

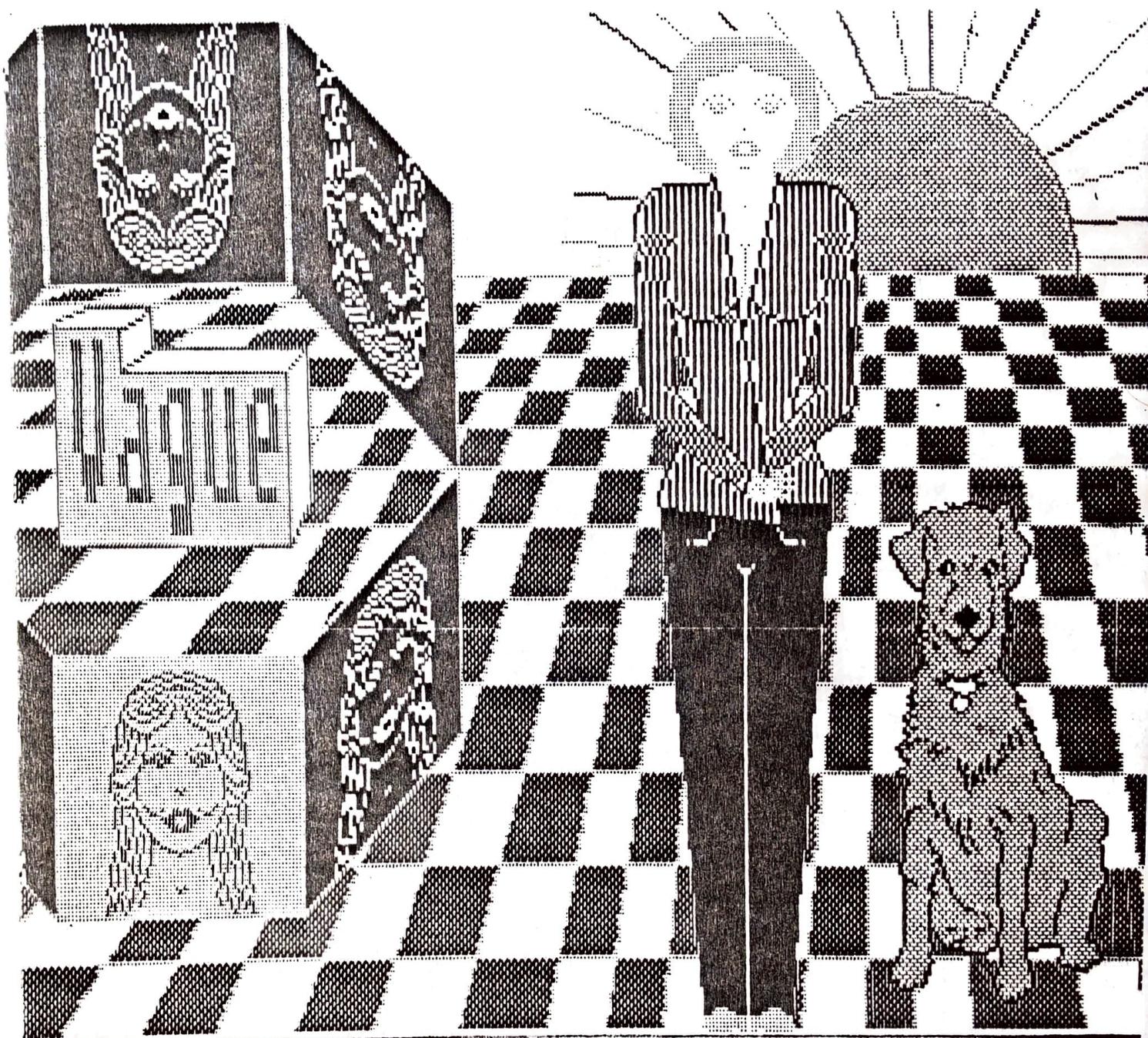
# ABUG



ACORN & BBC  
microcomputers  
USER GROUP  
Sheffield

please reply to:-

Newsletter No.29



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## DIARY

October 2	R & B's	Social
October 16	<del>Park Baths</del>	Details to be announced
November 6	<del>R &amp; B's</del>	Social
November 20	<del>Park Baths</del>	Details to be announced

*Shake-Spear.*

## CHAIRMAN'S LETTER

Many is the time all of us who are "into computing" have been asked "What do you do on your machine?". My answer has always been .. whatever I wish to do, be that the playing of games or grumbling over the results from running the Home Accounts program. It is difficult to describe to the un-initiated the joy to be derived from writing and successfully running a computer program however large or small and on whatever subject is of interest to each of us as individuals.

