EINSTEIN MAGAZINE

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YOUR letters, articles, thoughts, ideas,
hints, tips and problems are needed here!

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No. 80

CHIEF EDITOR'S PAGE

ABOUT THIS ISSUE OF THE MAGAZINE (and other happenings)

Quite inevitably(*) and unavoidably(*) this issue of the magazine is going to be (ahem) just everso slightly late (cough, cough, splutter!) in reaching you.

(*) "It's lies, folks: it's all lies! It didn't have to be late reaching you at all. You could have had it on time, with no problem at all (just so long as you didn't mind the pages being completely blank, or as diabolically printed as some past issues, that had better remain numberless!)"

To be quite truthful, your tame slave at HQ now has a severe logistical problem, as "Authority" has discovered that I am one of those dedicated chaps blighted by the policy of our Prime Ministers, Handbag & Son Ltd, of making Britain great again by bankrupting all the employers, blaming the workers, and reopening the workhouses. The "Treasury Support Agency" system is being applied to the "Make The Unemployed Commit Suicide In Despair" Agency, employers are nearly an extinct species in what was once The Rich South-East, and the only option left open to me is that of mandatory self-employment.

I'm compulsorily enrolled on a course intended to force me to start up my own business equipped with no business skill, no capital, no business sense (and not a lot of sense of any other sort either!). To gain much-needed skills I am putting in three days a week of hectic unpaid effort as self-taught architect, carpenter, bricklayer, tiler, plumber, labourer, electrician and lorry driver, helping a destitute widow to rebuild her disintegrating circa-1720-vintage oak-beamed cottage that has major structural defects that cause it to collapse regularly every 90 years. This is its 3rd time!!!

Training myself to start up in business as a printer and publisher as well takes up another two days every week, but the fact that I have no suitable printing equipment and no premises to run a business in does present a few problems.

I have partly solved this problem by donating my services to my local church on two days a week as their unpaid in-house printer, and as volunteer production/distribution manager of their parish magazine and other community print needs. This deal gives me access (at cost) to their printing machine (recently upgraded to an improved model at my instigation).

In addition, administration/correspondence of sundry clubs, users groups, etc., and operating an international banking service for genealogists (i.e. family history researchers) keeps me fully occupied for at least two more days a week.

If you add this all up, you will realise that I am now fully occupied for at least NINE DAYS A WEEK. This is why letters from me are subject to delay, why it's quite hard enough for me just to collate, staple, envelope and post the magazine out after getting it printed, and why it's become absolutely and utterly impossible for me to edit the magazine as well.

Fortunately new(ish) 256-owner members John and Jenny Murray have stepped into the breach at short notice as our new apprentice Einstein Magazine editors, with the support and expertise of Ted Cawkwell -- who stays on the team as our Technical Editor. Those members who knew him will be sad to hear that long-time member John Luther didn't survive the experience of getting a new IBM-compatible PC with bells and whistles hung all over it. The culture shock and excitement seem to have been just too much for him, but his widow Winn has generously donated his Einstein equipment to us, Ted has collected it, and by the time you read this, John and Jenny should hopefully be equipped with a TC-01 as well as a 256.

They will obviously welcome your input, as they are simple computer users with mainly word-processing experience, and are not whizzkids, expert programmers, or technical boffins. If you've always meant to write for the magazine, but were afraid to do so for fear of appearing a dumb cluck, you now have the assurance that we all know even less than nothing anyway, and you will look an absolute genius by comparison!

More on contributing to the mag when the new arrangements have settled down a bit, meanwhile you can send your input to me at HQ, or to John and Jenny, or to Ted, whichever seems the more appropriate (I'll try to remember to include their contact details in this issue, of course!).

YOUR HELP IS ALSO NEEDED:-

to replace Frank Wadl, who has valiantly kept us visible to Einey owners by inserting regular free ads for us in PC Mart (fortnightly) and MicroComputer Mart (weekly), originally by post and more recently with his fax machine. Like me, Frank is now so overloaded with other commitments that he is quite unable to continue, and we urgently need one (or more) eager beavers, hopefully with a printer, a fax machine (or e-mail link?) to fill this absolutely crucial role in keeping the group alive. Offer anyway, we urgently need you. And helpers who like to write letters and are willing to make us visible in other computer/hobby magazines would be a real godsend.

Clem Cole continues to work wonders in making sense of the software library content, but we do need more help in this area, and also with our revived commercial software range.

On the financial side a faint trickle of income continues to materialise out of nowhere, but our big van needed expensive repairs after being thoroughly thrashed around the country for several years on user group business. We've acquired the redundant church printing machine very cheaply (as a standby and in case we lose access to the new one), but this will need money to be spent on replacement parts to refurbish it.

In addition we've got an offer of a load of paper at a price that is far too good to turn down, from a dealer who agreed to clear a rambling Victorian house, only to discover that it had been used as a printing works, and was just as it had been left on the day that the printer died. Paper is now steadily escalating in price as the recession slowly lifts, and demand constantly exceeds world production capacity. The clearance price for this stock is such that we would be daft to turn it down -- but we have to take the lot, or nothing.

In all we need to find about a thousand smackers -- which dramatically exceeds the stretchability of the second-hand shoe-strings that we run the user group on. If you happen to have won the lottery, or to have had a bit of luck on the dogs or the gee-gees, PLEASE make a donation to our funds!!!

You'll have noticed that there are other embryo magazines in your magazine bundle too. If the Einstein group is to be kept going as the number of Eineys in use falls inexorably, we do need to develop these titles to support MessyDos and non-Einey machines/users as well, so that total membership remains above the level at which it ceases to be remotely supportable. Lots of you have MessyDos or other non-Einey machines, so please DO contribute something on these too.

If you are into internetting, bulletin boarding or other such esoteric activities, your plugging our existence there would be tremendously helpful, as would your acting as a contact point there for the wonderful world of Einstein. Our resident expert Duncan has had twins (although he does admit that he couldn't have done it without his wife's help!), and being two daddies at once is proving rather a strain for him.

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EDITORIAL -(Ted Cawkwell)

EINSTEINIAN BRAINWAVES

The editorial mail from members is always interesting but recently there has been what can only be called a rush of waves to the brain. Charlie Wallis says in one letter that "the real problem with programming is to get the basic concept to build the program round". Experiment is often the way to the concept and experimenters are exactly what many of our members are.

Stan Gibbs asked in recent issue whether there was a way to stop hangups when using a printer that wasn't online (or hadn't been told it was!) using XBAS. To his credit he did not leave it there but experimented on his own behalf. I was working on the same problem and it seems that we came up with the solution at about the same time.

The two resulting programs are remarkably similar using the Auxiliary Command/Status Register byte on port &20. The Basic Reference Manual p109 refers. Because I have a nodding acquaintance with machine code, I opted to use the three printer bits in my program, while Stan used the whole byte. It turns out that my version is rather more reliable but they both work and we both got there in the end, but, credit where it is due, it was Stan's query that got me started.

Another brainwave was that of Steven Potts. He was experimenting with extra drives and was not satisfied to be able to use only one side of his 3.5" or 5" disks because of a lack of an advanced and expensive enhanced DOS system, such as DOS 80 or Xtal System 5.

Our third experimenter is Les Foskett, a formidable brain this one! Just two of his ideas are using the TC01 to switch a video recorder, and to connect two Alberts and a VCR to one TV set with a switch to select which one is displaying at the moment. The Twin Albert article is also in this issue.

It is ideas like this which will take Albert into the next millenium, dragging us steam computer operaters with it.

EXTRA DRIVES WITH SWITCHABLE SIDES
Stephen Potts.

GOOD NEWS FOR EVERYONE

The good news is that we have sorted out how to use almost any 3.5" drive without any complicated mods or clashing DOS modifications. We can use the standard DOS that comes with every machine.

The 3" disks are expensive so the answer has to be use a 5.25 or a 3.5 drive. In the past this has meant worries about which DOS or format to use and caused many problems. With this in mind I have re-invented the wheel, and made a modern disk drive behave as the standard 3" one with "A" and "B" sides thus avoiding complications.

