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APOLOGIES IF YOU'VE BEEN INCONVENIENCED

by the lateness of this issue, & delay in answering letters.
        Last year I very cleverly fell onto a baulk of
timber with large rusty nails sticking out of it. I still
have the scars where 2 embedded themselves deep in my right
arm, and one issue of the magazine was lost while it healed.
        This year I bought the local village hall (to use
the materials to repair various buildings I'm responsible
for) but the site had to be cleared as soon as the new (much
larger) hall was completed. This coincided with the 2 weeks
I'd allowed to do a grand tour of the country on user group
business, on the way to and from the Spring Stafford Show.
Six 18-hour days of wrenching apart boards, purlins, joists
and trusses followed; the materials being recovered, carted
and stacked with the aid of a Ford Transit van and a granny.
        Driving to the show & back in the resulting state
of total physical exhaustion resulted in crippling & painful
repetitive strain injury up both arms and across both
shoulders, which is only now beginning to become bearable.
        As a result we are one magazine issue adrift, and
a mountain of correspondence threatens to engulf me, which
must have priority. I'll try & get the mag back on track if
I can. If not, you'll get a double-size Xmas issue instead.
***\ (Tony)

YOU MAY BE AWARE THAT

several magazine-based user groups have already shut down & left their members completely stranded and unsupported, and a number of other groups are also in serious difficulty.

There are a number of reasons for this, the main ones being lack of willing volunteers to share the workload, a lack of contributors, dwindling membership as users are seduced away by the Windows confidence trick, & diminishing membership subscription income failing to meet exponentially escalating printing costs and copier servicing bills.

We are immune to none of these factors -- nor to what is now breaking camel's backs:- paper prices vanishing through the roof as U.S.A. recession recovery boosts demand way above the world paper production capacity that remained intact after wholesale recession shut-downs and scrappings.

Admittedly your Chief Bottle-Washer's parsimonious housekeeping & persistent scrounging (born of a long light railway tradition of income never meeting expenditure) does enable us to ignore insignificant trivia like never actually having any cash in the kitty, but this is often at the cost of our pitifully-few volunteers burning the midnight oil far into the wee small hours, wondering why the heck we do it.

We'd love to give you a magazine that others would envy, but we'd need lots more input from you, and a good copier or digital printer to replace the wrecks bought cheap at auction that we can't afford to replace or buy parts for.

Paper cost is not a problem for now, as I seek out cheap lots at auctions, amateur printing shows, boot fairs & wherever else it is to be got (preferably without crossing palms with silver!). The best is used to print material for public use, & the rest is used for internal group purposes.

A fruitful source of paper is web offset printing paper reel ends, except that the copier you can read doesn't like glossy paper -- it's actually a Cornish china clay coat that absorbs atmospheric moisture. This boils & bubbles out as it passes through the superheated rollers that fuse the toner into the paper! Also, it's one heck of a task cutting enough paper -- ALL DONE BY HAND -- to print the mag, from a reel a yard wide by "if-you-think-I'm-going-to-unreel-it-to-try-&-measure-it-you-jolly-well-be-me!" long.

What we really need is a d-i-y paper converting engine, of Victorian simplicity, that slits the web of paper into two as it is reeled (by hand will do) from the core it comes on, onto another similar core. Either free-standing or table/benchtop, though the latter might be more practical.

Anyone with time, ingenuity and simple workshop skills/experience/equipment should be able to make one up for us. Brazing/welding ability might be useful, though at a pinch it might equally well be made from wood. PLEASE help with this if you can, - or with any help that you can offer.

EINSTEIN SECTION

Editors: Andrew McRobbie and Ted Cawkwell
****

XtalBASIC (XBAS) for Beginners:-
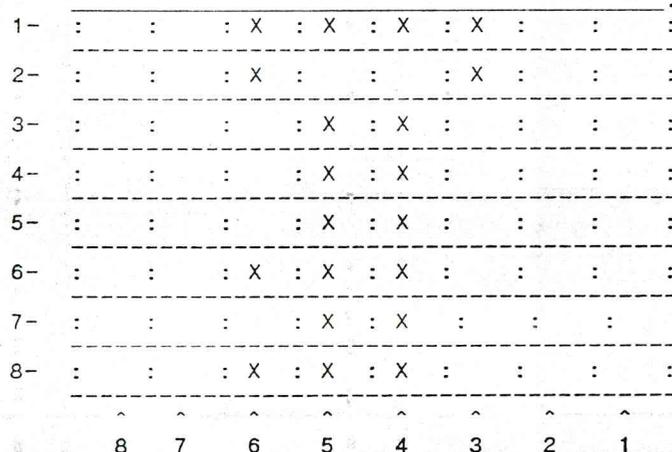The SHAPE and SPRITE commands - by Roy Prime.

