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EINSTEIN MAGAZINE & ALL MICRO NEWS (No.78)

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(opinions herein are not necessarily those of the publisher)

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EDITORIAL - (Andrew McRobbie)

The Einstein magazine is now 10 years old. This would be a perfectly respectable innings for a computer magazine with a circulation of hundreds of thousands, but for one which has been out of the public eye for the best part of five years it is something to be really proud of, even though our plans to celebrate the event with you in a special triple-size issue last time backfired badly due to major problems with our new copier, which created a printer's nightmare for us.

It may be depressing to compare your machine's cost in the early to middle 80s, with the bargain prices some people have been able to obtain them for lately, but the Einstein is not alone in this respect. A BBC B, available for £1 and a rubber keyed Spectrum Mk3 (NOT +3), together with a number of games for £2, both in working order, are my recent car-boot bargains buys. How the mighty have fallen! The difference is, that as far as I know, I am on my own with these machines. The same cannot be said of the Einstein.

We have to thank you for your continued support in keeping the Einstein alive. Albert & Co are only 'past it' when we give up on them. From the quality of information you have been sending in to us to pass on to others, plus the enthusiasm shown by you, it is obvious that the Einstein machines should be with us for quite a while yet.

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BEGINNERS PAGE(s).

PRINTING OUT THE POUND SIGN.

by A.C.McRobbie.

PROBLEM: I cannot get my printer to print out pound signs.

In this case the printer was an old nine pin Citizen (LP100 based, I think on the 120D or 120D+) and the program was Tasword. (There were also problems printing out the pound sign with a Psion Series 3 which my brother first brought to my attention.)

The wordprocessor was being used to prepare and print reports for college work. The academics, not content with getting everything typed these days, were not happy with the student printing the word 'pounds' after the numbers in the various columns. Marks were being deducted accordingly.

The first thing to do is to check to see if the printer can print out a pound sign. i.e. If it appears in the printer's character set. This is done using the printer's self test. In the Citizen's case, simply turning on the power while holding down the form feed button, will do this. Other printer's self test may use the linefeed instead so it is best to try it and see.

Ensure that there is paper in the printer first.

The next thing to do is to write a BASIC program to list the ASCII characters on screen and also send them to the printer. The results are NOT the same, as some characters, when sent to the printer, will cause the printer to form feed or print in bold or large type. Apart from these, you can see what ASCII code should print out the pound sign.

The BASIC program follows:-

<pre> XTAL BASIC ===== 10 REM EINSTEIN character set. 11 REM 20 FOR I=33 TO 255 25 REM characters below 32 26 REM are control characters. 27 REM (32 is a space.) 30 PRINT I,CHR\$(I), 40 NEXT I 100 REM 110 REM PRINTER character set.</pre>	<pre> PSION OPL LANGUAGE ===== Like BBC BASIC but no line numbers. PRINTER CHARACTER SET. LOCAL A\$, A\$(3) LOPEN "PAR:A" A%=33 DO A\$=CHR\$(A%) LPRINT A%;A\$</pre>
---	---

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<pre> 111 REM 120 FOR I=33 TO 255 130 PRINT#1, I,CHR\$(I), 140 NEXT I</pre>	<pre> A%=A%+1 UNTIL A%=160 ENDP</pre>
---	---------------------------------------

N.B. An ASCII code is a number code for letters, digits and other characters which has been standardised for computer use. This means that if a file has been recorded in ASCII code, it can be read by other types of computer. Lower and Upper case are also catered for. e.g. The letter A is 65. If I remember correctly, all computers with the exception of the Sinclair ZX81 [Ch.Ed:- & some Sharps] use ASCII code.

The pound sign was well down the list, amongst some international characters and not identified by the usual ASCII code of 35 or 129. In this case it was 156. The Psion was 35, the normal code for the # (sharp) sign.

The Citizen has eight DIP switches under a sliding cover in the area where the print head moves. Open the cover and note the position of these switches. If all else fails, you can then still reset the printer to its original settings.

The BASIC program was first run with the printer switched on and the results checked. No pound sign! NB: The printer may hang during these tests. The printer was switched off, one switch position altered and the printer switched on again. This is necessary as the printer reads the switch positions on power up. The program was run again. Still no success! The printer was switched off and the switch I altered, set to its original position before a second switch was tried. The program was run three times before the pound sign appeared. I then noted the ASCII code representing the offending character.

All this is probably not required if you happen to have the printer manual. We were not so lucky.

Recording this change in Tasword

Using the DEFINE KEYS option in Tasword, you can give a character a different code. Each time you press that character on the keyboard, the new code is sent to the printer.

Select D for Define Keys then press Enter to keep the settings of the Function Keys (Underlining, Emphasis etc).

You are asked Define Normal Print Characters (Y/N). Type Y then the pound sign.

You are then asked for the code.. (156).

Press Enter three times to return you to the Option

Screen. That is all there is to it.

Saving your changes

To retain this change in Tasword, select the Backup option and the program is saved as TASWORD.COM. This becomes your working version.

If your favourite wordprocessor is not Tasword, choose the 'REPLACE TEXT' option and substitute the character you have identified to replace the pound sign.
For the Psion, any text on screen will read # (sharp) but when printed out, will read £ (pound).

Build Your Own Power Supply by Les Foksett

INFORMATION ON VVP1 SUPPLY.

Construction is not critical but the following points should be noted.

- 1) The L200CV I.C must be bolted to a heat sink. A 2"x2" metal plate will do. If the unit is housed in a metal case, the I.C. can be bolted to this instead. No insulation is required but if you have some heat sink compound, smear a little on the back of the I.C.
- 2) C2 should be fitted as close to pin 1 as possible.
- 3) R2 sets the max output amps. (in this case 2 amps) If you want less than this, ($R2 = 0.45$ will give you maximum current) but the supply will shut down if you try to draw more than 2 amps anyway.
- 4) C1 Needs to be a large value because ideally the input for a 12 volts output should be about 18 volts but I have never had any difficulty getting just over 12 volts.
- 5) The knob of the variable Vr1 can be fitted with a pointer and scale to show the output or better still, a meter fitted to the output. The front end for this unit can be a car battery charger (i.e. raw D.C.) but stick to a modern insulated case one with internal cut-out unless you are experienced at mains working. In which case you don't need my advice.

By building a different front it's possible to get somewhere in the region of 30 to 40 volts at 2 amps.

