AMSTRAD

MicroFile/ MicroWord

Running under CP/M Plus

SOFT 07053

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SOFT 0705S

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Soft 07053

Published by Amsoft, a division of

Amstrad Consumer Electronics plc
Brentwood House
169 Kings Road
Brentwood
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Getting started.

There are just a few simple steps you need to take to make a working disk with the MicroFile programs ready for use. Please DON'T use the **DISTRIBUTION DISK** for any purpose other than making a working copy.

1. **FORMAT** a blank disk using the **DISCKIT** utility program which you will find on your **CPM Plus** system disk.

2. Put the distribution disk in drive A: and the **FORMATTED BLANK DISK** in drive **B:** (If you haven't a second disk drive don't worry - the computer will prompt you to swap disks as necessary).

   Type

   `MAKEDISK` **[RETURN]**

   and all the files for a work disk will be copied to your blank disk.

3. Your work disk is now ready to use - to start the program simply type

   `SETKEYS KEYS.JBS` **[RETURN]** if using a PCW8256 or
   `SETKEYS KEYS.DBS` **[RETURN]** if using a CPC6128

   then type

   `MF8` **[RETURN]** if using a PCW8256 or
   `MF6` **[RETURN]** if using a CPC6128

4. When MicroFile has **LOAD**ed you will see a 'welcome' screen. At this point you may remove the work disk and replace it with any **DATA** disk. If you are using a CPC6128 then the disk in drive **A:** must ALWAYS contain a copy of the **OVERLAY** FILES `MF.000` through to `MF.011`.

Before starting to use MicroFile for storing your own data or embarking on a study of the details in the manual why not spend just 15 minutes putting together this simple database. By following the keystroke by keystroke description and actually making the entries on your computer you will become familiar with the way MicroFile works in just a short space of time.

We recommend that you don't worry too much at this stage if there are terms or things you don't fully understand - you can look these up in the manual later. Any words which are printed in **CAPITALS** like that are explained in the Glossary at the back of the manual.

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.

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. Please note that MicroFile will NOT run if you use **CPM 2.2**.

Next put the Working Copy of MicroFile into the disk drive so that the arrow symbol, next to the A on the edge of the disk, is pointing to the LEFT. 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]** (`SETKEYS KEYS.DBS` if using a CPC6128) then `MF8` **[RETURN]** (`MF6` if using a CPC6128). The MicroFile program will be **LOAD**ed and the **FUNCTION KEYS** set up in the special way required by MicroFile. After this you will see a welcome screen asking you to press the SPACE BAR to start the program.

At this point you should remove the program disk from the drive and replace it with a disk on which you are going to store your data. It need not be a completely blank disk - you can mix MicroFile **FILES** and other **FILES** on the same disk if you want. However don't use a disk which has only a little free space on it.

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.

A fifteen minute database

Keystrokes	Comments
↑ **[RETURN]**	Choose Create a New Database from the **MENU**.
[RETURN]	Select Data Disk Drive as A B.
`MAILLIST` **[RETURN]**	Enter database **FILENAME**
`AMSOFT` **[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`
`2Ø` **[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 **[SHIFT]** in conjunction with the **ARROW KEYS**. We could have used this method for the first **FIELD**.
[SHIFT] → **[RETURN]**	Select `TExt` as the **FIELD** type.
`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
`25` **[RETURN]**	**FIELD** size is 25. 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`.
`25` **[RETURN]**	**FIELD** length is 25.
↓ **[RETURN]**	Now define the fourth **FIELD**.
`TE` **[RETURN]**	`TExt` type.
`ACad` **[RETURN]**	**FIELD** name is `ACad`.
`25` [RETURN]	**FIELD** length is 25.
↓ **[RETURN]**	Now define the fifth **FIELD**.
`TE` **[RETURN]**	`TExt` type.

TOwn **[RETURN]**	**FIELD** name is `TOwn`.
`2Ø` **[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`.
`1Ø` **[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 Database Maintenance Menu
[RETURN]	Select Maintain Screen Layouts.
[RETURN]	Select Define Screen Layouts.
↓ ↓ ↓ →→→→	Move **CURSOR** to where you want to start your long descriptions.

`NAME.....`	) This process is called FORMS
[RETURN] ↓→→→→	) painting - you can really) enter what you like where you
`ADDRESS.....`	) like. The purpose is to) provide the framework of a
[RETURN] ↓↓→→→→	) form which can be filled in) when entering or editing data
`TOWN.....`	) Use the **CURSOR KEYS** to move to
[RETURN] ↓→→→→	) where you want the text to go) and type the words / symbols
`POSTCODE.....`	) you want. You can amend any) mistakes as you go.
[f7]	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.
[RETURN]	Selects the first **MENU** item (ie. the **FIELD** called `NAme`). You could have typed `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 Database Maintenance Menu

↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ [RETURN] Return to the Use Database Menu.

[RETURN] Select the `Add/Delete/Amend` Option.

[SHIFT][f2] Select `Add A New Record`.

Enter some data of your own here. NOTE that you can use the **ARROW KEYS** to move around the screen form which you designed. The only requirement which MicroFile makes is that **KEY 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.

This first run through using MicroFile will probably have raised more questions in your mind than have been answered at this stage.

Don't worry - join me in the next chapter, the Introduction, and we'll have a look at the workings of MicroFile in a little more detail.

Looking deeper into MICROFILE.

If you have worked your way through the introductory example - the 15 Minute Database - 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 through 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 ?
* WHEN I LEAVE MICROFILE WHY DO SOME OF THE KEYS WORK DIFFERENTLY ?

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** or delete ones which are no longer required. 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. If you have a PCW8256 you CANNOT use drive **M:** as this is used to store program overlays.

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.

When I leave microfile why do some of the keys work differently ?