(This series of articles was originally written by Roy for the Bedfordshire user group)

Sprites are strange creatures which are very common in games. However, when the average human (you or I) tries to create them they are harder than they actually look.

The actual sprite is defined by a command called SHAPE. This command is used with a number e.g. 144 and a "string" of numbers inside quotes. As this looks even more complex than it is, I will try to make it as easy as possible.

First draw a grid 8 * 8 on a page, or use graph paper.

Once this is done you can fill in each square or box with what you want, so if you wanted to design a key you would do it like this - rather like a cross stitch knitting pattern:-

```
    _____
1- :   :   :   : X : X : X : X :   :   :
   --------------------------------------------------
2- :   :   :   : X :   :   : X :   :   :
   --------------------------------------------------
3- :   :   :   :   : X : X :   :   :   :
   --------------------------------------------------
4- :   :   :   :   : X : X :   :   :   :
   --------------------------------------------------
5- :   :   :   :   : X : X :   :   :   :
   --------------------------------------------------
6- :   :   : X : X : X :   :   :   :
   --------------------------------------------------
7- :   :   :   : X : X :   :   :   :   :
   --------------------------------------------------
8- :   :   : X : X : X :   :   :   :   :
   --------------------------------------------------
        ^   ^   ^   ^   ^   ^   ^   ^
        8   7   6   5   4   3   2   1
```

This is a rough drawing of a key onto paper. The next thing you want to do is convert the picture to one the computer can understand.

To obtain the shape of the key in computer language, simply change the Xs to 1s as on the next page.

```
1-  :   :   :1 :1 :1 : 1:   :   :     .
    -----------------------------------
2-  :   :   :1 :   :   : 1:   :   :
    -----------------------------------
3-  :   :   :   :1 :1 :   :   :   :
    -----------------------------------
4-  :   :   :   :1 :1 :   :   :   :
    -----------------------------------
5-  :   :   :   :1 :1 :   :   :   :
    -----------------------------------
6-  :   :   :1 :1 :1 :   :   :   :
    -----------------------------------
7-  :   :   :   :1 :1 :   :   :   :
    -----------------------------------
8-  :   :   :1 :1 :1 :   :   :   :
        ^   ^   ^   ^   ^   ^   ^   ^
        8   7   6   5   4   3   2   1
```

Each 1 represents an X, which you have previously added (the shape of the key), while zeros are inserted to fill in the remainder of the boxes as spaces, as shown below. You get a block of 1's and 0's which make up a key.

```
1-  :0 :0 :1 :1 :1 :1 :0 :0 :     .
    -----------------------------------
2-  :0 :0 :1 :0 :0 :1 :0 :0 :
    -----------------------------------
3-  :0 :0 :0 :1 :1 :0 :0 :0 :
    -----------------------------------
4-  :0 :0 :0 :1 :1 :0 :0 :0 :
    -----------------------------------
5-  :0 :0 :0 :1 :1 :0 :0 :0 :
    -----------------------------------
6-  :0 :0 :1 :1 :1 :0 :0 :0 :
    -----------------------------------
7-  :0 :0 :0 :1 :1 :0 :0 :0 :
    -----------------------------------
8-  :0 :0 :1 :1 :1 :0 :0 :0 :
        ^   ^   ^   ^   ^   ^   ^   ^
        8   7   6   5   4   3   2   1
```

Then comes the nasty bit. On page 225 of the Introduction to Einstein there is a table, Decimal/Binary/Hex equivalents and here is where you have to do some work. For each horizontal line you you now have to look for the equivalent HEXADECIMAL number i.e. the first line is 00111100.

What has this got to do with the computer?

Inside the computer are lots of digital switches. i.e. A switch that is either ON or OFF. An example of a digital switch in the 'real' world is a light switch-simple eh?. The number 1 represents ON while O represents OFF.

More and more electrical goods are now using this method to identify when a switch is on. Look at the switch on a jug kettle and see for yourself.

This BINARY number, 00111100 in fact, equals the hexadecimal number 3C in the book, (on the LH page, fourth from the bottom in the Einstein Manual).

Going through the whole set you will end up with this:-

```
1-  0  0  1  1  1  1  0  0   = 3C
2-  0  0  1  0  0  1  0  0   = 24
3-  0  0  1  1  1  1  0  0   = 3C
4-  0  0  0  1  1  0  0  0   = 18
5-  0  0  0  1  1  0  0  0   = 18
6-  0  0  1  1  1  0  0  0   = 38
7-  0  0  0  1  1  0  0  0   = 18
8-  0  0  1  1  1  0  0  0   = 38
```

Quite a number of the later types of calculators have a facility to switch to BINary mode, which is what you have been using when laying out the key shape. You can enter the numbers and then switch to HEXadecimal mode to obtain the equivalent value.

