Micro Collection

Quality Computer Software

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MicroFile

A Flexible Program for

Data Management

CONTENTS

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INTRODUCTION.

GETTING STARTED.

WHAT DO YOU NEED ?

MicroFile will work with the CPM Plus operating system as supplied with Amstrad PCW8256/8512 computers.

Before you can get started with MicroFile you will need -

1. An Amstrad PCW8256/8512 computer. MicroFile is loaded from drive A: into the memory disk drive M: leaving drive A: or drive B: completely free for data storage.

2. Some blank floppy disks - three should be enough for now.

3. A printer - this is not absolutely essential but is very useful when extracting information from your database. MicroFile is set up to support DOT MATRIX printers which are Epson compatible - the standerd printer which is supplied with the PCW computers is Epson compatible as is the Amstrad DMP2000.

4. Some paper for your printer.

5. A basic knowledge of operating your computer. IN THIS MANUAL WE WILL ASSUME THAT YOU KNOW HOW TO -
   * START THE COMPUTER & LOAD THE OPERATING SYSTEM.
   * COPY DISKS.
   * FORMAT DISKS.
   * COPY INDIVIDUAL FILES USING PIP.
   * USE FILENAMES INCLUDING DIFFERENT DRIVE DESIGNATORS and FILENAME EXTENSIONS.

   If you haven't yet mastered these basic things we suggest that you do so before going any further. Full instructions can be found in your computer's operating manual. One point to remember when naming files is that CPM does not allow spaces in file names.

Saxon Computing. MicroFile.

The easiest way to visualise a MicroFile database is to think of a CARD INDEX file. Such a FILE is made up of individual cards each of which holds information which is similar in FORM to the other cards in the FILE.

For the moment we will also assume that each line on the card is used to hold a separate item of information. However so that it is easy to find an item on ANY card which we might pick out at random we arrange it so that the same kind of data is always written onto a particular place on the cards.

Using these simple guidelines a blank card which is used to store name, address and telephone numbers of all my friends would look something like this :-

```
Name      ..............................
Address   ..............................
          ..............................
Town      ..............................
Postcode  ..............................
Phone     ..............................
```

All cards in the FILE would look the same except, of course, that the information written where the dotted lines are would differ from card to card.

When we use a computer to manage a FILE like this each card is called a RECORD and each separate item of information on the card is called a FIELD.

In the RECORD shown above we have used only one kind of information - ALL OF IT IS COMPOSED OF TEXT only. There are other types of data which MicroFile recognises as separate kinds -

* NUMERIC composed wholly of numbers with or without a set number of decimal places.

* CALCULATED which is a numeric FIELD but instead of the data being entered via the keyboard it is calculated from the values in other numeric FIELDS.

* UK Date where the information is stored in DAY / MONTH / YEAR format.

* US Date where the information is stored in MONTH / DAY / YEAR format.

When entering information into date FIELDS the data is checked and invalid dates are rejected.

WHAT TO DO NEXT - BEGINNERS.

STEP ONE.
Next, before you do anything else, PLEASE make a back up copy of the distribution disk which contains the MicroFile programs. If you don't know how to do this detailed instructions can be found in APPENDIX B. After making a back up copy of the MicroFile disk put the distribution disk in a safe place and work with the back up copy - that way if the disk you are working with becomes damaged or unusable you can always make another back up copy.

STEP TWO.
Read through the rest of this introduction so that you understand just what it is that MicroFile is doing.

STEP THREE.
Work through the TUTORIAL SECTION of this manual which will take you through the basic steps of setting up a database, entering information and manipulating it.

WHAT TO DO NEXT - I FEEL CONFIDENT.

Many users will be experienced in operating other applications programs and feel confident enough to adopt the "if all else fails then read the manual" approach. If you are in this category then we recommend that you spend a few minutes working through the first part of the TUTORIAL SECTION (SETTING UP). Doing this will probably cover all of the important DOs & DON'Ts and will only take between five and fifteen minutes depending on how fast you can push the keys.

After this feel free to experiment and just dip into the REFERENCE SECTION whenever you need further details.

MicroFile ADVANTAGES OVER MANUAL CARD INDEX SYSTEMS.

MicroFile offers a number of advantages compared with storing information in a manual card index system.

1. You can find specific items (or sets) of information much more quickly than by using manual methods.

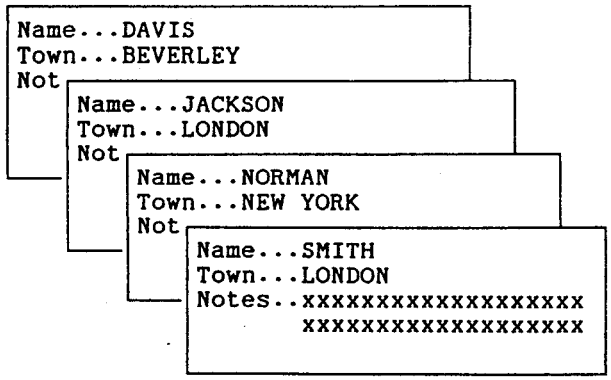
2. You can retrieve information from your FILES in a flexible manner without repetitive effort.

3. Having entered your data you can selectively move all or part of it to other FILES. This ability avoids the tedious task of keying in data more than once.

4. A traditional card index is stored in a set order. MicroFile can keep track of your information in up to FOUR different orders without any effort on your part. This is achieved by using separate INDEXes - for further details see below.

HOW MicroFile USES INDEXING TO FIND YOUR DATA.

In an ordinary card index we might have information stored on just four cards which look like this -



Using this system it is fairly easy to find a particular person because the FILE is kept in Alphabetical order of names. To search through a file like this you can use the order to look for an item in an efficient way which avoids having to look at each card until the desired one is encountered. However, the only way to

find, say, the first person who lives in LONDON is to start at the very beginning and look at every card until the Town FIELD equals LONDON.

In a large FILE of information with many RECORDS using this method of search is very slow even when you use a computer to do the donkey work!

MicroFile overcomes this problem by using a separate INDEX for each item of data you want to know the order of. The actual RECORD is still stored just the once but in addition an index is kept on disk which is updated every time you add new information to the FILE and when you remove old information by deleting it.

There is a minor disadvantage to this method in that each index takes up a small amount of disk space but this is greatly outweighed by the increase in speed of access to your data.

MicroFile further increases the speed of access to data by using a technique known as VIRTUAL MEMORY. Although writing and reading information to and from disk seems quite quick it is actually many times slower than access to information held in the computer's internal memory.

The VIRTUAL MEMORY technique holds as much of your information as possible inside your computer only using the disk when the item to be found is not already held in the internal memory. It follows that the number of physical disk read and write operations is greatly reduced and so the general performance of the database much increased by the use of VIRTUAL MEMORY.

Although using these methods involves some complex computing you need know nothing of the workings of these methods to benefit from them as their workings are completely transparent whilst the program is in use. There is, however, one thing you should NOT do whilst running MicroFile -

DON'T EXIT FROM THE PROGRAM BY REMOVING THE DISKS
AND SWITCHING OFF THE POWER.

It follows from what we have said about VIRTUAL MEMORY that if you do leave MicroFile in this way part of your data and the associated INDICES will be in the internal memory when you do this. Any changes to these may not have been written to disk when you kill the power and would thus be lost for ever.

So what ? you might ask.

The answer is that an incomplete index is worse than useless because it cannot be trusted to point to your stored data in the correct order. Even worse the disk INDEX may be pointing to areas of memory which contain no real data at all, just random garbage, which can produce unpredictable results.

Let's take these questions one at a time.

WHAT IF I NEED TO CHANGE THE DATABASE DEFINITION ?
The Database Maintenance Menu has an option which allows you to re-define your database at any time. You may add new FIELDS, delete ones which are no longer required or re-build the key field indices. The passwords may also be changed using this feature. When the process of re-building your files is complete your old database will cease to exist.

HOW DO I SORT INFORMATION INTO ORDER ? The short answer is you don't. This is because there is no need. MicroFile maintains an index for each of your **KEY FIELDS** and uses these to keep track of the order every time you make a new entry or change an existing one.

CAN I USE ANY DISK DRIVE TO STORE MY DATA ?
You can use either drive **A:** or drive **B:** - if you only have one disk drive fitted then you should indicate (at the start of the program) that you are going to use drive **A:** as the data disk.

WHAT HAPPENS IF I CHANGE A CONSTANT VALUE ?
If you do change the value of a constant then any data which is calculated from that value will also change.

WHAT IF I CAN'T REMEMBER FIELD NAMES ?
When setting up your database or defining screen layouts etc. you will often find yourself being prompted for the name of a **FIELD** as part of the information required. It is almost impossible to remember all the names you have used so if you need a reminder just press the <RETURN> key and a **POP UP MENU** of choices will appear.

HOW DO I DE-ACTIVATE A SELECTION ?
When working with a restricted set of data, as defined by a **SELECTION**, you will often want to revert to working with the whole database. To do so is quite simple - just recall the **Null SELECTION** and access to all records will be restored.

The correct way to exit from MicroFile is to use the CLOSE DATABASE option in the menu then the program will make sure that all your INDICES are correctly written onto disk before you close down.

OK so you know NOT to just cut off the power without closing down properly but what if the power to your computer is accidentally cut off ? In this event or if you suspect that any index has been corrupted in any other way you can have MicroFile rebuild all the INDICES from scratch by destroying and re-building the key fields making sure always to have one key field intact.

SOME RULES RELATING TO MicroFile INDEXING.

1. Each index is associated with a KEY FIELD. ie. a FIELD whose contents are used to form an INDEX.
2. KEY FIELDS can't be longer than 20 characters.
3. INDEXES can't be formed from multiple FIELDS.

Right now would be a good time to work through the first part of the TUTORIAL SECTION. This covers the procedure for starting up a new MicroFile database and will provide a practical background to looking at MicroFile in a little more detail. The example in that first section should only take about fifteen minutes of your time so please do that before continuing.

If you have finished the first section of the TUTORIAL - and followed each keystroke exactly you will have created a simple database which will store names and addresses. During that process we advised that any questions you might have be postponed until you had completed the example.

Hopefully some of the more obvious queries may have been answered as you progressed though the example, but others are bound to remain. Let's try to anticipate some of them and provide some answers.

* WHAT IF I NEED TO CHANGE THE DATABASE DEFINITION ?
* HOW DO I SORT INFORMATION INTO ORDER ?
* CAN I USE ANY DISK DRIVE TO STORE MY DATA ?
* WHAT HAPPENS IF I CHANGE A CONSTANT VALUE ?
* WHAT IF I CAN'T REMEMBER FIELD NAMES ?
* HOW DO I DE-ACTIVATE A SELECTION ?

USING THIS MANUAL.

You will probably have already noticed that, when referring to a particular key on your computer we emphasise the fact by enclosing it in < > **CHARACTERS**. Thus <RETURN> means press the key marked RETURN on your keyboard and <CTRL><Q> means press both the key marked CTRL and the key marked Q at the same time.

There are two standard computer keys which are marked differently on the PCW range of computers. These are the **<CTRL>** and **<ESC>** keys which are marked as **<ALT>** and **<EXIT>** respectively. Throughout this manual and the MicroFile screen prompts we use **<CTRL>** and **<ESC>** but you should press the **<ALT>** and **<EXIT>** keys.

Technical terms and computer jargon are inevitably used in a manual of this kind. So that we don't bore you too much by explaining each term every time it is used we have compiled them all into a Glossary at the back of the manual. Words which are explained there are shown in bold capitals (eg. **FIELD**) as they occur.

If you haven't read and carried out the instructions in the first chapter GETTING STARTED please do so before attempting to run MicroFile.

The REFERENCE SECTION contains a **MENU** map which depicts an overview of MicroFile's structure. Features which will probably be least often used are accessed through the lower level **MENU**s. This section also contains a detailed description of each major **MENU** option and the things you should consider in their use.

When you are entering information you can edit it by moving the **CURSOR** with the **ARROW KEYS**. You may, at the same time, have a **POP UP MENU**, present and want to move the **HIGHLIGHT BAR**. To do so you must use either the <SHIFT> or <CTRL> key in conjunction with left or right ARROW - the unshifted keys still move the **CURSOR** in the text you are entering.

USING SELECTIONS.

In working with the information you have stored in your database you may want to work only with data which has certain characteristics. You can define these as a set of rules and store them as a **SELECTION**.

When you activate a **SELECTION**, either by defining a new one or recalling an old one from disk, the SEARCH and reporting facilities will only use **RECORDS** which conform to the rules you have specified.

You can define **SELECTION** rules which are very wide in scope or ones which are so narrow that there may be no **RECORDS** in the whole database which fit such a description. If you want to de-activate a particular **SELECTION** and return to using the whole database you simply recall the **NUll SELECTION**.

For full details of the workings of the **SELECTIONS** feature please see the REFERENCE SECTION.

IMPORTING and EXPORTING INFORMATION.

The information which you enter into your database **FILES** can be transferred to other MicroFile databases through the **IMPORT / EXPORT** features on the Database Maintenance Menu. You can use these same facilities to exchange information with any program which can read **FILES** containing pure **ASCII** data.

MicroWord can make use of information **EXPORTED** from MicroFile, either through the MAILMERGE feature or by **READ**ing the **FILE** directly from disk.

GETTING THE MOST FROM MicroFile.

To obtain maximum benefit from the MicroFile features you need to do three things -

* Read this manual carefully.
* Work through the examples.
* Don't be afraid to experiment. Remember however, that if the data you are using is important to you, ALWAYS make sure that you have a **BACKUP** copy before you try something new.

TUTORIAL.

HINTS, TIPS, DO'S and DON'TS.

DO	make regular **BACKUP** copies of your data disks. See APPENDIX B for precise instructions on how to do this. Remember disks are cheap - your time isn't.
DO	take the time to work through the TUTORIAL SECTION as doing so will provide a practical background to the material in the manual.
DON'T	keep **BACKUP** copies with the originals.
DO	make BACKUP copies on a rotation so that if you copy a corrupt original disk to a BACKUP copy you don't corrupt your only good copy.
DON'T	use the **DISTRIBUTION DISK** as a WORK disk.
DON'T	remove the **WRITE PROTECTION** from the **DISTIBUTION DISK**
DON'T	expose your disks to HEAT MOISTURE MAGNETIC FIELDS STICKY FINGERS or COFFEE.
DON'T	if you are using a single disk drive try to put too much data onto one disk. It is always good practice to leave about 25% of the disks capacity as spare working space for exporting data etc. Where your database looks like growing too large for a single disk you should split the files on some suitable basis and use a second disk.
DON'T	turn off the power to the computer while the program is running or with a disk still in the drive. If you do you may lose data.

TUTORIAL SECTION.

This tutorial section contains a number of keystroke by keystroke examples of how to operate the principal features of MicroFile. We recommend that all users should commence by working through the first example which is concerned with starting the program and setting up a new database from scratch. Other examples are included which cover -

* EDITING INFORMATION - ADD / DELETE / AMEND.
* SEARCHING FOR INFORMATION - BASIC STEPS.
* SELECTING ONLY SPECIFIC RECORDS.
* CHANGING THE DATABASE DESIGN.
* PRINTING REPORTS.
* EXPORTING INFORMATION.
* IMPORTING INFORMATION.

In the first couple of examples we will list every keystroke required for you to reproduce the exercise on your own computer. After the first few we will assume that you will have become familiar with the absolute basics such as how to move about the MENU tree etc and list only the important keystrokes.

Just one thing which is important before we start - PLEASE PLEASE make a copy of the original program disk and use that for this exercise - DON'T use the original disk. If you are not completely sure as to how to do this then refer to Appendix B where you will find full details.

STARTING THE PROGRAM AND SETTING UP A DATABASE.

The simple database we are going to construct will record names and addresses keeping track of the information in both Name and Town order. By using both Name and Town as **KEY FIELDS** we can then access information quickly whether we want it in Name OR Town order.

Make a start by turning on your computer and **LOAD**ing the **CPM Plus** operating system.

Next put the Working Copy of MicroFile into the disk drive. Each time we want you to press a key on the keyboard which is not part of the alphabet or a punctuation symbol we will enclose it in < > symbols, like this

<RETURN>

which means the key marked RETURN.

Enter into your computer -

SETKEYS KEYS.JBS <RETURN>
FF8 <RETURN>

The MicroFile program will be **LOAD**ed. After this you will see a welcome screen asking you to remove the work disk and insert your formatted DATA disk and press the SPACEBAR to start the program.

To construct our Fifteen Minute Database just enter the list of keystrokes which follows exactly as shown.

WHAT IF I MAKE A MISTAKE ? Well if you do use the <DEL> keys to remove the mistake or use the **ARROW KEYS** to move the **CURSOR** to the mistake and simply type in the correct information over the top.

<<<<<<<<<< Keystrokes >>>>>>>>>	<<<<<<<<<< Comments >>>>>>>>>>>
↑ <RETURN>	Choose Create a New Database from the **MENU**.
A <RETURN>	Select Data Disk Drive as **A**
MAILLIST <RETURN>	Enter database **FILENAME**
SAXON <RETURN>	Supervisor password - there are two levels. Supervisors can change information, users can't.

ANYNAME <RETURN>	User password. Passwords mean that unauthorised persons can't access your data.
<f7>	Accept this information. If you have made a BIG mistake just press <f1> to start again.
<f7>	We don't want to define any CONSTANTS for this database so <f7> accepts the blank form.
	NOW WE DEFINE OUR **FIELDS**.
<RETURN> TE <RETURN>	**FIELD** TYPE is TE (ie. short for text.)
NAme <RETURN>	**FIELD** name is NAme
20 <RETURN>	**FIELD** size is 20 **CHARACTERS**.
Y <RETURN>	Yes it is a **KEY FIELD**.
↓	Move on to define **FIELD** 2
<RETURN> <RETURN>	The first press indicates which **FIELD** definition we want to edit, the second one brings a **POP UP MENU** onto the foot of the screen. Make selections from these by moving the **HIGHLIGHT BAR** left or right using <Ctrl> in conjunction with the **ARROW KEYS**. We could have used this method for the first **FIELD**.
<Ctrl>→ <RETURN>	Select TExt as the **FIELD** type.

ERRATA SHEET

Page 20 of the MicroFile manual refers to loading the MicroFile program by typing -

SETKEYS KEYS.JBS <RETURN>
FF8 <RETURN>

These instructions should read -

SETKEYS KEYS.JBS <RETURN>
MF8 <RETURN>

AAad <RETURN>

FIELD name is AAad. What only four characters available ? This is the short form of naming our FIELDS - if you wait you will see how we can get much more descriptive when we design a screen FORM.

30 <RETURN>

FIELD size is 30. Because the maximum KEY length is 20 we don't have to fill in the Y/N box indicating whether a KEY or not.

↓ <RETURN>

Now define the third FIELD.

TE <RETURN>

TExt type.

ABad <RETURN>

FIELD name is ABad.

30 <RETURN>

FIELD length is 30.

↓ <RETURN>

Now define the fourth FIELD.

TE <RETURN>

TExt type.

ACad <RETURN>

FIELD name is ACad.

30 <RETURN>

FIELD length is 30.

↓ <RETURN>

Now define the fifth FIELD.

TE <RETURN>

TExt type.

TOwn <RETURN>

FIELD name is TOwn.

20 <RETURN>

FIELD length is 20.

Y <RETURN>

Yes this is a KEY FIELD.

↓ <RETURN>

Now we define the last FIELD.

TE <RETURN>

TExt type.

COde <RETURN>

FIELD name is COde.

10 <RETURN>

FIELD length is 10.

N <RETURN>

No - not a KEY FIELD.

<f7>

Accepts this definition.

MicroFile now creates the database files on your data disk.

You will now see a **MENU** which allows you to use the database.

COULD I QUIT NOW IF I WANTED TO ? Yes - to do this you would move the **HIGHLIGHT BAR** to the CLOSE DATABASE option and press <RETURN>. You could resume the rest of the exercise when you next **LOAD** MicroFile.

Our next job is to define a screen to do data entry.

)

↓↓↓↓↓ <RETURN>

Select Maintain Database Menu.

<RETURN>

Select Maintain Screen Layouts.

<RETURN>

Select Define Screen Layouts.

↓↓↓→→→→

Move **CURSOR** to where you want to start you long descriptions.

NAME.....

<RETURN>

ADDRESS.....

<RETURN>

TOWN.....

<RETURN>

POSTCODE.....

)<f7>

} This process is called FORMS
} painting - you can really
} enter what you like where you
} like. The purpose is to
} provide the framework of a
} form which can be filled in
} when entering or editing data.
}
} Use the **CURSOR KEYS** to move to
} where you want the text to go
} and type the words / symbols
} you want. You can amend any
} mistakes as you go.

Accept the text design of the screen - now move on to mark where the data will go.

↓↓↓——→

Use the **CURSOR KEYS** to move to row 4 column 18.

<f3>

This marks the position where you want a **FIELD** to go.

<RETURN>

Brings a **POP UP MENU** of **FIELD** NAMES you can choose from.

