists of field names and the arithmetic operators: plus (+), minus (−), multiply (*), and divide (/).

Let's look at a simple example. Suppose you have created an inventory data base, and each record contains information about a single item. Suppose that one of the fields, named Quantity, contains the number of items on hand, and another field, named Unit Cost, contains the cost of each item. You want a

report that shows the quantity on hand, the cost per item, and the total cost of items on hand. You decide to name your derived field Total Cost.

Your entry would be **Total Cost = Quantity * Unit Cost.**

Here are some more samples using imaginary field names.

Gross Profit = Units Sold * (Retail Price – Cost – Commission)

Order Quantity = Stock Level – Quantity on Hand

Multiplication and division take precedence over addition and subtraction. We'll use some simple numbers to see just what that means. Consider the formula Result = 2 + 3 * 4. If you just evaluate this form left to right, Result equals 2 plus 3, which equals 5, times 4, which equals 20. However, since multiplication takes precedence (is done first), Creative Filer gets a different result. Creative Filer says Result equals 3 * 4, which is 12, plus 2, which is 14.

If you're not used to dealing with precedence rules, you can use parenthesis to make sure you get the result you expect. In the example above you can be sure you will get a result of 20 if you type the formula as

(2 + 3) * 4,

or if you want a result of 14, type the formula as

2 + (3 * 4).

Put each derived field formula on a separate line and always start in column 1. When you are done entering derived fields, press **CTRL 2** to return to the INCLUDE FIELDS screen.

The derived fields you created will now be included at the bottom of the list of field names. You can now make the appropriate entries in the Include, Size, and Tot columns. After doing this short job, you can enter browse criteria for selecting the records you want printed on the report.

There are a couple of precautions you need to be aware of. First, you shouldn't use the arithmetic operators (+, −, /, or *) in any of the fields names on your form. Creative Filer would interpret them as arithmetic operators no matter where they appear in the line, so it won't work. If you've already done this, you can go back and modify these characters in your form, to eliminate this problem.

A second point is that you must make sure all the field names are correctly spelled. Whenever you leave the DERIVED FIELDS, Creative Filer checks that these fields exist and writes the definitions to the disk. If there is an error, an error message is displayed and you are asked whether you want to fix the error. If you choose not to fix the error, Creative Filer will return to the Include screen but won't save your derived fields.

REPORT BROWSE SCREEN

You now use the REPORT BROWSE screen. This screen looks just like the BROWSE/MODIFY screen you've seen before. You enter search criteria just as you did to browse through the data base. This time the criteria will determine which records will be included in the report.

When you are done entering criteria, press CTRL 2 to return to the INCLUDE screen. Notice that you can move back and forth among the three screens we've looked at so far. Don't worry about getting everything just right the first time, you can always go back and change things easily.

Pressing CTRL 3 from any of these three screens will get you to the REPORT PARAMETERS screen.

REPORT PARAMETERS SCREEN

Here you complete setting up the report. The screen presents you with some blanks to fill in and some choices to

make. Let's go over them one at a time. The cursor will be positioned after the word Title.

Report Title

The entry you put after Title will be printed at the top of each page of the report. It will be centered on the page. Press **RETURN** to go to the next blank.

Header

The entry you put after Header will be the third line printed on every page of the report. The most common use is to provide column headings for a columnar report.

You can type any header you like. If the header is longer than print width (usually 80 characters) the extra characters will be printed on the next line. You usually don't want this. There are times, though, where you may use this to your advantage. Experiment a little to see just what happens on your system.

Printer Columns

The normal printer column width of 80 is supplied already. If this is satisfactory, just press RETURN to go on. Otherwise, type in the value that applies to your printer.

Printer Line Length

The entry for Printer Line Length tells Creative Filer the length of each page. Standard printer paper is 11 inches long, which is equal to 66 print lines. If you are using some other size paper, enter the number of print lines here. Figure this by multiplying the length in inches by six.

There are a lot of tricks you can do. Just remember that Creative Filer formats printing based on your entries. You can get Creative Filer to print more than one "page" on a single

piece of paper. Experiment! You'll find you can print mailing labels and all sorts of things with the right combination of entries.

Text Length

The entry following Text Length can be used to control both the top and bottom margins of your report. Here's how to do it. The Printer Line Length tells Creative Filer how many lines can be printed on a page. 66 lines can be printed on an 8½ by 11 inch page. That's 6 lines per inch.

Now let's suppose you want one-inch margins, top and bottom. Enter 54 as the text length you want. Then position the paper in the printer so that printing starts one inch from the top of the first page. Creative Filer will print 54 lines and roll the paper up two inches. This gives you a one-inch margin at the bottom of the page and a one-inch margin at the top of the next page.

Print Page Numbers

You are asked here if you want page numbers printed. Whatever answer is highlighted when you press RETURN selects your answer. You can cause the opposite answer to be highlighted by pressing one of the cursor control keys. If your answer is Yes, page numbers are printed in the upper right hand corner of the report.