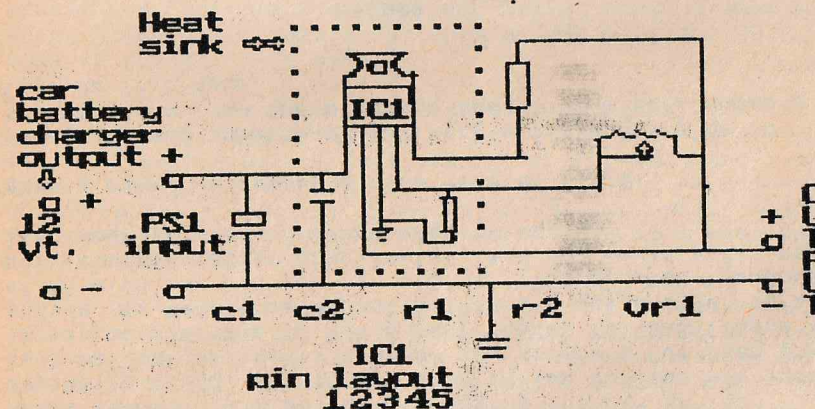
Refer to circuit diagram

All parts are available from Maplins.

Order No: CAT PAGE No.

C1 4700 uf electrolytic 35v.	JL30H	498
C2 220 nf capacitor:	Ra50E	492
R1 820 ohm Resistor:	M820R	637
R2 0.22 ohm Resistor:	S0R22	638
VR1 10K ohm variable potentiometer:	FW02C	640
I.C1: L200CV Voltage/Current Regulator:	YY74R	766

3 Volts to 12v variable voltage over current protected supply.



AMATEUR RADIO WITH THE EINSTEIN. by Ted Cawkwell.

As I was a radio ham long before I became "computerate", it was inevitable that acquiring a ZX81 led quickly to thoughts on using it with my hobby. In many ways the ZX81 was ideal for my first programs which were intended to reduce the hard maths involved in calculating the number of turns of 18 gauge wire needed for a 10 microhenry coil.

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Another ideal candidate was the conversion of the latitude and longitude of my station to the special co-ordinates used by radio hams because they were easier to pass by voice. This also gave a better idea of one's location. This conversion is called a 'Locator'. My first one was ZL16g and to derive it mathematically was an art.

I recall that once my program was running I could almost have run a business generating the Locaters for people - for a while anyway, there being a limited number of hams in any one area!

NGR's (National Grid references) were another fruitful line and before long I had a set of programs that could convert anything in the Locator line to anything else!

Other programs followed: designing filters for radios, working out voltages, resistances, capacitances and power outputs, designing antenna systems and printing QSL cards that we send to other amateurs confirming a contact. i.e. a message sent and received according to a protocol. I even had a stab at a logbook program - tall order for a 16k micro, but did succeed in writing a very basic WP with both capital and small letters.

The final triumph though, was a program to receive and transmit radio teleprinter (RTTY) messages to either screen or printer. This was my introduction to the dreaded Machine Code as Basic was far too slow for the job.

After a brief use of a Spectrum, which was nearly compatible with the programs, needing little modification, I obtained my Einstein. The wonders of the disk drives quickly persuaded me that this was the way to go.

I did a check of program loading times, which I still have.

To RUN the Locator program from scratch took 34 secs on the ZX81, 10 secs on the Spectrum and about 1.5 secs on the TC01!

The transition from Sinclair Basic to Crystal was a fairly lengthy process as there are significant differences. Once achieved, progress was quick and before long all my original programs were safely on disc and I was looking for new worlds to conquer. I was greatly aided in this by the book 'Amateur Radio Software' by John Morris GM4ANB and later by 'Newnes Amateur Radio Computing Handbook' by Joe Pritchard G1UQW, the former using a particularly good hybrid BASIC remarkably similar to Xtal. The other book is biased more toward BBC BASIC and GWBASIC.

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Further progress was hampered by two factors, the lack of manufacturer support for the Einstein and, that Albert is just about the noisiest radio frequency generator available. It could hardly have been better had it been designed for the job! If I had been told that the Russians used them to jam 'Voice of America', I would not have been surprised.

The Einstein is similar in many ways to the BBC micro and radio programs for that are legion because people were allowed access to its innards and all of its secrets were revealed. However, Hams like Mike Pugh in Birmingham with his G4VPD Collection and Peter Swainsbury G4EJO in Plymouth with his facsimile program PAX, managed to produce excellent programs and using some of the data gained by them I even managed to produce my own RTTY program. All of these are obtainable from The Einstein User Group. Also, I used my spare time to get XBAS experience by knocking out GOLF, as some of you may have heard!

I have almost cured the noise problem by using filters in the leads and increasing the distance between radio and micro. I keep Albert 4 feet away from any radio and even then I can sometimes hear the key clicks if I am using the WP! Originally I had my antennas in the loft which was above the computer bench but moving them outside to a mast has been most beneficial.

I have noticed that my amateur radio activity has reduced considerably over the last 3-4 years, I spend more time on the computer. At the same time there is much less going on, on the air, RTTY is hard to find on VHF and my home-brew Morse transmit and receive program has never been used.

There is less of the social chat and most activity appears to be on the Packet radio frequencies. Packet appeared about six years ago and has made tremendous strides. This is really the stuff of spy stories. Messages are typed and compacted into a 'packet' by a gadget called a Terminal Node Controller (TNC). This monitors the frequency for a break when it sends the packet in a quick squirt and checks for correct reception. Any snags and it does it repeatedly until the message gets through.

It is quite normal to send computer files this way and there are many Bulletin Board Services (BBS's) around the country and indeed, the world, working 24 hours a day, mostly unattended and just waiting to send your message on the next step to it's final destination, or store it until the recipient reads it.

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PRINTER CHECKING IN XBAS by Ted Cawkwell

After burning much midnight oil, I have found the answer to a question many members have been requesting; i.e. how to stop Elnex crashing if a printer command is issued while the printer is not connected.

The answer is that INP(&20) AND &1C must be equal to 16! In plainer English, the number obtained by reading the printer port ANDed with 28, has to be 16. As 28 is represented in binary as 00011100, this apparently means that bits 2 and 3 are RESET (0) and bit 4 of the byte is SET (1).

I suspect these 3 bits are STROBE, BUSY and PE (paper end) but so far have not found out which is which. Not that it matters too much, because what we now know is sufficient to write an XBAS program which will check that the printer is present and active at the other end of the lead.

```
5 REM PG.XBS PRINTER GUARD for any DOS or XBAS program
  Ted Cawkwell 1995 for EM
10 GOSUB 50
20 PRINT@13,22;SPC(14);@4,23;SPC(32);CHR$(17);
30 PRINT#1;"PRINTER ON LINE"
40 END
50 A%=INP(&20) AND &1C
60 IF A%=16 THEN RETURN
70 PRINT@13,22;SPC(14);@4,23;SPC(32);CHR$(20);
80 TCOL6,11:PRINT@13,22;
90 IF A%=12 OR A%=8 THEN PRINT "PAPER OUT"
100 IF A%=4 THEN PRINT "PRINTER BUSY"
110 IF A%=0 THEN PRINT "PRINTER OFF"
120 IF A%<>12 AND A%<>8 AND A%<>4 AND A%<>0 THEN
  PRINT"PRINTER ERROR"
130 PRINT@4,23;"CORRECT FAULT AND PRESS <SPACE>";
140 Y$=INCH$:IF Y$<>" " THEN 140
150 TCOL15,4:GOTO 50
```

It is intended to be used as a subroutine accessed by GOSUB 50 but of course, line numbers may be changed to suit your own purposes. Remember that, for maximum speed, subroutines should be located as close as possible to the GOSUB. This can make quite a difference in long programs, where the interpreter may have to check a large number of lines to find the subroutine.