<SHIFT><f2>	Select Add A New Record.
	Enter some data of your own here. NOTE that you can use the **ARROW KEYS** or the <RETURN> key to move around the screen form which you designed. The only requirement which MicroFile makes is that **KEY and DATE FIELDS** cannot be left blank. When you are happy that each **RECORD** is properly entered just press <f7> to accept and store the data.
	When you have entered a few **RECORDS** press <f1> to return to the Use Database Menu.
↓↓↓↓↓↓ <RETURN>	Selects the Close Database Option.
↓↓↓<RETURN>	Ends the program run and returns you to **CPM**. The MicroFile end message reminds you of the importance of **BACKUP** copies of your data disks.

<RETURN>	Selects the first **MENU** item (ie. the **FIELD** called NAme). You could have type NAme <RETURN> if you had wanted to.
↓ <f3> <RETURN> <RETURN>	Marks **FIELD** 2 - AAad the first line of the address.
↓ <f3> <RETURN> <RETURN>	Marks **FIELD** 3 - ABad the second line of the address.
↓ <f3> <RETURN> <RETURN>	Marks **FIELD** 4 - ACad the third line of the address.
↓ <f3> <RETURN> <RETURN>	Marks **FIELD** 5 - TOwn.
↓ <f3> <RETURN> <RETURN>	Marks **FIELD** 6 - COde the postcode.
<f7>	Accepts the whole design.
	DO I HAVE TO MARK THE **FIELDS** IN THE STRICT ORDER IN WHICH THEY WERE DEFINED ? No - you can use any order and screen position you like. The only restriction is that a **FIELD** must fit onto one line. You can have more than one **FIELD** on the same line.
	YOU SHOULD NOW HAVE BEEN RETURNED TO THE SCREEN LAYOUTS **MENU**.
↓<RETURN>	Select Store Screen Layout Option.
INscreen <RETURN>	Lets call this layout INscreen.
	MicroFile now saves your layout onto the disk for future use.
↓↓↓ <RETURN>	Return to the Maintain Database Menu.
↓↓↓↓↓↓↓ <RETURN>	Return to the Use Database Menu.
<RETURN>	Select the Access Records Option.

EDITING INFORMATION - ADD / DELETE / AMEND.

After setting up a new database the next logical task is to enter some information into it. Let's assume that you have returned to the CPM A> prompt and start the key sequence from there.

<<<<<<<<<< Keystrokes >>>>>>>>>	<<<<<<<<<< Comments >>>>>>>>>>>
SETKEYS KEYS.JBS	Sets the keyboard. This is not necessary if your computer was not switched off after the previous section.
MF8<RETURN>	Starts the MicroFile program.
<SPACEBAR>	Moves you from the welcome screen to the MAIN MENU.
<RETURN>	Selects the USE DATABASE option.
A <RETURN>	Use drive A for data files.
MAILLIST <RETURN>	Database to use is MAILLIST
<F7>	Accept drive & name.
SAXON <RETURN>	Password is SAXON. Note that we have entered the supervisor password so that ALL of the MicroFile features are available to us. Control now passes to the USE DATABASE MENU.
↓ <RETURN>	Selects RECALL SCREEN LAYOUT option.
<RETURN> <RETURN>	Recalls the INscreen screen layout from disk.
<RETURN>	Selects the ADD/DELETE/AMEND option.
<F2>	Uses the <F2> function key to select the ADD a RECORD option.
ANDREWS <RETURN>	Enter the NAme
12,High Street, <RETURN>	Enter 1st address line.
<RETURN><RETURN>	Skip the next two lines.
ANDOVER <RETURN>	Enter the TOwn

RG10 5YR <RETURN>	Enter the postCOde. Note how the CURSOR jumps back to the first FIELD. If you press <RETURN> a few times you will see how this moves the CURSOR down to the next FIELD. Now try using the Up Arrow & Down Arrow keys to see how they affect the movement of the CURSOR. The Left & Right Arrow keys move the CURSOR from side to side ONLY WITHIN THE CURRENT FIELD.
<F7>	Function key 7 used to accept the data we have entered.
<F2>	ADD another RECORD.
JACKSON <RETURN>	Name.
21, The Avenue, <RETURN>	Address line 1.
Main Street <RETURN><RETURN>	Address line 2.
LANCASTER. <RETURN>	Town.
LA2 5ES <RETURN>	Postcode.
<F7>	Accept the RECORD.

PLEASE NOW ENTER SOME MORE INFORMATION OF YOUR OWN - SAY ABOUT 10 RECORDS USING THE SAME PROCEDURE AS ABOVE STARTING WITH THE <F2> KEY. TRY TO MAKE SOME OF THE NAMES & TOWNS START WITH DIFFERENT LETTERS.

	Now let's try to call up the first RECORD which we entered (for ANDREWS) and change the postcode.
<F4>	Starts the SEARCH routine.
<RETURN>	Search on the NAme KEY FIELD.
ANDREWS <RETURN>	Find the first RECORD where the NAme IS exactly ANDREWS

<F7>

Let's EDIT this RECORD

↓↓↓↓↓

Move the CURSOR down to the POstcode FIELD.

→→→→8HB <F7>

Move across to 5YR and change it - then ACCEPT the change.

Now let's change a KEY FIELD.

<F7>

Start EDITing.

<F8>

Insert a space at the start of the NAme.

S <F7>

Change the name to SANDREWS then accept the change.

OK so we've changed the NAme which is a KEY FIELD so what's happened to the ANDREWS record ? Let's find out by doing a simple SEARCH.

<F4>

Starts the SEARCH routine just like before.

<RETURN>

Search on the NAme KEY FIELD.

* <RETURN>

This is a WILDCARD character which means look for any pattern in place of this * For a full explanation see advanced searching later in the Tutorial.

<F5>

Keep pressing <F5> until you see the SANDREWS record on the screen. You will have noticed that the RECORDS are recalled in Alphabetical order irrespective of the order in which you entered them.

You will also have noticed that the RECORD for ANDREWS was not shown - this is because the amended RECORD replaced the original one.

SANDREWS IS A RATHER SILLY NAME (WE CHOSE IT BECAUSE IT WAS UNLIKELY THAT YOU WOULD ENTER IT YOURSELF) SO LET'S DELETE IT FROM THE DATABASE

<F3>

Begin the DELETE routine.

Y <RETURN>

Confirm that we want to delete this RECORD. (Press <N> or just <RETURN> if you don't want to delete).

The RECORD has been deleted from the database - a quick search like the one above will confirm this fact. Note that deleting RECORDS does N O T make the database files any smaller. The gaps left by deleted RECORDS are used by new data when you enter more information.

SEARCHING FOR INFORMATION - BASIC STEPS.

In the ADD / DELETE / AMEND data tutorial we have performed some very simple searches so now let's add some detail to what we've done already. First of all we'll have a look at the RULES for searching out information.

1. You can only SEARCH on a KEY FIELD.

   Information in other FIELDS which are not KEY FIELDS can be taken into account but let's leave complications like that until we look at ADVANCED searching.

2. Searching IGNORES CASE DIFFERENCES.

   ie. If you are looking for SMITH then smith , Smith and SMITH would all count as valid data to be found.

3. You can use WILDCARD characters in your searches.

   ? means substitute ANY ONE character for the ?
   eg. Search for SM?TH and you could find Smith or Smyth or even Smoth.

   * means match ANY character string you like in place of AND AFTER the *
   eg. Search for S* and you would find Simpson , Smith , Smythe or any thing beginning with S

   If you search just using the * character as we did in the ADD / DELETE / AMEND tutorial then this means FIND ME EVERYTHING.

   Note that you can't use the * character like this SM*TH.

4. MicroFile remembers your last SEARCH SPECIFICATION and will use that if you print a REPORT or EXPORT some information. If you want the REPORT to contain some different RECORDS from your last search then y must re-set the search pattern first.

   If you have'nt already searched for something before using a REPORT or EXPORT then the * global pattern will be assumed.

<<<<<<<<< Keystrokes >>>>>>>>> <<<<<<<<<< Comments >>>>>>>>>>>

Let's start by looking for all the names beginning with J . There should be at least one because we entered JACKSON in the example above. If you haven't got a JACKSON then please enter one now.

<F4>	Begin searching.
<RETURN>	Search on the NAme FIELD.
J* <RETURN>	Look for all names starting with the letter J
<F5>	Look for the next name starting with J
<F6>	Look for the previous name starting with J

IF THERE ARE NO (MORE) NAMES WHICH MATCH THE SEARCH PATTERN THEN YOU WILL SEE AN ERROR MESSAGE. Press <RETURN> to continue.

Now let's try some different ways of searching for our friend JACKSON.

<F4> <RETURN>

J??KSON <RETURN>	This combination should also find Jackson. Can you see how ?

<F4> <RETURN>

JACKSON* <RETURN>	And this one.

<F4> <RETURN>

J??KS* <RETURN>	And this one too.

Before we finish let's re-set the search pattern so that all our reports etc will use the Global search.

<F4> <RETURN> * <RETURN>	Re-Sets the search pattern
<F1>	Return to the USE DATABASE MENU

CHANGING THE DATABASE DESIGN.

You will sometimes find that, no matter how carefully you have designed your database, changing circumstances will mean that your original design not longer meets your exact needs. Some vital piece of information may be missing or a FIELD may not be quite long enough to cope with every item which you need to enter.

The option AMEND DATABASE DEFINITION on the DATABASE MAINTENANCE MENU is there to cope with these situations.

In the following example we are going to do four things :-

1. Define a CONSTANT value for use in a CALCULATION.
2. Remove the third line of the address because we have found it to be surplus to requirements and is taking up unnecessary space.
3. Add some extra length to the second address line.
4. Add two new FIELDS -
   a. a NUMERIC FIELD recording a SALES VALUE.
   b. a CALCULATED FIELD which will be the sales value MULTIPLIED by the constant which represents SALES TAX % to give a SALES TAX value which will be calculated automatically.

<<<<<<<<<< Keystrokes >>>>>>>>> <<<<<<<<<< Comments >>>>>>>>>>>

Assume the start position for this example to be at the top of the USE DATABASE MENU.

↓↓↓↓↓<RETURN>	Select DATABASE MAINTENANCE MENU option.
↓↓↓↓ <RETURN>	Select DEFINE CONSTANT VALUES.
<RETURN>	Define first item in list as a constant value.
STax <RETURN>	Call it STax (short for Sales Tax)
15.0 <RETURN>	Enter the value as 15 (actually we want it to be 15% but see below for how to get the decimal places right)
<F7>	Accept the change and return to the menu.

↓↓↓↓↓↓↓ <RETURN>	Select AMEND DATABASE DEFINITION option.
<RETURN> <RETURN> <F7>	Don't bother to change the passwords although you could if you wanted to.
↓↓↓ <RETURN>	Select ACad FIELD to be edited.
NU <RETURN>	Make it FIELD type NUll. This effectively kills off the FIELD. Note that your actual data will NOT be affected until you press <F7> to accept the changes. If you press <F1> now the database will be left unaltered.
↓↓↓ <RETURN>	Start a new FIELD definition.
<RETURN> <Ctrl>→→→→ <RETURN>	Use the POP UP MENU to select the NuMeric FIELD type.
SAle <RETURN>	Call it SAle.
8 <RETURN>	Make the FIELD 8 characters long.....
2 <RETURN>	.....with 2 decimal places.
<RETURN>	SAle is not a KEY FIELD.
↓ <RETURN>	Move down one line & define the second new FIELD.
CA <RETURN>	It's a CAlculated FIELD.....
StaX <RETURN>	...called StaX (Sales Tax)
8 <RETURN> 2 <RETURN>	StaX is 8 characters long with 2 decimal places.
<RETURN>	It's not a KEY FIELD.
SA * ST / 100 <RETURN>	The way to work out the value of SX is SAle multiplied by STax and divided by 100 (because we stored STax as a percentage not a decimal number)
<F7>	Accept all these changes and rebuild the FILE where necessary.

PRODUCING REPORTS FROM YOUR DATABASE.

One of the principal reasons for maintaining a computer database is to be able to extract information in the form of a printed report. The instructions to MicroFile as to how you want your report to look are held in a REPORT DEFINITION which you put together using an option on the MAINTAIN DATABASE MENU.

You can store your report definitions so that regular reports can be produced quickly without having to define the report each time you want to use it.

When a report is printed the information is extracted from the database using the LAST SEARCH PATTERN which you entered and any SELECTION which may be active. If you haven't done a search during the current session then the GLOBAL search pattern will be used automatically.

Let's start with a simple report from our MAILLIST database which just lists the NAme , TOwn and postCOde for every RECORD in the FILE.

<<<<<<<<<< Keystrokes >>>>>>>>>	<<<<<<<<<< Comments >>>>>>>>>>>
We'll assume a starting position with the MAILLIST database active and the CURSOR at the top of the USE DATABASE MENU.	
↓↓↓↓↓ <RETURN>	Select MAINTAIN DATABASE MENU.
↓↓ <RETURN>	Select MAINTAIN REPORTS.
<RETURN>	Select DEFINE A REPORT.
<RETURN>	Start defining first column.
<RETURN>	Brings up POP UP MENU.
<RETURN>	Selects FIELD name from POP UP MENU.
Name of Person <RETURN>	Enter column heading.
<RETURN>	Don't use this FIELD for subtotal breaks. (See next example if you need an explanation of this term.)
↓ <RETURN>	Move to next column definition & start defining.
<RETURN>	Brings up POP UP MENU.

<RETURN>	Select MAINTAIN SCREEN LAYOUTS because we need to amend our existing layout to reflect the changes we just made.
<RETURN>	Select DEFINE option.
↓↓↓↓↓↓↓↓↓→→→→	Move cursor to where new FIELD descriptions are to go.
Sale value..... <RETURN> Sales Tax Value.. <F7>	Enter the new descriptions.
↓↓↓↓↓↓↓↓↓→→→→	Move the cursor to the position on the screen where the new FIELD is to go.
<F3> <RETURN><RETURN>	Position SAle.
↓ <F3> <RETURN><RETURN>	Position StaX.
<F7>	Accept the screen as amended.
	NOTE THAT THERE WAS NO NEED TO ADJUST FOR THE FIELD WHICH WAS DELETED THIS HAPPENED AUTOMATICALLY.
↓ <RETURN><RETURN><RETURN>	Store the amended screen layout for future use.
↓↓↓ <RETURN>	Return to MAINTAIN DATABASE MENU.
↓↓↓↓↓↓↓ <RETURN>	Return to USE DATABASE MENU.

NOW YOU SHOULD USE THE AMEND RECORD SKILLS WHICH YOU HAVE ALREADY LEARNED TO ADD THE NUMERIC VALUES FOR SALES INTO EACH RECORD. NOTE HOW AS YOU ADD EACH NEW VALUE THE StaX FIELD IS CALCULATED AUTOMATICALLY.

THE REPORT WILL NOW BE PRINTED.

<RETURN>	No - don't repeat the printing of this report.

You should now be back at the top of the USE DATABASE MENU having printed your report. Having defined and listed a simple report it is now time to use the more complex features which are connected with numeric FIELDS.

These include -

* SUB-TOTALS & TOTALS - the sum of a numeric column.
* MEAN - a simple arithmetic average.
* STANDARD DEVIATION - a statistic measuring spread.
* VARIANCE.
* MAXIMUM value.
* MINIMUM value.

If you don't understand the usage of the statistical terms you can find a full explanation in any basic statistics textbook.

To start the example go to the MAINTAIN REPORTS MENU and start from there (we're sure you don't need us to tell you how to use the menu system at this stage.)

<<<<<<<<<< Keystrokes >>>>>>>>>	<<<<<<<<<< Comments >>>>>>>>>>>
↓↓ <RETURN>	Select Recall Report option.
NU <RETURN>	Recall the NUll report definition. This effectively loads in a completely blank report definition.
<RETURN>	Select DEFINE REPORT option.
<RETURN>	Select 1st line to enter details onto.
<RETURN>	Brings up POP UP MENU.
<RETURN>	1st column will contain the NAme FIELD.
Persons Name <RETURN>	Enter column heading.

<Ctrl>→ <Ctrl>→ <Ctrl>→ <RETURN>	Selects TOwn FIELD from POP UP MENU.
Town Where He Lives. <RETURN>	Enter column heading.
<RETURN>	Don't use for subtotals.
↓ <RETURN>	Move to third column definition & start entering details.
<RETURN>	Brings up POP UP MENU.
CO <RETURN>	Third FIELD to be used is COde - Note that there are two ways of entering the FIELD names either from the POP UP MENU or directly from the keyboard.
Postcode <RETURN>	Enter column heading.
<RETURN>	Don't use for subtotals.
<F7>	Accept the definition as it appears on the screen.
↓ <RETURN>	Select Store Report option from the MENU.
NAmelist <RETURN>	Call it NAmelist (Note that the name must contain two capitals.)
↓↓↓ <RETURN>	Return to MAINTAIN DATABASE MENU.
↓↓↓↓↓↓↓ <RETURN>	Return to USE DATABASE MENU.
↓↓↓↓ <RETURN>	Select PRINT REPORT option. There's no need to recall the report on this occasion as defining it makes it active.
	If you don't have a printer connected to your computer it is IMPORTANT that you make the next input S <RETURN> not just <RETURN>.
<RETURN>	Use the default output device ie. the PRINTER. (The alternative is to print to the screen.)
Demo Report <RETURN>	Enter the page header.

Y <RETURN>	Break for subtotals on change of NAme. (ie. a subtotal will be printed each time the text in the NAme FIELD is different.)
↓ <RETURN><RETURN>	Move down a line & select POP UP MENU.
<Ctrl>→ five times <RETURN>	Select the FIELD SAle.
Sale Value <RETURN>	Enter column heading.
<RETURN>	Bring up POP UP MENU.
<Ctrl>→ <RETURN>	Select SUM as a calculation.
<RETURN>	Bring up POP UP MENU.
<Ctrl>→ <Ctrl>→ <RETURN>	Select MEAN as a calcuation.
<RETURN><RETURN>	Selecting the NUll calculation finishes the list of calculations to be performed.
↓ <RETURN><RETURN>	Move down & bring up POP UP MENU.
StaX <RETURN>	Select StaX FIELD for the next report column.
SalesTax <RETURN>	Enter column heading.
SU <RETURN> ME <RETURN> NU <RETURN>	Select SUM. Select MEAN. End list of calculations.
<F7>	Accept this report definition.
↓ <RETURN>	Select Store Report.
<RETURN>	Bring up POP UP MENU
<Ctrl>→ <RETURN>	Select an EMpty storage slot.
DEmo <RETURN>	Call the new report DEmo.

NOW RETURN TO THE USE DATABASE MENU
AND PRINT THIS NEW REPORT JUST AS WE DID
WITH THE NAmelist REPORT.

If you have any two names which are the same (case differences excepted) then you will notice how they are grouped together before the sub-totals and averages are calculated.

As a final experiment with reporting go back to the ADD / DELETE / AMEND option on the USE DATABASE MENU and try searching for a specific name which you know exists. If you immediately print the report again you will see that only the records which match your search pattern are included in the report.

To return to reporting using all the records in the database you will need to perform a global search using just the * character.

If you have more than one KEY FIELD and you want to prepare a report in which the basic contents are the same then remember that the KEY FIELD on which you last searched determines the order in which records are retrieved from the database. This in turn determines the order in which the records are printed on your reports.

<<<<<<<<<< Keystrokes >>>>>>>>>	<<<<<<<<<< Comments >>>>>>>>>>>
Start by moving through the menus to the MAINTAIN SELECTIONS MENU.	
<RETURN>	Select DEFINE SELECTION option.
<RETURN>	Bring up <POP UP MENU>.
<Ctrl>→ <RETURN>	Select TOwn as FIELD which determines KEY ORDER.
<RETURN>	We want to enter a RULE on 1st line of 1st quadrant.
TO <RETURN>	TOwn is the FIELD to be tested.
EQ <RETURN>	If it's EQual to .....
LONDON <RETURN>	...LONDON then the test is TRUE.
↓ <RETURN>	Move down to next condition...
NA <RETURN>	... which is NAme.....
EQ <RETURN>	... is EQual to .....
S* <RETURN>	... S and any characters following. Note the use of the wildcard character * in the condition.
↑→ <RETURN>	Move CURSOR to 1st line of 2nd quadrant.
TOwn <RETURN>	TOwn is the FIELD to be tested.
EQ <RETURN>	If it's EQual to.....
SHEFFIELD <RETURN>	....SHEFFIELD then the test is TRUE.
<F7>	Accept this definition as it's shown on the screen.
↓ <RETURN>	Select STORE option from the menu.
LonShef <RETURN>	Call the selection LonShef
↓↓↓ <RETURN>	Return to MAINTAIN DATABASE MENU.

BEING SELECTIVE WITH THE RECORDS YOU USE.

There may be occasions when you won't want to work with all the RECORDS in a database but just those which meet certain conditions (eg. just the people who live in LONDON). In order to achieve this we must define a set of rules for looking at a record and deciding whether the specific conditions you want have been met. We call this set of rules a SELECTION.