1.The drive can be any 3.5 or 5.25 and can be either self powered or not. For ease I have used a CUMANA self powered drive from a BBC. The way to tell if it is suitable is the mains plug for the 12/5v transformer and the 34 way data/ribbon cable, don't worry about what size of drive it is as the no. of K per side is set by the computer's extended disc block parameter not the actual drive.

2.The ribbon will have no.1 wire marked, usually red, and the rest grey. If we take the top off we will find that the ribbon goes directly to the disk unit and the power is on a separate 4 way plug. The pin layout is a Shugart standard as on page 222 of the EINSTEIN manual. Looking at the pins the lower are all earth or ground so we only use the top row.

3.Plug the 34 way IDE connector in to the EINSTEIN port at the rear and switch on the drive, then EINSTEIN. Use your normal working copy of the master disk and using BACKUP format a new disk in the new drive. This will be 1/B on a single drive and 2/C on a double drive. The drive select is usually set at 1 but can be changed with a switch or jumpers, counting 4 drives as 0 1 2 3 and if there is a 40/80 switch leave it on 40 but it really doesn't matter at all.

4. Now we have a disk with side A formatted but how can we format side B? Well, we could buy a new DOS system or we could try mucking about in EINSTEIN's brain (MOS), or you may want to make life easy and use two discs to backup one 3" calling one A and the other B; i.e, two 25p discs instead of one £2 one. But this is an odd way.

5.The way I have found by collating various bits of info and looking up old computer books relies on the fact that if line 32 on the 34 pin plug is pulled to ground then the disk drive uses the second head to read/write. On the 34 way data cable the odd nos. are ground so all that is required is to connect to the next line to fool the drive into thinking that the disk controller chip is sending out ground (0) not +5v (1). This is very easy as the Einstein doesn't use pin 34 'drive ready' as on Amstrads or PCs.

6.Look at the diagram of where I have modified my drive, inside the case I have cut three strands opposite the no. 1 wire . Firstly line 34 is not used, secondly line 33 is ground and could be used but I preferred to ground at the drive case for other reasons. Lastly, cut wire 32 and solder wires to extend them. Take the end of wire 32 that goes to the drive and solder it to the centre pin of a two way switch. The end of wire 32 that goes to the computer is soldered to the bottom pin. Finally the ground wire goes to the top pin.
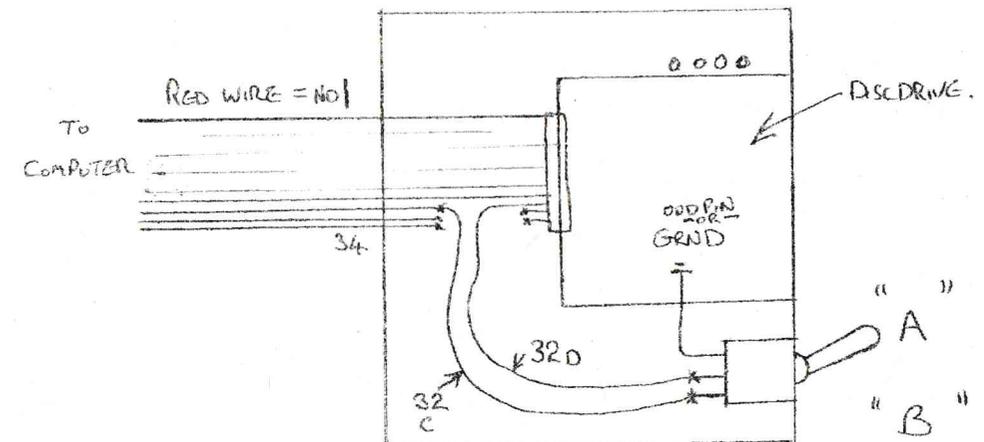
My switch is mounted at the left of the disk slot. I have
used a 2 way flip switch but would recommend using a rocker
type as this is less susceptible to damage and knocking. The
best is a double pole double throw rocker switch. It has six
pins set out like a domino, with no connection between
throws.

N.B. You need the six pole switch if you wish to install the
LEDs. The author suggests Maplin part No. FH04E.(Ed.)

7.You should now have a working side-switch for about £3 or
you can for about 19p extra have an Einstein type red and
green indicator LED to show A and B sides. This mod works
with 3.5 and 5.25 drives and you can use all normal Einstein
software and the normal amount of disc space (188k) without
any special software or tricks.

8.Flipping the switch is now the equivalent of turning the
disk over. If you have the special DOS systems these still
work normally with the switch in the A position. Practice a
few times and it will then be second nature I promise.

EDITOR's note: A snag with rocker switches is that they need
a rectangular hole for fitting. You have to be handy with a
file!

{{ CH.ED:- Part 2 of this article will appear in the next issue, and
will describe the additional option of adding traditional "home
computer disk drive traffic lights" for those owners who get panic
attacks without them. As a user of a "real grown-up computer" from the
start I always find them no more than a distracting nuisance, but "yer
pays yer money and yer takes yer choice", as a wise man once said.}}

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HELD OVER TO THE NEXT ISSUE:-

We've got a number of items held over to the next issue due to lack of
space. This will give our new Einstein editors something to put on
the otherwise-blank pages of their first issue, but we still need more
letters, articles, ideas, tips and hints from you to keep it all
going. Also we know that some contributions went to the old editor in
Scotland for publication, but have been lost without trace there. Dave
Salvage and others concerned:- CAN WE HAVE COPIES PLEASE!

HIGHLIGHTED TEXT READERS
Ted Cawkwell

The Highlighted Files program (No.78 p.13) has proved so
useful that I decided to incorporate it into the Text
Readers I have been working on for some months. You can now
check whether it was worth doing.

Xbas text readers are definitely a pain in the ****! I have
persevered though and managed to come up with one that does
seem reliable in 40 columns. As the highlight is a feature I
have also prepared an 80 column version, even though such
programs as Newsweep make it rather superfluous.

One snag was that data files always caused a crash. The new
versions do not, they tell you that you have selected a data
file and return to the start of the program. You are also
warned not to try XBS,COM or OBJ files but are not prevented
from doing so.

At one stage, through a suggestion by Andrew Dunipace, I had
a reader which allowed going back to the previous page but
it was very slow with even largish files and reluctantly
discarded. If anyone wants to try it, it read blocks from
the file to an array and then loaded the array to the
screen. It took 120 lines to do the job. If anyone is
interested I can let them have a copy.

The main problem with these programs is that they often
crash at the end of the file, especially WP80 files. I have
tried everything I can think of to prevent this without any
luck. Even putting an EOF marker at the end of WP80 files
has no effect.

The program should be on the disk you are reading text files
from, and, failing a crash, you press F7 to rerun.

So, they are not perfect, but here they are:-
N.B. The strange character near the end of Line 50 is my
printer's version of a Carriage Return, obtained by GRAPH +
ENTER.

QTR.XBS for 40 columns   {{ CH.ED:- see foot of previous page.}}

```
   10 REM QTR.XBS
   50 KEY 7,"RUN"+CHR$(&22)+"QTRì"
   60 PRINT"TEXT Reader -will not read XBS,COM,OBJ  or
random data files."
   65 PRINT:PRINT "SPACE to Continue:ENTER to Quit."
   66 Y$=INCH$
   70 IF Y$=" " THEN 75:ELSE END
   75 CLS
   80 DIR:PRINT CHR$(20)
   90 C=3:R=1
  100 PRINT@C,R;
  110 F$=MID$(SCRN$(POS(2)),C+1,12)
  120 TCOL4,15:PRINT@C,R;F$
  130 TCOL15,4
  140 K=INCH
  150 PRINT@C,R;F$
  160 IF K=13 THEN 270
  170 IF K=10 THEN R=R+1
  180 IF K=11 THEN R=R-1
  190 IF K=4 THEN C=C+15
  200 IF K=8 THEN C=C-15
  210 IF C<3 THEN C=3
  220 IF C>18 THEN C=18
  230 IF R<1 THEN R=1
  240 IF MID$(SCRN$(R),C+1,12)="            " THEN R=R-1
  250 F$=""
  260 GOTO 100
  270 FOR A=1TO8
  280 T$=MID$(F$,A,1)
  290 IF T$=" " THEN 315
  300 R$=R$+T$
  310 NEXT A
  315 R$=R$+RIGHT$(F$,4)
  325 ON EOF GOTO 360
  330 OPEN R$,FD$
  340 INPUT£ FD$,0;N
  341 IF N>0 THEN PRINT@4,23;"DATA FILE":R$="":CLOSE:GOTO
65
  342 INPUT£ FD$
```

```
  345 CLS:TCOL4,15:PRINT@10,23;" Next=N:Quit=Q";:TCOL15,4
:PRINT@0,0;
  350 PRINT INCH$(40);
  354 IF POS(2)=>22 THEN 367
  356 GOTO 350
  360 CLOSE FD$:R$=""
  365 PRINT "EOF-Press Q"
  367 INPUT £0
  370 Y=INCH
  380 IF Y=81 OR Y=113 THEN CLOSE:R$="":GOTO 65
  390 IF Y=78 OR Y=110 THEN 342
  400 GOTO 370
```