I have checked that the above works with both XBAS 4 and 5, using a Tatung TP100 printer and also that it works with the screen dump commands PRINT CHR\$(1) and PRINT CHR\$(2) the

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latter only with System 5 of course.

The actual subroutine starts at Line 50 and ends at Line 150. Line 10 GOSUB 50 should be inserted in your program immediately before the Printer command and followed by the rest of your program. Line 20 above blanks out the warning on the screen and CHR\$(17) enables the flashing cursor which was switched off earlier by PRINT CHR\$(20);. The next line prints a message to the printer and the program ENDS. If you don't need this in your program, don't include them. You can of course, change the print position of the warning if you wish, by amending the PRINT@s.

I am pretty confident that this program will work with most Dot Matrix printers and probably others as well, as all parallel printers use the same Centronics plug, which has standard wiring.

After correcting Paper Out on the TP100, it is necessary to press the On-line switch as well but if you forget, the program still warns you and prevents a crash. The program can only RETURN from a Printer Ready situation, otherwise it goes round and round the Line 50 to Line 150 loop.

The red on yellow colours for the warning message were chosen to stand out on the standard blue and white screen. Just change the TCOL's to suit your own preferences.

So far so good.....but now I want to add this to WP80! I have lost many a file asking for a quick print out and realising too late that the printer was off or maybe switched to the PC! I don't really fancy my chances here because it means using the dreaded machine code, although the REAL problem is going to be finding where to put it in the WP80 code without screwing other addresses up.

---@@@---

TWP40 AN ANSWER TO THE EDITOR'S PRAYER
by Ted Cawkwell

You saw it first in Einstein Magazine! A FREE word processor for the masses and in only 9 lines of XBAS! No more messing about with the Program Editor! This article was written with TWP40. It is a real MAN'S -Oops sorry PERSON'S -WP, no bells and no whistles. Some Control key codes work, CTRL+L to clear the screen, etc. and the cursor and delete keys work as normal. If you want a print of your work, just make sure the printer is on before

you start. As each screenful is written to disk it will be printed out as well. TWP only writes to ONE file so you have to change its name when you have finished, else your next session will overwrite it. However, you can read any text file - as long as its name starts with a T!

When you RUN TWP40, you find an opening screen with:-
"To load a T file input name and ext."
If you want to read a file, you do just that, otherwise input any letter except T and you are ready to write. First use Control+L to clear the screen and off you go. The Enter key doesn't work quite as normal. It returns you to the beginning of the same line! You need to hit the down arrow key as well to get the next line. If your last letter on a line happens to be the 40th, you will find that you go to the beginning of the next line without any trouble.

Once at the bottom of the screen, you have to be careful not to go past the end of the bottom line, or, FIRST AWFUL WARNING, you will scroll off your top line and lose it forever!

Having arrived at this point you just need to press ESCape and the text will be saved as "MSTRPECE.TXT" and then sent to the printer providing it is on-line. You then arrive at the next nice clean page for more words. You can press ESC at any time of course. If you finish in mid-page for example, SHIFT+BREAK will bring you back to XBAS and this is when you should change the name of "MSTRPECE.TXT" to something else if you want to keep it.

SECOND AWFUL WARNING!

Failure to do this will result in your work being OVERWRITTEN the next time you run the program.

If you want to read text with this program, the new name should start with a T. The REN (rename) command is used in the form REN "MSTRPECE.TXT" TO "NEWNAME.EXT" or in DOS, without the quotes.

```
10 CREATE "MSTRPECE.TXT", FD$:CLOSE:BCOL1:TCOL15,4:CLS40
20 INPUT "To load a T file input name & ext.: "; F$:IF
LEFT$(F$,1)="T" THEN OPEN F$,FD$:GOSUB 70:CLOSE FD$
30 A=INCH:IF A=27 THEN GOSUB 50
40 PRINT CHR$(A)::GOTO 30
50 APPEND "MSTRPECE.TXT", FD$:PRINT#FD$:FOR X=0 TO 23:PRINT
SCRNS(X): NEXT:CLOSE:IF (INP(1)&20)AND(1C)=13
THEN PRINT CHR$(1):CLS:RETURN
60 CLS:GOTO 30
70 ON EOF GOTO 90:INPUT# FD$
80 PRINT INCH$(123)::GOTO 30
90 RETURN
```

Be careful entering line 50, it is close to the maximum line length and if you put in any extra spaces you will run out of line! It looks messy but runs fine. When I saved this I called it "T.XBS", for running speed - you can't get much quicker than RUN "T", (and you don't really need the 2nd "T")

I can only vouch for the hard copy on the Tatung TP100 but any dot matrix printer should be OK, and probably other types too. In line 50 'PRINT CHR\$(1)' is the Einstein screen dump.

The main thing about TWP is that once you have pressed ESC you are committed. You have a copy on file and possibly one on paper but your screen copy is gone, so no more mods. are possible. It IS possible to reload a file of a single screen though, and work on it and resave it.

When reading a file with TWP, hold down the BREAK key to stop the scrolling whilst you read. Release BREAK to get more text.

If the CLS40 in line 10 is changed to CLS80 the program will work in 80 columns with System 5, giving 80 character lines of hard copy, but I have not found a way to show the screen edges and layout is rather difficult.

Finally, there is one hidden benefit - the online Spell Checker! Forget your Oxford English Dict.; with TWP if your word is not in the T.E.D. it will let you know!! Frankly, it lets you get away with mudder!

PS. Don't ask what the T stands for! I haven't decided yet.

---@---

GRAFDRAW REVIEW PART 2. by A.McRobbie.

DESIGNING YOUR OWN FONTS.

If you find that the fonts provided, are not suitable for your needs, or you require a character which is not found on the keyboard, you can make up your own, by selecting Option 3.