The general effect of having an active SELECTION is to appear to reduce the size of the database to ONLY THOSE RECORDS which conform with the conditions outlined in the SELECTION definition. It is as though you had temporarily deleted all the RECORDS which don't conform. In some database packages this process is also called FILTERing.

You can best see this when, with a SELECTION active, you do a global search using just the * character as the search pattern. As you step through the database any RECORDS which don't meet the SELECTION conditions will NOT be shown even though you are doing a global search.

The combination of a SEARCH PATTERN A N D a SELECTION gives a very powerful way of finding specific items of data. However you should be careful not to overload your conditions too much as it can be very easy to include so many selection rules so that there are no records at all which match up to your specifications.

HOW TO DEFINE A SELECTION.

The main part of the screen form used to define a selection is split up into four quadrants. Each quadrant contains six lines each of which can hold a SELECTION RULE.

The way in which the rules are combined works like this -

1. All the rules in the same quadrant have to be true for the SELECTION to be met.
2. If any of the quadrants evaluate as true then the SELECTION will be met.

EXAMPLE.

In the following SELECTION records will only be included IF -

a. The TOwn is LONDON
AND the NAme begins with a letter S

OR b. The TOwn is SHEFFIELD.

EXPORTING INFORMATION.

One of the advantages of storing your data in computer files is that you should not have to re-key lots of information into a new application if you already have that information stored on a disk.

MicroFile has facilities for selectively EXPORTing your data from your databases. You can control not just which RECORDS are exported but also which FIELDS. Also, should you need to, you can export information from a particular FIELD more than once - this facility can be of special use when EXPORTING data for use in MAILMERGE operations.

Information which has been EXPORTed can also be IMPORTed into other MicroFile databases thus saving effort in entering data more than once.

Data is exported in ASCII format which makes it easy for you to use that information with many other programs including ones you have written yourself.

In the following worked example we will split out just the NAme and TOwn from our MAILLIST database and send them to a FILE which will be used in constructing a new database (see IMPORTing data for details).

<<<<<<<<<< Keystrokes >>>>>>>>>	<<<<<<<<<< Comments >>>>>>>>>>>
START BY MOVING THE CURSOR TO THE EXPORT DATA OPTION ON THE MAINTAIN DATABASE MENU.	
<RETURN>	Select EXPORT DATA option.
<RETURN>	Enter a MATCH FIELD which must be a KEY FIELD.
NA <RETURN>	NAme FIELD will be the MATCH FIELD.
-- <RETURN>	Move CURSOR over to DATA FIELDS.
NA <RETURN>	1st DATA FIELD to be exported is NAme.
↓ <RETURN>	Move CURSOR down to next line.
TO <RETURN>	2nd DATA FIELD to be exported is TOwn.
<F7>	Accept this screen.

IF YOU NOW SEARCH YOUR DATABASE OR PRODUCE REPORTS OR EXPORT ANY DATA YOU WILL FIND THAT ONLY RECORDS WHERE THE TOWN IS LONDON AND NAME BEGINS WITH S OR TOWN IS SHEFFIELD ARE INCLUDED.

IF YOU WANT TO RETURN TO USING ALL THE RECORDS IN YOUR DATABASE YOU MUST RECALL THE NUll SELECTION USING THE RECALL SELECTION OPTION.

<<<<<<<<<< Keystrokes >>>>>>>>>	<<<<<<<<<< Comments >>>>>>>>>>>
START ONCE AGAIN AT THE EXPORT DATA OPTION IN THE MAINTAIN DATABASE MENU.	
<RETURN>	Select EXPORT DATA option.
<RETURN><RETURN>	Call the POP UP MENU and select the NAme FIELD.
↓ <RETURN><RETURN>	Move to the second line in the list & call the POP UP MENU.
<Ctrl> → <RETURN>	Select address line 1.
↓ <RETURN>	Move to the third line in the list & call the POP UP MENU.
AB <RETURN>	Select address line 2.
↓ <RETURN>	Move to the fourth line in the list & call the POP UP MENU.
TO <RETURN>	Select the TOwn FIELD.
↓ <RETURN>	Move to the fifth line in the list & call the POP UP MENU.
CO <RETURN>	Select the COde FIELD.
↓ <RETURN>	Move to the last line in the list & call the POP UP MENU.
NA <RETURN>	Select the NAme FIELD for a second time.
<F7>	Accept the list of EXPORT FIELDS.
<RETURN>	Accept the default setting - ie. don't EXPORT markers.
Y <RETURN>	Use the NewWord MAILMERGE format.
<RETURN> <F7>	Send the data to the default file called EXPORT.ASC
THE DATA IS NOW WRITTEN TO EXPORT.ASC	
<RETURN>	When EXPORT is completed press <RETURN> to return to the MAINTAIN DATABASE MENU.

Y <RETURN>	Because we want to re-import this data it is essential to export the markers which the IMPORTing process requires.
IM <RETURN>	Change the name of the FILE where the data will be sent to IMPORT.ASC. You can use any name you want - we just use these because they're easy to remember.
<F7>	Accept these istructions & start sending out data to the disk.
<RETURN>	When the EXPORT of data is finished return to the MAINTAIN DATABASE MENU.

A second use of the EXPORT facility is to send data to a FILE which will be used by a word processor for MAILMERGE. Compared with the above example there are some minor differences which are, nevertheless, important.

* For MAILMERGE no MATCH FIELD is necessary.
* Some word processors, like NewWord, expect information in a format known as "comma delimited ASCII". You can select the use of this format through the simple Yes/No switch provided. Note that this facility is automatically by-passed if you are using MATCH FIELDS because the two uses are incompatible.
* Remember data is EXPORTED in the FIELD order which you specify - you don't have to stick to the original order in which the FIELDs were defined.
* You can EXPORT the information from a particular FIELD more than once - this is useful if you want to use a name first in an address and then as a salutation later on in the MAILMERGE letter.

In this next example we will send name, address, postcode and then the name again to a file for use with NewWord MAILMERGE printing.

IMPORTING INFORMATION.

In the previous example on EXPORTing information we created a FILE containing data in a format suitable for re-IMPORTing into a MicroFile database. By doing this we can avoid having to key in data more than once.

If you want to try this IMPORT example for yourself please start by creating a new database with just three FIELDS. (If you don't already know how to do this without a keystroke list then it isn't yet time for you to be looking at advanced features like IMPORT.) These should have the format -

* TExt FIELD	NAme	length 20
* TExt FIELD	TOwn	length 20
* TExt FIELD	PHon	length 15

With the PHONES database loaded it is now easy to IMPORT the NAme and TOwn from the FILE IMPORT.ASC which we created earlier leaving just the entry of the phone numbers to complete this simple personal phone directory.

<<<<<<<<<< Keystrokes >>>>>>>>>	<<<<<<<<<< Comments >>>>>>>>>>>>
START AT THE IMPORT DATA OPTION ON THE MAINTAIN DATABASE MENU.	
<RETURN>	Select IMPORT DATA option.
<RETURN>	Let's IMPORT information from the default FILE called IMPORT.ASC
A <RETURN>	We want to add new RECORDS into our new database.
<F7>	Accept these instructions.
INFORMATION IS NOW READ FROM IMPORT.ASC	
<RETURN>	Return to MAINTAIN DATABASE MENU.

REFERENCE SECTION.

MENU NAME **USE DATABASE.**

OPTION NAME **ADD / DELETE / AMEND / SEARCH for RECORDS.**

FUNCTION This option has four parts -

1. New **RECORDs** may be added to the database.
2. **RECORDs** may be searched for.
3. Once found the **RECORD** may be either amended or
4. Deleted from the database.

NOTES

1. When adding a new **RECORD** or amending an existing one none of the **KEY FIELDS** may be left blank. (ie. you must enter something into a **KEY FIELD**).
2. The space left in a **FILE** by a deleted **RECORD** will be taken by the next addition.
3. Searches operate within the scope of the current **SELECTION**.
4. You can produce a **HARD COPY** of the **RECORD** currently on the screen by pressing the <COPY> key.

MENU NAME **USE DATABASE.**

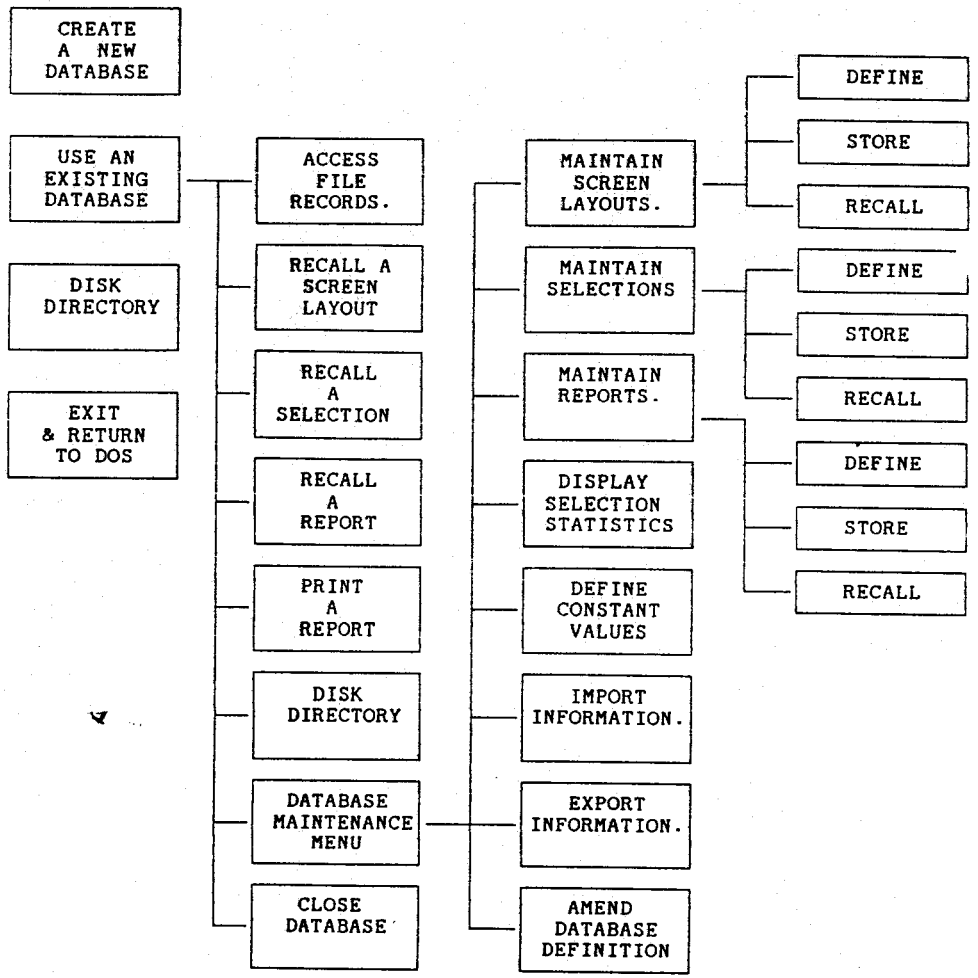
OPTION NAME **RECALL a SCREEN LAYOUT.**

FUNCTION To **LOAD** a screen layout from disk. You must do this before you can ADD/DELETE/EDIT/SEARCH for **RECORDS**. Screen layouts are created when you use the MAINTAIN SCREEN LAYOUTS option on the DATABASE MAINTENANCE MENU.

NOTES

1. If you want to effectively have no layout active then you can achieve this by recalling the **Null** layout.
2. To recall a layout you must previously have stored it on disk.

MENU MAP.



MENU NAME **USE DATABASE.**

OPTION NAME **RECALL a SELECTION.**

FUNCTION To **LOAD** a **SELECTION** from disk which then becomes the active **SELECTION**. You can create up to 8 **SELECTIONS** using the MAINTAIN SELECTIONS option on the DATABASE MAINTENANCE MENU.

NOTES
1. While a **SELECTION** is active access can only be made to **RECORDS** which meet the conditions specified by that **SELECTION**. If you want to restore accees to all **RECORDS** in the database then you must recall the **NUll SELECTION**.
2. **SELECTIONS** operate within the scope of the last **SEARCH** pattern.

MENU NAME **USE DATABASE.**

OPTION NAME **RECALL a REPORT.**

FUNCTION To **LOAD** a previously **SAVED** report specification. This then becomes the active report which will be used whenever you use the following **MENU** option Print a Report.

NOTES
1. If you want to return to the position of having no report active then you do this by recalling the **NUll** report.

MENU NAME **USE DATABASE MENU.**

OPTION NAME **PRINT a REPORT.**

FUNCTION To produce a report showing all the **RECORDS** in the current **SELECTION** which also match the last search pattern. The report is shown in the format as defined by the currently active report.

NOTES
1. You may print reports either on your printer or view them on the computer screen.
2. Reports which are more than 79 **CHARACTERS** wide will be printed in condensed size **CHARACTERS** so as to fit on standard paper.

MENU NAME **USE DATABASE.**

OPTION NAME **DATABASE MAINTENANCE.**

FUNCTION Allows access to a lower level **MENU** which contains options concerned with the format of the database itself and the **IMPORT / EXPORT** of data. These options are -
* MAINTAIN SCREEN LAYOUTS.
* MAINTAIN SELECTIONS.
* MAINTAIN REPORTS.
* DISPLAY SELECTION STATISTICS.
* DEFINE CONSTANT VALUES.
* IMPORT INFORMATION.
* EXPORT INFORMATION.
* AMEND DATABASE DEFINITION.

MENU NAME **MAINTAIN DATABASE.**

OPTION NAME **MAINTAIN REPORTS.**

FUNCTION Accesses a lower level **MENU** with options for the creation, amendment and storage of report definitions. The options are -

* DEFINE a REPORT.
* STORE a REPORT.
* RECALL a REPORT.

See page 59 for further details.

MENU NAME **MAINTAIN DATABASE.**

OPTION NAME **DISPLAY SELECTION STATISTICS.**

FUNCTION To obtain information about how **RECORDS** in the current **SELECTION** relate to the whole database. The **FILE** is scanned and a short screen report will tell you -

* The number of **RECORDS** in the **SELECTION.**
* The total number of **RECORDS** in the **FILE.**
* The percentage of the total number which meet the **SELECTION** conditions.

NOTES A running score of the number of **RECORDS** scanned is shown on the screen.

MENU NAME **MAINTAIN DATABASE.**

OPTION NAME **MAINTAIN SCREEN LAYOUTS.**

FUNCTION Accesses a lower level **MENU** concerned with the creation, amendment and permanent storage of your screen layouts. The options are -

* DEFINE a SCREEN LAYOUT.
* STORE a SCREEN LAYOUT.
* RECALL a SCREEN LAYOUT.

See page 57 for further details.

MENU NAME **MAINTAIN DATABASE.**

OPTION NAME **MAINTAIN SELECTIONS.**

FUNCTION Accesses a lower level **MENU** with options for the creation, amendment and permanent storage of **SELECTION** definitions. The options are -

* DEFINE a SELECTION.
* STORE a SELECTION.
* RECALL a SELECTION.

See page 58 for further details.

MENU NAME **MAINTAIN DATABASE.**

OPTION NAME **DEFINE CONSTANT VALUES.**

FUNCTION To amend the constant values which you set up when the database was created. You can amend these values any time you wish or add new constants to the list.

NOTES
1. The values of any calculated **FIELDS** in your database will change to reflect the revised value associated with any constant name.
2. The permanent disk record of your constant values will be automatically updated when you close the database and return to the main **MENU.**

MENU NAME **MAINTAIN DATABASE.**

OPTION NAME **IMPORT INFORMATION.**

FUNCTION To take information from a disk **FILE** and incorporate it into your database. This can be done in one of two ways -
* UPDATE MODE or
* ADD MODE.

In UPDATE mode the database is scanned to find a **RECORD** in which the MATCH FIELDS have values which are the same as those in the **IMPORT FILE.** If they are then the data **FIELDS** which follow in the **IMPORT FILE** are used to replace the existing data in that **RECORD.**

In ADD mode new **RECORDS** are simply created using the data from the **IMPORT FILE.**

NOTES
1. ADD mode is much faster than UPDATE mode.
2. You can create an **IMPORT FILE** using either MicroFile in **EXPORT** mode from another database, a word processor which generates **ASCII** text output or any of your own programs.
3. For a detailed example of the way in which data is matched, **IMPORT**ed and **EXPORT**ed please refer to APPENDIX D. Of the original MicroFile manual.

MENU NAME **MAINTAIN DATABASE.**

OPTION NAME **EXPORT INFORMATION.**

FUNCTION To copy information from your database to an external **FILE** so that it may be used by other programs or other MicroFile databases. The information is **EXPORT**ed in **ASCII** format for maximum portability.
The Match **FIELDS** are only relevant if you are exporting data which you want to selectively include into another MicroFile database using the **IMPORT** feature in update mode.

NOTES
1. If you have an active **SELECTION** then only those **RECORDS** which fall within the **SELECTION** will be used for **EXPORT**. If no **SELECTION** is active then information will be **EXPORT**ed from the whole database **FILE**.
2. **EXPORT**ing information will NOT delete any data from your database.
3. As with printing reports the last search pattern used will affect the choice of records to be EXPORTED.

MENU NAME **MAINTAIN DATABASE.**

OPTION NAME **AMEND this DATABASE DEFINITION.**

FUNCTION To change any of the information used to create the database. Some items affect your data which is stored on **FILE** others (eg. Passwords) only affect the database definition and do not require the data **FILE** to be rebuilt.

NOTES
1. There is no limit on the number of times you can amend the database definition.
2. If you want to retain the database in its original form then you should make a **BACKUP** copy before using this option.
3. For safety MicroFile keeps a copy of your data **FILE** when rebuilding to your new definition. The old copy is 'thrown away' when rebuilding has been successfully completed. This implies that you need free disk space at least equal to your database size to rebuild a data **FILE**.
4. There is NO provision for the conversion of existing data from one data type to another.(eg. from NUmeric to TExt).

MENU NAME **SCREEN LAYOUTS.**

OPTION NAME **DEFINE a SCREEN LAYOUT.**

FUNCTION To create a screen form to your design which is used when adding / deleting / amending / searching for your data. The process has two steps -
1. Create a text framework with any **FIELD** names, titles, borders etc.
2. Fix the points on the screen where your data will actually appear.

NOTES
1. If you have recalled a screen layout prior to using this option then the last one recalled will be presented to be amended instead of starting with a new screen. If you want to de-activate an old layout you can do this by recalling the **NUll** layout.
2. You can define up to four screens.

MENU NAME **SCREEN LAYOUTS.**

OPTION NAME **STORE a SCREEN LAYOUT.**

FUNCTION To keep a screen layout definition so that it can be recalled at a later date. You can store up to four layouts and there are four 'slots' provided for that purpose. A 'slot'which is not being used is described as EMpty. If you store any layout in a 'slot' which is already being used then that layout will overwrite the one which previously occupied the 'slot'.

NOTES
1. Any layout which is defined but not stored will be lost when you close the database and return to the main **MENU.**

MENU NAME **SCREEN LAYOUTS.**

OPTION NAME **RECALL a SCREEN LAYOUT.**

FUNCTION See RECALL SCREEN LAYOUT on page 49.

MENU NAME **SELECTIONS.**

OPTION NAME **DEFINE a SELECTION.**

FUNCTION To prepare or amend a **SELECTION** definition. The definition screen is divided into four quarters. A quarter which is blank will be ignored. If a **RECORD** matches the conditions specified in ANY of the quarters then it will be taken as being included within the current **SELECTION**.

Each quarter of the **SELECTION** definition is made up of six lines. Blank lines are ignored. For a **RECORD** to match with the conditions in particular quarter ALL of the conditions in that quarter must be met. (Technically the lines in each quarter are ANDed whilst the quarters are ORed).

NOTES
1. Using this option the current **SELECTION** is edited. If no **SELECTION** is active then a blank form is used. To de-activate a current **SELECTION** you should recall the **NUll SELECTION.**
2. To keep a **SELECTION** for future use you should **SAVE** it using the STORE a SELECTION option.

MENU NAME **SELECTIONS.**

OPTION NAME **STORE a SELECTION.**

FUNCTION To **SAVE** a named **SELECTION** definition so that it may be used at some future time. You can store up to 8 **SELECTIONS**. There are 8 'slots' provided for this purpose. If you choose to store a **SELECTION** in a 'slot' which is not EMpty then that **SELECTION** will overwrite the previous **SELECTION** in that 'slot'.

MENU NAME **SELECTIONS.**

OPTION NAME **RECALL a SELECTION.**

FUNCTION See RECALL a SELECTION on page 50.

MENU NAME **REPORTS.**

OPTION NAME **DEFINE a REPORT.**

FUNCTION Creates a new report definition or amends the one which is currently active. You may specify a subtotal to be printed when the value of one of the **FIELDS** changes and for calculations to be performed on numeric **FIELDS**. (SUM / MEAN / STANDARD DEVIATION / VARIANCE / MAXIMUM / MINIMUM). Subtotals will only be printed for numeric **FIELDS** which are to be SUMmed.
All of the calculations which you specify for a given **FIELD** will be performed - you are NOT limited to just one.

NOTES If you press <f1> to abort when amending a report definition then the original one will be restored (ie. you won't lose the current one).

