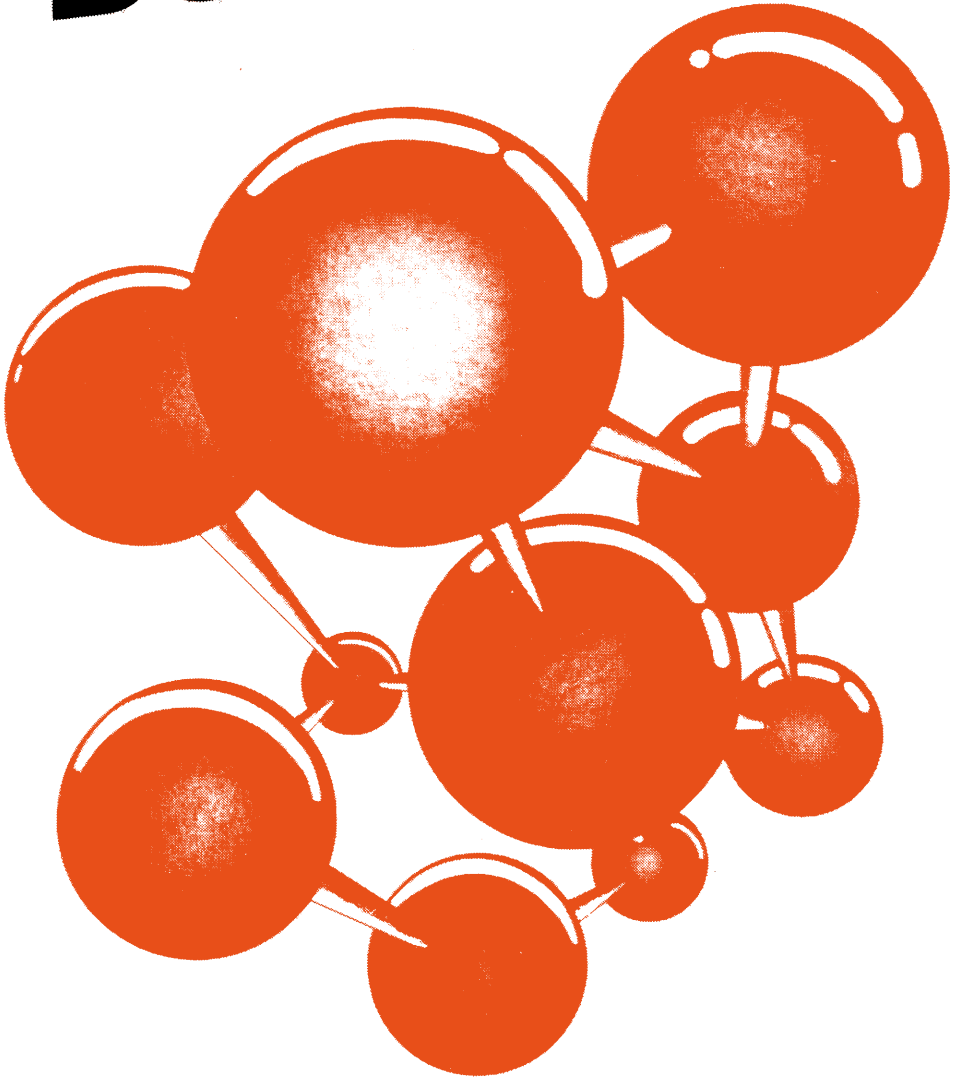


Bee-ALIEN



 **microbee**

Bee—ALIEN

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Introduction.

Someone once said "There is strength in diversity". This is certainly true but, like most things, there is a cost.

When the 5.25" floppy disk became popular at the end of the 1970's, Digital Research's CP/M operating system was well established as the standard for 8 bit microcomputers. CP/M was designed to be adapted for many different disk drives and manufacturers introducing new machines with 5.25" drives wasted no time in making such changes.

For 8" drives, a standard single density format was recommended by DR and was adopted by almost all manufacturers, usually in addition to a double density format. The standard format allows exchange of data and programs between different CP/M systems with eight inch drives.

Unfortunately, DR did not nominate a standard 5.25" format, so each manufacturer 'did his own thing'. While the resulting diversity was the source of today's high capacity diskettes, it has left the legacy of a vast number of (mostly incompatible) disk formats.