You are first asked for the name to call your font design. I liked the idea of lower-case letters being identical to the upper-case, only smaller, so I called mine WEECAPS. Press Enter and this name is written to a file. The ASCII code or alphanumeric required to be defined, is then requested, the latter by simply pressing the appropriate key. (For lower-case letters, ensure that the

alpha lock key is not lit). An 8x8 grid is drawn with the letter chosen, highlighted. Actual sizes, before and after changes made, are also displayed so that you can see how your changes are progressing. Use the arrow keys and space bar to make changes and the Enter key to accept them. This can be carried out for the remaining letters as required. Confirmation of the alterations made by typing Y will save the file to disc. If you have partially completed a font and wish to complete the alphabet, load the font from Option 2 first, before continuing your work.

PRINTING GRAFDRAW FILES.

With the preparation of a page complete and saved to disk, you can print it out using Option 4 from the main menu. The program defaults to an Epson compatible printer but if yours does not work, you can configure Grafdraw to suit your particular make - EXCEPT printers which only print 7 bit graphics - found mainly on older printers. Again you need to know the page name to be printed out before you start.

No of pages across (1-3): 2 or more may lose some detail on an 80 column printer.

Page Name: May be preceded by drive number.

Density: Usual density is 2.

Sideways or Normal: Normal or portrait is usual.

Dot Width(1-2): width across page.

Dot Height(1/2/4/8): This alters length enormously.

Margin(0-225): To centralise print on a page.

No.of Strikes(1-9) Increase if ribbon is worn.

No.of copies:

The page is loaded from disk and printed out. As it is printing, the percentage finished is displayed on screen. Due to the number of variables required for the printing option, many different results can be obtained even with the same page or same page loaded twice.

VIDEO TITLING.

Option 5 might possibly be one of the reasons an Einstein and this program were bought in the first place. After creating a number of pages, you can link them together to form a demonstration. The pages can be displayed (scrolled) from the top, bottom, left, right or appear in the middle. The time each page can be displayed, can be individually altered too. The effect is rather professional looking. Coupled with the ability to record the demo on video tape meant that this was at one time, the cheapest and most effective way of getting a message across on tape without the use of a camera. It perhaps still is although it has

been overtaken by advances in technology.

The remaining options are for converting old Grafdraw files to suit the latest version and general housekeeping activities. The conversion of ASCII files doesn't work too well as it chops off the last three characters at the RHS of a file. This can be got round by adding 3 columns of rubbish before loading. I also found that the last line on one page was repeated on the top line of the new page. Very frustrating. Perhaps Grafdraw users can advise me where I am going wrong

'AND THERE'S MORE.'

To add more value for money, there are other programs on disk to allow the user to load and convert Screen Plus files. Grafdraw pages can also be used in BASIC programs by renaming the files as .OBJ files. Similarly, BASIC pictures like those found in the picture puzzle PD338 can be loaded into Grafdraw and altered much more easily than having to alter the data statements in BASIC. The fonts you design can also be loaded into your BASIC programs.

In conclusion, a "fabbydoo" program, not without its faults but one released at the forefront of the desktop publishing explosion AND available on the Einstein.

If this has whetted your appetite, Tony has Grafdraw available for members for the princely sum of twenty pounds for non-members. Members pay ten. I thought at nearly thirty quid when I bought it, that it was good value for money then.

Les Foskett has advised us of a method of improving the video signal when used with the Einstein and Grafdraw, if video titling is your interest. This has been held back till the Grafdraw review to benefit more members.

-- @@@ --

BASIC PROGRAMS TO TYPE IN.

HIGHLIGHTED FILES by Ted Cawkwell.

```
10 REM Adapted from a PC program by
20 REM John Briggs, QR.XBS (Quick Run)
30 REM brings up a highlighted list
40 REM of XBAS FILES. ARROW KEYS move
50 REM the highlight and <ENTER> runs
60 REM the file.
70 REM Ted Cawkwell June 1995
80 CLS:DIR "*.XBS"
```


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```

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$=""
260 GOTO 100
270 FOR A=1 TO 8
280 T$=MID$(F$,A,1)
290 IF T$=" " THEN 320
300 R$=R$+T$
310 NEXT A
320 CHAIN R$

```

N.B. Line 240 has 12 spaces between the quotes.

The above short program gives a sort of "PC" feel to DIR's and, on the face of it, works OK in that it does as described in the REMs. I suggest you type it in and SAVE it to a disk containing a lot of XBS files as QR.XBS and try running it. Good eh? But only up to a point.....:-

In the course of converting John's program (itself a mod. of an Einstein program!) I had little trouble with the highlighting system but a lot with RUNNING the selected file! All these years using XBAS and I was not aware that it will not accept a command like "RUN file\$". It will only work on the actual file name. However, CHAIN file\$ works, but I was still not home and dry because file\$ must not have any SPACES in it - even at the end. This is the reason for the little routine at 270 - 310, it extracts the actual file name up to the first space.

If you have ever had rude words on your screen for mis-spelling a file in your RUN command this routine will certainly help, it is great, move the highlight and press enter, who could ask for more?

Of course, you must LOAD and RUN "QR" first, so it would be best to have it on the disk. Then, when you have run your XBAS prog and need to do another you have to RUN "QR"

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again. I could find no way of holding QR in memory waiting for another go. It gets wiped out when your XBAS prog is loaded. HOLD was no use - it needs to be in the program you have last loaded! To test this I added QR with Line nos. starting at 20000 to a disk of short games and then modified the endings of all the games to finish with:-

HOLD 20000 :RUN "QR"

This worked nicely, returning to the highlighted DIR after each game, but it was a lot of work and you have to be sure that none of the games have Line nos. greater than 20000. You can use line numbers as high as 65536 maximum.

There seems little point in changing the DIR at the beginning to do .COM or any other files (unless you just want to look at them!) because you couldn't RUN them anyway. It may be possible to RUN a text reader in XBAS (There is one in the Reference Manual p.279) and use another version of QR with the DIR set for .ASC or .TXT or .DOC I suppose, but it seems rather complicated, and you would still have to load your version of QR between files.

What a pity, it seemed a nice idea at first!

Have I missed something? Is there a fix staring me in the face and I am too blind to see it? I'm sure someone will tell me if I have.

-- 000 --

AREA. by David Williams.

There are many programs written for the Einstein to help one determine the area enclosed by a triangle. Unfortunately, those that I have seen all assume the figure to be that of a right-angled triangle. This one however, will cope with any triangular shaped figure and will also advise when the lengths entered do not form a triangle.

Would members please write in and comment on the shape of the figure resulting if you ever find that the area is given as 0 (zero) square units.