MENU NAME **REPORTS.**

OPTION NAME **STORE a REPORT.**

FUNCTION To keep a report definition so that it may be used again at a future time. There are 8 storage 'slots' provided for this. Any 'slot' may be used to store a definition but if you use one which is not EMpty then the definition previously stored there will be overwritten.

MENU NAME **REPORTS.**

OPTION NAME **RECALL a REPORT.**

FUNCTION See RECALL a REPORT on page 50.

Saxon Computing. MicroFile.

APPENDICES.

A:
Refers to disk drive A on your computer. When used in a **FILENAME** (eg. A:CARS.DTA) it means the **FILE** called CARS.DTA on disk drive A.
See also **B:** and **C:**

A>
Called the A **PROMPT**. This is displayed on the screen by **CPM** when the computer is waiting for a command. You will not see the A prompt while MicroFile is running.

ARROW KEYS.
The keys on the right hand side of the keyboard marked with ARROW symbols. These keys are used to move the **CURSOR** around the screen.

ASCII codes.
The most popular standard for representing characters so that they can be understood by the computer. Short for American Standard Code for Information Interchange.

B:
Refers to disk drive B on your computer. See also **A:** and **C:**

B>
Called the B **PROMPT**. See **A>** for a description.

BACKUP.
Making a copy of a **FILE** or a whole disk which can be used should the original become damaged or mislaid. Remember that your time is of much greater value than the cost of the extra disks used as **BACKUP** copies.

BOOT.
Computer jargon meaning to start your computer and **LOAD** in the **CPM**.

BYTE.
The unit amount of memory space needed to store one **CHARACTER** of information. See also **K.**

C>
Refers to disk drive C on your computer. See also A: and B: . Disk drive C is often the designation given to a hard disk when a computer has both hard and floppy disks.

CARRIAGE RETURN.
ASCII code 13 which, when printed on the screen or on a printer, causes the **CURSOR** to move to the start of the line. The origin of this term is from the electric typewriter which had a key to return the carriage to the start position.
See also **ENTER KEY** and **RETURN KEY.**

CHARACTER.
Any symbol which can be represented in a computer and displayed by it, including letters numbers and graphics symbols.

CODES.
Numbers or symbols which act as instructions to your computer or printer.

COMMAND.
An instruction to the computer.

CURSOR.
A block character which marks the postion on the screen where **CHARACTERS** will appear when entered at the keyboard.

CURSOR KEYS.
The keys on the keyboard which will move the **CURSOR**. These are the **ARROW KEYS** which, used in conjunction with the SHIFT, ALT or CTRL keys, move the current **CURSOR** position in a variety of ways.

DATABASE.
Information stored and organised in a computer readable format.

DATA DISK.
A disk which is used for storing data or information. cf. Program disk which is used to store programs. There is no special reason why programs and data cannot be stored on the same disk.

DEFAULT.
The standard value which MicroFile assumes for certain settings. You may change any **DEFAULT** values to ones of your own choice whilst operating MicroFile.

DIR.
A **CPM COMMAND** which is used to view a list of **FILES** which are stored on a disk.

DIRECTORY.
A list of the files on a disk. The list is automatically kept up to date by the computer. You can view a disk **DIRECTORY** whilst running MicroFile by selecting the appropriate option on one of the **MENUS.**

DISK DRIVE DESIGNATOR.
Every disk drive attached to your computer has a unique label consisting of a single letter. When used in conjunction with a **FILENAME** the letter is followed by a colon : to distinguish the letter from those in the body of the **FILENAME.**
See also **A: A> B: B> C: C>**

DISTRIBUTION DISK.
The original program disk as supplied by a software vendor to you. You should NOT use such a disk as a working disk. Make a **BACKUP** copy and keep the original in a safe place.

CPM.
Disk Operating System. This is the resident program which actually runs the computer and handles such basics as storing and retrieving information on the disks. You should be familiar with the basics of the CPM on your computer if you want to handle data and programs in a competent manner.

EDIT.
The act of updating information which has already been entered into the computer.

ENTER KEY.
A key which, when pressed, generates a **CARRIAGE RETURN**. This usually signals to the computer that a **COMMAND** or entry of a line of data is complete.
See also **RETURN KEY.**

EXPORT.
Taking data from a **FILE** and storing it in a second **FILE**, perhaps in a different form or order. Often used to transfer information selectively to other programs.

FIELD.
A component part of a **RECORD. FIELDS** are made up of **CHARACTERS, RECORDS** are made up of **FIELDS** and **FILES** are made up of **RECORDS.** You can liken this structure to a card index file where each **RECORD** is a CARD and each **FIELD** is a single line on that card.

FILE.
A collection of data stored on a computer disk. To be able to identify one collection from another each **FILE** is given a different name. New files may be created and old ones changed, merged together or sliced up into separate parts.

FILENAME.
FILES must be given names which conform to certain rules if they are to be accepted by the **CPM.** Please refer to your computer's operating manual if you are not sure what these rules are. A typical **FILENAME** might consist of three parts -

1. The DRIVE DESIGNATOR (eg. **A:**);
2. The main name (eg. CARS).
3. The extension (eg. .DTA).

so that the complete name would be entered as B:CARS.DOC
The DRIVE DESIGNATOR and extension are optional.

FORMAT DISK.
Preparing a new disk to receive information. Invoked by a CPM command, see your computer's manual for further details.

FUNCTION KEYS.
Keys which are reserved for special jobs rather than the ordinary entry and editing of data which most of the keys do. The jobs performed by the function keys are usually determined by the author of a particular program and so will not necessarily do the same job in two different programs. In MicroFile the keys <f1> to <f8> are used to signify acceptance / rejection of a screen full of data etc. The current use of the **FUNCTION KEYS** is always displayed by MicroFile at the foot of the screen.

HARD COPY.
Paper print out of a file. The screen image is called soft copy.

HIGHLIGHT BAR.
Screen text where the **CHARACTERS** are shown with the colours reversed and used as part of a **MENU.** This **HIGHLIGHT BAR** is used to indicate the current choice which will be activated if you press the <RETURN> key. The BAR is moved to another option by using the **ARROW KEYS.**

IMPORT.
Taking information from an external **FILE** and incorporating it into your database. This may be done either selectively or in total.

K.
A term often used to refer to the storage capacity of a computer or its disks. Short for Kilobyte although the figure is actually 1024 **BYTES** not 1000 **BYTES.**

KEY FIELD.
A **FIELD** which is used to determine the order in which information is stored in **FILES.** MicroFile supports up to 4 **KEY FIELDS** for any one **FILE** which means that you can keep track of your data in four different orders.

LOAD.
Transferring a program or **FILE** from disk into your computer.

LOG.
The act of specifying a particular drive as the **DEFAULT** drive. You do not need to use the DRIVE DESIGNATOR in respect of the **DEFAULT** drive. To change from one drive to another simply type the DESIGNATOR and press the <RETURN> key. eg. **C:** <RETURN> will **LOG** onto drive **C:** as the **DEFAULT** drive.

ROM.
Read Only Memory. Memory which, once written to cannot be erased. This implies that the only meaningful operation with memory of this kind is to read information from it.

RS232.
A widespread standard for serial (ie. one bit of information at a time) data communications.

SAVE.
Storing a **FILE** on disk so that the information may be retrieved later.
See also **LOAD.**

SEARCH.
To look for a specific piece of information or one which meets certain conditions.

SEARCH KEY.
A **FIELD** the value of which is used to determine the order in which your information is stored. MicroFile uses B-trees to keep track of your data. Using this method **SEARCH**es of large quantities of data are faster than other **RANDOM ACCESS** methods.

SELECTION.
A set of rules entered by a **DATABASE** user to determine which **RECORDS** from the **DATABASE** are accessed by a **SEARCH** or report operation. The effect is to limit access to only those **RECORDS** which conform to the set of rules.

SERIAL PRINTER.
One which uses the SERIAL port (or RS232 port) on your computer. Called SERIAL because all the signals travel down a single wire in SERIES. (cf PARALLEL PRINTER).

STRING.
Jargon. Literally a series of **CHARACTERS** 'strung' together.

SYSTEM FORMAT.
A disk which has been **FORMATTED** with the **CPM** system stored on it. See **FORMAT.**

SYSTEM TRACKS.
An area of a disk reserved for storage of the **CPM** system programs.

MENU.
A list of choices available to you at a particular time. You select just one of those options by moving a **HIGHLIGHT BAR** using the **ARROW KEYS**. If you press <ENTER> or <RETURN> then the option currently under the bar will be carried out.

NUll.
A term describing a blank **RECORD** or definition. (eg. a **NUll SELECTION** is one which has no conditions entered into it).

OVERLAY.
If a program is too big to fit into your computers memory all at once then it is possible to organise it into smaller parts which are **LOAD**ed in from disk only when they are needed. This is called **OVERLAY**ing.

PARALLEL PRINTER.
A type of printer which is connected to the parallel port on your computer. Called parallel because up to eight signals travel simultaneously down eight wires to the printer. Sometimes called CENTRONICS after a printer company who popularised the use of this type of printer. (cf SERIAL PRINTER.)

POP UP MENU.
A **MENU** which appears temporarily on the screen prompting you to make a choice. When that choice has been made the **MENU** disappears leaving the remainder of the screen intact.

PROMPT.
A request for information by the computer or a program. This may be as cryptic as **CPM's A>** prompt or an instruction such as ENTER FILENAME - .

RAM.
Random Access Memory. Memory which is part of the computer's circuitry and can be both written to and read from.

RANDOM ACCESS.
The ability to read from or write to either memory or disk in any desired order. Compare this with sequential access where you must start at the beginning and examine each item in turn until you find the item you want.

RECORD.
A collection of **FIELDS** which grouped together form a discrete set of information. Each **RECORD** can be identified and accessed via its **KEY FIELDS** of which there must be at least one.

TEXT FILE.
A **FILE** composed of **CHARACTERS** which all have their literal meaning. (ie. there are none which have a coded meaning).
Some programs use **CHARCACTERS** in a way which uses the **ASCII CODE** number as part of a private coding system so that you cannot read a **FILE** and take it at face value. MicroFile **IMPORT** and **EXPORT FILES** are Pure **TEXT FILES** with no hidden meanings.

UTILITY PROGRAM.
Programs, usually supplied with the **CPM**, which perform basic tasks such as **FORMAT**ting disks or copying **FILES**.

WILDCARD CHARACTERS.
Ones which are used when you only want to specify part of a piece of information to be used in a **SEARCH**. The two **CHARACTERS** concerned are * and ?.
These have specific meanings. ? means substitute any **CHARACTER** for this one. * means substitute any **STRING** for this character.

WILDCARD SEARCH.
A SEARCH in which you use **WILDCARD CHARACTERS** instead of specifying the full item which you want to **SEARCH** for. (eg. **SEARCH**ing for FRE* would find both FRED and FREDA).

WORK DISK.
A disk which you use to store and process data. Compare this with **BACKUP** disks and **DISTRIBUTION** disks.

WRITE PROTECT.
A notch at the top left of each disk side. If the notch is open the disk cannot be written to nor can information be erased from it. If the notch is covered usually with a red or white tab then the disk operates normally. It is good practice, when copying disks, to **WRITE PROTECT** the disk you are copying from.

MAKING BACKUP COPIES.

There are two kinds of BACKUP copies you will want to make - but the procedure is the same in both cases. You will need to make BACKUP copies of your program disk and also at least one copy of each DATA disk.

The procedure is simple with only 5 steps.

1. WRITE PROTECT the disk you are going to copy from.
2. Starting at the A> PROMPT put the CPM system disk in drive A:
3. Type DISCKIT <RETURN>
4. Remove the CPM system disk and replace it with the disk you are copying FROM.
5. Follow the instructions given to you by the DISCKIT UTILITY until the copy is complete.

Please be diligent in making BACKUP copies - it isn't often that a disk comes to grief but you can be sure that when one does it will be at a crucial or inconvenient time. You can avoid much wastage of your valuable time if you have made regular BACKUPS of your disks.

MicroFile DISK FILES.

The FILES which should be on your DISTRIBUTION copy of MicroFile are -

MF8.COM	Loader program.
MF.CHN	The main MicroFile program.
MF.000 .. MF.011	OVERLAY programs which are transferred to drive M: by MF8.COM.
SETKEYS KEYS.JBS	Used to set-up the keyboard when loading the program.
README.NOW	If this FILE is present on your disk please read the contents by using the TYPE UTILITY program. This FILE contains information regarding the latest version of MicroFile and any special news we feel you ought to have. If README.NOW is not on your disk don't worry.

MicroFile SPECIFICATION.

Maximum number of FIELDS.....20

Maximum number of KEY FIELDS.....4

Maximum KEY FIELD length.....20 CHARACTERS.

Maximum FIELD length.....80 CHARACTERS.

Maximum number of records.....65536

Maximum number of selections pre-defined.....8

Maximum number of reports pre-defined.....8

Maximum number of screen layouts pre-defined.....4

Maximum report width.....117 CHARACTERS.

All of the available space on a single disk may be used for data storage.

The database definition may be changed at any time. New FIELDS may be added, ones which are no longer necessary may be deleted. FIELDS which were not KEY FIELDS may be re-designated to be KEY FIELDS.

Information may be IMPORTED and EXPORTED in ASCII form for maximum compatibility with other programs. When IMPORTING data may be added to the database on either a selective or global basis.

FILES are password protected on two levels. On the higher level (Supervisor) any operation may be performed. At the lower (User) level information may be inspected and reports produced but changes to both data and the database definition are prohibited.

MicroWord

A Flexible Program for Word Processing

CONTENTS.

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GETTING STARTED.

What's needed to start using MicroWord.

* An Amstrad PCW8256 or PCW8512 computer.
* Some blank disks so that you can make a working copy of the MicroWord programs and to keep your documents for later use.
* You should know how to turn on your computer and how to format and copy disks.
* A printer and a supply of paper - these are not absolutely essential to start with but are very useful.

MAKING A WORK DISK.

You should N E V E R use the program distribution disk to run the MicroWord programs on your computer. Use this disk only for making a WORK DISK to be used for day to day processing of your texts.

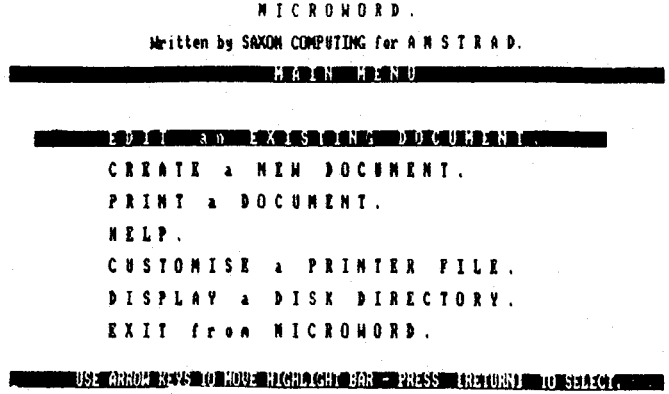
The MicroWord programs are NOT copy protected so you can make as many copies as you need for your own personal use. However each copy does contain an individual serial number and wherever we find that this trust has been abused the full weight of the law will be used against any software thief or pirate.

Making a work disk is very easy. Simply use the DISCKIT program on your CPM Plus System disk to copy the distribution disk onto a blank disk.

The MicroWord programs and Printer Control Files will be copied onto your blank disk. Now put the MicroWord distribution disk in a place where it can be kept safe in case you ever need to make another WORK DISK.

Saxon Computing MicroWord.

On the screen you should now see a Menu of choices like this -



To make a choice from the MENU simply use the ARROW keys to move the highlight bar to the option which you want to use then press the <RETURN> key.

We suggest that you spend an hour or so experimenting with MicroWord to familiarise yourself with the program before attempting any serious work. If you need a reminder about a particular command then you can call up the HELP MENU whilst you are EDITING your document by pressing the <F1> key. In a similar way you can display the DIRECTORY of any disk drive on your computer by pressing <F2> and the Printer Control Codes in use can be displayed by pressing <F3>.

If you are very new to computing or word processing and still don't feel too confident then read on through the introduction where there's a closer look at the computer's KEYBOARD and an example of MicroWord in use. Those of you who are old hands can skip the introduction and just dip into the REFERENCE section as and when you need to.

If your computer is equipped with a HARD DISK please consult the APPENDIX - USING A HARD DISK if you want to run MicroWord from that disk.

MicroWord has been designed so that it can be used with many different printers and take advantage of the features which they offer. To achieve this PRINTER CONTROL FILES for many of the popular printers have been included on the MicroWord disk and these will have been transferred to your WORK DISK.

Most people using MicroWord will, over quite a long period, probably only use one, or at most two, different printers. To save having to specify which PRINTER CONTROL FILE (PCF for short) you are using each time you LOAD the program MicroWord will automatically look for and LOAD a DEFAULT PCF which will be called D.PCF. To start with the file D.PCF contains a copy of the PCF for the general family of EPSON printers and compatible types but if you need to use a different PCF then you can set the DEFAULT file to another printer type in this way.

STEP 1. Place the WORK DISK in the current drive.

STEP 2. Type COPY SANPLEDS.PCF D.PCF < ENTER >

This will copy the printer control details for the SANPLE Daisy Step printer into the default control file. Now each time you run MicroWord it is those details which will be used instead of those for the EPSON type printers.

Don't worry if you can't see a PCF specifically for your printer - you can experiment with the other files on the disk or , if really necessary , make a new file specially for your printer. (see Printer Control Files in the REFERENCE SECTION for further details).

STARTING THE PROGRAM.

MicroWord can be loaded from any of the disk drives on your computer. On the PCWdrive **M:** is used to store the **OVERLAY FILES** so once MicroWord has been loaded you may remove the work disk from drive A:. There is no reason why you should not also store your document files on the work disk but equally you might use any formatted disk in the drive which you were logged on to before loading MicroWord. If you were logged on to drive A: and wish to store documents on drive B: then you will need to precede all filenames with B:. (See glossary for explanation of **FILENAME**).

Assuming that the current drive is drive A: place the work disk into that drive and type

SETKEYS KEYS.MWJ <RETURN>
MW8 <RETURN>

IF YOU ARE FAMILIAR WITH THE POPULAR WORDSTAR WORD PROCESSING PROGRAM THEN YOU WILL BE INTERESTED TO KNOW THAT MicroWord ALSO USES THE "MAGIC DIAMOND" CURSOR CONTROLS. MOST OF THE COMMANDS ARE WORDSTAR COMPATIBLE TOO.

The Function Keys.

MicroWord uses the **FUNCTION KEYS** for the following purposes :-

* <F1> HELP !
  Any time during editing you can call up the HELP menu if you need to look up the use of a particular command or feature. Please note that the HELP function is not available whilst printing.

* <F2> DISK DIRECTORY.
  There are be many occasions when it is useful to be able to look at the directory of a particular disk to check on a filename etc. You can do this at any time when MicroWord is asking you to enter a filename or at any time when editing a document. When you have finished with the directory pressing <RETURN> will return you to your previous task.

* <F3> PRINTER CONTROL.
  It is useful to be able to call up a list of the PRINTER CONTROL CODES as defined by the PCF which is resident. Pressing <F3> whilst editing will show you the list - press <Esc> to return to editing your document.

* <F4> AUTOMATIC DOCUMENT BACK UP.
  Whilst you are editing a document every ten minutes MicroWord will stop for a few moments and save your document to the current disk drive under the name BACKUP.TXT. The program defaults to BACK UP ON but the function is turned off by pressing <F4> and answering Y for YES.

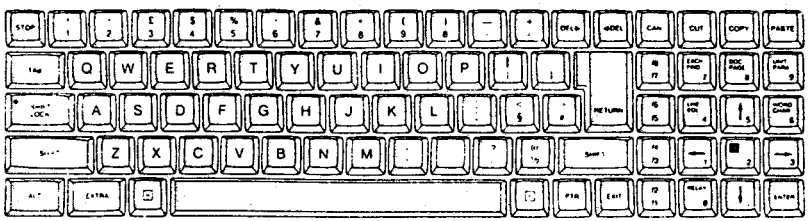
* <F5> AUTOMATIC INDENT ON / OFF.

* <F7> GO.
  Used during printer control file set up and when setting up a print run to indicate that all data entry is finished.

INTRODUCTION.

The Keyboard.

If you are using an Amstrad PCW Computer then your keyboard should look something like the picture below. Throughout this manual and the MicroWord screen prompts we use **<CTRL>** and **<ESC>** which on a PCW are marked **<ALT>** and **<EXIT>** respectively.



The keys fall into four main groups :-

* The FUNCTION keys - on the right of the keyboard and marked F1 through to F8. These are used for dedicated program features like HELP !

* The SHIFT type keys - these are used in conjunction with other keys on the keyboard to alter the meaning of these other keys. At the simplest level the SHIFT keys determine whether a key produces an UPPER or LOWER CASE character. Also included in this group are the keys marked <Ctrl> this is the CONTROL key or <Alt> the ALTERNATE key.