With the coming of Microsoft's MS-DOS for 16 bit machines, the IBM-PC disk format has become a de-facto standard. Unfortunately, this is not compatible with CP/M and the "Tower of Babel" problem with CP/M remains (both CP/M-86 and CP/M-68K use the same disk format as the 8 bit system - this manual uses CP/M to refer interchangeably to any of the three members of the operating system family).

More recently, the increasing use of 3.5" and high capacity 5.25" drives has led to a number of MS-DOS machines which are not compatible with the standard IBM format. There is, thus, a need in this area for a convenient way to exchange information between machines.

The *Bee-ALIEN* package is designed to help with these problems. It will read, write and format diskettes for a large number of systems and allows these diskettes to be prepared and copied without access to parent systems.

Chapter 1

Scratching the surface



Scratching the surface

1. Scratching the surface.

Because *Bee-ALIEN* is very similar to CP/M and MS-DOS in its command structure, most users will find operation of the program intuitive. If you are moderately familiar with the 'file management' commands of these operating systems (DIR, TYPE, COPY, REN, DEL), you will be able to use the program with minimal reference to this manual.

1.1. What you will need.

To run the program, you will need the following items:

- 1) A *Microbee* computer with at least one disk drive and at least one other mass storage device (hard disk, diskette drive or M-Drive).
- 2) A working copy of your original *Bee-ALIEN* diskette (if you don't know how to make a back-up copy of your *Bee-ALIEN* master diskette, please read your system manual before continuing).
- 3) A diskette from one of the machines which the program supports.

1.2. What's on the disk.

There are two versions of *Bee-ALIEN* on the master disk. The first one, named ALIENC, reads foreign diskettes in CP/M, MP/M, CP/M-86 and CP/M-68K formats. The second, ALIENM, reads MS-DOS and PC-DOS formats. The operation of the two programs is almost identical. Simply select the format which suits the disk you wish to read.

Scratching the surface

1.3. Getting Started.

To run the program, enter the command:

ALIENC <CR>

and the menu shown in Figure 1.1 will appear on your screen.

```
Bee-Alien Version 1.0b Copyright (c) 1986 FBM Software, Australia
A Product of Microbee Systems Limited

CP/M, CP/M-86 and CP/M-68K Disk Formats Supported: (Page 1 of 6)

A Abacus DS (96 TPI)          N AMUST Executive DS (96 TPI)
B Actrix AM SS                O Archive DS (96 TPI)
C Actrix AM DS                P Associate DS
D ADDS Multivision DS         Q Avatar TC10 DS
E Adler Alphantronic DS (96 TPI) R Beehive Topper DS
F Adler Alphantronic DS       S Bondwell 12 SS
G Adler TA DS                 T Bondwell 14 DS
H Altos DS (96 TPI)           U Burroughs B24/5 DS (96 TPI)
I AMPRO Little Board SS       V Cambridge Technology DS
J AMPRO Little Board DS       W Canon AS-100 DS (96 TPI)
K AMPRO Little Board DS (96 TPI) X Casio FP-1000 DS
L Amstrad CPC 464 SS           Y CCS DS
M AMUST Executive (Early) DS (96 TPI) Z Colex DS (96 TPI)

Press page number to select new page # (0 to quit)
or press letter for required format: █
```

Figure 1.1 ALIENC's main menu.

If you had decided to execute the ALIENM program, to read from and write to MS-DOS disks, the menu which is shown in Figure 1.2 would appear:

Scratching the surface

Bee-ALiEN Version 1.0g Copyright (c) 1986 FBN Software, Australia
A Product of Microbee Systems Limited

MS-DOS Disk Formats Supported:

(Page 1 of 2)

A ACT Apricot 3.5in SS (3.5 inch)	N IBM JX 320K DS (3.5 inch)
B ACT Apricot 3.5in DS (3.5 inch)	O IBM JX 180K SS (3.5 inch)
C Burroughs B25 DS (96 TPI)	P IBM JX 360K DS (3.5 inch)
D Burroughs ET-2000 SS	Q IBM PC 160K SS
E Canon 3.5in DS (3.5 inch)	R IBM PC 320K DS
F Canon AS100 DS (96 TPI)	S IBM PC 180K SS
G Convergent NGEN DS (96 TPI)	T IBM PC 360K DS
H DEC Rainbow SS (96 TPI)	U IBM PC Quaddrive DS (96 TPI)
I DOT PC SS (3.5 inch)	V IBM PC JFormat 640K DS (96 TPI)
J Eagle DS (96 TPI)	W IBM PC JFormat 720K DS (96 TPI)
K HP 150 SS (3.5 inch)	X IBM PC JFormat 800K DS (96 TPI)
L HP 150 DS (3.5 inch)	Y Kaypro 2000 DS (3.5 inch)
M IBM JX 160K SS (3.5 inch)	Z Mica V300 360K SS (96 TPI)

Press page number to select new page # (0 to quit)
or press letter for required format: █

Figure 1.2 ALIENM's main menu.