```
10 REM*****
20 REM* THE AREA OF A TRIANGLE *
30 REM* by David Williams *
40 REM*****
```


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```
*****
50 BCOL7:TCOL1,0:CLS40:GCOL1,0
60 PRINT@9,0;"THE AREA OF A TRIANGLE"
70 DRAW 55,183 TO 186,183:GCOL8,0
80 DRAW 60,116 TO 180,116 TO 95,166 TO 60,116
90 FILL 80,117,6:ON ERR GOTO 220
100 PRINT@11,5;"a";@24,5;"b";@19,10;"c"
110 PRINT@5,13;"Input the lengths of each side:"
120 FOR J=1 TO 3
130 PRINT@5,14+J;"Side ";CHR$(J+96);" = ";
140 INPUT"";N(J):NEXT J
150 A=N(1):B=N(2):C=N(3)
160 IFA=0 OR B=0 OR C=0 THEN 220
170 IFA>B+C OR B>A+C OR C>A+B THEN 220
180 D=(A*A-B*B+C*C)/(2*C)
190 D=SQR(A*A-D*D)
200 Z=INT(50*D*C)/100
210 PRINT@11,19;"AREA =";Z;"Sq units.":GOTO 230
220 PRINT@6,19;"These do not form a triangle."
230 OFF ERR:PRINT@15,22;"Again (Y/N):";
240 A=INCH AND 223:IF A=89 THEN 50
250 IF A=78 THEN BCOL4:RST:END
260 GOTO 230
```

-- @@@ --

YOUR LETTERS.

Dear Tony,
I enclose another 2 years' membership subs.

With today's economic demands on us all, and falling membership numbers, I am encouraged by your and other members' commitment to retaining this valuable service, and to arousing awareness that the group does still exist.

I purchased my Einey from Dixons as "end of line stock" whilst working in London, and returned to Manchester soon after -- which was when I quickly discovered how important a user group can be. I felt as though I was speaking a foreign language when I mentioned the Tatung Einstein. As for software -- forget it!

So you see, your hard work -- and your helpers' too -- has at least kept my Einey up and running, and plays a major part in this household's financial budgeting.

Again, many thanks from a grateful UKEUG member who would otherwise be lost.
M.W. MARTIN, UKEUG 1606

17
EINSTEIN MAGAZINE & ALL MICRO NEWS (No.78)

STEAM COMPUTER SOCIETY ***** U.K. EINSTEIN USER GROUP
A E Adams, Ivy Cottage, Church Rd, New Romney, Kent, England

Many thanks for your letter.

Much of the credit must go to Graham Bettany, of course, for keeping the group alive for so long when there seemed to be no light at the end of the tunnel, but it's gratifying to know that the efforts of myself and the many other members who are contributing to the Einstein revival are appreciated.

It's very pleasant to be able to pass on your note to the new Einstein editors too, in the hope that they'll find a spare corner in the magazine that it can usefully occupy, so that you can "see your name in lights", even though you hadn't realised that your comments would be of value and benefit to us all, and didn't think to send a copy on disk as well as on paper.

Please write some more nice things about us to print in the mag, but this time send a copy on disk too!

Seriously, though, any hints, tips, ideas, suggestions, or the benefit of your Einstein experience generally, are always of value to share with the rest of us, many of whom are lone new novices badly in need of reassurance and help, and even the smallest comment or idea may be of tremendous value to someone else, so please DO put finger to keyboard, regardless of whether you're a genius or an ignoramus, and please DO send us a copy on disk of EVERYTHING you put on paper to us -- you never know when what you regard as humdrum and insignificant may prove an answer to a maiden's prayer at our end of the line.

-- @@@ --

Short of uses to put your computer to? Here is some food for thought from Les Foksett.

It is said that necessity is the mother of invention, I reckon that lack of gelt is the mother of inspiration. I often thought it would be nice to have a photo C.D. Rom drive and just realised I already have the nearest I'm ever likely to get. I have Albert connected to an old video recorder and then on to a normal T.V. (besides the usual Tatung monitor) this allows me to record or playback anything I do on Albert. It has occurred to me if the fast forward/fast rewind/stop and play could be controlled by

computer programs via a port, then we have a very useful device. Not as fast as a C.D. but not as frustrating as the audio tape system on the Sinclair. It is also possible to record real pictures on taken 'off air' or from a video camera plus 35mm slides photos etc.

The general idea is that information is put on tape as above, then when called by a program, the recorder goes fast forward from the start of the tape for a set time and goes into play.

At another signal, it stops and goes fast rewind back to the beginning of tape ready for the next call. The reason it would have to go back to the beginning is because it has to have a set point for the timing. This is of course the basis of the idea but it should work as it's the same as I do manually at the moment. If any one has any experience of external control from the Albert, I'd be grateful but please keep it simple.

It shouldn't cost more than the rest of the equipment put together. By the way, don't go using your best recorder. There are plenty of old ones such as Betamax on the second-hand market. As I say, I haven't actually done it yet, I still have to work out a safe system for output from Albert.

I'm open for feedback. As far as the input for control of the video, I'm well equated to these but of course they vary some-what and I can't give exact details but remote control types are best although it's still possible to wire up others. The output control from Albert would be from a port to mechanical relays, transistor or I.C.'s.

To clarify the above rambling, I can work out the hardware side of it but would like information on programming the user port. Any offers?

-- *** --

INSIDE THE NEXT ISSUE

With the completion of the Grafdraw review, we look at ways to improve the video titling part of the program with a tip from Les Foskett.

More basics for beginners.

More of your letters so keep sending them in.

3/11/95

6 COTHERS COURT
BLOCKLEY
MORETON IN. MARSH
GLOS. GL56-9EA

Dear Tony,
I have connected a Spectrum +3 to my Einstein colour monitor and it works perfectly. I made a lead to connect between the RGB TTL socket on the Einstein monitor and the RGB/PERITEL socket on the Spectrum +3.

EINSTEIN MONITOR SOCKET



SPECTRUM +3 SOCKET



- | | | | |
|---------|---|---|-------------|
| 1-RED | ← | → | 7-RED |
| 2-GREEN | ← | → | 6-GREEN |
| 3-BLUE | ← | → | 8-BLUE |
| 4-SYNC | ← | → | 4-COMP SYNC |
| 5-0V | ← | → | 2-GND |

CONNECTING WIRES

This could be of use to MC Silva from Portugal? (No 76)

Yours Sincerely
L.G. STANLEY 406

PS Sorry no 3" disk. All locked away at the moment. Trying my hand at decorating.

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EINSTEIN MAGAZINE & ALL MICRO NEWS (No.78)

ABOUT THE MAGAZINE AND USER GROUP

One copy of this magazine is mailed FREE OF CHARGE to each paid-up member of the U.K. EINSTEIN USER GROUP (UKEUG).