The **ASCII CODES** produced by the keys of different computers are not always the same for things like **ARROW KEYS** or **FUNCTION KEYS**. So that MicroFile can be run on more than one type of computer the start up procedure ensures that these keys produce **CODES** which it will recognise by using the SETKEYS UTILITY.

If you need to run another program after using MicroFile and the redefined keyboard causes problems then you can overcome this by re-**BOOT**ing CPM after finishing with MicroFile.

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. If you have a PCW8256 there won't be a **[CTRL]** key - please refer to USE OF KEYS below for a further explanation.

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. PUTTING THE DISTRIBUTION DISK IN DRIVE A: AND TYPING `MF8` or `MF6` **[RETURN]** WILL NOT WORK !

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.

We have also included some working examples in a section called HOW DO I DO THAT ? By examining the examples there we hope that you will see how MicroFile can be used to solve different kinds of information storage problems and use those ideas in your own databases.

Use of keys.

MicroFile has been designed to run on both the Amstrad CPC6128 and PCW8256 computers. These both run the **CPM Plus** operating system but you should know about some minor differences in key markings as they affect MicroFile. There are two standard computer keys which are marked differently on the PCW8256 -these are the **[CTRL]** and **[ESC]** keys. On the PCW8256 they are marked as **[ALT]** and **[EXIT]** respectively.

The reason is simply because the PCW8256 was designed as a dedicated word processor first and a general purpose computer second. Throughout the manual and the MicroFile screen prompts we use **[CTRL]** and **[ESC]** - if necessary please use **[ALT]** and **[EXIT]** instead. There is no direct equivalent of the PCW8256 **[EXTRA]** key on the CPC6128.

If you have a CPC6128 you obtain access to the **FUNCTION KEYS** by pressing either **[CTRL]** or **[SHIFT]** in conjunction with the appropriate key on the numeric keypad. In the unshifted state this produces numbers in the usual way. (eg. to obtain **FUNCTION KEY [f1]** you would press **[SHIFT][1]** or **[CTRL][1]**)

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 **[SHIFT]** or **[CTRL]** 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.

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 15 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**.

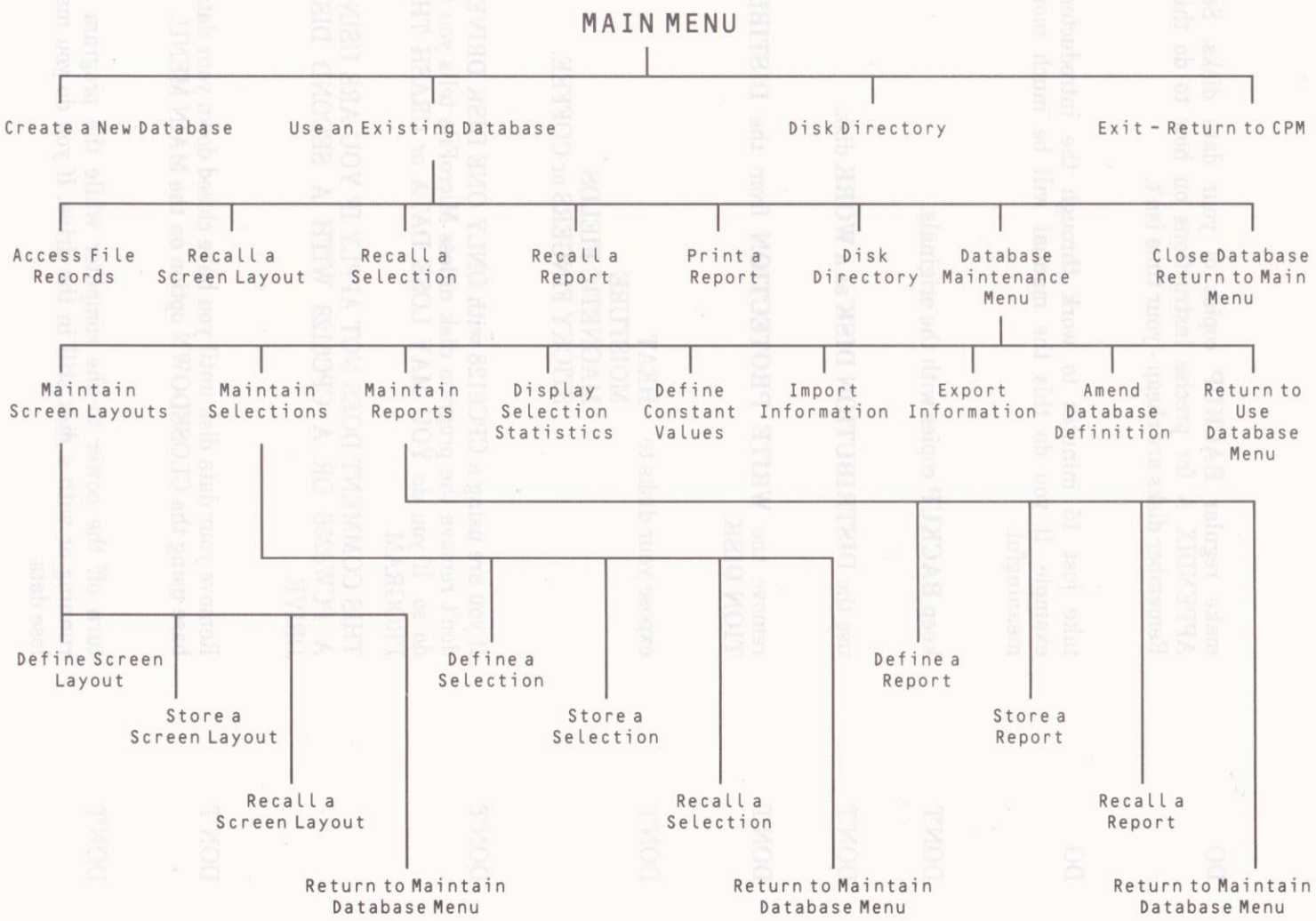
DON'T — expose your disks to
HEAT
MOISTURE
MAGNETIC FIELDS
STICKY FINGERS or COFFEE.