The different disk formats supported by **Bee-ALIEN** are displayed on this menu in alphabetical order. There are a number of pages to the menu and any page may be selected by pressing the appropriate number key.

If the format needs a special disk drive such as a 96-TPI 5.25" drive or a 3.5" micro-floppy drive, this is indicated. Double sided formats (those in which information is recorded on both sides of the diskette) are indicated by 'DS' after the name, single sided by 'SS'. Where both double and single sided formats are provided for a machine, be sure to choose the correct one for your diskette.

Scratching the surface

1.3.1. Selecting a drive.

When you have located the format you want to use, press the corresponding letter. The screen will clear and you will be asked which drive to use for the foreign disk.

If the format you have selected requires any special hardware, a message will be displayed on the screen. You should read the 'Special Hardware' section of the manual before proceeding.

Bee-ALIEN will then ask you to enter a drive number for the foreign diskette. Valid numbers are 0-3, and these correspond to internal drives A: and B: and external drives (usually C: and D:). Select the drive you wish to use for foreign disks, by pressing the appropriate number.

1.3.2. The Command Prompt.

After you have selected a drive, *Bee-ALIEN* will display the command prompt. This is similar to the CP/M prompt and consists of the drive number followed by a '>' symbol. If drive 1 is selected, the following prompt will appear:

1>

Like CP/M, the drive number displayed indicates that this is the logged drive. If you do not specify a drive in a command or filename, *Bee-ALIEN* will use this drive and expect to find a diskette with a foreign format.

1.3.3. Viewing the directory of a disk.

Now, insert your foreign diskette in the selected drive and display the directory. This is done in the same way as you would under CP/M, by using the DIR command.

```
DIR <CR>
```

To display a directory of a *Microbee* diskette in another drive, just specify the drive name in the usual way:

```
DIR A: <CR>
```

(of course, you should not specify the drive which contains the foreign disk, as the program would then look for a *Microbee* format diskette in this drive).

You can also use CP/M's wildcards to search for specific files within a directory, such as:

```
DIR *.TXT <CR>
```

or:

```
DIR A:WS*.OVR <CR>.
```

1.3.4. Copying files between formats.

The COPY command is really what *Bee-ALIEN* is all about - it allows you to copy files between *Microbee* and foreign disks. To copy all files from a foreign disk to the *Microbee* disk in drive A:, use the:

```
COPY *.* A: <CR>
```

command. With the COPY command, you may use the standard CP/M wildcards to define the files to be copied. For example, to copy all the '.TXT' files from a foreign disk to a *Microbee* disk in the B: drive, we would use the command:

```
COPY *.TXT B: <CR>
```

The COPY command will also allow you to copy files from *Microbee* disks to a foreign disk. If we were copying all the '.DOC' files from the *Microbee* disk to the foreign disk, we would use the command:

```
COPY A:*.DOC <CR>
```

COPY will also allow a file to be copied with a new name. The command:

```
COPY A:FILENAME.OLD FILENAME.NEW <CR>
```

will copy the file FILENAME.OLD (on the *Microbee* disk in drive A:) onto the foreign disk, with the name FILENAME.NEW.

Scratching the surface

1.3.5. Formatting disks for other machines.

Bee-ALIEN allows you to format a disk that may be booted on a foreign computer. This is very handy, especially when the machine for which you are preparing files is not readily accessible. If you enter the command:

FORMAT <CR>

Bee-ALIEN will display the current format and will prompt you to insert a disk to be formatted into the selected drive and then to press a key. The formatting operation permanently erases all data, so make sure that you have a blank disk.

If you change your mind at this stage, press the <ESC> key and you will be returned to the **Bee-ALIEN** prompt. Otherwise, press any key. The program will begin to format and will then verify each track of the disk. Once formatting is complete, **Bee-ALIEN** will redisplay the prompt.