For those of you interested in how the maths works out, the values for the first horizontal line are as follows:

NB Where the number is shown as O the value is zero. Whereas we start counting from 1, zero is a valid number for the computer so it starts at O. i.e. 1 through to 8 (for us) is the same as 0 to 7 (for the computer).

Position	7	6	5	4	3	2	1	0
BinaryNo.	0	0	1	1	1	1	0	0

$$= 0^{**}7 + 0^{**}6 + 2^{**}5 + 2^{**}4 + 2^{**}3 + 2^{**}2 + 0^{**}1 + 0^{**}0$$

$$= 0 + 0 + (2*2*2*2*2) + (2*2*2*2) + (2*2*2) + (2*2) + 0 + 0$$

$$= 0 + 0 + 32 + 16 + 8 + 4 + 0 + 0$$

Total = 60 or 3C in hexadecimal.

You now need to put all these numbers together in the SHAPE command in Xtal BASIC:-

```
10  SHAPE $$$,"3C 24 3C 18 18 38 18 38"
```

($$$ equals any number from 144 to 225)

When all these numbers are added together they tell the computer to define SHAPE $$$ to be a key shape

Now we have created our key, it would be nice to put it on the screen and move it about a little.

SPRITE. This is the command we will use to do this, but first we need to know a little more about it before we start.

Sprite needs certain parameters to work. The command in full is SPRITE P,X,Y,C,SN

The letter P in this case stands for priority (0-30).

The priority is very important and can be used to make some very interesting effects. The higher the number, the lower the priority given to it.

Basically this means that something with a high number (for example 20) will seem to pass behind something with a lower number (of say 5).

The letters X and Y stand for the screen co-ordinates. X is anything from 0 to 255, while Y is anything from 0 to 191 (X is across while Y is up).

C stands for colour. This can be any number from 0 to 15.

SN. is the shape number. If you have defined SHAPE 144 as the key, to tell the computer to put it on to the screen, SN becomes 144.

After giving these symbols suitable numbers, you have defined a sprite and displayed it on the screen, but can you move it ?.

Below I have listed a very basic program which moves a few keys around. See what you think!.

```
 5 REM    SPRITE MOVEMENT PROGRAM by ROY PRIME.
10 CLS
20 MAG 0      :REM ** MAGNIFICATION SIZES CAN BE 0 OR 1 **
```

```
30 SHAPE 144,"3C 24 3C 18 18 38 18 38"
40 FOR F=1 TO 191
45 L=RND(15)
50 SPRITE 1,10,F,1,144
60 SPRITE 2,190,F,2,144
70 SPRITE 3,F,10,3,144
80 SPRITE 4,F,190,4,144
90 SPRITE 0,F,F,L,144
100 REM ** PRESS SHIFT + BREAK TO STOP THE PROGRAM **
110 NEXT F
120 GOTO 40
```

This program moves a few keys around! Play around with it and have some fun!