and QTR80.XBS for 80 columns

```
   10 REM QTR80.XBS
   20 KEY 7,"RUN"+CHR$(&22)+"QTR80ì"
   25 CLEAR &7FF5
   30 POKE &7FF5,&21,&00,&80,&11,&50,&80,
&0E,&00,&CF,&85,&C9
   35 CALL &7FF5
   40 POKE &7FFA,&11,&00,&80,&CF,&D4,&C9,&20,&20,&20,&20
,&20,&20,&20,&A0,&CE,&C5,&D8,&D4,&BD,&CE,&BA,&D1,&D5,
&C9,&D4,&BD,&D1,&A0
   60 PRINT"TEXT Reader -will not
read XBS,COM,OBJ  or random data files."
   65 PRINT:PRINT "SPACE to Continue:ENTER to
Quit."
   66 Y$=INCH$
   70 IF Y$=" " THEN 75:ELSE END
   75 CLS80
   80 DIR:PRINT CHR$(20)
   90 C=3:R=1
  100 PRINT@C,R;
  110 F$=MID$(SCRN$(POS(2)),C+1,12)
  120 PRINT CHR$(23):PRINT@C,R;F$
  130 PRINT CHR$(23);
  140 K=INCH
  150 PRINT@C,R;F$
```

```
160 IF K=13 THEN 270
170 IF K=10 THEN R=R+1
180 IF K=11 THEN R=R-1
190 IF K=4 THEN C=C+15
200 IF K=8 THEN C=C-15
210 IF C<3 THEN C=3
220 IF C>63 THEN C=63
230 IF R<1 THEN R=1
240 IF MID$(SCRN$(R),C+1,12)="            " THEN R=R-1
250 F$=""
260 GOTO 100
270 FOR A=1TO8
280 T$=MID$(F$,A,1)
290 IF T$=" " THEN 315
300 R$=R$+T$
310 NEXT A
315 R$=R$+RIGHT$(F$,4)
325 ON EOF GOTO 360
330 OPEN R$,FD$
331 INPUT£ FD$,0;N
332 IF N>0 THEN PRINT@4,23;"DATA FILE":CLOSE:R$="":GOTO
65
340 INPUT£ FD$
345 CLS:CALL&7FFA
350 PRINT INCH$(80);
354 IF POS(2)=>22 THEN 367
356 GOTO 350
360 CLOSE FD$:R$=""

365 PRINT "EOF-Press Q"
367 INPUT £0
370 Y=INCH
380 IF Y=81 OR Y=113 THEN CLOSE:R$="":GOTO 65
390 IF Y=78 OR Y=110 THEN 340
400 GOTO 370
```

THE EINSTEIN TWIN TC01 COMPUTER
by Les Foskett

Never heard of it? Well, if, as it seems from Members'
letters, you have two TC01 computers but only one TV as a
monitor, YOU have one of these! It has the following
advantages over a single machine:-

1. A double size memory.
2. Twice as many disk drives.
3. Two audio outputs.
4. In fact, as is obvious, two of everything! It seems a
pity to leave one stuck in a cupboard not used over a long
period. (This is not good for anything containing
electrolytic capacitors anyway.)

By using two computers, one TV screen and a switch as under
you have the Einstein Twin. You can in fact use any kind of
different types of computer, i.e. Einstein/Sinclair,
Apple/Sharp, etc. The only thing is, they must both use the
same type of output; both R.F. for TV or composite video via
a video recorder or modulator to TV.
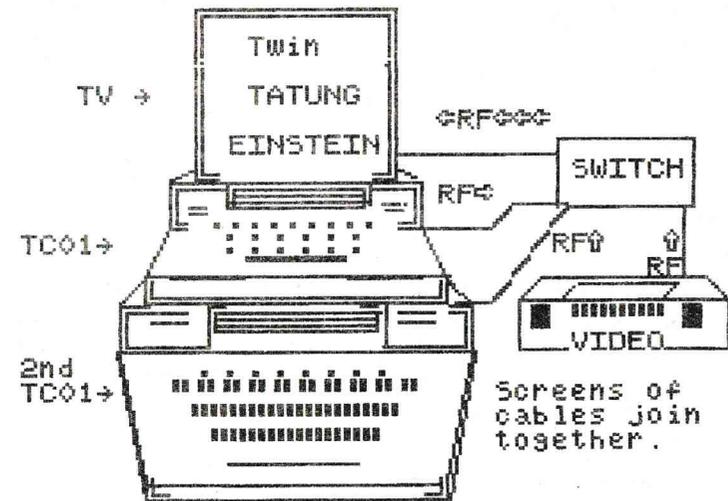
Using this setup you can run two programs at the same time, even though the machines are not compatible, switching from one to another at the press of a button. Add a video recorder and you can put a picture into your programs at the press of a button. The pictures would have to have been loaded on to the video tape previously by camera or off air of course, and can not be put into memory or saved by either computer but remains on tape for further use. (a video ROM?).

A hard copy can be made of either of the computers by using one printer and a printer switch box. (See page 7, Issue 74 by Ted Cawkwell).

Possible programs are, for example, Tasword on one and a word directory on the other, or Grafdraw on one and a Help comment advise, etc, on the other, leaving all the memory on one for the Graphics.
No doubt many will be able to think of other uses and, in any case, it will give you something to think about.

I have used a similar idea to the above in a home made video editor for some years now and found the switches so reliable and so fast that you don't see the changeover on the screen. This is why I have included LED's in the circuit so that you can tell which computer output you are viewing.

Editor's Note:

Les presents this as an 'ideas' article rather than a constructional one, as he understands that building such a switch needs a fair amount of electronic knowledge. It would be very easy to end up with images from all three 'boxes' on the screen at the same time!

There are cheap and expensive ways of avoiding this.

The expensive way, which I would recommend to electro-novices, is to fork out between £15 and £25 for a coaxial RF switch as used in radio applications. They are not easy to find but rallies are a good source. You will need leads to fit the switch and the various boxes but the setup should work from the start and the switch can be marked to show which bits are in circuit.