1.3.6. Viewing the contents of a file.

You may check the contents of a text file by using the TYPE command. This command will display the ASCII contents of a file on the **Microbee's** screen. Be sure that the file is an ASCII file, because if it isn't the screen will be full of odd looking characters. To TYPE a file on a foreign diskette, use the command:

TYPE FILENAME.EXT <CR>

or, to TYPE a file on a **Microbee** diskette, use the command:

Scratching the surface

TYPE A:FILENAME.EXT <CR>

Using the TYPE command is very useful to check that the format of the foreign diskette has been correctly selected. If a file TYPEs correctly, it is likely that the format is correct. If it does not, it is quite certain that either the format is incorrect or the disk is bad. You can stop *Bee-ALIEN* TYPEing a long file and return to the prompt by pressing the <ESC> key.

1.3.7. Deleting files.

To erase a file on a foreign or a *Microbee* disk, use the DEL command - it is similar to the CP/M ERASE command. Thus, to erase all the '.BAK' files on a foreign disk, we would type:

DEL *.BAK <CR>.

1.3.8. Renaming files.

The structure used when renaming files differs a little from standard CP/M (actually, this follows MS-DOS conventions). The syntax for renaming a file is:

REN FILENAME.OLD FILENAME.NEW <CR>

where FILENAME.OLD is renamed as FILENAME.NEW on a foreign diskette.

Scratching the surface

1.3.9. Changing the disk format.

Issuing the MACHINE command will return you to the format selection menu and allow you to change the disk format and default drive, without returning to CP/M and restarting *Bee-ALIEN*. The command structure is simply:

MACHINE <CR>.

1.3.10. Changing disks.

CP/M requires you to warm boot whenever you change disks (if you do not do so, any attempt to write to the new disk results in the notorious "BDOS ERROR ON A - R/O" error message). To warm boot CP/M (i.e., do a <CTRL-C>) whilst running *Bee-ALIEN*, change disks and issue the:

RESET <CR>

command. This will ensure that CP/M resets all drives.

CP/M requires a *Microbee* format disk in drive A: during the RESET operation. If you have selected drive 0 for the foreign drive, the program will prompt you to remove the foreign disk, and replace it temporarily with a *Microbee* disk. As soon as the *Bee-Alien* prompt has reappeared, you may replace the foreign disk.

Scratching the surface

1.3.11. Using the HELP pages.

If, at any stage, you can't remember a command, enter either:

HELP <CR> or ? <CR>

and *Bee-ALIEN* will display a summary of the commands and examples of their use.

1.3.12. Exiting to CP/M.

To return to CP/M, use the command:

QUIT <CR>

and the CP/M prompt will reappear on the screen.

Chapter 2

Bee—ALIEN from within



2. Bee-ALIEN from within.

This chapter provides a detailed description of the commands that may be used with *Bee-ALIEN*. The format of each command is given as well as a description of its results and examples of its use.

In the command format or syntax descriptions, braces, '(' and ')' are used to show optional sections; 'D:' indicates a drive specification, such as A:, B:; and "filename" stands for a DOS or CP/M file name.

2.1. Filenames.

Filenames under DOS and CP/M consist of two sections. A name which can be from one to eight characters long and an optional extension of up to three characters. All names use upper case letters, although the program allows them to be entered in either upper or lower case as a convenience. Digits and some punctuation characters may also be used in filenames, but their use is not encouraged. Typical filenames are:

CHAPTER1.TXT ZIP ALIEN.COM PROGFIL.C

Two wildcard characters (? and *) may be used in some circumstances. The ? character in a filename matches any character in the same position. For example:

BOOK?.TXT matches both BOOK1.TXT and BOOK9.TXT

The * character is shorthand for multiple ? wildcards and has the effect of filling the remainder of the name or extension with ? characters (i.e., WS*. * is equivalent to WS?????.???). Please

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note that any characters appearing after a * wildcard will be ignored.

2.2. CP/M User Areas and DOS sub-directories.

The later versions of both DOS and CP/M have methods of organizing the directories of high capacity disks to make them more manageable. DOS uses a tree structured arrangement of sub-directories, while CP/M partitions the directory into different User Areas.

When ALIENM is started, its operations are conducted in the ROOT directory of the foreign drive. The CD command changes the current directory so that future operations can take place in the new directory.

When ALIENC is started, its operations are conducted in CP/M User Area 0 of the foreign drive. To allow the transfer of files from other CP/M user areas, *Bee-ALIEN* uses the USER command to specify a new user area. When a user number other than 0 is selected, *Bee-ALIEN* modifies the command prompt to include the number as a reminder.