One of the fascinating facts about computing as a hobby is that it can be related to virtually any other facet of human activity. This can be a catalogue of butterflies or to the example of a hobby which was meant to go together with computing, that of amateur radio. There is hardly an activity in amateur radio where a home computer cannot be of use. Computer power is a boon to the radio ham in areas such as the tracking of satellites, cw, rtty, contact records, ariel design, propagation predictions, vhf locators and circuit design.

I ask forgiveness of the members of the club for the plug for amateur radio, you may have guessed by now that the author is a radio ham, but I use the plug purely to try and emphasise to members the unlimited scope and enjoyment to be obtained from computing.

Right! you computer buffs, WRITE.

Articles, complaints (if you dare), for inclusion in the magazine.

Frank Webster

## PUZZLE CORNER ANSWER

In Newsletter number 27 we published coded message for you to decypher. The program below shows you how to do it, and also gives you the option of coding your own messages. It is fully commented to enable you to see how it works.

5 REM letter in JACOB & in JOSEPH	= J
6 REM in BASIC but not in LISP	= A
7 REM in REALS but not in REEL	= S
8 REM in ONE and also in TWO	= O

(Continued Overleaf)

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9 REM in FINAL and also in END      = N
10 REM the name of the year =
11 REM jfmanj<JASON>d
12 REM now for the easy part
100 CLS
110 PRINTTAB(0,10)"DO YOU WISH TO CODE OR DECODE YOUR      SENTENCE?"
120 PRINTTAB(0,12)"ENTER <C> OR <D>"
13 INPUTF$
140 IF F$="C" THEN PROCcode
150 IF F$="D" THEN PROCdecode
160 GOTO 100
170 DEFPROCcode
180 CLS
190 PRINTTAB(0,10)"ENTER SENTENCE OF LESS THAN 250 LETTERS":REM
capital letters only
200 INPUT SENTENCE$
210 PRINT SENTENCE$
220 PRINT"IS THIS CORRECT? Y/N"
230 INPUT YN$
240 IF YN$<>"Y" THEN PROCclear:GOTO180
250 Y=1
260 FOR X=1 TO LEN(SENTENCE$)
270 L$=MID$(SENTENCE$,X,1)
280 IF ASC(L$)=32 OR ASC(L$)=160 THEN CODE$=CODE$+L$:GOTO 330:REM add
a space
290 M$=MID$("JASON",Y,1):REM chose your own code word of 5 letters
300 L=ASC(L$):M=ASC(M$):CO=INT((L+M)/2):CO$=CHR$(CO):REM add ASCII
and divide
310 CODE$=CODE$+CO$
320 Y=Y+1:IF Y=6 THEN Y=1
330 NEXT X
340 PRINT CODE$
350 PROCdelay
360 ENDPROC
370 DEFPROCclear
380 PRINTTAB(0,11)STRING$(39," ")
39 PRINTTAB(0,12)STRING$(39," ")
400 PRINTTAB(0,13)STRING$(39," ")
410 ENDPROC
420 DEFPROCdecode
430 CLS
440 PRINTTAB(0,10)"ENTER SENTENCE TO BE DE-CODED"
450 INPUT SENTENCE$:REM enter coded sentence including spaces
460 PRINT SENTENCE$
470 PRINT"IS THIS CORRECT? Y/N"
480 INPUT YN$
490 IF YN$<>"Y" THEN PROCclear:GOTO430
500 L=LEN(SENTENCE$)
510 CLS
520 PRINTTAB(0,10)"ENTER CODE WORD"
530 INPUT CODE$:REM enter JASON here

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(Continued Overleaf)