The cheap way has two aspects, full colour or monochrome. Black and white output is achieved using composite video throughout and in this case a coaxial VIDEO switch can be got at e.g. Tandy's for about £6.99. The hardest way of all is to get your relays and LEDs and a switch and try soldering it all together. Your problem is going to be RF breakthrough and only careful screening can minimise this, which is outside the scope of this magazine. Les tells me that his original switch used composite video and worked admirably.
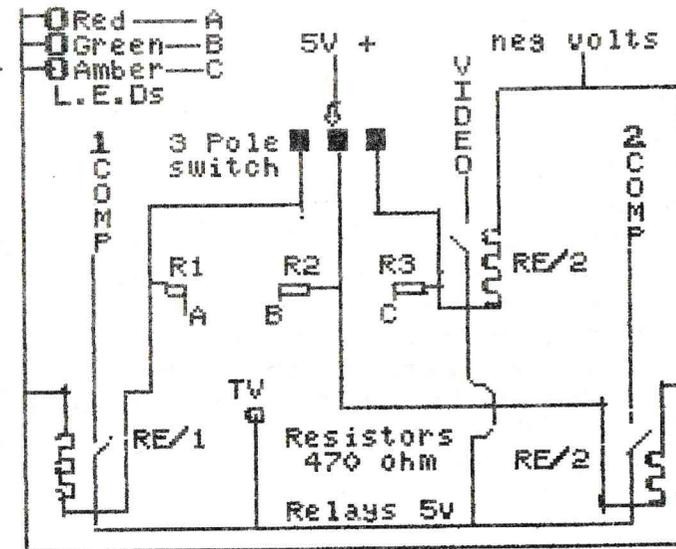
COLOUR PRINTING WITH THE EINSTEIN
Ted Cawkwell

I was very fortunate at the beginning of the year to win a sum of money in a promotional competition which was large enough to contemplate replacing my Tatung TP100 printer, which, though a faithful if slightly troublesome retainer, is now distinctly old fashioned.

I decided from the start that I wanted colour and was thinking of a 24 pin Citizen or Panasonic, which were on offer locally at around the £100 mark or less. However, the two Andrews up in Scotland (McRobbie and Dunipace) were quite sure that I would be happier with a bubble jet or ink jet type and as it happened a local firm were doing a very good offer on the Canon BJC210 COLOUR printer. Mark the word in capitals! There was also the consideration that pin printers play hell with my fillings, so the die was cast.

The 210 came fitted with a black ink cartridge and a colour one was free for returning a voucher. I sent off the voucher and connected up the printer to my three micros via the data switch. The first prints were fantastic, sharp, clear and pure letter quality. None of your blocky letters with this machine! A snag arose when trying to print screen dumps however - a white line between each line of print.

Reference to the manual indicated that I should perhaps use LQ mode which simulates Epson graphics instead of the BJ mode as set by the factory. Easy to do - hold down the Power button until 8 beeps are heard and let go. I try it and can't hear a thing! Of course, I am a bit mutt and jeff, more than a bit if I am honest and haven't had my ears reamed lately! Switch off the tele and radio, etc. open the front cover of the BJC and try again. I do believe I can hear some little squeaks inside!

Success in the end and everything is fine so I study the manual to find out more, and about colour. There is one (yes one!) reference to colour. Colour can only be done with the provided software and a PC with minimum 386 processor and 4 meg of RAM! I do not BELIEVE it! Also there are just a few brief notes about Escape codes with no details. Then I find a reference to a Programmer's Manual which turns out to cost another £12.50. I send for one.

While I am waiting for the book the colour cartridge arrives. Sure enough, the only thing I can do in colour is a nozzle check! This gives me hope. I figure that there must be some sort of command to do even this and if I knew it I could use it.

The manual arrives and contains Escape codes for colour but they do NOTHING!

After trying the Canon Hotline and getting nowhere I compose a carefully argued and reasonably worded letter and send it by Recorded Delivery to the MD of Canon. This really gets things moving and I end up with a BJC4100 for the 210 and a few pounds to offset the higher price. A bargain really, because the 4100 does let me print colour from the TC01 and even from the Psion Series 3 (which has a B/W screen!). The 4100 is an advanced version of the 210 with more features,

but minus a couple I could have used. You can't win 'em all! Canon did throw in a Programmer's Manual, which is handy!

Thoughts after a few weeks use: it takes up less room on the bench and with no requirement for fanfold paper leaves even more room. It is much quieter, except that it bangs and whines when initialising,and my fillings will last forever. The results on good quality paper are superb and on cheap copier paper excellent - there is some ink spread but you need a microscope to see it.

The sheet feeder is a precision job; more about this later.
It is not quite as instantly ready as the TP100 loaded with
fanfold as it has to be switched on and loaded with paper,
and it is not easy to position a sheet in a just-so position
as you can with a DMP - you have to use Vertical Tabs which
take a bit of working out. It has a 64k buffer so you seem
to be returned to the WP almost instantly.

The main thing I am having trouble getting used to is the
way the paper feeds out of the bottom upside down and you
don't see much at first; I guess I am too impatient.

It is excellent with WP80 because you can set Esc codes into
the document where ever necessary, though you do have to
give some thought to formatting, especially if you use
enlarged or condensed type.

With Grafdraw it is possible to print two rectangles one
inside the other quite accurately but you have to rely on
the sheet feeder. My first attempts were hand fed and were
not too good. If you put a dozen or so sheets nicely squared
up into the feeder and let it get on with the job it copes
very nicely. You can change colours between feeds of course
and I reckon it should be possible to make magenta, cyan and
yellow masters and superimpose them like in days of old. I
shall certainly be trying this.

Although not listed in either Manual I was pleased to find
that 'incremental and view mode '(ESC "i";n: 1=on,0=off) was
implemented on both machines. This was a relief as I have
some programs which rely on this, which effectively makes
the printer a typewriter. Lines of text are printed on
pressing ENTER.

The printer comes with software drivers for DOS and Windows
on PC, and Mac drivers too. In fact, I have installed the
DOS driver on my 286 because it is easier in some cases to
make settings from the PC rather than by writing an Xbas
program to do it. With my data switch I can then bring
either the Psion or Albert into play.

Judging by what I have heard from other purchasers of this
type of printer the rule is that you are intended to use a
PC with at least 4meg of RAM and the supplied Windows
printer driver. You have to pay extra for information about
ESC codes. I have had good reports of aftersales service
from Citizen and Epson and of course, my own experience with
Canon. I cannot speak for any other manufacturers but have
no doubt they are in business for the same reasons.

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LETTERS:- Further thoughts from Les Foskett

L. FOSKETT,
ANCHOR COTTAGE,
7. EAST STREET,
DENBURY,
NEWTON ABBOT,
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TQ12 6DL.

Dear Ted,

Received your letter yesterday, it took me by surprise
as I thought Tony had buried my artical in his files and
forgoten it. I should explain that when I wrote about the Twin
Einstein it was just an idea and nothing more. I expected him
to reply that I was daft. However I must add that I really did
believe the idea was practical and really wanted to hear what
others thought. He did mention he had passed it on but as time
passed I forgot about it. I still have the disk which is on 5"
500k Einstein and have enclosed a 3" copy. I'm short of these
and had to send one that has Ham progams on other side. I also
have a 386 Unisys P.C. but not too familiar with using it .

The original circuit was not intended as a construction
artical just to illustrate the idea. It was however based on a
video editor that I made some years ago and still in use and
uses comp video except for the output to the tv which of course
is RF. I mentioned using RF because I thought most would find
this easier to rig up but I would not consider this myself.

I have no objection to you making alterations as you see
fit and will help as much as I can but you have caught me at a
time when the days seem 4 hours long and my junk box (The loft)
is in such a mess that I can't find any thing. If you are
prepared to do the artical I'm quite happy for you to do so but
in all fairness I think you should take the credit
for what you do. I would be happy if you credit me with
the original work and idea. I don't believe in fighting amongst
ourselves it's killed off too many clubs and lost too many
members. Dave Art for instance. Any way I don't think I can
teach you much about the subject you don't already know.

As I have explained my set up is comp video the only draw
back to using this is that it is necessary to use a modulator
for the final stage but these are fairly inexpensive. In my
case I use a video recorder which is a bonus because this allows
me to make a recording of what I am doing and of course is
normaly used when I edit a video.

I won't go into the full details of the editor but will tell you of my findings when building it. It isn't necessary to buy expensive switches I found reed relay switches passed the video signal without any deteriation what so ever, mine cost about 10 p each from J.Bull co. (about 10 years ago I might add)They where the glass type Maplins have them page 982 in the cat: These were placed inside coils from the back of a t.v. tube (covergence coils) in fact I used the whole fitting they are as you know mounted in a circle. Normaly of course it is a case of winding a coil over the glass but I never never make any thing if I can put some thing to another use. I used U.H.F. plugs and sockets but this is not necessary,Phono plugs as used

in commercial home video editors will do the job at a fraction of the price. The change over switch type is not critical as it only carries the voltage for the coils and can be mounted on one of the keyboards. Coaxle or screened cables should of course be used through out. The layout is not critical the only screening I have the front panel. One other problem the fact that it requires comp video from the computers and we know the mod for this. Many computers such as Apple 11 etc have this as standard any way. I think any one who can't carry out the mod on the Einstein would not be able to build the project any way. Though I do feel the way you sujested via the monitor socket is the safer option instead of diving inside with a hot iron. Thats about all I can think of at the moment.