Date

If you enter a date in this box, it is printed in the upper left hand corner of each page.

PRINTING THE REPORT

After all the report parameters are set, you can print the report to either a printer or a disk file. Pressing **f 1** sends the

formatted report to the printer; pressing **f 2** will send it to a disk file.

If you press **f 2,** you'll be prompted for a file name for that report. Enter up to 12 alphanumeric characters and press **RETURN.** Creative Filer will send the report to that disk file, for later use by Creative Writer.

Remember, you can return to the previous report screens to make changes at any time.

When the printout completes, you are again returned to the Menu.

SAVING A REPORT FORMAT TO DISK

Once you have the report looking the way you want it, save it to disk. You do this by pressing CTRL 6 while you're in the REPORT PARAMETERS screen. Creative Writer will ask for a file name. Again you can use up to 12 alphanumeric characters.

LOADING A REPORT FORMAT FROM DISK

There's just one more thing in regard to report formats. This is a little out of place, but we waited until now to explain it so you would have a better idea of what report formatting meant. When you first select REPORT from the Main Menu and get the INCLUDE FIELDS screen, you can press CTRL 5 to save a lot of work. Creative Filer will ask for a file name. Enter the name of a previously-saved format, press **RETURN,** and all the formatting information is recalled from disk. It's a real time saver.

If you want to clear all the report parameters and set them back to default values, use the **f 6** key. Be careful, though since **f 6** also erases your INCLUDE fields.

INTEGRATING CREATIVE FILER
WITH CREATIVE WRITER

One of the most powerful uses to which you can put Creative Filer is creating custom reports and form letters for integrating into Creative Writer. Basically, send the report to disk (f 2) rather than the printer (f 1) when you're ready to print.

There are really two types of disk files that Creative Writer can distinguish from Creative Filer. The first one is a full report, including title and heading, such as a listing of all the names in a mailing list file, that has been written to the disk.

The second type is a data file that Creative Writer accesses and uses when printing form letters rather than whole reports. When doing this, Creative Writer picks up the data one field at a time and substitutes it for the variables you have included in your word processing document.

However, when writing the data to disk, Creative Filer does not distinguish between these two different types of files. It is your INCLUDE fields and REPORT PARAMETERS which do this. Later on, Creative Writer will know whether to include an entire report, or just the individual fields, by the way you format your word processing document.

CREATING A REPORT FILE FOR USE BY
CREATIVE WRITER

If you have a report that you wish to include in a word processing document created by Creative Writer, just choose the f 2 option on the report parameters screen. Creative Filer will ask you for a file name (up to 12 characters), and write the entire report to a disk file using that name.

In your Creative Writer document, you'll use the imbedded INCLUDE command to include this file in your document. Creative Writer will look for the file name on the disk, and if

it is found, will simply include the report in the document, keeping all formatting intact.

CREATING A VARIABLE FILE FOR USE BY CREATIVE WRITER

If you want to use data from Creative Filer in a form letter, you have to pay very close attention to the order and number of fields you include in your report.

In order to produce a form letter, Creative Writer accesses the data, one field at a time, from the report you have written to a disk file. This implies that the EXACT data, in the EXACT order your form letter needs it, must have been written to the disk by Creative Filer. If you include just one more field, or a title or heading, in this file, Creative Writer will get that data from the disk and (incorrectly) substitute it for a variable in your form letter.

Specifically, this means you must not include any Title, Header, Page Number, Date, or Text Length when you are setting up the report parameters for your report. Further, each IN-CLUDEd field MUST BE followed by a carriage return (i.e., use the "+" option in the INCLUDE field screen), and MUST use the slash option (no trailing spaces) in the Space column. Also, the last field to be printed in the form letter should include the "−" option in the INCLUDE column.

EXAMPLE: Suppose you wish to include a person's name, street, city, state and zip code on a form letter. These five fields must be on your Creative Filer form.

STEP 1: Choose the Report option in Creative Filer.

STEP 2: In the INCLUDE screen, place a plus sign (+) in the INCLUDE column next to the fields Name, Street, City, State in that order. Place a "−" next to Zip. Place a slash in the SIZE column for each of these fields.

STEP 3: Press **CTRL 3** to get to the Report Parameters screen.

STEP 4: Erase any Title or Header information. Press **f 2** and Creative Filer prompts you for a file name. Type in the file name you wish to use for this report and press **RETURN.**

Note that the page length and printer width parameters aren't used at all and don't need to be entered.

You now have a file ready for use as a "variable" file with Creative Writer. When you create your form letter on Creative Writer, be sure to put the variables in the same order as you chose when you created your report using Creative Filer.

INDEX

—S—

saving forms **10**

     report formats **26-28**

searching for records **see browsing**

secondary key **6-7, 19, 22**

size, in reports **23**

storage capacity **2**

—T—

titles, in reports **25**

totals **23**

—U, V—

updating forms   **see modify**

     records

variables **29-30**

(used in Creative Writer)

—W, X, Y, Z—

wild card match **15**