2.3. Command Abbreviations.

It is possible to abbreviate *Bee-ALIEN* commands to a single letter. For example, to TYPE the file README.DOC on the foreign disk, you could enter any one of the following:

TYPE README.DOC <CR>

or:

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TYP README.DOC <CR>

or:

T README.DOC <CR>

but not:

TP README.DOC <CR>

When the commands are abbreviated to a single letter, the program cannot distinguish between the DEL and DIR commands or the CD and COPY commands. In these cases, the most frequently used commands (DIR and COPY) take precedence.

D README.DOC <CR>

and:

C F:FROG <CR>

are interpreted as:

DIR README.DOC <CR>

and:

COPY F:FROG <CR>.

2.4. CD - Change DOS Directory.

Purpose : Allows the currently selected directory for a DOS drive to be displayed or changed.

Format : CD {PATH}

Notes : *Bee-ALIEN* looks on the current directory of a DOS disk to find files. If a path is specified and is valid, the new directory specified by the path becomes the current directory. If the path is empty, the current directory path is displayed.

There are some restrictions on the use of sub-directories on the foreign DOS drive. Firstly, only one level of sub-directory is supported; you will not be able to access files in '\LEV1\LEV2' for example. Secondly, sub-directories are "read only". You can type or copy files FROM them, but not delete, rename or copy TO them.

Examples : CD \DIR <CR>

Sets DIR as the current sub-directory of the foreign DOS disk.

CD \ <CR>

Re-selects the root directory as the current directory.

CD <CR>

Displays the current directory. Following the first example above, the display would be:

Path: \SUBDIR

2.5. COPY - Copy between formats.

Purpose : Copies one or more files from the foreign diskette to the *Microbee* diskette or vice versa.

Format : COPY D:FILENAME1 {FILENAME2}
COPY FILENAME1 D:{FILENAME2}

Notes : A drive must be specified for either the first or second file name. If specified for FILENAME1, the copy is made FROM the *Microbee* diskette TO the foreign diskette. If specified for the second filename, the copy is in the reverse direction.

If FILENAME2 is not specified, FILENAME1 may contain wildcards. The source disk is searched for matching files and these are copied in sequence to the destination disk. If a wildcard was specified, the name of each file will be displayed as it is copied.

If FILENAME2 is specified, FILENAME1 must not contain wildcards. If a matching file is found, it will be copied to the destination diskette and renamed as FILENAME2. If a file already exists on the destination diskette with the same name as the new file, it will be erased and replaced with the new file.

Examples : COPY *.* A: <CR>

All files on the foreign diskette are copied to the *Microbee* diskette in drive A:. The name of each file is displayed on the screen as it is copied.

COPY C:*.TXT <CR>

Bee-ALIEN from within

All files with names ending in '.TXT' on **Microbee** drive C: are copied onto the foreign diskette. The name of each file is displayed on the screen as it is copied.

2.6. DEL - Delete a file.

Purpose : Permanently remove one or more files from the directory.

Format : DEL {D:} FILENAME

Notes : If a drive is specified, the operation is carried out on the *Microbee* diskette in that drive. Otherwise the operation applies to the foreign diskette.

Files matching FILENAME are erased from the directory and the disk space they occupy is made free for allocation. Note that it is not possible to undo the effects of this command without special software, so use it with care.

The file name may contain wildcards. If '*.*', which matches all files, is specified, the program will ask if you are sure, before carrying out the operation.

Examples : DEL *.BAK <CR>

All files with names ending in '.BAK' on the foreign diskette are erased.

DEL A:DATA.COM <CR>

DATA.COM on the *Microbee* disk in A: drive is erased.

2.7. DIR - Display the directory.

Purpose : Display a full or partial list of files.

Format : DIR {D:}{FILENAME}

Notes : If a drive is specified, the files on the *Microbee* diskette in that drive will be displayed. Otherwise, the files on the foreign diskette will be displayed.

If a file name is specified, only the files matching that name will be displayed. The name may contain the "?" and "*" wildcard characters.

Sub-directories and volume labels of DOS disks are displayed followed by a "<D>" or "<V>" symbol.

Examples : DIR <CR>

Displays all the files on the foreign diskette.

DIR D:*.*BAK <CR>

Displays all files with names ending in '.BAK' on D: drive.