Regarding the R.F. version this has some advantages and some problems. It does't need comp video but as you rightly point out there are break through problems. That is in theory, but I have found out over the years that there is always an unknown factor in theory. Some years ago when I was running a Television business the firm was mean when it came to getting equipment I managed to squeese a booster out of them intended for one T.V. I used to display some 10 sets all aerial leads in parallel and got excellant pictures on all of them. Impossible in theory but our sales proved different. The missing factor?. Having read your comment I got a bit worried and decided to check it out trouble was I could not find any bits and peices but I did have 2 Einsteins set up one on top of the other and a video just above, managed to find cables but no means of switching. In desperation I switched every thing on tuned the video modulator to same freq as the copmputers ,held the three cables in my left hand , the T.V.cable in the right. and as you would expect was greeted with ripe old mess on the screen. touched No1 Einstein cable to the T.V. cable, a perfect picture. could'nt believe it Touched No 2 to T.V cable perfect again except for slight rope effect across bottom of screen ,this was easily cleared by increasing preasure on contact. The video was going to do the dirty on me. touched video to T.V. PERFECT PICTURE. IT COULD'NT BE POSSIBLE COULD IT. But it was I tried it again same result. As one of the three would always be in contact there would always a clean screen no hash.

This has lead me to believe that using reed switches spaced as far apart as practical and the leads feeding in from different directions and screening its a feasible prospect. The R.F. switch you mention sounds o.k. but I feel that many of our members have Einsteins not only because they are super computers but because they got them cheap and can't afford anything expensive. I'm not being high minded about this Ted I'm not that flush myself. If it was'nt for buying cheap often faulty vid recorders and equipment etc at car boots and being able to repair them I would'nt have much equipment myself.15 pounds for a switch is quite a lot.

Having written the above it occured to me that there is a very simple way to do it . Fit a miniture relay in each 5v supply lead to the modulators switching one on at a time here again reed switches would be ideal Total cost about a fiver?. Not possible for every body to do but easy enough.

Hope the previous ramblings have been of use to you I just wish I could carry on with something really poitive I can't get too involved at the moment. However don't hesitate to write if I can be of any help I'll do my best.

Your colour printer seems super some thing I'd like as I'm very keen on Grafdraw but its some thing for the future.

Have you any information on Sony 3½"drives ?. I have just obtained a twin COMPact BBC MASTER SERIES disk drive unit with its own power supply. It contains 2 drive units of Sony type I think they are standard units but a bit puzzled about by the edge connector layout. The lead from these is terminated by a 26 pin D type plug. Im hoping to use these with an Einstein. I have a similar unit F.D.X. 5¼" size which was just a case of pluging it in and away it went. Not so easy with this one.

MFD 63W-ODD

MODEL MP-F63W-OOD

Will say cheerio for now Ted wishing you all the best. ....

PRINT CONTROL THAT WHENT WRONG

To video Rec. p/b control panel.

Printer bed
Roller and all surplus fittings removed.
Leaving only print head etc.
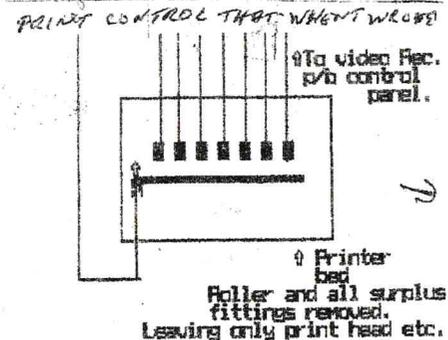
The video conrtol by an old printer was a different project altogether and it worked 100%. The program on disk Vidcon.asc is the program I used to control it. You are right about about the string but I spent some time trying to remember where I had fitted a peice of string untill the penny droped. After the serial intaface packed in I lost interest.
::

Further thoughts on the twin.

I actualy like your suggestion of the R.F switch except for the price, also for the computer to control the recorder it would need to be able to switch remotely can it do this?. If so members could be given the choice of this or making their own I have an idea how this could be done, see below.

The remote switching I refer to is to yeiw the recorder picture. This still leaves of course the conrol from port to computer to work out, which can be done by wiring the out put to a spare remote T.V control or to the conrol panel itself via a buffer etc.

TO COMPUTER PORT VIA BUFFERS ETC.

COIL WORKS PASSED THROUGH HOLES IN SIDEWALL OF CASE

FROM VID RF OUT

COPPER WATER PIPE DISC SEALD ENDS WITH HOLE FOR COAXE CABLE

REED RELAY1 WITH COIL

TO TV.

SCREEN OF COAXE SOLDER TO PIPE
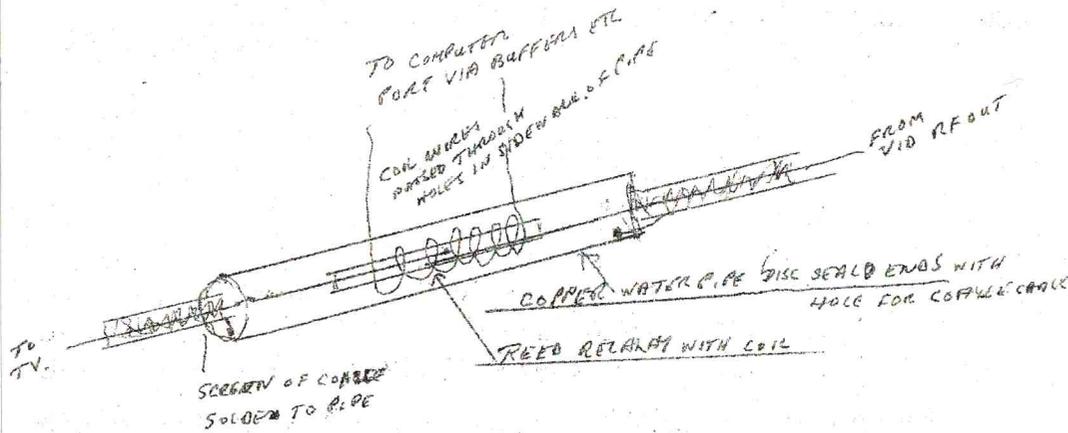
1 FOR VID REC
2 FOR COMPUTERS.

THESE WOULD ALSO BE SCREEND IN TURN BY UNITS CASE.

I'll try and make a couple of these if I can get some reed switchs local. Don't want send for them with post & pack as the price too high.

Dear Mr. Adams.

26, Guysfield Drive.
South Hornchurch.
Rainham. Essex.

Very many thanks for the Einstein Information Pack, I have perused it's contents and found it most enlightening.

As your reply was somewhat delayed I did wonder if you had fled to the South of France for two weeks of Sun, Fun and Debauchery with my small donation ----- how wrong can one be.

Within the Micro Mart two to three weeks ago was a pair of adverts from the same chap for both models of Einstein Computer (you probably noted these ad's) but the price of over £100 including postage for the pair was too much for me to gamble, as it may turn out that when I obtain one or the other or both I might not get on with them.

If by coincidence I spotted a TC-01 with monitor and a number of booklets and disks at my local boot sale last Sunday but the price asked was £90, this again was a too much for me to pay as the machine may not even have worked --- venders always say they do but I find that 50% do not. At the same boot fair I purchased an Amstrad PCW8256 with keyboard & printer but on testing I found that the disk drive was faulty and also the PCB within the printer was defective --- so this machine was not a bargain !!!!!. The same can be said for an Amstrad PcW10 (which I have never seen before) with keyboard purchased again at the same boot sale, this also is not working and as this machine is unfamiliar to me it will take a little time for me to get it going --- if ever. Things at this boot fair were not all doom & gloom as I obtained many interesting and cheap 8 bit items of software and hardware some of which I can use for swops.