****
E256 Drive Belt Repair -- Bob McDonald
~~~~~~

When the 256 drive packed up, I opened up the computer & had a look at the situation. Having put the lot aside once or twice, I thought, well there's nothing to lose. Have a go.

To start with, there are six star headed screws all the same length which hold the the computer together. Remove them and carefully separate the two halves of the computer. They are still connected together by the two leads from the keyboard. Carefully remove these leads from the base section leaving them connected to the top section.

To remove the drive, disconnect the large and small leads from the rear of the drive then remove the four screws holding the drive to the computer base. Remove the drive. The circuit board has to be removed next. Two BA screws are located underneath the drive. Several small cable connectors have to be disconnected before these two screws can be removed and the circuit board pulled rearwards and lifted clear. The drive and belt are now visible.

In my case the drive belt was badly stretched. I removed it and replaced it with an elastic band which was a good bit smaller than the belt but about the same width. The rough measurement of the old belt was 4.4". The elastic band (available at that time) was 3.1". I re-assembled the computer, plugged in, switched on but still no drive.

I repeated the above procedure to find the the elastic band had come off the drive pulley. On further examination, I noticed the small pulley at the drive end had a deep flange but the large pulley at the driven (front) end had no flange. The edge of the pulley has nothing to prevent the belt from slipping off if it is so inclined.

I re-assembled again, first making sure that the elastic
band was in line and running true. To my surprise, BINGO,
everything worked and is still doing so.

It should be fairly simple to fix something on top of the
large pulley, or (as suggested by a member recently) a card
above the belt to keep it in line.

The life expectancy of the elastic band could be doubtful,
of course. Time will tell. Meantime I have written to
Sharward with an SAE asking about belts and availability of
a suitable second drive and I await their reply. I have also
written to B&H with the same request. Belts are available at
a cost of ten pounds plus two pounds postage and packing.
They look about fifty pence worth to me.

Incidentally a disk to set the speed of a drive would cost
twenty pounds. Cost to have it sent to them to do the job is
twenty five pounds, plus carriage both ways.

NB. The 256 manual quotes the internal disc drive as a
Panasonic EME-150 low profile inch disk drive. In fact the
drive fitted to mine is a Matsushita Electronics Co. Ltd.
EME-150C. This is a dual sourced item.
            **Ch.Ed:- Panasonic seems to be the brand name
                used by Matsushita for its products.**
            ****
     TEAC drives FD235F and FD235H identified by Clem Cole
~~~~~~
Further to the query in Ted Cawkwell's project article an
issue or two ago, FD235HF is the high density version of the
FD235F double density drive that Ted used. Clem obtained
this data from his Farnell Catalogue. More such data please!
            ****
     AEGOS! Reviewed by Roy Prime (& available from UKEUG).
~~~~~~
     The AEGOS games pack has 7 games for all ages.
   (ED. Roy has missed one game out as he only mentions six)

First there is my personal favourite, <u>DICE</u>. This is based on
the Yahtzee(TM) game by Waddingtons(R). You have 5 Dice and
you have three throws to get the dice in a certain order.
        Some of the orders are:-
                3 of a kind
                4 of a kind
                Dice (5 of a kind)
                Full house. Three of one and two of another i.e. 2
                    Sixes and 3 Ones.
                Low straight. i.e. 1,2,3,4 or 2,3,4,5.
                High straight. i.e. 1,2,3,4,5.

The game is for up to 6 players, & each player has 6 games.
The winner is of course the person with the most points.

CONCENTRATION
     Well, this is easy to play, yet hard to remember! You
have a full deck of cards face down, the idea is to match up
every card on the deck. You type in a number from 1 to 52
and the computer will turn over a card for you. You have to
try and match this card with another. Once again you must
type in another number. Hopefully they will match. If so,
they will remain face up. If not however they will turn face
down again! This becomes a lot easier as you progress as
there are less and less cards to chose from. The quickest I
have seen anybody complete this game is 43 turns.

BLACKJACK
     Well this game speaks for itself! Based on the famous
game Blackjack, you are dealt the standard 2 cards. If you
are lucky you might just get a 21, if not you can decide
whether to stick or twist depending on how lucky you feel.

IN BETWEEN
     In this game you are dealt 2 cards. If you think the
next card will be in between the first 2 cards you were
dealt, you type Y and enter the amount you want to bet. If
you think it isn't going to be in between you type N and
again enter the amount that you wish to bet. If you win you
will double your money. If however you lose, your money will
be halved. The game ends when either you have run out of
money or you break the bank (over £500!)

Here's two for the kiddies !

PLANK
     Very similar to Hangman, the only difference being that
he jumps off of a plank

ROMULANS.
     This will show that even if you have a quick eye you are
not likely to see this. You are shown up to 99 Romulans on
the screen and given about 2 seconds to estimate the number,
then type it in! If you are dead on you will be given about
10 laser points. (You start off with 100). If you were too
far over or under, your lasers will jam -(Game over!). If
you are quite a bit over or under, you will be shot at and
lose 20 laser points. If you are about 10 over or under, you
will lose 10 laser points. If you are only about 5 out, you
are given about 5 laser points. The game ends when you have
amassed 500 laser points (very unlikely!), or you lose all
of your laser points (Very likely!), when your lasers jam.

GOLF - Written by our very own Ted Cawkwell.
     There is a total of 18 holes waiting to be conquered
and you are just the person to do it! You are given a full
set of clubs and asked to - Go play golf! This requires a
bit of mathematics and you are likely to find yourself in a
bunker, up a tree or in the middle of a lake. This game is
fun when you get to master it. However, before you do that
you will get used to seeing "Sunk Putt" or "Double Bogie"
quite a lot

****
GAME TIPS by Peter Oxton
~~~~~~~~~~~~~~~~~~~~~~~~

CHUCKIE EGG: pressing all four direction keys at once
shifts you on to the next screen.
*** Ch.Ed. On the 256? How is it done on the TC-01? ***

PUNCHY: pause the game: <SHIFT> + <H> Hold down <CTRL> while
typing <BOOTSY> This freezes your score, but makes you
invincible - a lightning flash appears by the score to show
you're in this mode. Restart the game with <SHIFT> + <G>.
*** Ch.Ed. Does this work on both sorts of Einstein? ***

When you've crossed that impossible screen, you can revert
to normal scoring and death by repeating the same three
steps. Not that I've ever done this, you understand.
****

Pascal on the Einstein - the JRT way. Part 1   (Sid Dunn)

In issue 68 attention was drawn to the extensive Pascal
package - JRT Pascal - available from our software library.
This resides on volumes 287-293 (totalling 848k) & includes
a 220 page manual. Print this out before you begin.