DON'T — If you are using a CPC6128 with ONLY ONE DISK DRIVE - don't remove the program disk unless MicroFile tells you to do so. If you do YOU MAY LOSE DATA or CRASH THE PROGRAM.

THIS COMMENT DOES NOT APPLY IF YOU ARE USING A PCW8256 OR A CPC6128 WITH A SECOND DISK DRIVE.

DON'T — Remove your data disk until you have closed down your database using the CLOSEDOWN option on the MAIN MENU.

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.


MAIN MENU
Create a New Database
Use an Existing Database
Disk Directory
Exit - Return to CPM
Access File Records
Recall a Screen Layout
Recall a Selection
Recall a Report
Print a Report
Disk Directory
Database Maintenance Menu
Close Database Return to Main Menu
Maintain Screen Layouts
Maintain Selections
Maintain Reports
Display Selection Statistics
Define Constant Values
Import Information
Export Information
Amend Database Definition
Return to Use Database Menu
Define Screen Layout
Store a Screen Layout
Recall a Screen Layout
Return to Maintain Database Menu
Define a Selection
Store a Selection
Recall a Selection
Return to Maintain Database Menu
Define a Report
Store a Report
Recall a Report
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 **RECORD**s may be added to the database.
2. **RECORD**s 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 NAME USE A 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 access to all **RECORDS** in the database then you must recall the **NUll** SELECTION.

2. Selections operate within the scope of the last **SEARCH** pattern entered.

MENU NAME USE A 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

OPTION NAME PRINT a REPORT.

FUNCTION To produce a report showing all the **RECORDS** in the current **SELECTION** and based on the last search pattern entered. 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 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 22 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 23 for further details.

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 24 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 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 one 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.

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 **SEARCH** and/or **SELECTION** then only those **RECORDS** which fall within both the **SEARCH** and **SELECTION** will be used for **EXPORT**. If no **SEARCH** or **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.

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**.

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 15.

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 being 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 a 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 16.

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 16.

How do I do that?

In this section we have set out, in some detail, to describe the way you would go about using MicroFile to keep three different kinds of information. The examples show how you would construct databases for keeping -

* Names, Addresses and Phone Numbers.
* Details of a Portfolio of Investments.
* Vehicle Stock Management Records.

The Fifteen Minute Database example at the start of the manual used a keystroke by keystroke walkthrough to illustrate the way in which MicroFile is used. Here we use a different method: each step in the construction of the database is illustrated graphically by an exact copy of each screen as it should appear just before you press the **[f7]** key to accept the form you have filled in.

By studying these examples you should be able to modify them to solve your own data handling problems.

A Name and Address Database.

```
MICROFILE                    CREATE NEW DATABASE
```

Start with details of the database **FILENAME** and **PASSWORDS.** Press **[f7]** to accept these as correct.

```
Enter data disc (A/B)      ?A
Enter filename             ?Friends ACCEPT or ABORT
Enter supervisor password  ?SAXON    these database details ?
Enter user password        ?Amsoft

 1ABORT                                          7ACCEPT

                                          Drive is A:
```

```
MICROFILE                    DEFINE CONSTANTS              FILE-A:Friends

          NAME      VALUE
                    0.000000000
                    0.000000000
                    0.000000000
                    0.000000000
                    0.000000000
                    0.000000000
                    0.000000000
                    0.000000000
                    0.000000000
                    0.000000000
```

We won't be using any constant values in this database -so just press **[f7]** straight away to accept NIL values.

```
Select a constant by moving the cursor with the [ARROW] keys, then press
[RETURN] to edit the constant definition.

 1ABORT                                          7ACCEPT

                                          Drive is A:
```

```
MICROFILE                    DEFINE FIELDS                    FILE=A:friends

TYPE NAME SIZE DEC KEY CALCULATION     TYPE NAME SIZE DEC KEY CALCULATION
TE  SNam  20   0   Y                   TE  COty  20   0   Y
TE  CNam  15   0   N                   TE  PCod  12   0   Y
TE  AAad  25   0   N                   TE  PNum  15   0   N
TE  ABad  25   0   N                   UK  DOb   10   0   N
TE  TOwn  20   0   Y

Select a field by moving the cursor with the [ARROW] keys, then press
[RETURN] to edit the field definition.

1ABORT                                                    7ACCEPT

                                                          Drive is A:
```

Define the **FIELD** details. Remember you can select **FIELD TYPES** from the **POP UP MENUS.** To do this just press **[RETURN]** when the **CURSOR** is in the TYPE column. To delete a TYPE just enter NULL.

```
MICROFILE                    USE DATABASE MENU.               FILE=A:friends

   ADD / DELETE / AMEND RECORDS.
   RECALL a SCREEN LAYOUT.
   RECALL a SELECTION.
   RECALL a REPORT.
   PRINT a REPORT.
 DATABASE MAINTENANCE MENU.
   DISPLAY a DISK DIRECTORY.
   CLOSE DATABASE & RETURN to MAIN MENU.

      USE ARROW KEYS TO MOVE HIGHLIGHT BAR - PRESS [RETURN] TO SELECT

                                                          Drive is A:
```

After your empty files have been created you need to create a screen layout to enter data. Use this series of **MENUS** to get to the DEFINE SCREEN LAYOUT option.

```
MICROFILE                MAINTAIN DATABASE MENU.          FILE=A:friends
  MAINTAIN SCREEN LAYOUTS.
  MAINTAIN SELECTIONS.
  MAINTAIN REPORTS.
  DISPLAY SELECTION STATISTICS.
  DEFINE CONSTANT VALUES.
  IMPORT INFORMATION.
  EXPORT INFORMATION.
  AMEND this DATABASE DEFINITION.
  RETURN to the USE DATABASE MENU.

      USE ARROW KEYS TO MOVE HIGHLIGHT BAR - PRESS [RETURN] TO SELECT

                                                    Drive is A:
```