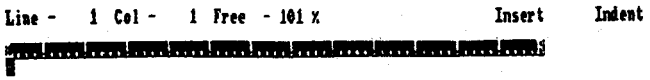
* The NUMERIC KEYPAD - on the right hand side of the keyboard. The keys here can have two different uses which are governed by the use of the key marked <EXTRA>. With the <EXTRA> depressed the keys produce numbers. Without the <EXTRA> key the ARROW KEYS which control the flashing CURSOR come into use.

* The remaining keys are used to produce the characters with which they are marked - except when used in conjunction with the <Ctrl> key.

SAMPLE LETTER.

If you're not familiar with word processing a good way to start is by following a short example. Experienced users will probably skip this section and be able to get started with no further delay and get by with the built in HELP facility.

Start the MicroWord program as described on page 8 then choose option 2 Start a New Document from the main menu. The computer screen should then look like this :-



The top line gives you information about the current status of your document and which of the various modes of operation are being used.

If you press the <F6> key several times you will see how the indicator changes as you vary the mode between INSERT and OVERWRITE. Now try pressing the <Ctrl> followed by <V> and notice how this has exactly the same effect. The duplication of command keystrokes is for the benefit of the many people who are familiar with the WORDSTAR word processor program and would not want to re-learn a whole new command structure.

Now try the <F5> (or use <Ctrl Q > <I>) to alternatively turn on & off the automatic indent.

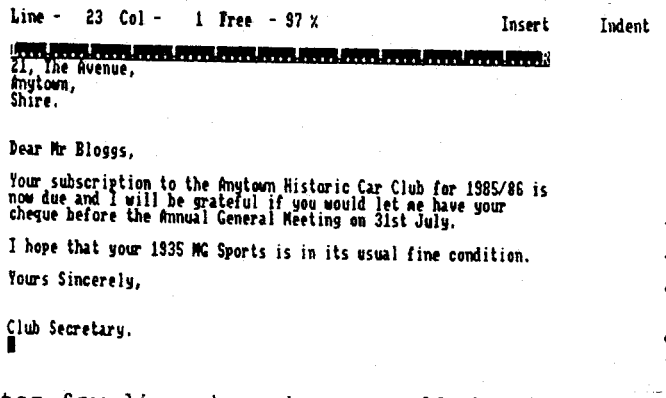
As you enter more and more text the indicator at the top will tell you how much free space is left for you to use. If you try to use the CURSOR DOWN key when the document is empty you will find that it won't move. This is because its movement is limited to the length of text typed on the current line and vertically to the last line of the document. If you haven't typed anything then there's nowhere to go.

Type in the example letter exactly as shown in the following box. Don't press the <RETURN> key at the end of each line unless that key is also used in the example. If you make a mistake and notice it straight away then delete it using the <Del> keys but otherwise leave any errors for now.

Type this in exactly as shown :-

```
10th July, 1985.<RETURN>
<RETURN>
<RETURN>
<RETURN>
Mr F.Bloggs,<RETURN>
21, The Avenue,<RETURN>
Anytown,<RETURN>
Shire.<RETURN>
<RETURN>
<RETURN>
Dear Mr.Bloggs,<RETURN>
<RETURN>
Your subscription to the Anytown Historic Car Club for 1985/86 is
now due and I will be grateful if you would let me have your
cheque before the Annual General Meeting on 31st July.<RETURN>
<RETURN>
I hope that your 1935 MG Sports is in its usual fine condition.<RETURN>
<RETURN>
Yours sincerely,<RETURN>
<RETURN>
<RETURN>
Club Secretary.<RETURN>
```

Typing mistakes apart your letter should look something like this



The top few lines have been scrolled off the screen because the letter is too long to be shown all at once. If you wish you can now use the CURSOR keys to view different parts of the document.

PRINTING THE LETTER.

Firstly check that your printer is properly connected to the computer, that it is switched on, on-line and has a good supply of paper.

Now select option 3 Print a Document from the main menu. MicroWord will ask you for the name of the document to be printed.

Type LETTER.TXT <RETURN> and your letter will be loaded from the file of that name on the current disk drive.

The screen will now look like this :-

To keep things simple for the moment you need not make any changes to the DEFAULT values given to the printer settings. Because we have not used any special print formatting CODES we don't even need to worry about whether the current PCF is the correct one for the printer.

Press <F7> the GO key and your letter will be printed out. When printing has finished control automatically returns to the main menu.

HOW DO I GET A MORE COMPLEX PRINT OUT ?

Features such as MERGE PRINTING or LINKING DOCUMENTS are all handled by special instructions called DOT COMMANDS. These are different from the PRINTER CONTROL CODES in that they are independant of any special features of the printer (ie. you can use these whether your printer has a thousand features or none at all). When you have confidently mastered the basics of simple letters take a look at the REFERENCE SECTION pages on DOT COMMANDS for a full list of what is available.

CORRECTING MISTAKES.

You can do this in a variety of ways. Use the CURSOR keys to move the CURSOR to the error; you can then either :-

* DELETE the error using the <Del> keys.

or * Change to OVERTYPE mode and simply type over the error.

For more drastic changes there are powerful commands to delete whole words, whole lines or parts of lines and to reform a paragraph if you have inserted lots of new text and the layout has become untidy. You can also change the left and right margins and reform paragraphs to fit within the new margins if you wish.

When you have corrected any typing errors complete the exercise by SAVING your document to disk. Do this by typing :-

<Ctrl K > <X>

You will then be prompted for the name of a file to use. If you want to check the contents of the disk first press <F2> <RETURN> <RETURN> to display the disk directory.

Type LETTER.TXT <RETURN> to save your letter in the file called LETTER.TXT on the current drive.

After your letter has been saved MicroWord will check that you want to return to the main menu - press <Y> for yes. (There are several different combination commands for saving and returning to the menu - see HELP screens for more details).

CONGRATULATIONS.
You have typed and saved your first document using a word processor. If you have a printer attached we can now move on to printing it out.

SUMMARY.

By now you should be able to at least produce simple, no frills, documents and letters. MicroWord is, however, capable of much more than these basics. You can :-

* Link documents together which is how we produced this manual using MicroWord.

* Produce multiple personalised copies from a standard letter using MERGE PRINTING.

* Sort information in ascending or descending order based on a flexible columnar layout.

* Use special effects on your printer to highlight information.

Please take some time to read through the REFERENCE SECTION where you will find all the details you need to take advantage of these powerful features of MicroWord.

HINTS, TIPS, DO'S & DON'TS.

DO make regular back up copies of your data disks (see APPENDIX B for precise instructions on how to do this). Remember disks are cheap - your time isn't.

DON'T keep your back up copies with the originals.

DON'T expose your disks to
HEAT
MOISTURE
MAGNETS
STICKY FINGERS

DON'T bend disks or write on the labels with ball point pens.

DON'T remove the write protect tab from the original program disk and DON'T use the original disk as a work disk.

DON'T Turn off the power to the computer or disk drive whilst the program is running OR with a disk still in the drive.

HINT If you want to use continuous stationery in the PCW printer remember to use the UTILITY program PAPER to set up the printer before starting MicroWord.

CURSOR MOVEMENT

GOTO TOP of PAGE.

<Ctrl> <Q> <E>
or <Ctrl> <↑>

GOTO BOTTOM of PAGE.

<Ctrl> <Q> <X>
or <Ctrl> <↓>

GOTO TOP of DOCUMENT.

<Ctrl> <Q> <R>

GOTO END of DOCUMENT.

<Ctrl> <Q> <C>

GOTO START of LINE.

<Ctrl> <Q> <S>
or <Ctrl> <←>

GOTO END of LINE.

<Ctrl> <Q> <D>
or <Ctrl> <→>

GOTO NEXT TAB Stop.

<Ctrl> <I>
or <Tab>

CURSOR MOVEMENT

MOVE UP a LINE.

<Ctrl> <E>
or <↑>

MOVE DOWN a LINE.

<Ctrl> <X>
or <↓>

MOVE LEFT one CHARACTER.

<Ctrl> <S>
or <←>

MOVE RIGHT one CHARACTER.

<Ctrl> <D>
or <→>

MOVE LEFT one WORD.

<Ctrl> <A>
or <Shift> <←>

MOVE RIGHT one WORD.

<Ctrl> <F>
or <Shift> <→>

MOVE UP one PAGE.

<Ctrl> <R>
or <Shift> <↑>

MOVE DOWN one PAGE.

<Ctrl> <C>
or <Shift> <↓>

WORDWRAP.

MicroWord will use WORDWRAP when you are in INSERT mode and

* if you are typing in new text and you reach the RIGHT MARGIN.

or

* if you are inserting some text into a passage which already exists and the current line is about to overflow the maximum allowable line length.

WORDWRAP will also be used when you are in OVERWRITE mode and creating new text.

SEARCH for PHRASE.

<Ctrl> <Q> <F>

SEARCH and REPLACE PHRASE.

<Ctrl> <Q> <A>

REPEAT LAST SEARCH.

<Ctrl> <L>

Search and replace options are -

G	Search GLOBALLY.
B	Search BACK from CURSOR position.
N	NO ask for confirmation before replacing.
W	Match WHOLE WORDS only.
U	Ignore UPPER / LOWER case differences.

EDITING

DELETE Character LEFT.

<Ctrl> <H>
or <← Del>

DELETE Character under CURSOR.

<Ctrl> <G>
or <Del→ >

DELETE Current LINE.

<Ctrl> <Y>

DELETE WORD to RIGHT of CURSOR.

<Ctrl> <T>

DELETE from CURSOR to END of LINE.

<Ctrl> <Q> <Y>

DELETE from CURSOR to START of LINE.

<Ctrl> <Q> <Del>

EDITING

MARK BEGINNING of BLOCK.
<Ctrl> <K> <B>

MARK END of BLOCK.
<Ctrl> <K> <K>

UNMARK BLOCK.
<Ctrl> <K> <U>

MOVE BLOCK.
<Ctrl> <K> <V>

COPY BLOCK.
<Ctrl> <K> <C>

DELETE BLOCK.
<Ctrl> <K> <Y>

SORT BLOCK - ASCENDING.
<Ctrl> <K> <A>

The lines in the current block are sorted into ascending order. The sort key is taken from each line starting at the character position of the block begin marker.

SORT BLOCK - DESCENDING.
<Ctrl> <K> <E>

EDITING

INSERT MODE ON / OFF.
<Ctrl> <V>
or <F6>

INSERT a LINE.
<RETURN>
or <Ctrl> <N>
or <Ctrl> <J>

CENTRE current LINE.
<Ctrl> <O> <C>

REFORM current PARAGRAPH.
<Ctrl> <B>

* The current PARAGRAPH is taken from the CURSOR line to the next line ending with a HARD CARRIAGE RETURN.
The current margin settings will be used as the margins for the paragraph when re-formed.

SET LEFT MARGIN.
<Ctrl> <O> <L>

SET RIGHT MARGIN.
<Ctrl> <O> <R>

MARGIN RELEASE.
<Ctrl> <O> <X>

STORING TEXT

DISK DIRECTORIES.

There will be many occasions when you will want to check the contents of a disk whilst you are working with MicroWord. You can do this at any time whilst you are editing text or when MicroWord is prompting you to enter a FILENAME simply by pressing the <F2> key.

SAVE DOCUMENT then CONTINUE editing.

<Ctrl> <K> <S>

SAVE DOCUMENT then RETURN to MENU.

<Ctrl> <K> <X>

SAVE DOCUMENT then START a NEW DOCUMENT.

<Ctrl> <K> <D>

SAVE MARKED BLOCK to disk. (WRITE block)

<Ctrl> <K> <W>

READ BLOCK from disk.

<Ctrl> <K> <R>

Please note that if you give the name of an existing file as the name of a file to be SAVED then the old file in that name will be overwritten. A WARNING will always be given before this happens and you will be able to change your mind should you wish to do so.

AUTOMATIC DOCUMENT BACKUP.

MicroWord will automatically back up your current document to a file BACKUP.TXT once every 10 minutes whilst you are editing. This is to guard against loss due to power failure or loss due to inadvertantly returning to the MENU without saving your document first. (Note that you cannot do this without MicroWord first warning you of the danger.)

If you would prefer not to have this feature then you can turn it OFF (and back on again) by pressing the <F4> key.

If you are editing a number of documents in a sequence then, of course, when you change to a new document the first automatic backup will overwrite the backup of the previous one. It is best to regard this feature as a last resort in cases of power or hardware failure and keep proper security copies of all your important files.

PRINTING

NUMBER OF LINES per PAGE.

This refers to the TOTAL number of print lines which can be printed on the paper you are using NOT the number of lines you wish to print. The most common size of fanfold computer paper is 66 lines per sheet so this is the DEFAULT value. Other common sizes are 48 and 72 lines per sheet. A4 size single sheets rate 70 lines per page on normal printers.

You can set the number of lines per page anywhere between 1 and 99 lines.

LINE SPACING.

The default line spacing is set to 1 but you can set this as high as 10 should you have a need to. The line spacing may also be varied whilst printing by use of the DOT COMMAND .SPnn - see the section on DOT COMMANDS for further details.

TOP MARGIN.

This refers to the number of lines printed at the top of each page before printing of the body of the text begins. These lines are normally blank but may include a page HEADER as set by the DOT COMMAND .HE .

The top margin may be set to ZERO or as many as 20 lines.

BOTTOM MARGIN.

This refers to the number of lines between the end of the body of the text and the bottom of the page. These lines may include a page number and / or a page FOOTER as set by the DOT COMMAND .FO The bottom margin may be set between ZERO and 20 lines - but note that page numbers and footers will be abandoned if the bottom margin is set to fewer than 5 lines.

The top and bottom margin default values are arranged so that 55 lines per page will be printed on standard 66 lines per page paper.

PRINTING

To print out a MicroWord document which you have previously saved onto disk you should select option 3 from the main MENU. You will then be asked for the filename of the document which you want to print. As always you may press <F2> if you want to examine a disk directory whilst entering the filename.

If MicroWord cannot find a file with the name which you entered then you will be returned to the main menu. Similarly you may change your mind and not wish to print a document; in this case press the <Esc> key to return to the MENU. Pressing the <RETURN> key without having typed any other letters will have the same effect.

When MicroWord has found and LOADED your document a screen like the one below will be displayed.

These print settings have been pre-set to some commonly used values which are built into MicroWord but you can change them to different ones if you wish. To move the CURSOR use the UP and DOWN ARROW keys (or the <RETURN> key which acts like the DOWN arrow). Press the <F7> key when you are happy to accept the settings as displayed.

PRINTING

RIGHT JUSTIFY.

You may enter Y (for Yes) or N (for No) here. The default value is N so that if you want to right justify your documents you must positively switch on this feature. You may further affect RIGHT JUSTIFICATION by using the DOT COMMAND .RJON / OFF .

PAPER WIDTH.

You may need to use paper which is wider than the standard 80 character width so we have provided the facility to change the setting of the paper width. If a line is longer than this setting then it will be split into two lines at the character position which you enter. The minimum acceptable value is 10 and the maximum is 255. If you enter a value which is greater than the highest value your printer can cope with then you will probably get a very messy printout. The default value is 80 characters.

RIGHT MARGIN.

This setting is used only when RIGHT JUSTIFY is in use otherwise it will be ignored. When used, text which can be aligned to this margin will be printed in line with this margin. Lines which are longer than this setting will be printed as entered. The default value is 72 so that, when allied to the default Page Offset of 7 characters, gives a default printed width of 65 characters.

PAUSE BETWEEN PAGES.

Here is another setting which can only be Y or N . When set to Y printing will be halted at the end of each page so that you can hand feed single sheets of paper into your printer. To resume printing press the <RETURN> key. The default is for no pause ie. printing will be continuous.

SUPPRESS PRINT FORMATTING.

Possible settings are Y or N . If you enter Y here then all DOT COMMANDS will be ignored and printed exactly as you entered them so that you can, effectively, print a map of DOT COMMANDS used. The default setting is N ie. DOT COMMANDS are obeyed.

PRINTING

WITH PAGE NUMBERS.

You may enter either Y (for yes) or N (for no) here. If you enter Y then the number of each page will be printed in the centre of each page in the BOTTOM MARGIN. Page numbers are assumed to start at 1 but this can be altered through the DOT COMMAND .PNnn.

The printing of page numbers may be turned off at will by the use of DOT COMMAND .OP (Omit Pagenumbers) and you can change the print column in which the number is printed by the DOT COMMAND .PCnn (Pagenumber Column).

START PRINTING at PAGE NUMBER.

It may be that you don't want to print the whole of a document but just a few pages from the middle. For this reason you may specify the page numbers at which printing is to commence and cease. The default start page is number one. Entering a page number below one will not be allowed.

STOP PRINTING at PAGE NUMBER.

Used in conjunction with Start Page Number. The default value is set to page 999. If the end of the document is reached before the Stop Page Number then printing will cease at the last printed page. Entering a number below the Start Page Number will not be allowed.

NUMBER of COPIES.

You can have any number of copies printed between one and ninety nine. Multiple copies may be printed even when linking documents together or importing GRAPHICS IMAGES into documents. The defau' Number of Copies is one.

PAGE OFFSET.

This value determines how far in from the left extreme of your printer's travel the printing will begin. The value of the LEFT MARGIN in your documents will be ADDITIONAL to the Page Offset. (eg. If Page Offset = 6 and LEFT MARGIN = 4 then printing will start at print position 10).
The default Page Offset is 7.

PRINTING

OUTPUT to PARALLEL PRINTER.

You can vary the destination to which your report will be printed. If Y is entered here then your report will be sent to the printer attached to your computers PARALLEL port. You should note that if you answer Y to more than one output device then the output will be sent to each device simultaneously - the devices DO NOT override each other. It is, therefore, possible to print a report to a PARALLEL dot matrix printer, to a disk FILE, and to a SERIAL printer all at the same time. The default setting is Y.

OUTPUT to SERIAL PORT.

A document may be "printed" to any device which you may have attached to the SERIAL port on your computer (if you have one). Typically this might be a SERIAL printer, a MODEM or even another computer. The default for this setting is N. (ie the feature is not used until you switch it on by entering Y).

OUTPUT to DISK FILE.

It is possible to "print a report to disk" so that someone else may replay the report using the DOS TYPE or COPY commands. This is different from saving a document on disk as a data file in that the file will be fully FORMATTED in accordance with the DOT COMMANDS and PRINTER CODES you have used.

By using this facility you could store a long report onto a disk and send it halfway round the world and have a printer there obey the commands which you recorded onto the disk even if there were not a copy of the MicroWord program within a thousand miles. The default setting for this feature is N (ie. not used).

PRINTING

FILENAME.

If using the Output to Disk feature you must, obviously, tell the computer the name of a file to store your report in. Should you turn on the Output to DISK feature and NOT specify a filename then you will cause a disk error message and the print run will be terminated.

PRINTER CONTROL FILENAME.

If you happen to have a printer attached which is not matched to the default Printer Control File and you have forgotten to change the default file then you may change the name of the PCF to be used. The file used will be the one whose name matches the one displayed when you press the <F7> key. The default file is D.PCF.

MERGE PRINTING.

Sometimes you may find that you have to send what is, essentially, the same letter to several people but, in each individual letter, there are a few details which are different.

To avoid having to type many different letters or even taking a short cut and editing the changes into a standard letter we can make life very easy and use MicroWord's MERGE PRINT facility.

WHAT IS MERGE PRINTING ?

Merge printing involves typing a standard letter but leaving spaces for the text which will change in each copy. A second file is made up which contains, in sequence, the missing information which will be fitted into the spaces. When the letters are printed MicroWord will merge the changeable information into the spaces so that each letter appears to have been individually typed. The file in which the variable information is stored is called the Merge Data File.

HOW TO SET UP A MERGE PRINT RUN.

You will need to do three things :-

1. Compose a standard letter.
2. Make up a Merge Data File.
3. Print the letters.

Compose a Standard Letter.

A letter which you are going to use for merge printing is much like any other document except for two features :-

a. DOT COMMANDS are included which instruct MicroWord to read the next piece of variable information from the Merge Data File.

b. The places where the information is to be merged are marked with & characters. NOTE THAT THE OPENING & MUST NOT BE FOLLOWED BY A SPACE and THE CLOSING & MUST NOT BE PRECEEDED BY A SPACE. This is so that MicroWord can check whether you are using the & as a marker or just part of the ordinary text.

Set Up a Merge Data File.

You can do this with MicroWord or by using a database program such as MICROFILE which can selectively export information from its data files so that it can be used by other computer programs. The variable information may contain printer control codes if you wish to, say, print in **BOLDFACE** or italics.

* THE ORDER AND NUMBER OF MERGE ITEMS ARE VERY IMPORTANT. IF YOU SPECIFY THE NAMES OF THE MERGE ITEMS IN A DIFFERENT ORDER FROM THAT IN THE MERGE DATA FILE OR IF YOU MISS AN ITEM THEN DATA WILL BE MERGED INTO THE WRONG PLACES IN YOUR LETTER.

Take a look at the example to see how the information fom the Merge Data File finds its way into the final printed document.

LINKING DOCUMENTS TOGETHER.

MicroWord can handle documents which are up to 2000 lines long. For letters and short reports this is more than adequate but sometimes you may need to produce a manuscript which is much longer.