While it is worthwhile acquiring the complete set of
disks, encouraging results can be got from a carefully
chosen subset of the 167 files provided. Some of these -
like NS and TYPE1 (present on most of the library volumes) -
are generally useful utilities. I have found it possible to
work with one 3" drive holding the following:-

```
0: PASCAL0.INT : PASCAL1.INT : PASCAL2.INT : PASCAL3.INT
0: PASCAL4.INT : PASCAL .LIB : JRTPAS3.COM : EXEC   .COM
0: XED    .COM
```
              This selection occupies 124k.
*** AND IS NOW AVAILABLE AS SOFTWARE LIBRARY VOLUME 362. BUT
DON'T FORGET TO ORDER THE MANUAL TOO, ON VOLUMES 290-292 ***

Your public library should have several books suitable for
the Pascal learner, so I will concentrate on how the
language is made available on the Einstein.

The first step is to create a source file (the program)
using whatever editor you have which will produce an ASCII
file. Our example is a simple routine for the roots of a
quadratic equation:

```
PROGRAM quad;{finds real roots of a quadratic}
{declare variables}
VAR a,b,c,disc,x1,x2:REAL;
            YN:CHAR;
{offer key-press to break out of loop}
FUNCTION ACCEPT(test,c1,c2:CHAR):BOOLEAN;
  BEGIN
{use of SET notation}
    ACCEPT:=test IN [c1,c2]
  END;{ACCEPT}
{fetch function from the library}
FUNCTION SQRT(x:REAL):REAL;EXTERN;
{main program}
BEGIN
 REPEAT
  WRITELN('Enter values of a,b,c');
  READ(a,b,c);
  disc:=b*b-4*a*c;{must be +ve for real root}
  IF disc < 0.0 THEN
    WRITELN('roots are complex'){bad news !}
  ELSE
    BEGIN
    {calculate real roots}
     x1:=(-b+SQRT(disc))/2*a;
     x2:=(-b-SQRT(disc))/2*a;
    WRITELN('roots are ',x1,x2);
    WRITELN;WRITELN;
  END;
    {offer another go}
    WRITELN('Again ?');
    READ; READ(YN);
 UNTIL ACCEPT(YN,'N','n');
    WRITELN
END.
```

This should be saved as QUAD.PAS;

The next step is to run the compiler on this with the
command JRTPAS3 QUAD. If all is well, another file called
QUAD.INT will be added to the disk.

How the program is run will be covered in the next issue...

*** Ch.Ed.- Do try your hand at this. I dabbled with BASIC
many years ago, but found Pascal far easier to get into. ***

Another useful BASIC listing for you to tap in

```
10 REM ****************************
20 REM *    THE BRITISH CALENDAR    *
30 REM * by David Williams SEP 93 *
40 REM ****************************
50 BCOL7:TCOL1,0:CLS:TCOL1,0:GCOL1,0:DIMM$(12),D(12)
60 FORA=1TO12:READM$(A),D(A):NEXT
70 A$=MUL$(" ",21)
80 D$="SunMonTueWedThuFriSat"
90 S$="034025036146":GOSUB400:GOSUB440
100 PRINT@15,6::INPUT"YEAR :";Y
110 IFY<1ORY>999999THENPRINT@21,6;A$:GOTO100
120 PRINT@15,9::INPUT"MONTH:";M
130 IFM<1ORM>12THENPRINT@21,9;A$:GOTO120
140 Z=Y-1:GOSUB400:IFY<1800THENCY=0
150 A=INT(Y/100-17.01)-INT(Z/400)+4
160 IFY=1752ANDM<10ORY<1752THENA=3
170 X=Y+L+VAL(MID$(S$,M,1))-A
180 IFM<3ANDY<>4*LTHENX=X+1
190 IFM>2ANDY=CYANDY<>QYTHENX=X-1
200 N=X-7*INT(X/7)
210 IFM=2AND(Y=4*LANDY<>CYORY=QY)THEND(M)=29
220 CLS:GOSUB420:TCOL1,11
230 FORA=7TO17:PRINT@10,A;A$:NEXT
240 DRAW55,47TO55,136TO192,136TO192,47TO55,47:TCOL1,10
250 PRINT@10,8;Y;"A.D.  ";M$(M):TCOL1,11
260 FORA=1TO7:W$=MID$(D$,(3*A)-2,3)
270 PRINT@11,9+A;W$:NEXT
280 IFY=1752ANDM=9THENG=1
290 FORX=1TO6:FORV=1TO7
300 W=W+1:IFW=3ANDG=1THENW=14
310 IFW>D(M)THENV=7:X=6:GOTO350
320 IFW<10THENQ=3:ELSEQ=2
330 PRINT@8+G+Q+3*X,V+9+N;W
340 IFN+V>6THENN=0:V=7
350 NEXTV,X:TCOL1,0
360 PRINT@3,23;"Key ESC to quit or ENTER to repeat:";
370 A=INCH:IFA=13THENRUN
380 IFA=27THENBCOL4:RST:END:ELSE360
390 REM ******* SUBROUTINES *******
400 CY=100*INT(Y/100):L=INT(Y/4)
410 QY=400*INT(Y/400)
420 PRINT@10,1;"THE BRITISH CALENDAR"
430 DRAW62,175TO180,175:RETURN
440 PRINT@3,22;"Select period then press ";:TCOL15,6
450 PRINT"ENTER ";:TCOL1,0:PRINT"key.":RETURN
460 REM ****************************
470 DATAJANUARY,31,FEBRUARY,28,MARCH,31,APRIL,30
480 DATAMAY,31,JUNE,30,JULY,31,AUGUST,31
490 DATASEPTEMBER,30,OCTOBER,31,NOVEMBER,30,DECEMBER,31
```