For your information PINBOARD COMPUTERS LTD.
Unit 9 Bondor Business Centre.
London Road.
Baldock. Herts. SG7 6HP.
supply drive belts (£2 each including vat & post) for the 3"

drive and these belts fit all the Amstrad drives (180K & 720K) also the Sinclair +3, so therefore possibly the drives in the Einstein. When I obtain a new machine I normally change the belt(s) and clean the head(s) but of course not with a cleaning disk as all the men that know say this does more harm than good especially on the 180K single head drives.

As you have wetted my appetite with your imfo pack I feel there is little doubt that I will soon be a proud owner of an Einstein machine, then I will probably be writing to you to ask if I can mate it to an Amstrad CPC colour monitor.

John R.P.King.   Tel: 01708 630477.

{{ CH.ED:- The CPC monitor uses a different (linear?) version of the standard Einstein video display system. I'm sure that the boffins have found a fix to overcome this, but my Einstein magazine content text file database is far from complete, and I can't find a reference. Ideas anyone? }}

EINSTEIN MAGAZINE 80/24
****

5 Sunnyside Crescent   Tel.: 0161-330 2273
Cockbrook
Ashton-under-Lyne
Lancashire   16 November 1996
OL6 6UB

Dear Tony,

            Went to the show last Saturday, bit of a
disappointment, there weren't as many stalls as usual, the place
seemed half empty. Had a word with the helpers on the Einstein
stall, they were extremely nice but couldn't give me an answer to
a query I had, I'm hoping you can, or if not, ask Ted Cawkwell.
It's concerning the Lottery programme Ted wrote in the last issue
of the magazine. I've typed it in , checked it and double checked
it, but it will not retain any additional information I type in
once the Einstein has been switched off. When I reload the
programme it has reverted back to the 8th June. I don't know if
it is anything I have done or not done as the case may be, or if
there is a bug in it when it comes to saving information. It gets
a bit boring having to type a load of numbers in each week, which
of course gets bigger as each week goes on.
                        I've not won on the
Lottery yet, but at least since using Ted's programme I've been
getting two numbers, which is better than I did before, so I'm
hoping to win at least a tenner sometime in the future, ah well
we all live in hope.
            I have enclosed a stamped addressed envelope for
your reply, If Ted would like to phone me my number is above, or
I would gladly phone him if you would send me his number.
                                            Also, if
you are interested, I have a large number of converted Spectrum
games. Would you like me to send you some, or don't you bother
with this type of game. I don't know if it is even legal to pass
them on, I never see any mention of them in the Magazine. Can
they be put into the P.D. Section?
                        Anyway Tony, how are things
going with you, getting easier I hope. The printing of the
Magazine has certainly improved beyond all recognition. Getting
back to the show, even though I was pushing a friend round in a
wheelchair, I would have tried to help on the stall if I thought
they needed it, but sadly they didn't seem at all busy.
The friend I was pushing around was an old Einsteiner, very
clever, he converted all the Spectrum games I'm not that good. He
did have a book published by B & H on how to convert these games.
Unfortunately he has now progressed onto a P.C., that's life,

            Yours Sincerely,

            [signature]

THE STAFFORD SHOW -- 09 NOV 96 -- Steve Potts

Steve's report will be in the next issue of the magazine.
Please note that THE NEXT STAFFORD SHOW WILL BE ON 19 APRIL
1997, with other Sharward Services shows on 8 Nov 1997 at
Stafford, 16 Mar 97 and 05 Oct 97 at Spalding, 24 Aug 97 at
Clacton, and 17 May 97 at Ipswich. Steve would very much
welcome your help on the day, either basing yourself at the
stand as a helper and making sorties out into the show when
things are slack, or as a casual relief to stand in for half
an hour (or more?) during the day. As a helper you don't
have to pay to get in! Kit to donate/lend/display/sell on
the Einey stand is welcome too. Contact Steve at 85 Thorold
Ave, Cranwell Village, Lincs. NG34 8DS; or on 01400-261839.
****
BRITISH PRINTING SOCIETY SHOWS
The Lincolnshire Branch are combining their Open Day with
the BPS Annual Convention this year on Sat 19 April at Moor
Lodge Hotel, Branston, 4 miles from the centre of Lincoln.
More info from Paul on 01507-600848 or Ian on 01733-65007.
****

                        David A Edgar   5 Stowheath Place
Dear Mr Adams,   Wolverhampton
                        01902 562674   WV1 2TE

Thank you for your information pack concerning the Einstein PC. I have
owned a TC-01 with colour monitor for many years and have found it
especially useful for wordprocessing, I have done some basic programming
but these days it is used exclusively for my legal work which has been on
going for the past two and a half years.

I am currently involved in High Court Litigation which does generate a
large amount of correspondence. Needless to say the old Einstein and
Daisywheel printer have seen better days, although they are still going
strong.

I've joined your user group primarily to obtain help and advice on
correcting some of the hardware and software faults that have crept in over
the past few years, in addition I would be interested to expand the use of
the Einstein once I can get it fully operational again.

I have therefore enclosed a list of problems that I hope some of your
members may be able to help me with:-

Print Wheels required for - Daisy Wheel Printer :- Radio Shack DWP 510
   (Unavailable from Tandy National Parts Centre, Wednesbury, West Midlands)

>>>>>>>>>>>
The Einstein was (and is) a very good machine, and
it is a potentially excellent low-level option for
the 21st century for people with limited needs or
limited means if our research and development pays
off with the option of easy "plug-in-and-play" PC
compatibility for the average non-technical user.
Your Chief Editor is committed to this option, and
will continue to support it so long as Einstein
users themselves -- that's you, in case you'd
forgotten! -- are prepared to allow him to do so.

That needs you to revert to an industrial producer
society outlook of subscribing to a user group in
order to be a participant in what is going on, and
of postponing your membership of a post-industrial
consumer society until the research & development
has paid off, & you all have nice modern 3.5" PC-
compatible disk drives that take easy-to-buy 3.5"
HD disks, and 80 columns, hard disks & good modern
Einstein software, paid for by selling off your
redundant 3" disks to desperate Amstrad CPC, PCW &
Spectrum owners, who can't get them anywhere else.

If YOU decide to just pay your subs and sit back
waiting for someone to deliver whatever it is you
paid for, then so will the Chief Editor and the
small handful who make it all happen. If YOU don't
soon volunteer to be our Publicity & Recruitment
Officer, then soon YOU will be the only member!!!

As is far too obvious, your Chief Editor is not
best suited to run a one-man-show, and he will be
far too busy co-ordinating research & development
and keeping everyone informed. If you want the
rest of the user group to function properly it
must be a delegated responsibility. With immediate
effect the day-to-day running of the group is
therefore in the hands of the group's officers, a
list of whom will be published shortly, and who
will be responsible for forming a management
committee. Tell them what needs doing, and how.