The solution is very easy because you can link your documents together using a simple DOT COMMAND (.LFfilename) so that you can print many document files as if they were one long document.

This arrangement gives you the speed and convenience of editing shorter documents with the ability to produce longer manuscripts. If you plan the arrangement of your texts into suitable document files it will be possible to use them in a modular way so that long and complex manuscripts can be produced from "building bricks". That is how this manual was produced using MicroWord.

By using linked documents the maximum size of manuscript which you can produce is limited only by the disk capacity of your computer.

You may have a Merge Data File which you have used before but find that it contains one or two data items which you don't want to merge into your next letter. Editing those items out is not necessary - all you need to do is include a DUMMY read in your standard letter. To do this you would specify a .RV for the item but not allocate it a place in the actual letter with the & signs. MicroWord will then recognise the correct order in the Merge Data File but skip over the dummy item each time. You can have as many dummy items as you need; you are not restricted to just one.

The information to be merged should be pure ASCII text as any special formatting characters inserted by, say, an external database program may not be interpreted by MicroWord in the same way. If your merge information does contain such characters then you can either :-

a. edit out the special characters.

or b. build a special Printer Control File which will interpret them.

or c. put up with any messy printing which results from them.

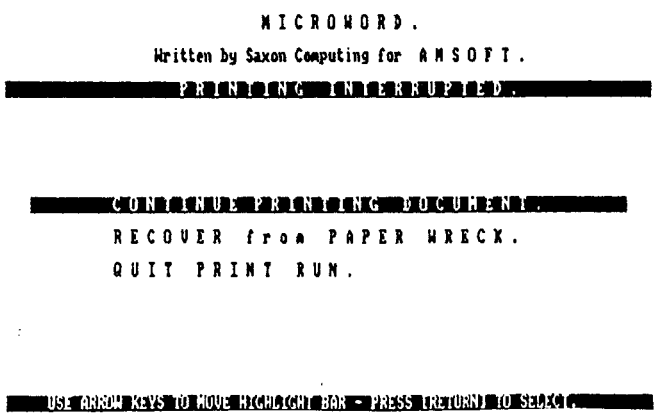
THE MAXIMUM NUMBER OF ITEMS WHICH CAN BE MERGED INTO EACH LETTER IS F I F T Y . You can of course have as many letters, each with up to fifty merge items, as you can have copies printed ie. 999. It is recommended that items to be merged into the text of a letter are of similar length.

INTERRUPTING A PRINT RUN.

Printing may suspended at any time by pressing the < Esc > key. You may wish to do this for a number of reasons :-

1. You want to go for coffee and don't want to leave the printer running unattended.
2. You are on the phone and can't hear for the noise of the printer
3. The paper has come off the tractor feed and is in a real mess.
4. You forgot to make some important changes before printing the document and wish to abandon this print run.

MicroWord will cope with all of these situations easily. On pressing the < Esc > key to suspend printing you will see a short menu like this :-



When recovering from a paper wreck you can specify a restart from any page number which is part of the document file currently being printed so if your printer sometimes chews up printouts, which some do, you don't have to start a long document all over again.

PLEASE NOTE THAT IF YOUR PRINTER HAS A BUFFER PRINTING WILL NOT CEASE UNTIL THAT BUFFER HAS BEEN EMPTIED.

PRINTER CONTROL CODES.

Most printers have special features such as BOLDFACE printing, special character sets etc. To make use of these features you need to send to the printer special sequences of CODES which tell it to begin using one or more of these features.

To use one of these features in your documents you must enter the appropriate CODE at the current CURSOR position. You can display the features available by pressing the <F3> key - pressing the <Esc> key will return you to your document. Enter the CODE appropriate to the feature you want to use by pressing <Ctrl> <P> followed by the letter associated with the feature.

Example - if you want to use BOLDFACE printing place the CURSOR at the place where you want the bold print to start and press

<Ctrl> <P> <B>

A graphic symbol which looks like a smiling face will be inserted at the CURSOR position. This symbol will NOT be printed in your document but indicates the place where bold printing will start.

If you move the CURSOR a little to the right and press

<Ctrl> <P> <A>

you will see a similar symbol which indicates the place where bold print is to cease.

These embedded PRINTER CONTROL CODES work in pairs with one CODE to start the feature and one to turn it off again. All CODES are indicated by the use of the graphics symbols which are used to indicate the place in the text where they have been used.

Sometimes codes can be used in combination to achieve different printed effects. For instance BOLDFACE and DOUBLESTRIKE can be used together to give a very heavy print effect. Similarly, on a dot matrix printer, you can use CONDENSED print in combination with ENLARGED print to print in a medium sized typeface.

Because of the wide range of printers which are available today it is not possible to summarise all the possibilties. However if you are not sure about whether a feature is available on your printer or of the effect of a combination of codes you should refer to your printer operating manual for guidance or try an experiment to see what result a special combination of codes may have.

PRINTER CONTROL FILES.

Printer control files contain the special tables which are used to translate the internal symbols used in MicroWord into the CODE sequences required for a particular make of printer. By using these tables it is possible for you to type in a document and make use of some special features and print it out correctly on any printer for which you have a control file. This is true even though the printers will use different CODE sequences to achieve the same effect.

A typical CODE sequence would be made up of numbers and look, to the printer, like this :-

27 70 27 52

To any Epson brand printer or one of the many which use the sam. control sequences this would mean

Start using BOLDFACE printing (27 70)

Start using ITALICS characters (27 52)

There is, however, little agreement amongst printer manufacturers about what CODE should mean what to the printer and CODES which make sense to one brand are gobbledegook to another.

Even if all printers used the same CODES to control the special features it would be tedious to have to type a long and complex sequence of numbers each time you wanted to make use of one.

To overcome this problem MicroWord uses a PRINTER CONTROL FILE (PCF for short) which translates simple keystrokes into complex PRINTER CONTROL CODES for you. There are many of these PCFs on your distribution disk but you will only be interested in the ones which match your printer(s).

THE DEFAULT PRINTER CONTROL FILE.

When you are about to print a document you have the option to use any PCF which is on any disk in your computer. But as most of us use only one printer for long periods of time it would be very tedious having to name the file before each print run. To avoid this MicroWord will look for a PCF with the filename

D.PCF

and load this if it is present.

You can make any PCF into the default PCF by using the DOS COMMAND COPY like this :-

A>COPY EPSON.PCF D.PCF < ENTER >

On your DISTRIBUTION DISK the D.PCF file contains a copy of EPSON.PCF

CODES WHICH ARE NOT USED.

You will notice that there are only 21 codes listed in each PCF - one for each of the letters of the alphabet but with G H J M and Z missing. The reason for this is that the CONTROL CODE used is represented on your screen by the symbol associated with the <Ctrl> key combined with A,B,C etc. By using these codes you can distinguish between ordinary letters and PRINTER CONTROL CODES. However, some of these , the missing ones have a very special meaning to your computer which means that they cannot be printed on the screen or incorporated into disk files :-

Code.	Number.	Meaning.
Ctrl G	8	Makes BEEP noise.
Ctrl H	9	Backspace.
Ctrl J	10	New line.
Ctrl M	13	Carriage Return / End of line.
Ctrl Z	26	Marks end of disk file.

It would be undesirable to have any of these coded symbols in an inappropriate place in a document (eg. any characters saved on disk following a Ctrl Z would be incapable of being re-loaded) so MicroWord is arranged so that there is no danger of this happening and these codes are not usable.

DOT COMMANDS.

These are special commands which are used to change the way a document is printed WHILST PRINTING IS IN PROGRESS. They are totally inactive unless printing is actually taking place.
The format of a DOT COMMAND is as follows :-

a full stop (DOT) .

followed by TWO LETTERS (which identify the command)

followed by ANY NECESSARY DATA (this depends on the particular command)

EXAMPLE.

.LFb:MWMANUAL.DOC

This DOT COMMAND says use the linkfile B:FWMANUAL.DOC when printing from the current file is finished and continue as if it were one long document.

THE RULES FOR USING DOT COMMANDS.

These are straightforward :-

* The first character on the line must be a full stop
* The next two letters must identify the command. If you enter a pair of initials which are not a valid DOT COMMAND then the line will be ignored.
* If the particular DOT COMMAND requires additional information this must be provided in the required format. If incorrect the whole command will often be ignored but some instances will give rise to an error message.

WHAT IF YOU CAN'T FIND A PCF FOR YOUR PRINTER.

We have tried to assemble PCFs for as many of the popular printers as possible but it may be that none of those is suitable for your printer. It is not very difficult to make up your own PCF using option 5 of the MicroWord main menu and your printer's operating manual.
Look for a table of special functions and the associated codes which are used to turn them on. Some of the codes may have strange names given to them like SO or Shift Out both of which represent the code number 14. You will find a full ASCII code table which lists the names , symbols and numbers at the back of this manual.
You can then insert the appropriate code sequence against which ever of the 21 control symbols you wish to use.

WHAT IF YOU DON'T LIKE OUR CODES.

If you find that the PRINTER CONTROL CODES and functions we have used are unnatural for you or irritating then you can easily re-arrange the codes to some of your own liking then make your new file the default PCF.

DOT COMMANDS

.HEtext
PAGE HEADER.

Use the text which follows the .HE as a page header on every subsequent page until another .HE command is encountered. This command will be overridden if the top margin becomes not deep enough to accommodate the header line ie. if fewer than three lines. You may include printer control codes in your header if you wish.
If you want to include a header on the very first page of your document then the .HE command must be the first line of the document. If this is not so then the first page will be partly printed before the command is found.

.HMnn
HEADER MARGIN.

Sets the number of lines between the top margin and the header line to nn lines. The default value for this setting is 0. (ie. the header is printer at the top margin).

.FOtext
PAGE FOOTER.

Use the text which follows the .FO as a page footer on every subsequent page until another .FO command is encountered. The command may be overridden if the bottom margin becomes too shallow to accommodate a footer line ie. if less than 3 lines. You may include printer control codes into the footer.

.FMnn
FOOTER MARGIN.

Sets the number of lines between the bottom of the page and the line where the footer is printed. The default value for this setting is 0. (ie. the footer is printer immediately above the page number).

.POnn
PAGE OFFSET.

Sets the zero left margin of the document nn characters in from the left hand edge of the page. The result of setting the page offset to 5 and the left margin (in your document) to 6 is to commence printing at column 11.

DOT COMMANDS

.PA
FORCE A PAGE BREAK.

A new page will be started with the line following the command as the first main line.

.CPnn
CONDITIONAL PAGE BREAK.

Start a new page if there are nn or fewer lines remaining to be printed on this page.

.OP
OMIT PAGE NUMBERS.

Starting with the next occasion on which a page number would be printed page numbers will no longer be printed.

.PNnn
PRINT PAGE NUMBERS.

Starting with the next occasion on which a page number would be printed print page numbers at the foot of the page. If a whole number is included in the command then the page number used will be that number otherwise the next page number in sequence will be used.

.PLnn
PAGE LENGTH.

Set the page length to the number of lines specified by nn. If the number nn is less than 10 or greater than 99 then the command will be ignored.

.MTnn
TOP MARGIN.

Set the top margin to nn lines. If nn is less than 0 or nn is greater than 20 then the command will be ignored.

.MBnn
BOTTOM MARGIN.

Set the bottom margin to nn lines. If nn is less than 0 or nn is greater than 20 then the command will be ignored.

DOT COMMANDS

.DFname
MERGE DATA FILE.

Identifies the Merge Data File to be used as name and turns on the MERGE feature. If you want to use more than one Merge Data File during a print run then you must close the previous MDF by using the .CF command before opening a second file. YOU MAY ONLY HAVE ONE MERGE DATA FILE OPEN AT ANY ONE TIME. If you attempt to open a second file the command will be ignored.
If the file specified by name cannot be found then the print run will be terminated.

.CF
CLOSE CURRENT MERGE DATA FILE.

Closes the current Merge Data File. If one has not yet been opened then the command will be ignored.

.RVname
READ VARIABLE FROM MERGE DATA FILE.

Reads the next item of information from the Merge Data File and places it in the queue of information to be merged into the document. The name is an aid to reading information in the correct order and is not strictly necessary. ITEMS OF INFORMATION WILL BE MERGED AND PRINTED IN THE ORDER IN WHICH THEY ARE READ FROM THE MERGE DATA FILE.

.RJtext
RIGHT JUSTIFY ON / OFF.

You may use this command to turn the right justify feature on and off. If the text following the command contains the word ON then right justify will be activated with effect from the next line. Similarly including the word OFF will de-activate the feature. If you include both ON and OFF then ON will take precedence over OFF. The current status of the right justify feature is ignored so, say, turning it OFF twice will NOT turn right justify ON.

DOT COMMANDS

.RMnn
RIGHT MARGIN.

Allows you to set the right margin to nn characters. If the page offset PLUS the right margin exceed the paper width as fixed at the commencement of printing then the right margin will be set at the width of the paper less the page offset.

.SPnn
LINE SPACING.

Sets the line spacing within the limits of 1 to 10 lines. Setting nn outside these limits will be ignored.

.LFname
LINK FILE.

Printing of the current document is terminated and printing continues with the document stored in the file identified by name . If that file cannot be found then the print run will be terminated. The link file may be on any disk drive connected to the computer and as many files may be chained together as required.

You may use link files and mutiple copies together if you wish. When printing of the first copy is finished MicroWord will start the cycle again with the first document file.

.PCnn
PAGE NUMBER COLUMN.

Sets the column number where the page number will be printed to nn. The default for this setting is column 38.

A:

Refers to disk drive A on your computer. When used in a FILENAME (eg. A:LETTER.TXT) it means the FILE LETTER.TXT on disk drive A.
See also B: and C:

A>

Called the A prompt. This is displayed on the screen by DOS when the computer is waiting for a command to run a program. You will not see the A prompt whilst MicroWord is running.

ASCII codes.

The most popular standard for representing characters so that they can be understood by the computer. Short for American Standard Code for Information Interchange.

B:

Refers to disk drive B on your computer. See also A: , and C:

BACKSPACE

A key on your keyboard which moves the CURSOR left 1 place then deletes the character there.

BACKUP.

Making a copy of a FILE or a whole disk which can be used should the original become damaged or mislaid. Remember your time is of much greater value than the extra disks used as BACKUP copies.

BOLDFACE.

Characters which are more heavily printed than normal. Some printers refer to this characteristic as EMPHASISED print.

BOOT.

Computer jargon meaning to start your computer.

BOTTOM MARGIN

A number of blank lines between the end of the body of the printing and the bottom of the paper.

BYTE.

The unit amount of memory space needed to store one character of information. (Note that 1K equals 1024 bytes - an approximation to Kilobyte.)

DIRECTORY.

A list of the FILES on a disk. The list is automatically kept up to date by the computer. MicroWord will allow you to view the directory of any disk currently on the computer either when prompting you for a FILENAME or whilst EDITING a document.

DOCUMENT.

Any text FILE produced by MicroWord. This may be a letter, manuscript, report, note etc.

DOS.

Disk Operating System. This is the resident program which actally runs the computer.
You should be familiar with the basics of the DOS on your computer if you want to handle programs and data in a competent way.

EDIT.

The act of creating a new DOCUMENT or updating or changing an existing one.

ENTER KEY.

The key which occupies the same position on the keyboard as the CARRIAGE RETURN key on an electric typewriter. This may be marked ENTER or RETURN or with a "Broken Arrow" symbol. It acts to send the CURSOR to the left edge of the screen and move it down one line in the manner of a CARRIAGE RETURN plus a line feed on an electric typewriter. Also used to signal to the computer that a COMMAND or entry of a line of data is completed.

FILE.

A collection of data stored on a computer disk. To be able to identify one collection from another each FILE is given a different name. New FILES may be created and old ones changed, merged together or sliced up into separate parts.

FILENAME.

FILES must be given names which conform to certain rules. Please refer to your computers operating manual if you are not sure what these rules are.
A typical filename might consist of three parts -

1. the drive designator (eg. B:).
2. the main name (eg. LETTER).
3. the extension (eg. .DOC).

so that the complete name would appear as B:LETTER.DOC . The drive designator and extension are usually optional.

C:

Refers to disk drive C on your computer. See also A: and B: . Disk drive C is often the designation given to a hard disk when a computer has both hard and floppy disks.

CARRIAGE RETURN.

ASCII code 13 which when printed on the screen or a printer causes the CURSOR to move to the start of the line.
See also ENTER KEY.

CODES.

Numbers or symbols which act as instructions to your computer or printer.

COMMAND.

An instruction to MicroWord (or to the computer for that matter) to perform a specific action.
Commands usually have particular keywords which must be typed in very precisely in order to work.

CPM Plus

Supplied with your Amstrad PCW this is a later more advanced version of CPM - Control Program for Microprocessors which is a disk based operating system by Digital Research. (see also DOS)

CURSOR.

A blinking underline or block character which marks the position on the screen where characters entered at the keyboard will appear.

CURSOR KEYS.

The keys on the keyboard which move the CURSOR. These are < Pg Up > < Pg Dn > < Home > < End > and the ARROW KEYS.

DEFAULT.

The standard value which MicroWord will assume for certain settings (eg. TOP MARGIN). You may alter the DEFAULT values to ones of your own choice whilst operating the program.

DIR.

A DOS command which is used to view a list of files which are stored on a disk.

FONT.
A print style. A dot matrix printer may have different fonts built in and daisywheel printers can usually work with changeable wheels with differnt fonts. Sometimes spelled FOUNT.

FORMAT.
Generally the appearance of the printed page. Also the act of editing or changing that appearance.

FORMAT DISK.
Preparing a new disk to receive information. Invoked by a DOS command , see your computer's manual for further details.

FUNCTION KEYS.
Keys which are set aside from the main keyboard, and which are usually reserved for special jobs within a particular program. MicroWord uses these keys to display Help Screens , disk directories etc. Other programs may use the function keys in a different way.

GLOBAL.
Action which affects the whole document.

INSERT MODE.
When INSERT MODE is on, as indicated at the top of the screen whilst EDITING a DOCUMENT, what you type in is included within the text surrounding the CURSOR. The opposite of INSERT mode is OVERWRITE mode.

JUSTIFY.
Lining up the ends of the text so that all the lines are of the same length. This is done by inserting spaces between the words until the right hand edges are even at a certain character position.

LOAD.
Copying a FILE from disk into the computer.

MACRO
A series of keystrokes which have been stored and can be replayed by pressing a single key. If the series contains program or DOS commands it may be called a MACRO INSTRUCTION.

MARGIN.
The space between the text and the edges of the paper. TOP and BOTTOM margins are measured in lines, LEFT and RIGHT margins in characters.

MENU.
A list of the choices available to you at a particular time. Each option is numbered and you may choose only one by pressing the key number of the option followed by the ENTER key.

MERGE.
Inserting words, phrases etc. which have been stored in a file into a document at specific places. Used to give the appearance of a personalised document to a circular letter.

OVERWRITE MODE.
Text which is entered replaces any existing text at the CURSOR position. See also INSERT MODE.

PARALLEL PRINTER.
A type of printer which is connected to the parallel port on your computer. Called parallel because up to eight signals travel simultaneously down eight wires to the printer. Somtimes called CENTRONICS after a printer company who popularised the use of this type of printer. (cf SERIAL PRINTER.)

PROMPT.
A request for information from the computer. This may be as cryptic as DOS's A prompt or an instruction such as ENTER FILNAME.

PROPORTIONAL SPACING.
Varying the spacing between printed characters according to the width of the individual character.

REFORMAT.
A COMMAND which rearranges the lines of text so that they all fit within the current margins. It is usually used to tidy up a paragraph after inserting or deleting some text.

RIGHT JUSTIFY
Adjusts the spacing between characters so that the right hand ends of each line are level.

MAKING BACK UP COPIES.

Not very often, but strictly in accordance with Murphy's law, (ie. at the very worst possible moment) you will experience some problem which causes the loss of a document file. There are several possible reasons most of which are outside your control.

* POWER FAILURE.
* VOLTAGE SPIKES due to storms and surges.
* DISK FAILURE.
* HUMAN ERROR.
* DISK DAMAGE (Coffee spills, pet eats disk, children with sticky fingers etc.etc.)

Relative to the cost of your time the cost of a few extra disks to make back up copies of your document files is very small. If you don't think so now you will just after the first time you lose a file which took six or seven hours to type.

There are several ways in which you can make you back up copies, it doesn't really matter which you use as long as you do make them.

1. Use the DISCKIT program to copy the whole of the disk containing the data files. This method is most appropriate if you keep all your documents together on one or more disks. When you use this method it is a VERY good idea to WRITE PROTECT the ORIGINAL disk. This will prevent disaster if you put the disks in the wrong drives and copy an empty disk onto the good data disk. It sounds silly but it does happen.
2. Use the CPM PIP program to copy individual files onto a backup disk.
3. When using MicroWord to save a document , save it a second time onto another disk.

REMEMBER NEVER TO USE THE PROGRAM DISTRIBUTION DISK AS A WORK DISK. SEE GETTING STARTED FOR INSTRUCTIONS ON COPYING THE PROGRAM DISK.