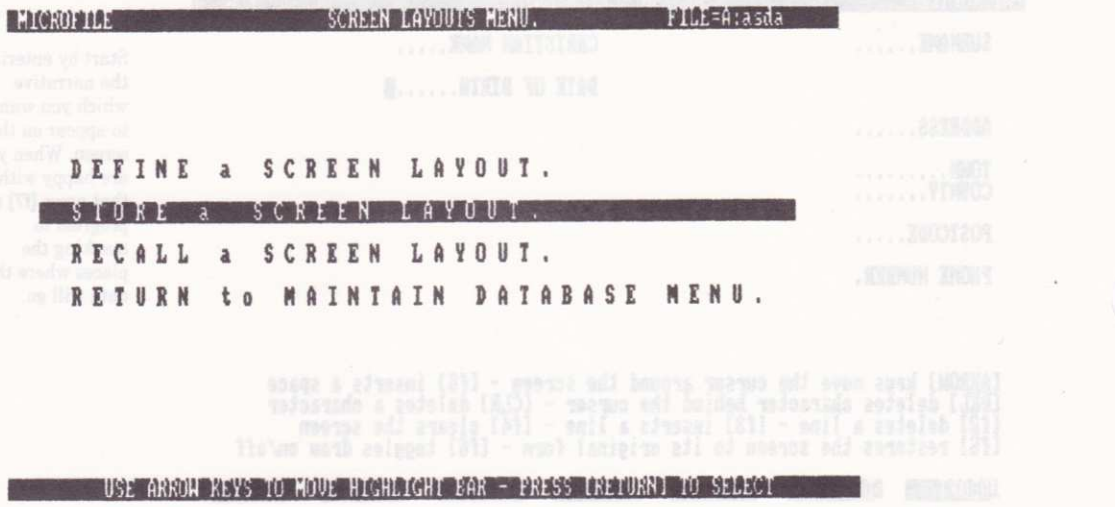
```
MICROFILE                SCREEN LAYOUTS MENU.             FILE=A:friends
  DEFINE a SCREEN LAYOUT.
  STORE a SCREEN LAYOUT.
  RECALL a SCREEN LAYOUT.
  RETURN to MAINTAIN DATABASE MENU.


      USE ARROW KEYS TO MOVE HIGHLIGHT BAR - PRESS [RETURN] TO SELECT

                                                    Drive is A:
```

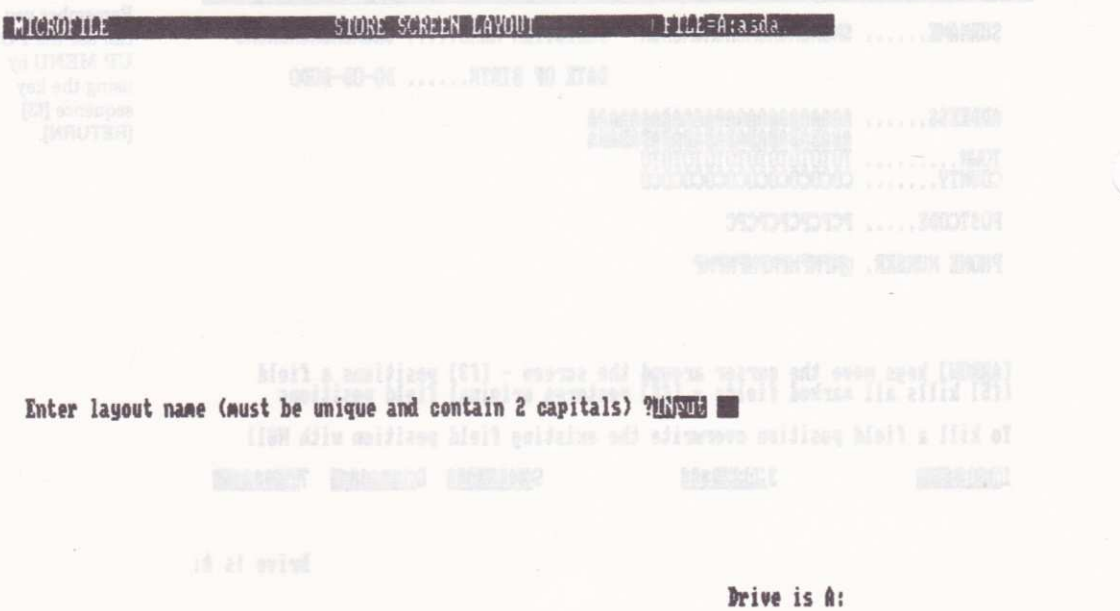
```
MICROFILE                    DESIGN SCREEN LAYOUT                    COL=60 ROW= 4

  SURNAME.....                          CHRISTIAN NAME.....

                                        DATE OF BIRTH.....

  ADDRESS.....

  TOWN.....
  COUNTY.....

  POSTCODE.....

  PHONE NUMBER.


[ARROW] keys move the cursor around the screen - [f8] inserts a space
[DEL] deletes character behind the cursor - [CLR] deletes a character
[f2] deletes a line - [f3] inserts a line - [f4] clears the screen
[f5] restores the screen to its original form - [f6] toggles draw on/off

1ABORT   2DEL LINE  3INS LINE  4CLEAR   5RESTORE  6DRAW TGL  7ACCEPT

                                                        Drive is A:
```

Start by entering the narrative which you want to appear on the screen. When you are happy with that press **[f7]** to progress to marking the places where the data will go.