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540 IF LEN(CODE$)>5 THEN PROCclear:GOTO510
550 C=LEN(CODE$):Y=1
560 FOR I=1 TO L
570 S=ASC(MID$(SENTENCES$,I,1))
580 IF S=32 THEN X=S:GOTO620
590 M=ASC(MID$(CODE$,Y,1))
600 Y=Y+1:IF Y=C+1 THEN Y=1
610 D=S*2:X=D-M
620 ANSWER1$=ANSWER1$+CHR$(X)
630 IF X=3 THEN X=X-1
640 ANSWER2$=ANSWER2$+CHR$(X+1)
650 NEXT:REM 007's poison
660 PRINTANSWER1$:REM a letter from here
670 PRINTANSWER2$:REM or a letter from here
680 PROCdelay
690 ENDPROC
700 DEFPROCdelay
710 X=GET
720 ENDPROC

```

Frank Webster

#### NEWS FROM ACORN

At the recent PCW Show, Acorn announced a 128K version of the B+, using the switched banks, or paged, technique, and also a version of its ADFS for the BBC B. Newsletter No 27 gave details of the new DFS, as fitted to the B+. We are including copies of Acorn handouts on these products with this edition of the Newsletter.

The cost of the new version of the B+ is £499, but that of the new DFS is not yet known.

#### VISIT TO RATCLIFFE-ON-SOAR POWER STATION

The club organised a visit to atcliffe-on-Soar Power Station in place of the last formal meeting. However, only five members arrived, which was rather embarrassing as the power station people were expecting 25! Those of us who were able to go, had a very enjoyable two hours looking round one of the largest power stations in the country. Coal fired, it generates 2000 megawatts of electricity when fully functioning, although one of the four 500MW generators was out of action while we were there.

We were shown the pulverising mills, that reduce the coal to fine dust before it is burnt, the 50 metre high boilers and the huge steam turbines. The noise was deafening, and it was a relief to everyone when we went into the relative peace and quiet of the control room. It was there that we saw the only computer we came across during the

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visit - an ICL micro! No-one seemed too sure how to work it, or what it did, but thought it was used for an information retrieval project.

It proved a very interesting visit, which started with coffee and biscuits, and a twenty minute video, and ended with more coffee and biscuits. The only regret was that more members were not able to take advantage of the opportunity.

Dave Brown

FOR SALE

1 40 track S/S disk drive + leads. Any offers around £65 ?  
Contact Pete Frith on Sheffield 389165 after 6pm.  
Also, anyone willing to swap a LVL dual 40 track drive (1/2 hight) for any dual 40 track drive (1/3 hight), please contact the above.

2nd processor cases (Ideal for projects EPROM Programmer etc) with power switch fitted. Matches Beeb case. £8  
Contact Fred Daley at user group meetings.

Anyone wishing to place a 'For sale' notice in the newsletter should give it, in writing to either Myself (Pete Frith) or Dave Brown.

SOLIDISK CPU & KEYBOARD CASE

Notice to anyone thinking of purchasing the Solidisk Cpu & Keyboard case.

The cases themselves are of very good quality, the Cpu case utilizing the bottom of the original case (So you do not have to remove the main PCB)

However, There are two major faults wich are not mentioned in the advertizing.

1) The disk drive cutout is for 1/3 hight drives only. 1/2 hight will just not fit (Esp. LVL !)

2) The black plastic keyboard surround (that has Caps lock Etc.) does not come with it.

Therefore you have to either buy a new set of stickers fom an Acorn service dept. (Very difficult) or to take the old one off the old case top, then glue it down (also very difficult.)

But aside from these faults, I have found it a joy to use, the disk drive cutout, being used for holding small manuals.

Pete Frith

The following books are additional to the list which appeared in the ABUG Newsletter No.26:-

Disc Systems for the BBC Micro	Sinclair
The BBC Micro Guide	
Interfacing the BBC Microcomputer	Opie
Graphic Art for the BBC computer	Allan
Functional Forth for the BBC computer	Allan

The first three books were omissions from the previous list but the last two are new additions to the library.

We have also acquired '3D Graphics Development System' on disc.

By far the most popular items in the library have been the Beebug cassettes. Therefore we are now also subscribing to the Micro User and the Acorn User cassettes. The Micro User cassettes commence with the June issue and the Acorn User with the July issue. In addition there is a special Acorn User cassette featuring all the graphic programs of recent issues.

As inevitably the most recent cassettes are in much demand, many members have had to wait several months before they get a chance of borrowing them. To ease the situation, we will keep copies of the most recent cassettes on disc.

Also we are holding in the library copies of all the available Solidisk software for the benefit of the many Solidisk users in the club. Members may freely copy this software as Solidisk make it available free (only charging for the media) to users of their RAM boards (it's not much use if you don't have sideways RAM).

At present we have volumes 1-5, vol.7 and most of vol.8 (the toolkit facilities are missing), as listed in the recent Solidisk advertisements. Even though advertised, Solidisk told me at the recent Acorn User exhibition, that the software pack 2 was not yet available. If any member has, or acquires, any new software, we would welcome the opportunity of making a copy for the library so that we may keep it as up-to-date as possible for the benefit of all members.