YOUR LETTERS -- and lots of them!
~~~~~~~~~~~~

It's nice to see that someone read my letter in Issue 68. In answer to John Briggs' comment about the relative speed(?) of WDPRO, I can only think that your handling of a given program is in direct proportion to your level of desperation to avoid administrative chaos if that program doesn't work!

Being the only word processor we had, I think we developed a fair speed in using it, and I certainly found it simpler and quicker than Wordstar 3.3. Another minor advantage was in proof reading, since text appears in a different screen position during input from that shown under a screen "Print" display, giving you a better chance to spot typos.
Each to their own, I suppose...

Peter Oxton.

****

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

Here is Tony's reply:-

Many thanks for your most encouraging 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.

<div align="right">Tony</div>

Dear Tony,
I have just received Issue No.73 of the Einstein Magazine.
I was very pleased to see that you are still running the special offer on back numbers. As I would like to take advantage of this deal, I enclose my cheque for £20.
To update your records, I now have a total of four TC01 Einsteins in good working order, one of which has twin 3" drives, 80 column card a Tatung monitor and a 250K silicon disk. In addition I have one TC01 in pieces.
I have also managed to secure a copy of the hardware manual as well as several software packages (see below). So far I have been unable to obtain an E256 but I do keep a weather eye on Micro Mart just in case one should appear. My collection of old machines has continued to grow and now includes machines like the old Gemini and Challenger range as well as Sirius, etc.
All the best.

<div align="right">C. Wallis 1658</div>

AEGOS	AEGOS GAMES	APOLLO11	BATTLE
BBCBASIC	BOOTMAN	BREAKOUT	C++
CHESS	CHUCKIE EGG	CURSED	DEFLECT
DEVPAC80	DISCMOD	ASSY LANGUAGE	LOGO
ENCOUNTER	FUKUNG	HANGMAN	HIGHSOFT PASCAL
INFOTEXT	KINGS VALLEY	KUMA DATABASE	KUMA SPREADSHEET
KUMA WORDPRO	LAZERSOFT UTIL	LES FLICS	MASTERMIND

MAYHEM	MERLIN TRNSFR	N'VADERS	OTHELLO
PELMAN	PETE'S UTILS	PHROGGER	PONTOON
PROGRAMMER KIT	PUNCHY	RAIDER	SEND/RECEIVE
SNAKES	SPECTRUM EMUL	SS UTILS	STARQUAKE
STOCKS	SUPERFORTH	SYNTEL	TASPRINT
TASWORD	CRACKER	TIME PILOT	TOMB OF KARNAK
TRAXMAN	TYCOON	VIEWDATA	XBAS
XBAS TUTORIAL	KUNGFU	ZRIM	

<div align="center">************</div>

Dear Tony,
I hope you can make sense out of the enclosed item on my Amstrad Notepad. I've found it quite interesting if a bit frustrating at times.
I am having a bit of trouble with the 256 at present, the notorious disk drive defect has shown up at last. I stripped out the drive to have a look-see but didn't go as far as removing the circuit board. On each occasion, when re-assembled the drive worked for a day. It appears to be stretched. (See Bob's article in project section)
I am very pleased to see that you are getting some real response from some members to your call for assistance and it seems to be mostly from members with some know-how.
(Every member has knowledge which could be shared. If we all contribute, a formidable amount of information becomes available to all.-ED.)
I look forward to future magazines with some anticipation.

<div align="right">Bob McDonald, 221</div>

<div align="center">*************************</div>

<div align="center">HINTS AND TIPS for serious users</div>

from Dick Keynes:-

In WP80, the labels program does work but needs correct positioning of the titles to prevent them being printed off the label.

For those of you with an 80 column card and an auto load program like SSS's Popup, set Albert to boot up in 40 Column mode use the autoload program to set the function keys first then load WP80. Switching between 40 and 80 column mode makes it easier to look at the second screen than the cryptic notes at the top of the keyboard.

Ian Palfrey, in Issue 69 was looking for help and some good books with examples to help him with dBASE II.
Dick says that he does not need the manual for this. There are some excellent examples of using dBASE on PD 209 A/B. All the commands are printed out in full. The program comes from S. Leon, via the SIG/M library of pd software.

Apparently two databases covering an inventory and orders
system, with two extremely impressive search programs both by
index and string, are included. Editing and additions to
records are available, the latter program being very well
explained.

Dick found several bugs in the program but does not
know if this was due to his errors or in his installation of