**** All contributions, subscriptions & enquiries should be ****
sent to Ivy Cottage, Church Road, New Romney, Kent. TN28 8TY
(Telephone or personal enquiries cannot be dealt with)

***** Membership of the user group is DOWN to £9 per year *****
(10% DISCOUNT!) if you pay for 2 years (or more) at a time.
(Members at addresses outside the UK pay slightly more)

(An information pack will be sent on receipt of TWO STAMPS)

If you can't even afford this much, tell us the problem. We happily accept subs in kind, instead of cash, if that helps.
(Or your blood, sweat, toil and tears will do nicely!)

***** All BANK DRAFTS, CHEQUES, POSTAL ORDERS, etc., *****
payable to EINSTEIN USER GROUP please.

***** The magazine and user group are run in their spare *****
time by unpaid enthusiasts on a VERY tight budget. If you require a reply PLEASE INCLUDE A S.A.E. -- OR WE MAY NOT BE ABLE TO AFFORD TO PAY THE POSTAGE BEFORE MAILING YOUR REPLY!

*****MAGAZINE BACK NUMBERS are £2 each, (£10 for 6) inc p+p*****
(BUT HALF PRICE TO MEMBERS, PLUS SPECIAL BULK-BUY OFFER)

The following are currently available:-
EINSTEIN MONTHLY 1/5 - 1/12, 2/1 - 2/12, 3/1 - 3/2
ALTERNATIVE MICRO NEWS 1/1 - 1/5
ALL MICRO NEWS 1/1 - 1/12, 2/1
EINSTEIN MAGAZINE & AMN: 65 - 76

***** BUMPER BONANZA BULK-BUY BACK NUMBER OFFER TO MEMBERS *****
Are you wise? Are you wonderful? Are you a whizz-kid expert on the Einstein? You jolly well will be if you read your way through all the user group magazine back numbers, so why not make a start RIGHT NOW! A continuous run of 51 are still in print, and ALL MEMBERS can now have a set for ONLY £20 !!!

****CABLES AND CONNECTORS:-** If you need these made up, have** a word with member Stuart Marshall on 01827-897-920, or send a SAE to him at 25 CARLCROFT, STONYDELPH, TAMWORTH, B77 4DL.

MEMBERS' SALES AND WANTS

ads for computer items (and others of interest to members) are printed in the magazine (or supplementary pages) without charge. A small donation is requested from non-members.

1
ALL MICRO NEWS (— IF THERE BE ANY!) No.78

published for users of other (and Einstein) computers
by Steam Computer Society. Chief Editor and Publisher:-
A E Adams, Ivy Cottage, Church Road, New Romney, Kent. TN28 8TY
(opinions herein are not necessarily those of the publisher)



THE SPRING '96 ALL MICRO SHOW AT SPALDING (Steve Potts)

After visiting a few computer fairs last year I went to the Stafford AMS show in November, where we saw Tony who was (to be quite honest) worn out. After hearing his tale of woe about the way he does the trip, and noting that the hall was not available for spring '96 (the show was to be at Spalding in Lincolnshire, which is reasonably OK for me to reach) I thought I could help out by showing my two working Einsteins to the public without doing the club any discredit.

I needed help on the stand, and magazine printing problems prevented Einstein owners volunteering, so I recruited a PC owner to help by allowing him to put a few of his spare bits on our stand. So, many thanks, John Richardson -- and while I'm on the thank-you's we must give a big thank-you to Ray Gamble and Graham Bettany for the space at the show to prove that our club is very much alive & supporting the Einstein.

2

ALL MICRO NEWS (— IF THERE BE ANY!) No.78

The week before the show I prepared my Vauxhall (with the rattling big ends) by splashing out on some thick oil and a new filter. On the Saturday I took the rear seats out and began to load up. Isn't it amazing how all those little bits in the bedroom fill the car up to the roof! John arrived early on Sunday morning, and we managed to squeeze into the space left, not forgetting the most important piece of kit -- the kettle!

Arriving at Springfields in Spalding we parked as close to the show hall as we could. As we looked in we were greeted by Ray, who showed us the spot allocated to us. The next hour or so saw me spreading out white sheets to cover the long tables. Thank you Mrs Potts, I promise to have them back for bed time, honest! Two pieces of iron went up at the ends of the table, and then a washing line between them, to hang the signs on that my daughter and I had made, over our table. Thank you Alex Potts.

As I believe in the American form of computer fair -- with things actually working -- we set up one Einstein with a colour monitor running the demo program continuously and the menu of games for the people to try. At the other end of the table we had my other Einstein, with the 80 column card and mono monitor, showing the software library disk. Also the printer was connected to this one.

I took a few printers to sell, and some old Spectrum stuff, but by lunchtime all I had sold was a large Teach Yourself BASIC book -- I simply went mad, and blew the lot on a currant scone!

As the day went on we had a constant trickle of enquiries from various standpoints. Several people had Einsteins in the loft, or had given them to nephews, etc. All our visitors were furbished with the software library list and details of the club.

The perplexing and disturbing part was that people expected us to know every part on every stall -- and give them free advice that the stall holder who was selling would not!

Also questions about how to set up a printer for Microsoft Word on an Amstrad PC1512 (that they hadn't got the manuals for, as they were given the machine). They couldn't even figure out that they needed a lead to connect it !!!

During the day several people tickled the Einstein keys; the younger ones played hangman, and others surprised themselves by getting their name on screen.

3

ALL MICRO NEWS (— IF THERE BE ANY!) No.78

The most interesting visitor of the day was undoubtedly Milton Finesilver. He still has a soft spot for Einsteins, dazzled me with some lightning key presses, and showed me a DR LOGO demo that I did not know even existed. We chatted pleasantly for a while, and he inspected my 3.5" drive mods.

He tells me he now has a PCW. Those of you who know me will know that my interest is in all 3 inch Z80 machines that run CP/M or clones -- such as the Einstein and the Amstrad PCW, also the CPC or "Arnold". [How about the Sharp X-1, Steve?]

Then it was time to pack up again. Some started early for the trip home, as they had far to travel. The attendance was probably less than Sharward would have liked (due to the new venue, away from Stafford), but we were there, flying the flag and giving out the message that we still have Einsteins and we still have the wherewithal to run and support them.

I have been asked to do the Stafford show on NOV 9 '96, but the amount of kit and the effort involved in setting up and down is more than one man can stand (as Tony found out the hard way!) So could I suggest a time-share deal with any members planning to attend? Anyone willing to man the stand for a time (especially while I have a break for dinner) -- or could donate/lend kit to display) please drop me a line at 85 Thorold Ave, Cranwell Village, Lincs. NG34 8DS; or phone 01400 261839 (considerately). It's cheap at weekends!

Steve has sent a photo of the stand at Spalding. Hopefully it will reproduce OK, but that's what it's supposed to be if all you can make out on the front page is a big dark blotch!