OUR POLICY:- SUPPORTING USERS AND OTHER GROUPS
Our policy is to support users of orphan computers, and to
co-operate (not compete) with other user groups. We have had
the following alterations and additions to the previous list
advised to us. Please continue to update us!
AMSTRAD:-
PCW PLUS magazine has ceased publication.
APPLE
Apple][varieties:- Rob Cann, 4 Patrick Rd, West Bridgford,
     Nottingham NG2 7JY (01159-141260). Trades Hardware,
software, lots more, issues lists on paper & on Apple disk.
ATARI:--
Portfolio Club:- Organiser = P H Finch, 16 Cedars Rd,
     Morden, Surrey. SM4 5AB
COMMODORE
Commodore PET (and CBM 80-column business versions):- Ken
     Ross is very active, and runs the ICPUG CBM/PET
     library. Contact him at 26 Redenham House, Tangley
     Grove, Roehampton, London SW15 4DW.
ICPUG (Independent Commodore Products User Group):- Their
May/June '96 magazine lists Tim Arnot, 17 Colne Drive,
Oakfields, Didcot, Oxon. OX11 7RZ (01235-815725 after 8.30p)
as Membership Sec. ICPUG covers all Commodore computers.
OSBORNE
We've tracked down BOOG (British Osborne Owners' Group) at
last. It seems to have little connection with the original
Osborne 01 Luggable machine nowadays, and seems to be mainly
concerned with the latest multi-media IBM-compatible kit
(whether or not it bears an Osborne brand label), but they
do still have a "CPM Library", complete with Librarian.
     BOOG Ltd Secretary (& Membership Sec) is Barrie Towey,
62 Chapeltown Rd, Ringley Wood, Radcliffe, Manchester, M26
1YF (0161-723-0031). Their CPM Librarian is John Furlong,
72 Alandale Drive, Pinner, Middx. HA5 3UY (0181-866-4002).
OTHER COMPUTER-RELATED:-
Trading Post, Victoria Road, Shifnal, Salop, TF11 8AF:-
     Reported to be very active in trading 8-bit computer
kit of every imaginable sort.
****
TELEDRIVE STILL WANTED, DEAD OR (preferably) ALIVE
Preferably complete, working & with CP/M system/utilities
disk, but will consider bits. The Teledrive was an add-on
item for Tonto/OnePerDesk, but is sometimes hacked to fit QL
     Offers to Steam Computer Society HQ, as above.
****
(C) 1996 Steam Computer Society

EVENTS IN 1988

23rd July 1988	Summer Show at Bull Green	2.00 pm
17th September 1988	Autumn Show at Village Hall	2.00 pm
	Entrance 10p: Children 5p	
14th October 1988	Annual General Meeting at Village Hall	7.30 pm

Andrew Solomon,
22 Holm Garth Drive,
Bellfield Avenue,
Kingston Upon Hull,
E.Yorks. HU8 9DU

Dear Tony,

Thank you very much for the information pack which I have read with interest,
please find enclosed a cheque for ten pounds to cover one years subscription, as
mentioned in my previous letter I do not have an Einstein computer and am
therefore mainly interested in the CP/M software your user group has to offer.
Of particular interest are the various Disc operating system's, are any of these
CP/M plus compatible or are they all variants on earlier versions of CP/M ?. I
have enclosed this letter on an Einstein format 3.5" disc which I hope you will
be able to read. Please keep the disc.

In the way of background information about myself, my interest in computing
started in 1980/81 when the ZX80 and 81 first appeared on the market, I resisted
buying one of these as I wanted something with a proper keyboard. My first
computer was therefore an Acorn Atom which was the forerunner to the BBC
computer and was a 6502 based computer. This was purchased in a minimum
(cheapest) configuration comprising of 2K user memory and 512bytes screen
memory, of the 9 graphics modes available I could initially only use text and
block graphics. Over the years the Atom was gradually expanded with more memory
and various do it yourself projects.

I later purchased a printer and a word processing ROM which elevated the machine
to a practical tool. The printer was a Seikosha GP100 which was very compact and
stylish although the print output resembled a (knackered) dot matrix printer.
The position of the roller on a modern dot matric printer was, on the Seikosha,
replaced with a plastic roller of horizontal blades which spun round at some
considerable speed behind the paper, the print head was a hammer synchronised to
hit the spinning roller through the ink ribbon and paper!. An 8 pin dot matrix
printer would print a vertical row of 8 dots in one go, the seikosha would have
to print each dot one after the other !. All said and done it still had a
reasonable print speed and respectable graphics output, noise permitting.

Commercial interest and support for the Acorn Atom declined to the point where I
started attempting to convert programs from other machines to run on it. It was
at this time I started looking for something to upgrade to. The Acorn Atom in
it's much expanded form was retired to the loft some considerable time ago.

I upgraded to a brand new Amstrad CPC6128 in 1986 on which I am now typing this
letter. After the cassette based Atom this was a luxury, proper keyboard, built
in disc drive, 128K memory, and dedicated 80 column (mono) monitor all working
off one plug. The machine came with its own built in Basic and operating system
(Locomotive Basic/Amsdos) plus two disc's containing CP/M 2.2, CP/M Plus,
System/Utilities, Programming Utilities, DR Logo and Help. I initially used the
Built in Basic which was available at switch on, this was also very similar to
most other basic languages including GWBasic running on PC's. In the early day's
CP/M was only loaded for formatting and copying disc's. The Seikosha printer was
also traded in for an 11 pin Taxan Kaga KP810 (Canon clone) which can take
tractor feed, single sheet paper and Roll paper.

The first major program purchase was Tasword CPC6128 which compared to my
previous wordprocessor was very sophisticated, the memory in the Amstrad is
split into two 64k banks, Tasword uses the second bank for the text files
therefore allowing quite large documents to be edited in one go. I also use
Masterfile (database) and AMX Stop Press (Desktop Publishing), these programs
are all non CP/M and run on the Amstrads native operating system.

I belong to several user groups and over the years have obtained several disc's of CP/M software, most of which I have explored but not used to any extent, these include several programming languages including Cobol, and VDE, although I do keep a copy of NSWP on my CP/M master disc.

When ever using CP/M I always use CP/M plus which uses banked memory, once loaded most CP/M programs will run without having to be installed on a system disc or have any setup programs run. CP/M plus loads most of itself into the second memory bank and leaves the user with 61K of free memory (TPA).

The only commercial CP/M program I own is MFU Version 4 by Moonstone computing, this was written to access 5.25" disc's but works just as well on 3.5" disc's. MFU stands for Multi Format Utility and allows the user to read and write data to any type of CP/M soft sectored floppy disc. MFU also allows non-CP/M file transfer, CP/M-BBC-CP/M and CP/M-MS/DOS-CP/M. This will also allow me to format, verify, read and write Einstein 3" Single Sided Double Density disc's in Drive B:, my second drive is a 3.5" drive with an external side switch.

A couple of years ago I obtained MBASIC/BASIC80 and its associated compiler which I now use extensively. This allows random access file handling which was not available under Locomotive Basic. I run this under CP/M plus for convenience as this allows me to write and run larger programs, also the escape codes for locating the cursor etc work slightly differently under CP/M 2.2. Any programs written are done so using Tasword, then loaded and run in MBASIC for final debugging and then re-saved using the ',A' option to save the program in ASCII format, this can then be loaded back into Tasword.

As Amstrad CPC owners do not have to use CP/M, this has taken something of a back seat in favor of Locomotive Basic and dedicated machine code programs. Even disc formatting and copying can now be done with public domain (Amsdos) utilities. Many users therefore shy away from using CP/M although there is a reasonable amount of Public Domain CP/M software in the various libraries.

The Taxan is my main workhorse printer using cheap fanfold paper and fabric ribbons. For letters, correspondence and special tasks I use a Canon BJ30 portable bubblejet, the print quality of this is very good and being portable is very compact.

My current projects are related to Genealogy, having already written a suite of programs in compiled MBasic to run under CP/M Plus, I am now finishing off a much updated version. These programs use all of the resources available on the Amstrad to their fullest extent. I do not know enough about the Einstein's version of CP/M or system resources to advise if they can be made to run on the Einstein, this may be something to dable with in the future.

The literature you send me did request a letter with the membership form I hope I have not overdone it !

Andrew Solomon

****

A SPOONFUL OF SUGAR

It appears that the deal fell through for Psion to take over the Amstrad computer business, and that Amstrad has become a computer empire that is waning fast, with new products being designed and marketed in such a way as to kill the empire off as effectively as possible. Not unconnected with this, the Anorexia Nervosa that has afflicted PCW PLUS magazine for the past year has now proved fatal, and it is no more.

Steam Computer Society
Einstein User Group
Ivy Cottage   56 Cambria House
Church Road   Larner Road
New Romney   Erith
Kent TN28 8TY   Kent DA8 3RQ

Dear Tony

Please find enclosed my application form and cheque to join the Einstein User Group . The information asked for is difficult to be put in detail on the form so I have listed a summary below of hard and software in historical order of aquisition . This I hope will give a better idea of my involvement with micro computers .