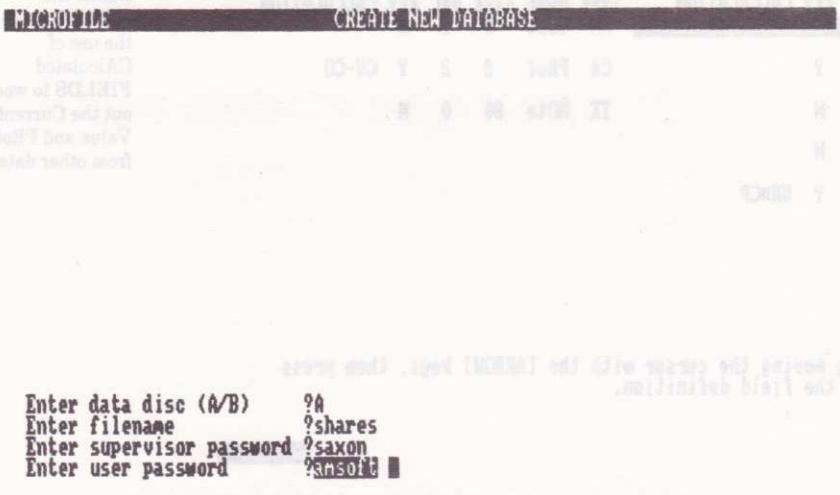
```
MICROFILE                  MARK FIELD POSITIONS                  COL=18 ROW=13

  SURNAME..... SNSNSNSNSNSNSNSNSN   CHRISTIAN NAME..... CNCNCNCNCNCNCNC

                                    DATE OF BIRTH..... DO-OD-DODO

  ADDRESS..... AAAAAAAAAAAAAAAAAAAAAAAAA
               ABABABABABABABABABABABABA
  TOWN.....    TOTOTOTOTOTOTOTOTOTO
  COUNTY.....  COCOCOCOCOCOCOCOCOCO

  POSTCODE..... PCPCPCPCPCPC

  PHONE NUMBER. PNPNPNPNPNPNPNP


[ARROW] keys move the cursor around the screen - [f3] positions a field
[f5] kills all marked fields - [f6] restores original field positions

To kill a field position overwrite the existing field position with NULL

1ABORT   3MARK FLD        5KILL ALL  6RESTORE  7ACCEPT

                                                        Drive is A:
```

Remember you can use the **POP UP MENU** by using the key sequence **[f3] [RETURN]**.


MICROFILE SCREEN LAYOUTS MENU. FILE=A:asda
DEFINE a SCREEN LAYOUT.
STORE a SCREEN LAYOUT.
RECALL a SCREEN LAYOUT.
RETURN to MAINTAIN DATABASE MENU.
USE ARROW KEYS TO MOVE HIGHLIGHT BAR - PRESS [RETURN] TO SELECT
Drive is A:

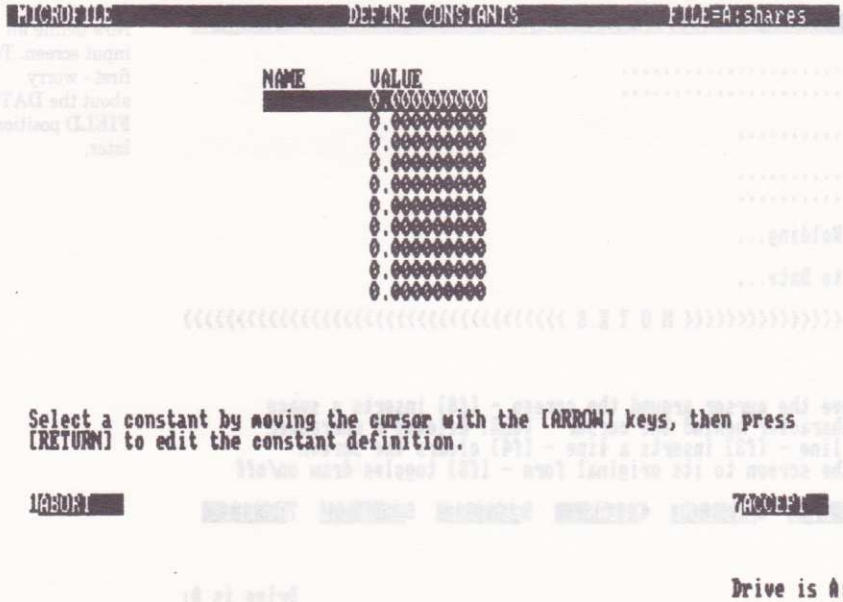

MICROFILE STORE SCREEN LAYOUT FILE=A:asda.
Enter layout name (must be unique and contain 2 capitals) ?layout
Drive is A:

A Share Portfolio Database.



Here are the important screens from the sequence to create a **SHARE PORTFOLIO DATABASE**. We assume that you know how to use the **MENUS** to go from one option to the next and show only the 'creative' screens.

First the **FILENAME** and **PASSWORDS** use **[f7]** to ACCEPT.



No need for constants - just press **[f7]** to continue.

```
MICROFILE                    DEFINE FIELDS                    FILE=A:shares

TYPE NAME SIZE DEC KEY CALCULATION     TYPE NAME SIZE DEC KEY CALCULATION
 TE  SNam  20   0   Y                   NM  COst   8   2   N
 TE  TYpe  20   0   Y                   CA  PRof   8   2   Y  CV-CO
 NM  UHld   6   0   N                   TE  NOte  80   0   N
 NM  CPri   6   2   N
 CA  CVal   8   2   Y  UH*CP

Select a field by moving the cursor with the [ARROW] keys, then press
[RETURN] to edit the field definition.

1ABORT                                                    7ACCEPT

                                                    Drive is A:
```