dBASE II. The first was in the sign-on program verifying the
date which does not crop up if you enter the date through
dBASE. To clear the date, it is necessary to re-arrange the
logic checks but is best ignored as proving all the fault
paths is daunting. To get round the problem it is best to
answer "N" to the message.

Another error appears in several places in the form of an
objection to the phrase:- 'If change1 = t'.

Possibly there is a mix of logical and relational
operators here. The removal of '= t' makes it purely logical
and solves the problem. Dick finds it impossible to return
to the starting menu and wonders if this fault was ever
noticed. It means that it would be impossible to get all the
files on one 3" disk. Dick has his running on a 3.5" disk
using DOS 2.5 formatted to double sided. There are probably
several methods of clearing this bug but he has used the
Return command. This together with the RELEASE ALL command
re-enters the menu but requires re-initialising memory
variables 'true' and 'command' ie.'t to true and STORE '?'
to command.

Another program from the same stable is available on PDs
116 & 117. This covers an accounting database together with
a building and tenant database. The same facilities as with
the previous program are available but this is far more
comprehensive and not as well documented.

Jim Ellacott's introduction does not stress that it is
necessary to run the initialising program on first entry as
this provides the file MANAGE.DAT (memory variables needed
to run the program) and sets up default drives and controls.

To show how versatile Dbase can be, a program by Rod Smith
uses a .DBF file for writing and storing letters.

Finally Dick warns that these programs keep the disk drive
spinning and printer chuntering away.

(Thanks for these notes and your kind remarks. If
anyone would be prepared to write an article on Dbase
it looks as if it would create quite a bit of interest
- ED.)

Our first new overseas member, Carlos M.C. Silva, has
written to Tony for information on the Einstein. He
apologises for his bad English, but you will understand what
he is saying. Not only is he new to the Einstein, but faces
the additional difficulty of following the instructions in a
foreign language.

Dear Sirs,
I have buy one secondhand Tatung Einstein TC01 but just
now I have a many difficulty to work with them, about my
unknowledge about the operating system (I have a little
experience with the Spectrum 128 +3). Please help me about
my difficulties.
a) I don't know the operating system.
b) I have a master disc system, but I only insert the
disk, press the key N, and after press the CONTROL with
BREAK.
After this I see in monitor:-

Tatung/Xtal DOS 1.11   (c) 1983-1984
0: flashing cursor.

c) I know press DIR to see the Directory, insert the command
BACKUP, FORMAT or X.
THIS IS ALL I KNOW ABOUT THE EINSTEIN.
d) If I insert another command like load, save (like a
Spectrum system) the computer says NO FILE, INVALID NAME
ect.

About the exterior of the computer, please tell me about the
connections:
KEYBOARD: I thing is the same like the Spectrum but I
do not understand the keys F0, F1, F2 and so on. This is for
only a special program?
RIGHTSIDE OF THE KEYBOARD: 5 boutons or connections.
TV. I know this connect the computer for TV monitor and
sound
SOUND. OK to more or less sound.
ANALOGUE 1 & 2. What functions for that? Is this a
input or output?
RS232. For connect of other hardware.

REAR OF THE KEYBOARD (from right to left and up to down)
UNIT OF 40 COLUMN. I presume is to see 80 columns in
the monitor. Right?
Video Socket. To connect to the monitor input (YUV-
RGB)? Connection of 30 pins. To connect in the Tatung Pipe?
Connection of 220/240 AC. I know about.
Switch ON/OFF. I know about.
YUV/RGB Select (6 connections), for what? To connect where?

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17 pins to connect a printer. OK but please inform me if any printer. All?

    8 Pins Connection User Input/Output. To connect where? Input/Output where hardware?

    30 Pins connections (Tatung Pipe). OK. To connect with 80 columns unity. Right?

    17 PINS EXTERNAL DISK DRIVE. OK. To connect a 3th Drive but only a 3" disk drive or is possible work with a 3.5" drive too?

    Reset. OK. To reset of course.

REAR OF MONITOR
    Switch ON/OFF. OK. I know.
    Fuse. OK. I know.
    YUV-RGB. To connect with a YUV-RGB in the rear of the keyboard? What a fonctions?
    To connect of 220/240 AC. OK. I know.

PS Is possible to use a mouse? What a type mouse and where the connections?

****
COMPETITION TIME