SAVE.
: Storing a FILE onto disk. See also LOAD.

SEARCH.
: A COMMAND to MicroWord to look for a word, phrase or character patternand put the CURSOR at that position.

SERIAL PRINTER.
: One which uses the SERIAL port (or RS232 port) on your computer. Called SERIAL because all the signals travel down a single wire in SERIES. (cf PARALLEL PRINTER).

TOP MARGIN.
: A number of blank lines between the start of the body of the printing and the top of the paper.

WORDWRAP.
: When the CURSOR reaches the right margin MicroWord automatically inserts a CARRIAGE RETURN and ensures that whole words are not broken up by line ends.

USING MicroWord WITH A HARD DISK.

Many popular programs are heavily copy protected and are almost impossible, or at least very inconvenient, to use with a hard disk based computer.

Not so MicroWord. To store the programs on a hard disk simply type :-

PIP C:=MW*.* <RETURN>

This assumes that your hard disk is labelled as drive C: .

That's all there is to it.

THE MicroWord PROGRAMS.

On your program distribution disk you should have the following files :-

* MW.CHN	this is the main program.
* MW8.COM	LOADER program
* MW.000 & MW.001	OVERLAY programs which are transferred to drive M: by MW8.COM
* FWPRINT.CHN	a sub-program which takes care of all the printing.
* FWPRINT.000/001	OVERLAY programs
* FWPCF.CHN	a sub-program used for altering or creating new PCFs.
* ???.PCF	many files with a .PCF extension. These are the printer control files. The REFERENCE SECTION contains the details of how to use the one for your printer.
* SETKEYS.COM * KEYS.MWJ	Programs used to set up the keyboard before loading MicroWord.
* README.NOW	If this file is present it will contain any up to date information which we feel is important to you. If it isn't there don't worry. You can read this file by loading it into MicroWord like any other document or view it using the DOS TYPE command. TYPE README.NOW <RETURN>
* LETTER.TXT * MERGELET.TXT	Sample document. Sample document.

Saxon Computing MicroWord.

Flexilabel

A Flexible Program for

Printing Labels

CONTENTS.

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THIS MANUAL WAS WRITTEN AND PRINTED USING FlexiWrite ON AN IBM-PC Computer and a STAR SR15 Printer.

INTRODUCTION.

WHAT DOES Flexilabel DO ?

Flexilabel has been designed to cope with TWO principal kinds of labelling problem -

* producing MAILING labels from a file of names and addresses.

* printing many identical labels for use in product packaging etc.

It is, of course, possible to print labels using either a word processor or the printing facilities in many database programs but many difficulties may arise if you want to use labels of different sizes and layouts. Furthermore it is usually impossible to easily make use of the many versatile print options available on modern dot matrix printers.

Using FlexiLabel you can -

* specify the exact size of the label you are using.

* print UP TO 5 labels across a sheet.

* have your information automatically printed in the centre of your label. This feature may be made to apply to every line on the label or just those which you select.

* use the Bold, Doublestrike, Condensed, Enlarged, Italic, Superscript, Subscript, and Underlining features of your printer in ANY combination on ANY label line.

* if your external mailing data contains blank or empty lines this can lead to very untidy looking labels. By using the SCRUNCH feature these blank lines can be automatically removed and the appearance of your mail labels much improved.

Please note that FlexiLabel will NOT by itself manage the task of maintaining and keeping up to date a mailing list of names and addresses. If you need to do this MicroFile by the same authors will perform this task AND produce the disk files needed to print your labels in bulk.

WHAT YOU SHOULD KNOW BEFORE YOU START.

Just as you need some basic knowledge before you can drive a car so there are a few simple skills which you should master before you attempt to work with FlexiLabel. You should know how to -

* Load the CPM Plus operating system into your computer.
* Make copies of disks using the DISCKIT utility program.
* FORMAT new disks using DISCKIT.
* Control your printer and load it with stationery.
* Use SETKEYS.COM to set up the keyboard for use by a particular program. (We provide the special keyboard definition file which you need - see page 9 for how to use it.)

If you don't know how to do these things then you should refer to the AMSTRAD PCW8256 user manual before starting FlexiLabel. All the above subjects are covered and listed in the INDEX at the back of the AMSTRAD manual.

WHAT YOU NEED TO START USING FLEXILABEL.

Before you start you will need the following items -

* An AMSTRAD PCW8256/8512 computer with the standard printer CONNECTED.
* Two BLANK FORMATTED disks.
* Some labels (you could use ordinary continuous stationery to practice with).
* A copy of FlexiLabel.

Additionally, if you want to do mail list labels, you will need some sort of database program to manage your names and addresse

STARTING TO USE FLEXILABEL.

Before you do anything else **PLEASE COPY THE FLEXILABEL DISK ONTO ONE OF THE BLANK DISKS AND PUT THE ORIGINAL IN A SAFE PLACE.**

NEVER USE THE ORIGINAL DISK FOR WORKING WITH ALWAYS USE A COPY.

To start the FlexiLabel program you need to do just three simple things.

1. Put the disk with your working copy of FlexiLabel into the disk drive.
2. Type SETKEYS KEYS.FL [RETURN]
   Please note the space between SETKEYS and KEYS.FL
3. Type FL [RETURN]
   When the program has loaded you can, if you wish, remove the work disk from the disk drive.

You operate FlexiLabel by using the MENUS and filling in forms. Most of the forms already have DEFAULT values entered into them but you can overtype these if you want to use different ones.

We recommend that you spend just 10 minutes working through the following example before starting work on your own labels.

A FIRST LABEL.

In this first example we will produce a PRODUCT LABEL (ie. one entered directly into FlexiLabel so that several identical copies can be made and used for labelling goods or boxes.)

Because we will be changing the size of label and the print styles to illustrate the many possible variations it is a good idea to use continuous paper in the printer rather than some of your own labels just for this example.

Please follow each of the keystrokes exactly as printed below. Where you see a name enclosed in square brackets like this -

[RETURN]

it means press the key on your keyboard with the word RETURN engraved on it. Sometimes it may be necessary to press two keys at once - these will be represented like this -

[ALT A]

which means hold down the ALT key and press the A key.

Let's assume that you are starting with the computer turned OFF and follow the sequence of instuctions.

<<<<<<< KEYSTROKES >>>>>>>>>	<<<<<<<<<< COMMENTS >>>>>>>>>
	Turn on the computer.
	Put your CPM Plus system disk into the disk drive.
	Remove the system disk and put a working copy of FlexiLabel into the disk drive.
SETKEYS KEYS.FL [RETURN]	Sets up the keyboard.
FL [RETURN]	Loads FlexiLabel into the computer. You should now see the main menu on the screen.
	If you wish you may remove the FlexiLabel disk from the drive - it need not be present for the program to operate. You will, however, need a disk in the drive if you want to load / save data.

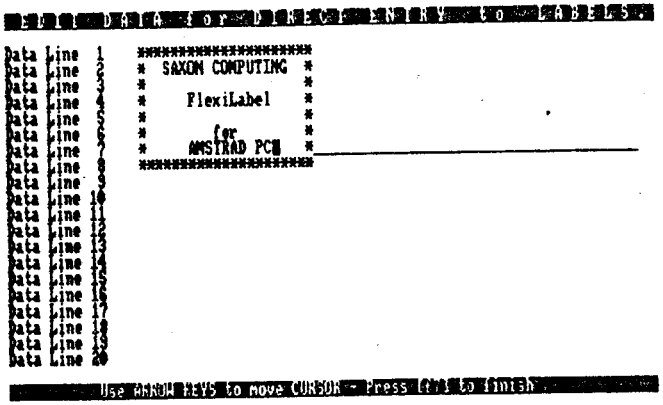
<<<<<<< KEYSTROKES >>>>>>>>>	<<<<<<<<<< COMMENTS >>>>>>>>>
[RETURN]	Selects first option from the menu.
[RETURN]	Selects EDIT LABEL FORMAT.
[RETURN]	Move down to LABEL WIDTH field (leaving HEIGHT unchanged).
3.000 [RETURN]	Change LABEL WIDTH to 3 inches.
2 [RETURN]	There are to be TWO labels side by side.
8 [RETURN]	There are to be 8 print lines per label.
)	Note how you can move about between the fields using the ARROW keys. In this way you can correct any typing mistakes or change your mind at any time.
[f7]	Accepts the data on the screen. Don't worry about SCRUNCH just yet.
↓ [RETURN]	Selects EDIT LABEL PRINT FEATURES.
MID [RETURN] MID [RETURN] MID [RETURN] MID [RETURN] MID [RETURN] MID [RETURN] MID [RETURN] MID [RETURN]	Sets the print features for the eight lines of the label. The features used are - Middle (centre the data). Italics. Doublestrike. Note that you can mix features - all lines needn't be the same.
)	

<<<<<<< KEYSTROKES >>>>>>>>>	<<<<<<<<<< COMMENTS >>>>>>>>>
↓↓ [RETURN]	Selects the SAVE DATA option.
SAXON.LAB [RETURN]	Save the data in a file called SAXON.LAB
↓↓↓ [RETURN]	Returns you to the main menu.
↓↓↓ [RETURN]	Selects PRINT LABELS.
[N]	NO we don't want to import any mail list data.
10 [RETURN]	Let's have 10 copies of the label.
Y	YES we want to check that the stationery is lined up correctly. Flexilabel will print a pattern which is equivalent to a label full of printing so that you can see whether horizontal and vertical alignments are correct.
Y	YES the alignment is OK. If you answer NO you can have the pattern repeated or return to the main menu.

You should now have 10 identical labels printed in two rows of five AND be back at the main menu. Before going on to produce your own labels there are some experiments you should try.

These can do no harm but will increase your understanding of the considerations to be made when using FlexiLabel for your own labels.

<<<<<<< KEYSTROKES >>>>>>>>>	<<<<<<<<<< COMMENTS >>>>>>>>>
[f7]	Accepts the screen.
↓↓↓ [RETURN]	Selects SAVE A FORMAT.
FORM.1 [RETURN]	Store the format data under the name FORM.1 so that it can be recalled if needed.
↓↓↓↓ [RETURN]	Return to main menu.
[RETURN]	Select ENTER LABEL DATA.
	Now enter each line of label data as shown in this screen copy. Press [RETURN] or to move down each time to the next line.



[f7]	Accepts the data on the form and returns you to the ENTER DATA MENU.

EXPERIMENT 1. IMPORTING A MAIL LIST.

Start at the main menu and put a copy of the FlexiLabel disk into the drive. This contains a copy of a sample mail IMPORT file called MAILLIST.EXP

<<<<<<< KEYSTROKES >>>>>>>	<<<<<<<<<< COMMENTS >>>>>>>>>>
↓↓ [RETURN]	Select DEFINE IMPORT DATA SOURCE
[f2] A [RETURN]	You don't have to do this but note how you can get a disk directory by pressing [f2]
MAIL.TXT [RETURN]	This specifies the IMPORT FILE (when used) as MAILLIST.EXP
06 [RETURN]	There are six lines of data to merged onto our label.
↓↓↓ [RETURN]	Select PRINT LABELS
Y	YES use data from the IMPORT FILE
N	NO don't bother checking the alignment.

You should now have 10 labels printed with names and addresses on them. Some of these will perhaps look a bit untidy because the database from which they were extracted had some fields with no data in them - only one street line perhaps or no county name.

If you go back to the EDIT LABEL FORMAT section and answer [Y] to the question Use SCRUNCH on mail labels ? then repeat the above PRINT you will see how the SCRUNCH feature can be used to remove those untidy blank lines.

EXPERIMENT 2. THE EFFECT OF UNDERSIZED LABELS.

Return through the menus to EDIT LABEL FORMAT and make the label width only 1.5 inches. If you repeat the print of MAILLIST.EXP you will see how lines which are too long to fit on a label are truncated (cut off) at the label edge rather than being allowed to overflow onto the next label to the right.

EXPERIMENT 3. THE EFFECT OF DIFFERENT SIZED PRINT STYLES.

Return to the EDIT LABEL PRINT FEATURES form and set each data line to a different mixture of features. Try these to start with

```
Line 1..... E
Line 2..... C
Line 3..... EC
Line 4..... CS
Line 5..... EI
Line 6..... U
```

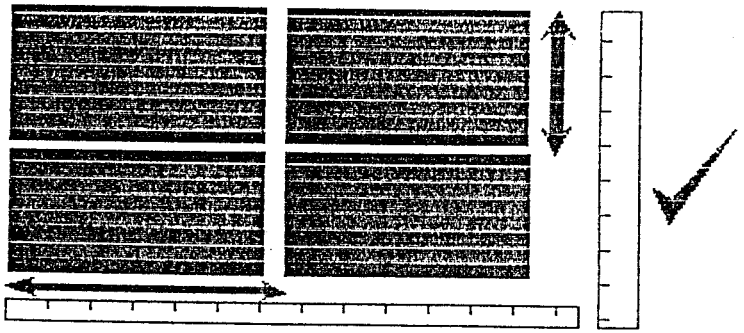
You should see that condensed print is only about two thirds of the width of normal print, enlarged is double normal width and a combination of the two is about one third wider than normal. Note also that changing the width of the print affects how many characters can be printed on a given label - THE LABEL BORDERS REMAIN CONSTANT.

HOW TO SPECIFY LABEL SIZES.

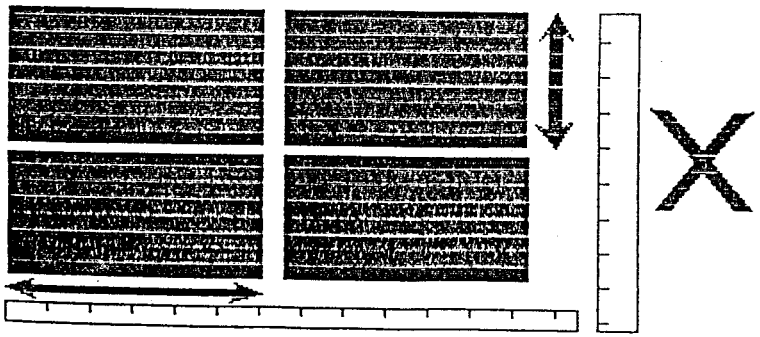
In label printing the question of size is very important for correct operation. This is especially true of the label HEIGHT where incorrect sizing can cause the printing to creep (ie. on each successive label the printing starts in a different place so that, eventaully, some printing is off the label altogether).

WHEN YOU SPECIFY LABEL SIZES TO FLEXILABEL IT IS IMPORTANT THAT YOU MEASURE FROM THE START OF ONE LABEL TO THE START OF THE NEXT ONE. THAT IS TO SAY THAT, FOR FLEXILABEL, YOU MUST INCLUDE THE GAP BETWEEN THE LABELS IN THE HEIGHT AND WIDTH MEASUREMENTS.

RIGHT



WRONG



When entering label sizes you may see the error message

WARNING - LABEL HEIGHT & NUMBER OF LINES GIVE UNEQUAL PITCH.

This means that, at the present settings, your label printing is certain to CREEP. Why ??? This is because your printer can feed the paper vertically in multiples of 1/216 of one inch. The warning is telling you that the height divided by the number of lines is not a whole number of 216 ths and so the line feed cannot be the same for each label.

If you can't get rid of this message you may need to look again at your measurement of the label height or the number of printable lines per label.

2. Use a word processing program to compose a list such as that shown above. You could use FlexiWrite or MicroWord or any word processor which can process ASCII files. If you have the option you should use what is often referred to as NON DOCUMENT MODE.

WHEN USING AN EXTERNAL FILE IN THIS WAY IT IS V E R Y IMPORTANT THAT EACH ADDRESS HAS THE SAME NUMBER OF LINES AND THAT YOU KNOW HOW MANY LINES ARE IN EACH ONE.

SCRUNCH.

We use this name to describe the feature which removes the blank lines from addresses, such as the one in the Johnson address above. This has the effect of making your mail labels look much neater. The default state for SCRUNCH is OFF so you don't have to use it if you don't want to.

SCRUNCH does not operate on product labels even if you switch it on.

IMPORTING DATA FROM EXTERNAL FILES.

You would want to do this if you are printing mail labels, or some similar operation, where the printing on each label is different, and the information to be printed is stored in a file on disk.

The information which you want to print should be stored in an ASCII text file (see GLOSSARY) which would look something like this -

A.Smith,
14, The Avenue,
High Road,
BURY ST.EDMUNDS,
SW43 6YT
W.Johnson,
53, Main Street,

COLCHESTER,
CO6 7EW
H.Hughes,
1, Maple Hill,
Finchworth,
CAMBRIDGE,
CA8 9KJ

There a a few points which are worth noticing -

* There are NO gaps between adresses.

* The gap in the Johnson address is because there is NO second street data - but to preserve the sequence and structure of the data it HAS to be there. This is how the information would appear if exported from a database program.

* Each separate data item appears on a new line.

How would you prepare or compile a list of names and addresses for use by FlexiLabel ? There are two basic choices -

1. Use a database program to manage the information exporting those names and adresses which you want to print. FlexiFile and MicroFile are ideal for this purpose. If you are considering using another database program make sure that it can export information in ASCII format before you buy.

Because FlexiLabel sends printer control codes until it reaches either the fifth code for a function OR the first ZERO code you might have a problem if you actually wanted to send the code 0 to your printer. This is overcome by sustituting code 255 for 0 (see EPSON.PCC code for Superscript as an example) and FlexiLabel will interpret this as a directive to actually send a code 0 to the printer.

If you are using a non-standard printer please note that it may not support every feature in the FlexiLabel code table. In this case you should set each code to 000.

PRINTER CONTROL FILES AND CODES.

IF YOU ARE USING THE STANDARD AMSTRAD PCW PRINTER YOU MAY TREAT THIS CHAPTER AS OPTIONAL READING ONLY.

There are certain characters which, when you send them to the printer, don't actually print out onto the paper. Instead they act as an instruction for the printer to do something.

If you look at page 113 of book 1 of your Amstrad PCW8256 manual against the code number 15 you will see an OMEGA symbol. However if you try to print the character with code number 15 on the printer you would not be able to print it out. Instead the printer would interpret this code as an instruction to enter CONDENSED PRINT MODE where the characters are printed approximately two thirds normal width.

The printer would continue in condensed mode until you sent a character with the code number 18 and then it would revert to normal sized printing. These special codes which work in this way are called PRINTER CONTROL CODES.

If you want to know more about them and what they do full details can be found on pages 126 to 137 of your Amstrad PCW8256 manual. However you don't need to know anything about how these codes work if you don't want to because FlexiLabel takes care of all the technicalities for you.

The special codes which work your printer are all stored in a PRINTER CONTROL FILE which you can identify because it has a filename extension .PCC

You will find several of these on the FlexiLabel disk each with a main file name relating to the printer with which it is designed to work. The standard Amstrad printer works just like any EPSON brand dot matrix printer and uses a copy of that PCC file.

However you don't even have to specify which PCC you want to use each time you load the program - there is a default PCC file (called D.PCC what else ?) which is actually a copy of EPSON.PCC and this default PCC file is loaded automatically every time you load FlexiLabel.

If you want to use a non-standard printer with your PCW8256 and you can't find a PCC for that printer it is quite easy to make one of your own. All you need to do is look up the control codes in your PRINTER'S manual and enter these against the appropriate function in the control code table.

CONTROL OVER PRINT FEATURES.

FlexiLabel allows you to make use of the most powerful features available on modern dot matrix printers.

This is BOLDFACE. Code letter B

This is CONDENSED. Code letter C

This is DOUBLESTRIKE. Code letter D

This is ENLARGED. Code E

This is ITALIC. Code letter I

This is SUBSCRIPT. Code letter P

This is SUPERSCRIPT. Code letter S

This is UNDERLINED. Code letter U

There is a ninth code letter M which, although not really a printer feature, most conveniently works with the others. This stands for MIDDLE and centres a line of text in the middle of the label. (We couldn't use C because that had been allocated to CONDENSED printing)

Print features can be used in any combination and the order in which you specify them is NOT significant. For example

MIECDB will produce centred, italic, enlarged, condensed, doublestuck bold printing.

All print features are reset at the end of every print line.

When you store a label format on disk the print features you specify will be stored as well so that you don't have to enter them each time you use the program.

EXAMPLE - A MORE COMPLEX LABEL.

With the help of some copy screens taken from a live FlexiLabel session let's now take a look at a more complex label printing job involving a short list of names and addresses and some fancy printing.

Here's a fictional name and address list which you will find stored on your disk under the filename MAILLIST.EXP
This file was, in fact, exported from a FlexiFile database.

Now we need to define the source of the information which is to be printed on our labels.

Use the DEFINE IMPORT DATA SOURCE option on the MAIN MENU and enter the filename and number of data lines as follows -

If you look at the sample import data above you will see that each address comprises six lines (some of which may be unused). The SCRUNCH feature will remove those blank lines if you don't want them to appear on the label.

Now select PRINT LABELS and answer [Y] to the question USE IMPORT DATA FILE ?