Define the **FIELDS** - note the use of CAlculated **FIELDS** to work out the Current Value and PRofit from other data.

```
MICROFILE                  DESIGN SCREEN LAYOUT                COL= 1 ROW=15

  Security name.....................
  Type..............................

  Units held.............

  Current price.....
  Current value.....

  Total cost of Holding...

  Profit / Loss to Date...

<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<< N O T E S >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
```

Now define an input screen. Text first - worry about the **DATA FIELD** positions later.

```
[ARROW] keys move the cursor around the screen - [f8] inserts a space
[DEL] deletes character behind the cursor - [CLR] deletes a character
[f2] deletes a line - [f3] inserts a line - [f4] clears the screen
[f5] restores the screen to its original form - [f6] toggles draw on/off

1ABORT  2DEL LINE  3INS LINE  4CLEAR  5RESTORE  6DRAW TGL  7ACCEPT

                                                    Drive is A:
```

```
MICROFILE                    MARK FIELD POSITIONS                    COL= 1 ROW=15

  Security name..................... SNSNSNSNSNSNSNSNSNSN
  Type.............................. TYTYTYTYTYTYTYTYTYTY

  Units held.............. UHUHUH

  Current price.....        CPC.CP
  Current value..... CUCUC.CU

  Total cost of Holding... COCOC.CO

  Profit / Loss to Date... PRPRP.PR

<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<< N O T E S >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
NONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONO

  [ARROW] keys move the cursor around the screen - [f3] positions a field
  [f5] kills all marked fields - [f6] restores original field positions

  To kill a field position overwrite the existing field position with NUll

  1ABORT          3MARK FLD          5KILL ALL  6RESTORE  7ACCEPT

                                                  Drive is A:
```

Mark the positions where the data **FIELDS** will go.

Remember to **STORE** your screen layout before leaving the database.

```
MICROFILE                    DEFINE REPORT                  FILE=A:shares
FIELD HEADING                          WIDTH CALCULATIONS      SUBTOTAL
SNam  SECURITY NAME                       21
TYpe  TYPE                                21
UHld  UNITS                                7  ME
CPri  PRICE                                7
CVal  VALUE                                9  SU
COst  COST                                 9  SU
PRof  PROFIT                               9  SU

CURRENT REPORT WIDTH= 83 MAX WIDTH=117

  Select column to define by moving the cursor with the [ARROW] keys
  then press [RETURN] to define the column.

  1ABORT                                                  7ACCEPT

                                                  Drive is A:
```

Now define a report. This one will calculate total SUm values for all share values, costs and profits, AND a mean value for all units held.

Vehicle Stock Management Records.

```
MICROFILE                    CREATE NEW DATABASE

Enter data disc (A/B)         ?A
Enter filename                ?carstock  ACCEPT or ABORT
Enter supervisor password     ?SAXON     these database details ?
Enter user password           ?amsoft

1ABORT                                          7ACCEPT

                                                Drive is A:
```

Start by naming the **FILE** and **PASSWORDS**.

```
MICROFILE                    DEFINE CONSTANTS              FILE=A:carstock

         NAME       VALUE
         VAt        0.150000000
         PMar       0.200000000
                    0.000000000
                    0.000000000
                    0.000000000
                    0.000000000
                    0.000000000
                    0.000000000
                    0.000000000
                    0.000000000

Select a constant by moving the cursor with the [ARROW] keys, then press
[RETURN] to edit the constant definition.

1ABORT                                          7ACCEPT

                                                Drive is A:
```

We'll use 2 constants for CAlculations -the VAT rate 15% and Profit Margin 20%. The values can be changed if necessary, should, say, the VAT rate alter.

```
MICROFILE                          DEFINE FIELDS                    FILE=A:carstock

TYPE NAME SIZE DEC KEY CALCULATION      TYPE NAME SIZE DEC KEY CALCULATION
 TE  MAke  20   0   Y                     CA  COst   8   2   N   SP - SP*PM
 TE  MOde  20   0   Y                     CA  UPro   8   2   N   SP * PM
 TE  SEno  10   0   N                     TE  NOte  40   0   N
 NM  SPex   8   2   N                     TE  CUst  20   0   Y
 CA  SInc   8   2   N  SP*VA + SP

Select a field by moving the cursor with the [ARROW] keys, then press
[RETURN] to edit the field definition.

1ABORT                                                        7ACCEPT

                                                        Drive is A:
```

Define the fields -a lot of data entry and checking is eliminated by using CAlculations for Selling Price inc Vat, COst price, and Unit Profit.

```
MICROFILE                        DESIGN SCREEN LAYOUT                COL=35 ROW=15

  Vehicle Make.....

  Vehicle Model.....

  Serial Number.....

  Selling Price ex. VAT.....
  Selling Price inc.VAT.....
  Cost Price ex. VAT.....
  Unit Profit.....

  Notes.....

  Customer name.....

[ARROW] keys move the cursor around the screen - [f8] inserts a space
[DEL] deletes character behind the cursor - [CLR] deletes a character
[f2] deletes a line - [f3] inserts a line - [f4] clears the screen
[f5] restores the screen to its original form - [f6] toggles draw on/off

1ABORT  2DEL LINE  3INS LINE  4CLEAR  5RESTORE  6DRAW TGL  7ACCEPT

                                                        Drive is A:
```

Now define the screen layout -Text first ....