2.8. FORMAT - Format a diskette.

Purpose : Formats a diskette for use on the foreign system.

Format : FORMAT

Notes : FORMAT formats all sectors on the diskette with a recording pattern acceptable to the selected system and then verifies that it has been written correctly.

Diskettes which have already been formatted can be reformatted for a different machine. This process permanently erases any data or files previously on the disk.

Example : FORMAT <CR>

The program displays the selected format, e.g.:

IBM PC CP/M-86 DS disk format

and the message:

Insert disk to be formatted in drive 1
Press any key to continue

Press <ESC> to leave the FORMAT command and return to the prompt. Otherwise insert the diskette and press a key. The program will display the message:

Formatting . . .

followed by:

Verifying . . .

Bee-ALIEN from within

As each track on the disk must be formatted or verified, each of these operations takes a little time. On completion of verification, the prompt will be displayed, ready for the next command.

2.9. HELP - Display help summary.

Purpose : Displays a summary of the command formats described above, with some examples.

Format : HELP or ?

Example : HELP <CR>

2.10. MACHINE - Re-select format and drive.

Purpose : Allows the selected format and drive to be changed.

Format : MACHINE

Example : MACHINE <CR>

Displays the format selection menu and then the drive selection menu.

2.11. QUIT - Return to CP/M.

Purpose : Exits *Bee-ALIEN* and returns control to CP/M.

Format : QUIT

Example : QUIT <CR>

2.12. REN - Rename a file.

Purpose : Change the name of one or more files.

Format : REN {D:}FILENAME1 FILENAME2

Notes : If a drive is specified, the operation will be carried out on the *Microbee* diskette in that drive. Otherwise, the operation applies to the files on the foreign diskette.

Files matching FILENAME1 are renamed as FILENAME2.

For operations on the foreign diskette only, FILENAME2 may contain wildcard characters (corresponding characters in the old file name are not altered). FILENAME1 may contain wildcards only if FILENAME2 does also. Wildcards in FILENAME1 control matching as usual.

If no file matching FILENAME1 is found, or if a file which matches FILENAME2 already exists, the operation will not be carried out and an error message will be displayed.

Examples : REN B:CH1.BAK CH1.OLD <CR>

Renames CH1.BAK on the *Microbee* disk in B: drive to CH1.OLD.

REN WS*.* WZ*.* <CR>

Renames all files matching WS*.* on the foreign diskette to WZ*.*.

2.13. RESET - Warm boot CP/M after disk change.

Purpose : Warm boots CP/M after a *Microbee* disk has been changed, to ensure that the new disk can be written to without a system error.

Format : RESET

Notes : If the foreign drive is 0, the program will prompt for a *Microbee* system disk to be temporarily placed in drive A:, before the system is warm booted. This is necessary because CP/M always 'logs in' drive A: when it is reset. If the foreign disk is not replaced, CP/M will attempt to read a *Microbee* format disk in the drive and will fail.

The foreign disk can be replaced in A: immediately after the *Bee-Alien* prompt reappears.

This command is only necessary when changing *Microbee* disks. You can change the diskette in the foreign drive at any time without any problem.

Example : RESET <CR>

The screen will prompt:

Replace Microbee diskette in Drive A:
Press any key to continue.

and, after a short period, the drive prompt will re-appear.

2.14. TYPE - Display the contents of a file.

Purpose : Displays the contents of the specified file on the console screen.

Format : TYPE (D:) FILENAME

Notes : If a drive is specified, the *Microbee* disk will be searched for the file. Otherwise, the foreign diskette will be searched.

The file name may not contain wildcards. If a file matching the name is found, it will be displayed line by line at the console, until an 'end of file' character is encountered. The viewing of the file may be aborted by pressing <ESC>.

Examples : TYPE MYFILE.TXT

The contents of MYFILE.TXT on the foreign diskette will be displayed on the screen.

2.15. USER - Change CP/M User Area.

Purpose : Allows a new CP/M User Area to be selected for future operations on the foreign disk.

Format : USER x

Notes : CP/M diskette directories may be partitioned into 16 logical User Areas, numbered 0-15. When *Bee-ALIEN* looks for a file on the foreign diskette, it searches the current User Area. The USER command selects a new User Area for future operations. The new number (x) must be specified and must be between 0 and 15.

When a user number other than 0 is selected, *Bee-ALIEN* modifies the command prompt to include the number.