SHOWS

We've a note of computer shows / radio rallies on 21 July at Colchester (01376-571239); 18 Aug at Kings Lynn (01553-765614); plus Sharward Promotions (01473-741533) shows on 25 Aug at Clacton, and 9 Nov 96 (plus 19 April 97 and 8 Nov 97) at Stafford.

It really is hard graft to do the Stafford show on your own, but with a working machine (or two) to attract interest, it's great fun if two or three members take turns to man the stand during the day.

This usually leaves plenty of time for the "off-duty" helpers to "do the show" while things are slack --and helpers DO get in free! So if you're thinking of "doing the show", please contact Steve and offer to give him a hand. After all, he wants to be able to enjoy it all too!

4
ALL MICRO NEWS (— IF THERE BE ANY!) No.78

SO YOU'VE NOTICED, HAVE YOU?

that this is a separate "All Micro News" insert? For half the lifetime of the group it's theoretically covered machines other than the Einstein, but the only practical result was that Einstein owners couldn't find it!

Nowadays there are many unsupported 8-bit (and early 16-bit) machines whose owners badly need the sort of support that UKEUG gives to Einstein owners, and a surprising number of Einstein owners have a wide variety of other machines with little or no support. Hopefully we've now overcome most of the awful printing problems that have plagued EINSTEIN MAGAZINE for the past couple of years, so we're making AMN a separate entity, as an extension of our user support.

If you want it, support it; and tell us about your non-Einey computers/computing, so we've got something to share with U.

STEAM PHOTOCOPIERS & DUPLICATORS PRESERVATION SOCIETY?

Not quite, but we do want to know if any user groups (or other support) are available to users of obsolete copiers, duplicators and other reprographic equipment. PLEASE tell us if you know of any. If not, George Bridge (and I) think that maybe there should be a user group. Anyone else interested?

MISSING MEMBERS

The following members seem to have gone missing, as mail has been returned to us, marked GONE AWAY, but their subs are still paid up. If you know where they are, PLEASE TELL US!

Richard AXE. Was at Reading, Berks, RG3 2DG

Wm Ironside. Was at West Stockwith, DN10 4BD

8-BIT MAGAZINE:- Not very much in it about Einsteins, but if you've got a CPC, SAM, C64, PCW or Spectrum, you should certainly send BRIAN WATSON a cheque for £2.00 for a sample copy, at 39 High St, Sutton, Ely, Cambs. CB6 2RA. It comes out bi-monthly, and if you like it there's a discount for subscribers, full details of this with your sample copy.

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?

Duncan Elvin has had twins, and is now too busy to monitor the BBS's (especially Omega BBS) for Einstein stuff, and to establish a 2-way dialogue between user group and on-line discussion groups. Anyone else interested? PLEASE!!!
& more help needed, keeping us visible in the computer mags.

(C) 1996 Steam Computer Society

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EINSTEIN MAGAZINE & ALL MICRO NEWS supplement 595

published for users of Einstein and other computers
by Steam Computer Society. Chief Editor and Publisher:-
A E Adams, Ivy Cottage, Church Road, New Romney, Kent. TN28 8TY
(opinions herein are not necessarily those of the publisher)

EINSTEIN MAGAZINE EDITOR ANDREW MCROBBIE

has borne the brunt of editing the Einstein section of the magazine for some while now, ably and enthusiastically encouraged and assisted by Ted Cawkwell.

However, Andrew was somewhat discouraged (in common with Yours Truly and every other member) by the persistent printing problems which culminated in the fiasco of the 10th birthday special compendium No.2 issue of the magazine, when our new copier (bought specially for the job) was driven to near-suicide by an uncontrollable British Gas heating system

Andrew is also run off his feet by being expected to put in exactly the same vast quantities of overtime at work as everyone else, despite his very demanding and time consuming computer night classes. He's reluctantly had to decide that something's got to give, and that he can no longer continue as unpaid editor of the Einstein section of our magazine.

Ted Cawkwell has now come out from under the bushel that he's been modestly occupying, and is putting #79 together for us (with great skill and ability, if the proofs he sent to Yours Truly are anything to go by). It is to be hoped that he will now take on the Einstein section editor's job himself, as he clearly has many hidden talents that we can benefit greatly from. It's not clear whether he is happy to do the job solo, or if he would appreciate some help, but if anyone else is keen to get their name in print (or help make the group more useful to members some other way), do tell us

We badly need a 256 editor, as there's inadequate input at present for our mutual self-help principle to work properly.

Meanwhile, if you've submitted anything for publication in the magazine that's not been printed yet, please let us have details (or a copy), so we can check it's not gone astray.

256 CONTACTS WANTED

New members John and Jenny Murray love their Einstein 256 as much as their marine coral fish, despite their devastating experience of buying it brand-new from B&H -- who never even told them that there was a user group! Contact them at 11 BEAUFORT WALK, BARNSTAPLE, DEVON, EX32 7JB (01271-24019).

(C) 1996 Steam Computer Society

2
EINSTEIN MAGAZINE & ALL MICRO NEWS supplement 595

COMPENDIUM ISSUE, #77

We're aware that much of the printing was below acceptable standards, but we were fighting a losing battle with the technology (and lack of cash) available to us. Hopefully we've now resolved the problem, and we intend to reprint the badly-printed pages of #77. Most of you got a mixture of good pages and bad. Please let us know exactly which pages need replacing, so we can work out how to organise the job.

It may take some time to reprint all the bad pages, so please be patient. Meanwhile, as well as telling us which pages you need replacements for, please also tell us whether to send them out to you with the regular magazine issues (for you to replace them yourself), or whether to keep them to one side (for you to return the defective copy of the special issue, for us to take apart, re-staple, and return).

WHAT, MORE MAGAZINES?

If all goes according to plan, an embryo ALL MICRO NEWS will be going out as an insert with this issue, IN ADDITION TO Einstein Magazine. For more than half the lifetime of the group it's theoretically supported owners of machines other than the Einstein, and Einstein owners have an amazing variety of non-Einstein machines, mostly without support.

Exactly the same principle of support by mutual advice, mutual encouragement, and mutual sharing of information applies to AMN -- AND THERE'S NOTHING MORE TO PAY!

WHAT, MORE, MORE MAGAZINES?

Andrew McRobbie and Ted Cawkwell honestly thought that our printing problems had proved too much, and that the printed magazine had died. Former member Andrew Dunipace had long thought that a disk-based magazine would be a very good idea -- many other machines have them as well as a printed one -- as it is ideal for interactive techniques like programming.