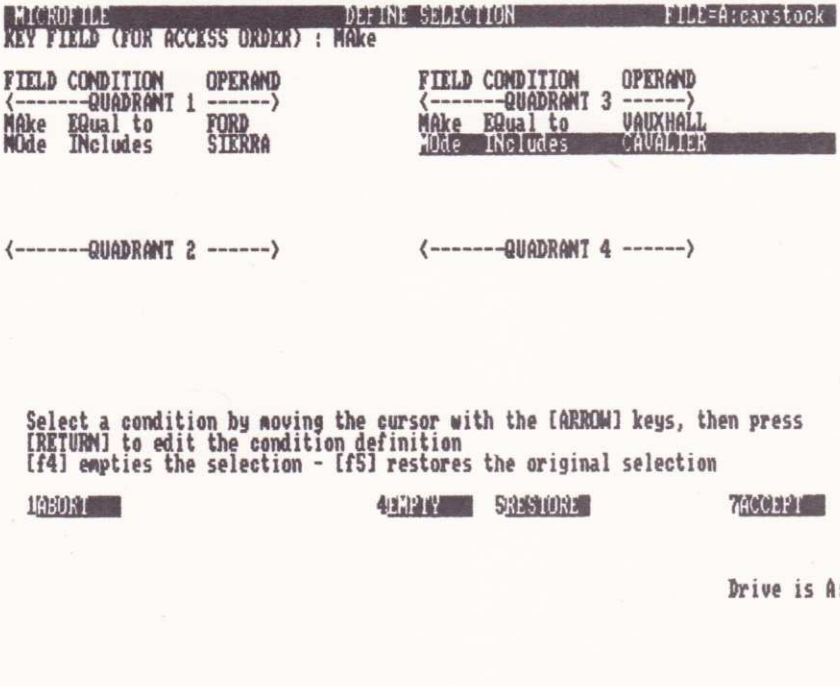
```
MICROFILE                    MARK FIELD POSITIONS                    COL= 1 ROW= 1

  Vehicle Make..................... MAMAMAMAMAMAMAMAMA

  Vehicle Model.................... MOMOMOMOMOMOMOMOMO

  Serial Number.................... SESESESESE

  Selling Price ex. VAT..... SPSPS.SP
  Selling Price inc.VAT..... SISIS.SI
  Cost Price ex. VAT..... COCOC.CO
  Unit Profit..... UPUPU.UP

  Notes............................ NONONONONONONONONONONONONONONONONONONONO

  Customer name.................... CUCUCUCUCUCUCUCUCU

[ARROW] keys move the cursor around the screen - [f3] positions a field
[f5] kills all marked fields - [f6] restores original field positions

To kill a field position overwrite the existing field position with NULl

1ABORT          3MARK FLD          5KILL ALL  6RESTORE  7ACCEPT

                                                    Drive is A:
```

.... then mark the data **FIELD** positions.

```
MICROFILE                    DEFINE REPORT                  FILE=A:carstock
FIELD  HEADING                          WIDTH CALCULATIONS      SUBTOTAL
MAke   VEHICLE MAKE                      21                        Y
MOde   MODEL                             21
SEno   SERIAL NO.                        11
COst   COST EX VAT                       12  SU
CUst   CUSTOMER NAME                     21
```

Let's define a report. There will be a subtotal on the **COST FIELD** every time the MAke changes.

```
CURRENT REPORT WIDTH= 86 MAX WIDTH=117

  Select column to define by moving the cursor with the [ARROW] keys
  then press [RETURN] to define the column.

  1ABORT                                                  7ACCEPT

                                                    Drive is A:
```



Now we'll define a **SELECTION**. When this one is active the database will deal with records whose MAke is FORD AND MODEL includes SIERRA

OR

MAke is VAUXHALL AND MODEL includes CAVALIER.

If you use this **SELECTION** with the **REPORT** defined above you will get a stock list of all FORD SIERRAS AND VAUXHALL CAVALIERS.

Glossary

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 **M:**

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 heavy **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 **M:**

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 **DOS**.

BYTE.

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

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.

CPM.

Control Program for Microprocessors. A disk based operating system by Digital Research which provides a standard systems interface to software written for a range of microprocessor based systems.

CPM Plus.

A later, more advanced, version of CPM supplied with your AMSTRAD computer. Sometimes called CPM 3.0

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**.

DISCKIT.

A utility program supplied on your **CPM Plus** System / Utilities / Basic disk. It offers facilities for the easy FORMATing and COPYing of disks.

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> M: M>

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** for the AMSTRAD PCW8256 and CPC6128 computers is called **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**.

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.

FORMAT DISK.

Preparing a new disk to receive information. You do this by selecting one of the options available when running the **UTILITY** program **DISCKIT**.

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 four **KEY FIELDS** for any one **FILE** which means that you can keep track of your data in four different orders.

LANGUAGE.

A utility program supplied with your AMSTRAD computer. You use this to determine which of the International character sets is to be used.

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. `M:` **[RETURN]** will **LOG** onto drive **M:** as the **DEFAULT** drive.

M:

The **DRIVE DESIGNATOR** for the RAM drive. See also **A:**

M>

The **CPM PROMPT** used when **LOG**ged onto drive **M:** . See also **A>**.

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. MicroFile uses **OVERLAY**s from the **RAM** drive **M:** so that they work quickly.

PIP.

A **CPM** utility program used to copy **FILES** from one part of the computer to another. eg. `A> PIP AFILE.DAT=M:BFILE.DAT` will copy the contents of `BFILE.DAT` on drive **M:** to a new **FILE** called `AFILE.DAT` on the `DEFAULT` drive.

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.

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.

STRING.

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

SUBMIT.

A **CPM** utility program which allows you to store a series of **CPM** commands in a **TEXT FILE**. When this **FILE** is **SUBMIT**ted the commands are replayed and carried out automatically.

SYSTEM FORMAT.

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

SYSTEM TRACKS.

An area of a disk reserved for storage of the CPM 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 **CHARACTERS** 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 **DOS**, which perform basic tasks such as **FORMAT**ting disks or copying **FILES**. See **FORMAT, PIP, SUBMIT, DISCKIT** all of which are **UTILITIES**.

VENDOR FORMAT.

A disk which, although **FORMAT**ted, has no **SYSTEM TRACKS**. The **CPM** system is Copyright of Digital Research and disks may not be distributed with those **CPM** programs on them.