Examples : USER 13 <CR>

Selects User Area 13 on the foreign disk for future operations. The prompt changes to 1[13]>.

USER 0 <CR>

Reselects User Area 0 and changes the prompt to 1>.

Chapter 3

Special Hardware



3. Special Hardware.

5.25" disk drives come in two principal flavours; those with a track spacing of 96 tracks per inch, with 80 tracks on each side, and those with a 48 track per inch spacing and 40 tracks per side (35 on some older machines). The 48 tpi drives are more common and these are the ones fitted as standard in the *Microbee*.

96 tpi diskettes can only be read using a 96 tpi drive, but it is possible to fit one of these drives to a *Microbee*. The newer 3.5" drives can also be attached in a similar manner.

Diskette formats requiring a non standard drive are indicated in the format selection menu. If one of these formats is selected, a warning message advising the type of drive required will be displayed when the program prompts for the drive selection.

3.1. Disk errors and problems.

Bee-ALIEN uses two types of information on the foreign disk format. The 'physical' format information concerns the actual magnetic recording format and includes such information as the number of tracks and sectors. The 'logical' format information concerns the information which is recorded, such as the location of the disk directory and the allocation of files to sectors.

By far, the most common source of errors is selection of the wrong disk format. If the chosen format happens to match the physical arrangement of the foreign disk, but has a different logical format, disk errors may not occur, but correct data transfer is impossible. To check for this type of error, make a practice of using the TYPE command, to

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read the contents of one or two text files on the foreign disk, whenever you use a new format for the first time.

If the format of the foreign disk and the format in use by *Bee-ALIEN* are not identical, the most likely result will be a hardware detected disk error. These errors can also be due to genuine disk or hardware problems, but always suspect format mismatches as the most likely cause.

If *Bee-ALIEN* encounters an error during operations on the foreign diskette, it performs five retries and then displays an error message similar to the following:

```
Disk error reading drive 1
At: Track 3, Side 1, Sector 10, Block 4
```

The main components of this message are the operation which was in progress (read, write, format or verify) and the position on the disk where the error occurred.

The program will also ask you if you wish to retry the operation, ignore the error or abort the operation which you attempted. You must respond by pressing the <R>, <I> or <A> keys. The effect of these answers is shown below.

Retry : The program will retry the operation and, if successful, will continue. If unsuccessful, the error message will be displayed again. You should attempt Retry at least once, in case the error is a random 'soft error'. Occasional soft errors are not a major problem.

Ignore : The program will ignore the error and continue the operation. This will usually

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result in bad data being copied. Ignore may be useful when copying a text file which can be corrected later by editing.

Abort : The current operation is abandoned.

3.2. CP/M allocation errors (ALIENC.COM only).

If the foreign diskette and the selected *Bee-ALIEN* format are physically compatible, but have different logical layouts, the program may report a 'CP/M Allocation Error' after reading the directory of the foreign disk.

This error indicates that the directory information used by CP/M to allocate files on the disk is logically inconsistent. This error is a certain indication that an incorrect format has been selected.

3.3. Unreadable formats.

Bee-ALIEN can read only those 5.25 inch formats which are compatible with the Western Digital WD 179x floppy disk drive controller chip used by the *Microbee*. This includes most soft sectorized formats, but excludes the following:

- 1 - Apple and Apple compatible formats
- 2 - 'Hard Sectorized' formats such as:
 North Star Horizon and Advantage
 Some Micropolis Formats

If you are not certain, you can check for a hard sectorized diskette by carefully rotating the mylar disk within its jacket. Be careful not to apply

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excessive force and only touch the diskette itself at the inner edge of the hub opening.

As you rotate the disk, watch the index hole opening in the jacket. A soft sector diskette has a single index hole which will appear once per revolution. A hard sector diskette has 10 to 16 sector holes in addition to the index hole.

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1. NAME OF THE MANUAL CONCERNED:

.....

2. WHICH HARDWARE ITEM/SYSTEM/SOFTWARE PROGRAM IS IT FOR?

.....

3. EXACT LOCATION OF PROBLEM IN MANUAL:

Section:..... Chapter: Page:

4. WHAT IS THE NATURE OF THE PROBLEM?

Text confusing ☐ Not enough information ☐ Error(s) ☐

5. PLEASE GIVE FURTHER DETAILS IF POSSIBLE:

.....

6. PERSON REPORTING THE PROBLEM:

..... Phone: (....)

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