If you want to you can check the label alignment before printing the labels which should look like this -

Mr R,Starr,
The House on the Hill,
HAZE,
Middlesex
HA5 8YT

Mr P,McCartney,
Penny Lane,
Main Street,
Isle of Mull
SCOTLAND.
WI19 4TR

Mr G,Harrison,
Woodstock Manor,
Woodstock,
OXFORD.
OX7 5DS

Mrs M,Thatcher,
10, Downing Street,
LONDON.
WC1 1AA

Mr N,Lawson,
11, Downing Street,
LONDON
WC1 2AA

Mr Paddington Bear,
c/o British Rail.
Paddington Station,
LONDON
WC1 4EE

Now return to the DEFINE LABEL FORMAT screen and turn OFF the SCRUNCH feature. If you now repeat the print run you will find that your labels now look like this -

Mr R,Starr,
The House on the Hill,
HAZE
Middlesex.
HA5 8YT

Mr P,McCartney,
Penny Lane,
Main Street,
Isle of Mull
SCOTLAND.
WI19 4TR

Mr G,Harrison,
Woodstock Manor,
Woodstock,
OXFORD.
OX7 5DS

Mrs M,Thatcher,
10, Downing Street,
LONDON.
WC1 1AA

Mr N,Lawson,
11, Downing Street,
LONDON
WC1 2AA

Mr Paddington Bear,
c/o British Rail.
Paddington Station,
LONDON
WC1 4EE

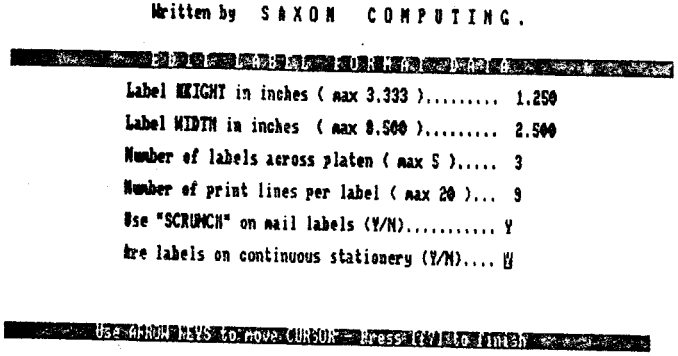
EXAMPLE - A MORE COMPLEX LABEL.

Make a start by setting up the label format so that the labels are 3 across the web, 1.25 inches high, 2.5 inches wide, and set for 9 print lines on each label. Also set SCRUNCH to ON and using continuous stationery.

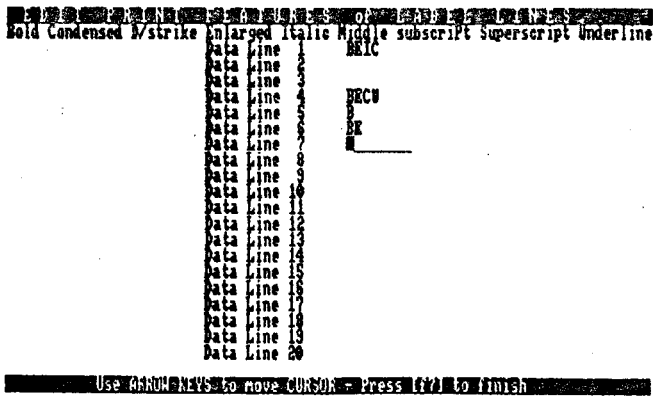
For this example we recommend that you use ordinary continuous paper so it won't matter if you haven't any labels this size.

Your format screen should now look like this -

FLEXILABEL.
Written by SAXON COMPUTING.



Exit by pressing [f7] and set up the special PRINT FEATURES for each line. We are going to emphasise certain lines by using BOLD print and some enlarged characters. Other lines (numbers 2 & 3) will use no special features at all. Note how you don't have to turn these features OFF - that happens automatically at the end of each line. Enter the feature codes so that your screen looks like this -



EXAMPLE - A MORE COMPLEX LABEL.

HINTS, TIPS, DO'S and DON'TS.

DO	make regular **BACKUP** copies of your data disks. See APPENDIX A for precise instructions on how to do this. Remember disks are cheap - your time isn't.
DO	take just 10 minutes to work through the introductory example. If you do this the manual will be much more meaningful.
DON'T	keep **BACKUP** copies with the originals.
DON'T	use the **DISTRIBUTION DISK** as a WORK disk.
DON'T	remove the **WRITE PROTECTION** from the **DISTIBUTION DISK.**
DON'T	expose your disks to HEAT MOISTURE MAGNETIC FIELDS STICKY FINGERS or COFFEE.
DON'T	turn off the power to the computer while the program is running or with a disk still in the drive. If you do you may lose data.
IF	you want to return to single sheet printer operation after using continuous stationery mode then you can do this by using PRINTER RESET on the main printer control menu (invoked by pressing [PTR] on the keyboard).
DON'T	try to print too close to the edges of your labels. There will always be small differences in the distances between individual labels on a sheet so if you try to print too close to the edges you may find occasionally that the printing has missed the edge of the label.

TROUBLE SHOOTING.

<<<<<<< PROBLEM >>>>>>>>>>	<<<<<<<<<<<< CAUSE >>>>>>>>>>>>>
CAN'T MOVE MENU HIGHLIGHT BAR	You have not set up the keyboard for use by FlexiLabel by using SETKEYS.COM SOLUTION type SETKEYS KEYS.FL [RETURN] before using FlexiLabel.
TEXT IS CUT OFF AT LABEL EDGE.	You are trying to print more text on a label than can be fitted on. SOLUTION use larger labels or, if you aren't already, use condensed printing.
TEXT OVERLAPS IN THE VERTICAL PLANE.	You are trying to print more lines than will fit into the height of your label. As a rule you should not try to print more than 10 lines per vertical inch.
MAIL LABELS HAVE GAPS BETWEEN ADDRESS LINES	Some of the data fields in the database from which you have extracted the addresses are blank. SOLUTION - Use SCRUNCH option when printing mailing labels.

A:
Refers to disk drive A on your computer. When used in a **FILENAME** (eg. A:CARS.DTA) it means the **FILE** called CARS.DTA on disk drive A.
See also **B:** and **C:**

A>
Called the A **PROMPT**. This is displayed on the screen by **DOS** when the computer is waiting for a command. You will not see the A prompt while FlexiFile is running.

ARROW KEYS.
The keys on the right hand side of the keyboard marked with ARROW symbols. These keys are used to move the **CURSOR** around the screen.

ASCII codes.
The most popular standard for representing characters so that they can be understood by the computer. Short for American Standard Code for Information Interchange.

B:
Refers to disk drive B on your computer. See also **A:** and **C:**

B>
Called the B **PROMPT**. See **A>** for a description.

BACKSPACE
A key on your keyboard which moves the CURSOR left 1 place then deletes the character there.

BACKUP.
Making a copy of a **FILE** or a whole disk which can be used should the original become damaged or mislaid. Remember that your time is of much greater value than the cost of the extra disks used as **BACKUP** copies.

BOLDFACE.
Characters which are more heavily printed than normal. Some printers refer to this characteristic as EMPHASISED print.

BOOT.
Computer jargon meaning to start your computer and **LOAD** in the **DOS**.

BYTE.
The unit amount of memory space needed to store one **CHARACTER** of information. See also **K**.

C>
Refers to disk drive C on your computer. See also A: and B: . Disk drive C is often the designation given to a hard disk when a computer has both hard and floppy disks.

CARRIAGE RETURN.
ASCII code 13 which, when printed on the screen or on a printer, causes the **CURSOR** to move to the start of the line. The origin of this term is from the electric typewriter which had a key to return the carriage to the start position.
See also **ENTER KEY** and **RETURN KEY**.

CHARACTER.
Any symbol which can be represented in a computer and displayed by it, including letters numbers and graphics symbols.

CODES.
Numbers or symbols which act as instructions to your computer or printer.

COMMAND.
An instruction to the computer.

CURSOR. .
A block character which marks the postion on the screen where **CHARACTERS** will appear when entered at the keyboard.

CURSOR KEYS.
The keys on the keyboard which will move the **CURSOR**. These are the **ARROW KEYS** which, used in conjunction with the SHIFT, ALT or CTRL keys, move the current **CURSOR** position in a variety of ways.

DATABASE.
Information stored and organised in a computer readable format.

DATA DISK.
A disk which is used for storing data or information. cf. Program disk which is used to store programs. There is no special reason why programs and data cannot be stored on the same disk.

DEFAULT.
The standard value which FlexiFile assumes for certain settings. You may change any **DEFAULT** values to ones of your own choice whilst operating FlexiFile.

DIR.
A **DOS COMMAND** which is used to view a list of **FILES** which are stored on a disk.

DIRECTORY.
A list of the files on a disk. The list is automatically kept up to date by the computer. You can view a disk **DIRECTORY** whilst running FlexiFile by selecting the appropriate option on one of the **MENUS.**

DISK DRIVE DESIGNATOR.
Every disk drive attached to your computer has a unique label consisting of a single letter. When used in conjunction with a **FILENAME** the letter is followed by a colon : to distinguish the letter from those in the body of the **FILENAME.**
See also **A: A> B: B> C: C>**

DISTRIBUTION DISK.
The original program disk as supplied by a software vendor to you. You should NOT use such a disk as a working disk. Make a **BACKUP** copy and keep the original in a safe place.

DOS.
Disk Operating System. This is the resident program which actually runs the computer and handles such basics as storing and retrieving information on the disks. You should be familiar with the basics of the DOS on your computer if you want to handle data and programs in a competent manner. The DOS on a PCW is CPM Plus.

EDIT.
The act of updating information which has already been entered into the computer.

ENTER KEY.
A key which, when pressed, generates a **CARRIAGE RETURN.** This usually signals to the computer that a **COMMAND** or entry of a line of data is complete.
See also **RETURN KEY.**

GLOSSARY.

EXPORT.
Taking data from a **FILE** and storing it in a second **FILE,** perhaps in a different form or order. Often used to transfer information selectively to other programs.

FIELD.
A component part of a **RECORD. FIELDS** are made up of **CHARACTERS, RECORDS** are made up of **FIELDS** and **FILES** are made up of **RECORDS.** You can liken this structure to a card index file where each **RECORD** is a CARD and each **FIELD** is a single line on that card.

FILE.
A collection of data stored on a computer disk. To be able to identify one collection from another each **FILE** is given a different name. New files may be created and old ones changed, merged together or sliced up into separate parts.

FILENAME.
FILES must be given names which conform to certain rules if they are to be accepted by the DOS. Please refer to your computer's operating manual if you are not sure what these rules are. A typical **FILENAME** might consist of three parts -

1. The DRIVE DESIGNATOR (eg. **A:**);
2. The main name (eg. CARS).
3. The extension (eg. .DTA).

so that the complete name would be entered as B:CARS.DOC
The DRIVE DESIGNATOR and extension are optional.

FONT.
A print style. A dot matrix printer may have different fonts built in and daisywheel printers can usually work with changeable wheels with different fonts. Sometimes spelled FOUNT.

FORMAT DISK.
Preparing a new disk to receive information. Disks are formatted on a PCW by using the DISCKIT program on your CPM Plus system disk.

FUNCTION KEYS.
Keys which are reserved for special jobs rather than the ordinary entry and editing of data which most of the keys do. The jobs performed by the function keys are usually determined by the author of a particular program and so will not necessarily do the same job in two different programs. In FlexiFile the keys [f1] to [f8] are used to signify acceptance / rejection of a screen full of data etc. The current use of the **FUNCTION KEYS** is always displayed by FlexiFile at the foot of the screen.

HARD COPY.
Paper print out of a file. The screen image is called soft copy.

HIGHLIGHT BAR.
Screen text where the **CHARACTERS** are shown with the colours reversed and used as part of a **MENU**. This **HIGHLIGHT BAR** is used to indicate the current choice which will be activated if you press the [RETURN] key. The BAR is moved to another option by using the **ARROW KEYS**.

IMPORT.
Taking information from an external **FILE** and incorporating it into your database. This may be done either selectively or in total.

K.
A term often used to refer to the storage capacity of a computer or its disks. Short for Kilobyte although the figure is actually 1024 **BYTES** not 1000 BYTES.

KEY FIELD.
A **FIELD** which is used to determine the order in which information is stored in **FILES**. FlexiFile supports up to four **KEY FIELDS** for any one **FILE** which means that you can keep track of your data in four different orders.

LOAD.
Transferring a program or **FILE** from disk into your computer.

LOG.
The act of specifying a particular drive as the **DEFAULT** drive. You do not need to use the DRIVE DESIGNATOR in respect of the **DEFAULT** drive. To change from one drive to another simply type the DESIGNATOR and press the [RETURN] key. eg. **C:** [RETURN] will **LOG** onto drive **C:** as the **DEFAULT** drive.

MENU.
A list of choices available to you at a particular time. You select just one of those options by moving a **HIGHLIGHT BAR** using the **ARROW KEYS**. If you press [ENTER] or [RETURN] then the option currently under the bar will be carried out.

NULL.
A term describing a blank **RECORD** or definition. (eg. a **NULL SELECTION** is one which has no conditions entered into it).

OVERLAY.
If a program is too big to fit into your computers memory all at once then it is possible to organise it into smaller parts which are **LOADed** in from disk only when they are needed. This is called **OVERLAYing**.

PARALLEL PRINTER.
A type of printer which is connected to the parallel port on your computer. Called parallel because up to eight signals travel simultaneously down eight wires to the printer. Sometimes called CENTRONICS after a printer company who popularised the use of this type of printer. (cf SERIAL PRINTER.)

PROMPT.
A request for information by the computer or a program. This may be as cryptic as **DOS's A>** prompt or an instruction such as ENTER FILENAME - .

RAM.
Random Access Memory. Memory which is part of the computer's circuitry and can be both written to and read from.

RANDOM ACCESS.
The ability to read from or write to either memory or disk in any desired order. Compare this with sequential access where you must start at the beginning and examine each item in turn until you find the item you want.

RECORD.
A collection of **FIELDS** which grouped together form a discrete set of information. Each **RECORD** can be identified and accessed via its **KEY FIELDS** of which there must be at least one.

ROM.
Read Only Memory. Memory which, once written to cannot be erased. This implies that the only meaningful operation with memory of this kind is to read information from it.

WILDCARD CHARACTERS.
Ones which are used when you only want to specify part of a piece of information to be used in a **SEARCH**. The two **CHARACTERS** concerned are * and ?.
These have specific meanings. ? means substitute any **CHARACTER** for this one. * means substitute any **STRING** for this character.

WORK DISK.
A disk which you use to store and process data. Compare this with **BACKUP** disks and **DISTRIBUTION** disks.

WRITE PROTECT.
A notch at the top of each disk.If the notch is open the disk cannot be written to nor can information be erased from it. If the notch is closed then the disk operates normally. It is good practice, when copying disks, to **WRITE PROTECT** the disk you are copying from.

RS232.
A widespread standard for serial (ie. one bit of information at a time) data communications.

SAVE.
Storing a **FILE** on disk so that the information may be retrieved later.
See also **LOAD.**

SCRUNCH
Jargon exclusive to FlexiLabel. A feature which removes unwanted blank lines from mailing labels.

SERIAL PRINTER.
One which uses the SERIAL port (or RS232 port) on your computer. Called SERIAL because all the signals travel down a single wire in SERIES. (cf PARALLEL PRINTER).

STRING.
Jargon. Literally a series of **CHARACTERS** 'strung' together.

SYSTEM FORMAT.
A disk which has been **FORMATTED** with the DOS system stored on it. See **FORMAT.**

SYSTEM TRACKS.
An area of a disk reserved for storage of the DOS system programs.

TEXT FILE.
A **FILE** composed of **CHARACTERS** which all have their literal meaning. (ie. there are none which have a coded meaning).
Some programs use **CHARCACTERS** in a way which uses the **ASCII CODE** number as part of a private coding system so that you cannot read a **FILE** and take it at face value. FlexiFile **IMPORT** and **EXPORT FILES** are Pure **TEXT FILES** with no hidden meanings.

UTILITY PROGRAM.
Programs, usually supplied with the DOS, which perform basic tasks such as **FORMAT**ting disks or copying **FILES.**

THE files on your FlexiLabel Disk.

On your program distribution disk you should have the following files :-

* FL.COM — this is the main program.

* ???.PCC — many files with a .PCC extension. These are the printer control files. The REFERENCE SECTION contains the details of how to use the one for your printer.

* README.NOW — If this file is present it will contain any up to date information which we feel is important to you. If it isn't there don't worry. You can read this file by loading it into FlexiLabel like any other document or view it using the DOS TYPE command.

  TYPE README.NOW [RETURN]

MAKING BACK UP COPIES.

Not very often , but strictly in accordance with Murphy's law , (ie. at the very worst possible moment) you will experience some problem which causes the loss of a document file. There are several possible reasons most of which are outside your control.

* POWER FAILURE.

* VOLTAGE SPIKES due to storms and surges.

* DISK FAILURE.

* HUMAN ERROR.

* DISK DAMAGE (Coffee spills, pet eats disk, children with sticky fingers etc.etc.)

Relative to the cost of your time the cost of a few extra disks to make back up copies of your document files is very small. If you don't think so now you will just after the first time you lose a file which took six or seven hours to type.

There are several ways in which you can make you back up copies, it doesn't really matter which you use as long as you do make them.

1. Use the DISCKIT program to copy the whole of the disk containing the data files. This method is most appropriate if you keep all your documents together on one or more disks. When you use this method it is a VERY good idea to WRITE PROTECT the ORIGINAL disk. This will prevent disaster if you put the disks in the wrong drives and copy an empty disk onto the good data disk. It sounds silly but it does happen.

2. Use the CPM PIP program to copy individual files onto a backup disk.

REMEMBER TOO NEVER USE THE PROGRAM DISTRIBUTION DISK AS A WORK DISK. SEE GETTING STARTED FOR INSTRUCTIONS ON COPYING THE PROGRAM DISK.

Lock-It

A Program for

File Encryption

INTRODUCTION.

Many people use their computers to process important confidential information without ever thinking how easy it is for others to examine their data. This is easily achieved with many data files by simply using the DOS command TYPE which will list the contents of most files on the computer screen.

Even in cases where parts of a file are unreadable, spreadsheet files with numbers stored in floating point format for instance, much of the file still remains readable by TYPE.

A second instance where security may be very important is in the use of specific computer programs. If a program has not been constructed with a password mechanism or with one which is weak then it is impossible to totally prevent unauthorised use.

The answer to this problem is to encrypt your files and security sensitive software and there are a number of public domain programs which will perform this task. THERE ARE SOME VERY GOOD REASONS WHY THESE SHOULD NOT BE USED!

1. Some are not themselves password protected so anyone with access to the encryptor could encrypt all your files making them inaccessable to you.

2. Some encryptors will perform the decryption process on a file even if you give it a KEY which is different from the one used to encrypt the original file. The result is that your important file is reduced to garbage.

3. Encryption programs which always use the same key are worse than useless because anyone with a copy of that program can decrypt your files without your knowledge. Feeling that your files are secure when really they are not is worse than not encrypting them at all.

4. They only operate on ASCII text files and cannot encrypt any file which may contain the ASCII end of file marker character Control Z (ASCII 26). Because of this most accounts files, spreadsheets and program files cannot be coded.

USING LOCK-IT.

LOCK-IT tackles all of these problems so that you can encode ANY file which takes up not more than half the free space on a disk. On a floppy disk this implies a maximum size of 180K which is a very large file.

To encode a file with LOCK-IT simply follow this procedure -

> Put the LOCK-IT program disk in the current drive & type LOCK-IT <ENTER>

> Enter the password required to start the program. At first this will be SAXON but you can change it if you want - PLEASE DO

> If you want to remove the LOCK-IT program disk you can do so NOW.

> Enter the name of the file you want to be encrypted. Include a drive letter & file extension if needed.

> Enter a password of up to NINE letters. Remember it because you can't UNLOCK your file without it.

To decrypt your file you simply select the DECRYPT option on the menu instead of the ENCRYPT option and enter the correct file password. If the password does not match the one which was used when the file was encrypted then LOCK-IT will refuse to start work on your file.

IMPORTANT HINTS ON USING LOCK-IT.

PHYSICAL SECURITY.

Don't keep your LOCK-IT program disk with your data files, that way it can't be used by unauthorised persons.

PASSWORDS.

Don't use obvious passwords. Many security systems fail because people use passwords which can easily be guessed by casual acquaintances. Don't use -

* your name (not even backwards).
* your wife's/husband's name etc.
* birthdays, car numbers etc.

Try to pick a password which is both easily remembered AND based on some obscure information known only to you in your immediate working environment. The other important thing about passwords is to change them on a regular basis so that if someone does discover the one you are using the security damage will be minimised when you next change it.

ELECTRONIC MAIL.

To send an encrypted file via an electronic mail service you will have to convert it to a suitable format first. There are several public domain programs for converting files into this so called HEX format.

BACK UP COPIES.

In your enthusiasm to keep your data files unreadable by others don't forget that BACK UP COPIES are important. A loss of electrical power during the encryption process will NOT result in lost data but nevertheless don't assume that disks last forever and don't sometimes become lost, damaged, worn out etc.