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 small device at the top left corner of each Amstrad disk. If the hole is open the the disk cannot be written to nor can information be erased from the disk. If the hole is closed then the disk operates normally. It is good practice, when copying disks, to **WRITE PROTECT** the disk you are copying from.

Appendix A.
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]**

   If you are using a CPC6128 you will need to type `DISCKIT3`.
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.

Appendix B.
MICROFILE disk files.

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

`MF8.COM` `MF6.COM`	Loader programs for PCW8256 and CPC6128 respectively.
`MF.CHN`	The main MicroFile program.
`MF.ØØØ .. MF.Ø11`	**OVERLAY** programs which are transferred to drive **M:** by `MF?.COM`
`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.

Appendix C.
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.**

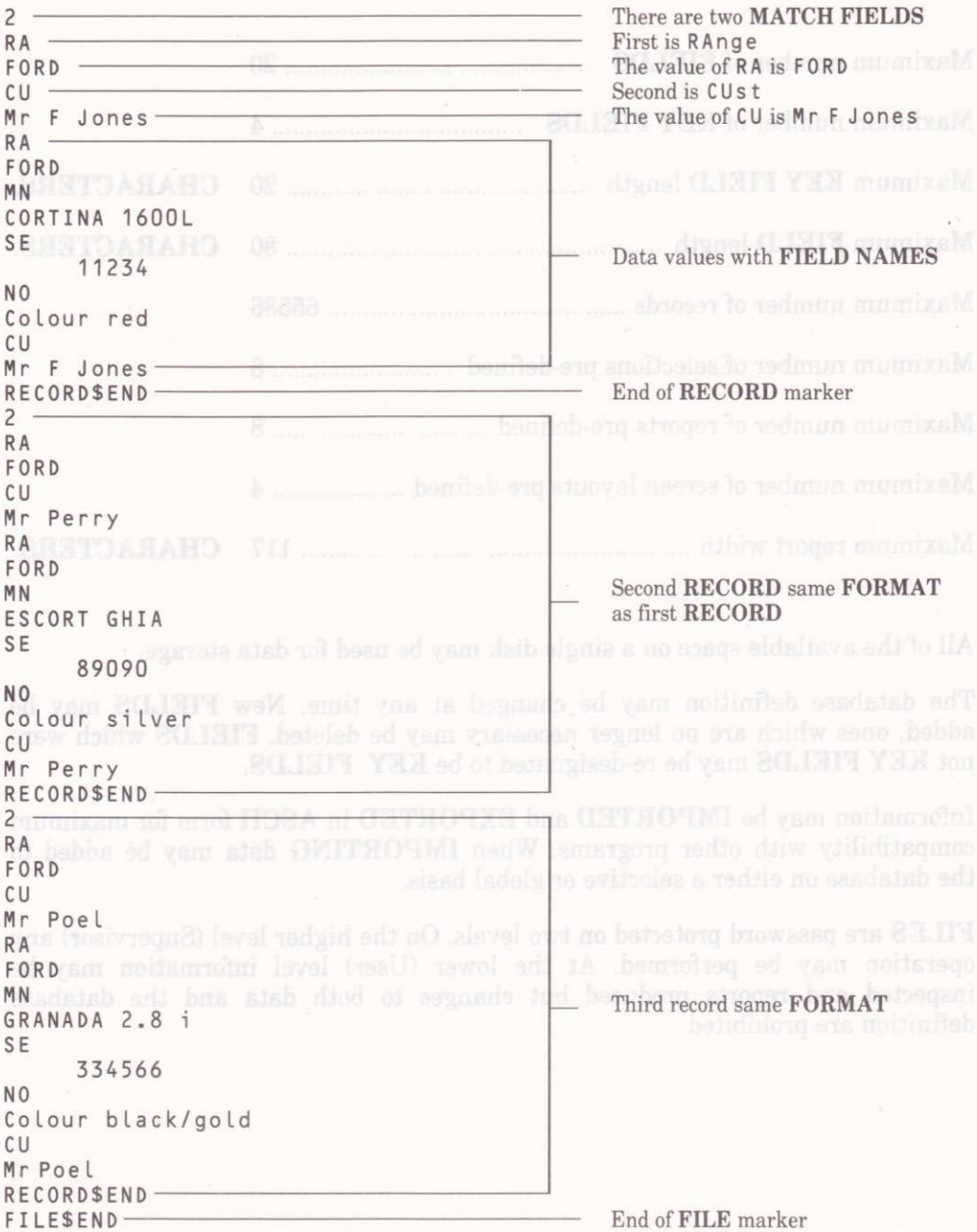
All of the available space on a single disk may be used for data storage.

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.

Appendix D.
Import / Export data format



Appendix E
Printing Mailing Labels with MicroFile.

MicroFile has no specific inbuilt facility for printing mailing labels. There are however TWO ways in which you can perform this operation using MicroFile/MicroWord.

Method 1.

The first method makes use of the `EXPORT DATA` option. The idea is to export information to the standard CPM Plus file with the name `LST:` . Whenever you copy data to this file CPM intercepts the data stream and diverts the output to the printer.

The only other requirement is to ensure that the total number of data fields exported is equal to the number of print lines per label. You achieve this by using a dummy field which is left **BLANK** and exporting this blank field for as many extra lines as are needed to make the number of data lines and label lines the same value.

Please note that this method will not print labels which are arranged side by side.

Method 2.

EXPORT the required information from MicroFile taking careful note of how many lines of information are exported from each record. You can then use the printing facilities of MicroWord to print your labels. The important considerations are -

* Set the document page length to the number of lines on each label.

* If the number of data lines exported (which you noted above) is less than the number of lines per label then make up the difference by setting the **TOP/BOTTOM** margins appropriately.

* If your labels are narrow you may also need to set the **PAGE OFFSET** to zero.

Appendix E
Printing Mailing Labels with MicroFile.

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