A lot of the Solidisk software appears to be very good but the documentation is unfortunately somewhat lacking, or even non-existent. Trying to unravel some of the programs and relate what's on the discs with what documentation there is, is not an easy task. I'm sure other Solidisk users in the club must be finding similar problems. At present I am trying to make a detailed assessment of the software - I will report on my findings in a future Newsletter.

#### SOLIDISK NEWS

SWR64: This board is now available. I exchanged my SWR32 for an SWR64 at the Acorn User show and I would say the upgrade is worth the cost (£27 normally - £22 at the show). Note: when upgrading it is only necessary to swap the actual plug-in board - the base with the wires attached can remain in your computer (so you needn't worry about soldering the wires).

The new board is a new design with fewer chips than previous models (so less overheating and power consumption). It has been specially designed to allow further expansion: i.e. to upgrade to 128k or 256k it is only necessary to add additional RAM chips and modify a few configurator links.

The main feature is that it has two extra ROM sockets on board. It is claimed they will accept all BBC Sideways ROMs including 32k as in the BBC+. So it will take the new ADFS 2.1 ROM which is available on a single 32k EPROM as an alternative to the two 16k EPROMs normally supplied.

**SOLIDISK MODEM:** This is still not available but I picked up an information sheet about it at the Acorn User exhibition (which any member may see on request). The sheet also gives details of the companion Linemaster ROM. The modem features autodial and autoanswer, and with Linemaster there are Prestel dialling, View data host, and terminal emulator facilities. BT approval has not yet been granted though it is being sought. (Note: the DEMON modem is not BT approved and they are NOT seeking approval!). The Solidisk Modem will cost £30 and Linemaster ROM £10. Linemaster can be used with most (all?) BT approved modems.

**SHADOW RAM:** Solidisk had a notice at the show proclaiming a shadow RAM board for £30 (not a show special price!). Needless to say it was not available! However there was one fitted to one of the computers on the stand and I was assured it would sit side-by-side happily with all the other Solidisk boards.

## 128k BBC Model B+

Acorn Computers are launching a 128k BBC Model B+ in time for this Christmas. This machine has all the recognised features of excellence of the BBC micro but with the added power and versatility resulting from four times the memory of the BBC Model B Microcomputer.

### Key features:

- \* BBC Model B+ with 128k RAM
- \* Full 64k BASIC programs with special BBC BASIC
- \* Four 16k PAGED RAMs capable of running Languages and Filing Systems
- \* Increased printer buffers and variable storage possible

The 128k B+ will be compatible with all existing hardware and software designed for the 64k B+. This reinforces Acorns prime commitment towards existing owners of upward compatibility and stability in the rapidly changing and confusing world of microcomputers. The advantages offered with the extra memory in the 128 B+ are as follows:

### Increased BASIC Program size

The 128k RAM provides the BBC Model B+ with a full 64k of BASIC programming area. The extra 64k RAM is supplied as 4 x 16k paged RAMS. Providing 64k of RAM for BASIC programs is quite unique for an 8-bit micro and is a feature many of the 128k competitive products cannot offer.

The extra 64k RAM area may also be used for storage of variables and for machine code programs.

### Data Processing

The 128k RAM offers greater potential and speed for processing data. The additional memory can be used for storing data variables. With this data in RAM, processing techniques such as sorting and searching become extremely fast.

**Business software**

The 128k B+ will greatly enhance the capabilities of the machine for business use. When using word processors, spreadsheets and databases the size of the data storage areas can be dramatically increased while the prospects for integrated packages are greatly improved.

**Paged RAM**

The extra memory will appear as 4 x 16k Byte pages in the PAGED RAM space (&8000 to &BFFF). Each Page of the new RAM will be capable of running a language or filing system e.g. Pascal, Basic, ADFS and 1770 DFS. Some programs, including the VIEW family, are protected and will not run in Paged RAM.

The implications of Paged RAM may be greatest using 128k B+ machines on the network. Each network machine could load a version of normal ROM based software, eg Pascal, from the fileserver into the Paged RAM and proceed as if the ROM chip were then in that machine.

**Printer Buffer**

With suitable additional software (not supplied) the extra RAM may be used as a printer buffer i.e. to store characters while printing thus releasing the machine for other work.

The Price of the 128k B+ will be £499 and will be available from Retailers. Existing 64k B+ may be upgraded to the 128k B+ by authorised Acorn dealers.