All boot sale purchases :   POUNDS

Commodore Vic 20   6.00
Commodore +4 (without manual)   2.50
Spectrum 48K+ with manual plus Tasword software   10.00
commodore +4 manuals with Commodore +4   2.00
Spectrum +3 Disk brocken now not working at all   10.00
Spectrum +3 manual   \5
Spectrum +3 all working   '10
2 Amtrad CPC 464 (one working tape deck broken
other not working tape deck ok switched keyboards result one
working 464)
1 Amstrad colour monitor
1 Amstrad Disk Drive DD1-1 (not woking)
16K ram expansion
mutiface 2 add on
Sound add on   total   20.00

Gift seconhand Einstein TC01 2 disk drives

    manuals :Eienstein Introduction

        XTAL Basic

        BBC Basic

        Mos Dos

        Dr. Logo

  Usefull

  software :Cracker spreadsheet

        Wordpro

        Database

        Spread sheet

    Bootsale Aquisitions

Hardware : Logitec dot matrix printer (working) .   5.00

    Epsom LX86 (needs attention and operating istuctions . Prints out very sma' . Do not understand SW switches .)   5.00

    Amplifier 9v battery   3.00

    Something called Knight Ridder

    (Has 9 pin D socket bus out & 9 pin D bus plug in 25 pin D plug Funnel Port ,5 25 pin D sockets Ports 1 to 5 . Hope its a modem .)   3.00

Useful Reading :

    Spectrum User Magazines 1987-1990   50p

MAIN AREAS OF COMPUTER INTEREST

With the Einstein being obtained only recently the Spectrum +3 with the Tasword processor is still my major workhorse . the Wordpro I got with Albert can not touch it .

With a library book Mastering Machine Code On Your ZX Spectrum by Toni Baker and hex listings from Your Sinclair I have built up a machine code toolkit . I am now using the Tasword and my own programmes pieced together from every where to make a hard copy library of Hex Listings for useful programmes .

Toni Bakers book is infuriating . It has a number of mistakes in

its listings and if the person before had not corrected them in pencil I would have given up . Most infuriating was that the most useful programme in the book to aid machine code understanding was a dissembler wich was partly listed in assemble language from its own dissemble programme and a hex listing which in my copy of the book was almost illegible . Also both listings overlaped just to confuse even more . Futher to my problems was that the programme would not sit in the memory of my Spectrum +3 as listed so I had to relocate tediously diciphering and changing the Calls and other hex .

When I finally got a result it was the wrong result and gave the wrong listing . Having been my own assembler and labouriously looking up op codes in tables I had made a mistake wich after repeated checking I could not discover . Then I got the Einstien , BBC basic and an assembler . Although I could not use this on the Spectrum I was able to assemble a hex listing on Albert to discover my mistake ,as always an 8 should have been a B .

I have at last got a dissembler for my +3 and a straight foreward hex listing of it on paper for my machine code library . If any one else is having the same problem with Toni Baker's book I may be able to help with a straight foreward hex listing not only of the dissembler but also the Debug programme .

I have been renewing Toni Baker's book from the library for over a year now and it is not going back until I know how to operate my Epsom printer . Then with a hex listing of little leters I shall carefully paste it into the back of the book so the next person will not have the same problem .

My interest to involve myself with Z80 micro computers is that inspite of " Knowitall PC Clever Dickies " the Z80 processor is still used and useful to run automated equipment like washing machines ect . Understanding machine code and chip operation is usefull . From the Cirkit electronic constuctors catalogue I have there is advertised a centronics interface to operate four relay switches price 26.44 . What this means is that ' techno scrimpers ' such as myself who can purchase an old micro with a centronics interface at a boot sale for few pounds then should be able to use it to run centroll heating ,switch on lights or

operate robots . Well thats my theory anyway .

At the moment my interfacing achievements have been limited to wiring incompatible DIN sockets together by using 1 mm dia. split pins attached to the wires then domestic earth wire sleaving pushed up over most of the shank and eye to stop them making unwanted contact . I am though at the moment successfully using an Amstrad Monitor for my Spectrum +3 also adding to it an amplifier for sound . This has been achieved by pulling an 8 Din & 6 Din socket off an old micro and cross wireing them onto a board then taking the two sound leads of to an amplifier . I will at a later date draw up a wiring diagramme for this and if it is thought useful for other readers send it in for the magazine . Making up my own null modem will be my next attempt .

My other hobbies at the moment still come under the heading of what I call " techno scrimping " that is inventing and designing new uses for the every day products around us so as to save a few quid . An example ; leaving a flat coil of hose pipe under polythene bubble rap , full of water and out in the sun . Turn on the tap again and out comes hot water . It dose work 50 mtre. length 1/2 inch dia. pipe provides 1.3 gals . Well it dose work for mum she has a garden I live in a flat and have to wait untill the winter when they turn on the underfloor heating . During the summer I have use a Burco Boiler and a 12v. caravan pump for a shower . Its either that or heat up a 20 gal. tank provided with the flat .

Of course I would like the above to be more sophisticated with the heat monitored and flow controlled by a Z80 proccessor .

My other hobby interest is cycles . Remember Sir Clive of successful Spectum computers and C.5. failure . Well he has now the ZETA a battery powered motor that fits on any cycle . I want to put one on my foldaway Bickerton . This is not because I need it to get myself around of course but when I put a trailer on the back , go to boot sales and buy another Albert and moniter Uncle Clive's battery power can help me get it back home .

This battery power seems to have some promice for people like me who can not afford to run cars . It brings back the concept of

working bikes . Any one got a rickshaw they do not want ?

What else can I say ? I have not got into using Albert much this is because I have not yet my kind of software for it . Can anyone recommend a wordprocesser better than Tasword and with a spell checker , a machine code toolkit , a sourse of hex listings and interesting programmes to type in ? I want to be able to transfer code between the Spectum and Einstein . My attempts to do this through the RS232 have not yet been successful but I have found +3 disks can be read by track and secter from Albert's MOS read . Its a pity Albert did not have a cassette tape facility its a cheap way to transfer programmes around . Can the new digital tape backups be used with Albert ? As anyone with conputers more questions than answeres .

Theres not much else I say can at the moment except to say I am looking foreward to receiving my first Einstein magazine and to wish it a long and usefull life .

Yours sicerely

Chris Coxall

Chris Coxall

P/s Important question are 3 1/2 inch disk drives still readily available for the Einstein and just as immportantly how much .

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STILL NEEDED
QUANTA magazine Vol.13 No3 reports (p.17) that there was an article on "Text Scanning With Fax And Modem" in the Oct 95 issue of POPULAR ELECTRONICS. Can anyone lend us a copy?

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4 November 1996

Greetings Tony,
          I have had aweek back in Kent from taking my grandchildren
to my old home near Bodmin Moor in Cornwall. oing through my mail I
noticed in the office supply firm with which I deal a reference to
drums for NP-150/155 copiers and I am enclosing the relevant page.
They look expensive but if it gets a loved machine going then it is
worth it.

          As to the Jowett the only club in existence, as far as can find
out, is the one you belonged to
               Jowett car club
               Aitken-Kemp
               "Brochdu"
             19 Wilson Terrace
             Stoneyburn
             EH47 8DB

Thanks for the informatiom on the Sharp Club, I have now joined and
bought all the back issues on the PC3000. Maurice seems anice chap
and since he is a fellow engineer I may call in to Weymouth on my next
trip South.

I have a Dragon 32 and a 64. They now live in the attic because I was
fed up with the limited screen area and poor design of case which is
hard put to support a monitor. I did use it for controlling my
grandchildrens toys but I am looking round for something smaller
possibly with 6" screen.

I wont waste your time any longer.
                         regards

                         Tom.

                    Tom Williams
                         749

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                    LOOKING FOR A NEW HOME
CBM 8023 AND CBM 8024 DOT MATRIX PRINTERS. EITHER OR BOTH
MAY BE COMMODORE IEEE-488 INTERFACE ONLY. ALSO A TAXAN 765
MONITOR. CONTACT KEN ROSS (LISTED ON P.1 UNDER COMMODORE)
FOR MORE INFO. THE MONITOR WON'T INTERFACE WITH HIS KIT, SO
IT MAY WITH YOURS!