No Einstein magazine of any sort was just too much to contemplate -- and the result is that there's now an Einstein "diskmag" AS WELL AS the paper one, AND WE ARE THE AUTHORISED DISTRIBUTOR FOR UKEUG MEMBERS. It's quite free, there's nothing extra to pay, but you DO have to provide a formatted disk for us to put it on. 3" disk for now, but if you want another size, send us a sample -- WITH A LETTER ON IT TO CHECK IT OUT -- plus return postage AND WHO YOU ARE!

There's a fair few text files on the disk, and you'll probably want hardcopy of them. If you don't have a printer -- or any spare 3" disks! -- just tell us, so we can work out if there's a big enough demand for us to print it out.

3
EINSTEIN MAGAZINE & ALL MICRO NEWS supplement 595

EDI -- EINSTEIN DISKMAG INTERNATIONAL

As announced on the previous page, this is a new magazine-on-a-disk for the Einstein. We take the view that if this competes head-on with EINSTEIN MAGAZINE it will fatally damage the existing Einstein user support system, but if it extends the support available to Einstein users, and extends support to users who the user group can't reach or doesn't appeal to, it will be, to quote a phrase, A GOOD IDEA.

We hope that the latter will be the case, as a matter of policy on EDI's part, and we are actively playing our part in establishing it by acting as the authorised distributor to UKEUG members, as an additional service to members at no additional cost -- except that members who want it on disk must provide a formatted disk and return postage for it.

Diskmag 1 and EDI 2 (it's gone international!) are one disk side each, so you need to send us one formatted disk (blank if you must, but we'd much prefer a letter or article for publication in EINSTEIN MAGAZINE on it!) for the first two issues. If you need a hardcopy printout of the text files, please say so specifically -- there's no charge for this.

Dear Tony

I hope you are still running the Einstein group, is it still surviving?. I have not used my Einstein much for ages so I have decided to part with it, I would much rather it went to a good home than some car boot sale! Could you let me know if it would be possible to advertise it in the newsletter? I would of course pay the going rate or help in some other way if I can.

The details;

Einstein TC01 single 3" drive fitted with flexidos,
3.5" separate drive,
B&W T/V as monitor
Joystick
much software, inc. Cracker, Tasword, BBC basic, Games
etc.,
Home made "sound card" & software,
Manuals etc.,
(Possibly printer as well).

Well, there it is, still working ok. any chance?
Either way are you aware of any Dos based IBM compatible user groups as I have now progressed to a 286 system!

|| All the best, look forward to hearing from you.

Yours sincerely

Stuart Edwards.

77 Beeches Road,
Great Barr
Birmingham
B42 2HL
0121-357-7860

TP100 PRINTER RIBBONS
STEVE POTTS SAYS THEY ARE THE
SAME AS MANNESMANN TALLY MT81

EINSTEIN MAGAZINE & ALL MICRO NEWS

LATE ITEMS 595

Steam Computer Society. Chief Editor and Publisher:-

A E Adams, Ivy Cottage, Church Road, New Romney, Kent. TN26 8TY

We used a strange new machine for the first time to print this issue of the magazine, and the listing on p.10 may be too faint to read on some copies. It should say:-

```
10 CREATE "MSTRPECE.TXT", FD$:CLOSE:BCOL1:TCOL15,4:CLS40
20 INPUT "To load a T file input name & ext.: "; F$:IF
LEFT$(F$,1)="T" THEN OPEN F$, FD$:GOSUB 70:CLOSE FD$
30 A=INCH:IF A=27 THEN GOSUB 50
40 PRINT CHR$(A);:GOTO 30
50 APPEND "MSTRPECE.TXT", FD$:PRINT#FD$:FORX=0TO23:PRINT
SCRN$(X): NEXT:CLOSE:IF (INP(&20)AND&1C)=16
THENPRINTCHR$(1):CLS:RETURN
60 CLS:GOTO 30
70 ON EOF GOTO90:INPUT# FD$
80 PRINT INCH$(128);:GOTO 80
90 RETURN
```

8-BIT MAGAZINE reports that most of the last-ever batch of 3" disks went to the Scottish trawler fleet for navigation use

HAM RADIO ARTICLE, pp.5-7:- Ted says it said "Locator" when the article left him, but someone's changed the spelling. No names, no pack drill, but it wasn't the Chief Editor!

ALSO:- The G4VPD Ham Radio software is available from UKEUG, as Ted says. See your heritage commercial software list and software library summary/prices/index -- or ask for another if you've lost the one we sent you! (SAE or postage please)

PRINTER CHECKING IN XBAS article, pp.8-9. We can supply WP80 (the Surrey Software 80-column wordprocessor. ALSO a version for the IBM-PC. Again, see UKEUG heritage commercial list).

GRAFDRAW REVIEW, pp.11-12. As Andrew says, a bargain from us

ALGOMA CENTRAL RAILWAY, ONTARIO:- Want 1996 passenger train details to plan your holiday? Send us 2 stamps for a copy.

BREDGAR & WORMSHILL LIGHT RAILWAY leaflet:- same again.

WANT A NICE DAY OUT, LOOKING ROUND THE STAFFORD SHOW IN NOVEMBER -- DETAILS OVERLEAF?

SO DOES STEVE POTTS -- SO OFFER TO GIVE HIM A HAND ON THE UKEUG STAND, SO YOU GET IN FREE, AND YOU BOTH SEE IT

STEVE SAYS YES, HE DOES TAKE A KETTLE WITH HIM!
(HE DOESN'T SAY WHETHER HE BREWS TEA OR COFFEE THOUGH!)

CH.ED:- ANYONE INTERESTED? THESE
ARE EXCELLENT MACHINES WITH BUILT-IN
PHONE & ANSWERING SYSTEM, BUT I HAVE
SEVERAL ALREADY. HOWEVER, I DO NEED
A TELEDRIVE ADD-ON DISK DRIVE UNIT

Mr G. James
58 Cromwell Court
Cromwell Road
Rushden
Northants
NN10 0DS
Tel. 01933-57374
23/5/96

Atten. Mr Tony Adams

Dear Sir,

I was advised to write to you by John Marriott who
said that you might be interested in buying a "Merlin Tonto".
I am writing this on mine, it has a mono monitor, 256kb
memory expansion, spare 128kb memory expansion, two plug-in
com. modules, all manuals and some microdrive cartridges with
most of the available software on them. It is in full working
order and has the Xchange software suite inbuilt in ROM. I
also have the Merlin mono printer which printed this letter.
I would sell the Tonto and display for £40.00 and the printer
for £20.00.

If this is of any interest please do call or drop

STOP PRESS ITEM - TED CAWKWELL SAYS CAN HE HAVE AN
EDITORIAL ASSISTANT PLEASE, AS HIS HEALTH IS NOT WHAT IT WAS,
AND HE DOESN'T WANT TO RISK LETTING US DOWN IF IT LETS
HIM DOWN.