John Briggs has suggested the following for a competition and it is one that everyone can do. Simply let us know what program you would like to see in the software library list.

    If you have lost your software library summary, a SAE to Tony (address on back page) will bring you one.

    The competition will be judged on the most useful, most unusual or simply most fun suggestion. Don't wait till another time to jot down suitable ideas, start now.

    To give you some encouragement, the winner will receive a free disk of library software of their choice OR a serious software disk from our list OR a year's free membership. The editors will decide which prize to award, on the basis of quality and quantity of YOUR response.

Finally there are no apologies for listing the software that members have in their collection. It lets everyone know just what is available on the Einstein. So where's your list?

--@@@-
THE NEXT ISSUE includes:-
More basics for beginners, JRT Pascal Part 2. and MORE OF YOUR LETTERS -- so keep sending them in!
****
PLEASE send your letters, articles, hints, tips, questions, answers, articles or ads ON EINSTEIN DISK (any size). A copy on paper too is very helpful, but not vital. If you use a switchable drive in 40-track mode PLEASE SAY SO! (Most other drives won't be able to read such disks without errors).

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CONTRIBUTING TO THE MAGAZINE
PLEASE DO! Articles at every level of expertise are very welcome, as are letters, hints, problems, queries, ideas, & tips. We can't print it if you haven't sent it in yet! Tell us about your software & hardware, how you use it, what for -- or tell us about more technical matters if you prefer.

    Many of your letters include valuable ideas or info, so ALWAYS assume that we will want to publish you in the mag.

    Please put it on disk, and send a copy on paper too if you have a printer. If not, send it on disk anyway. The issue you are published in is credited to your subscription. We can now handle any Einstein or PC (or PCW 3") disk format (& some other formats too). YES, YOU DO GET YOUR DISKS BACK!

    If you don't have a printer, send it on disk anyway. No word-processor? We sell them cheap to members! Or just use the XtalBASIC (XBAS) editor -- more on this in the next mag.

    At least one member finds word-processor software too hard to get to grips with. This is an easy one to solve. Let us know if you have this problem -- with any other type of software too -- and which programs are a problem to learn. Then we'll show you how to overcome this, simply and easily.

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Where are all those disks you offered us, with the boot-up tracks and/or special software for the EINSTEIN HARD DISKS? We can't progress on making this upgrade available without the software, as ACC junked all theirs 2 years ago, under the impression that no-one still used Einsteins any more.

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OTHER "GOLDEN OLDIES" COMPUTERS
This mag became ALT MICROS, then ALL MICROS many moons ago, but it's never really happened. Lots of members have other micros as well as Eineys, & user groups for them are closing down at an alarming rate. We are NOT going to cut down on Einey content -- only YOU can do this by not contributing to the mag! -- but we'll willingly help out by making this page available for members to discuss & share info about machines without other magazine support. To get the ball rolling, why not send us details of your non-Einey hardware & software. If you already have, then remind or update us -- on disk.

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DRAGON USER GROUP REPORTS that Royal Mail are now using some sort of coding or scanning equipment that scrambles files on computer disks in the mail. We've had problems too. Remedy? Try wrapping disks in aluminium kitchen foil, & clearly label the outside MAGNETIC MEDIA - COMPUTER DISK - WITH CARE

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COMPUTER & OTHER SHOWS:- 27 AUG, CLACTON (Essex), Amateur Radio & Computers. 11 NOV, STAFFORD, All Micro Show (01473-272002 for info) // 02 SEPT, Four Marks, A31 (4m W of Alton) British Printing Socy branch open day (& steam trains too!)

(No.75) EINSTEIN MAGAZINE & ALL MICRO NEWS (MAY-JULY 1995)
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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 and 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 WAS £18, IS NOW down to £9 per
  year if you pay for 2 years (or more) at a time. If you
  can't afford even this, tell us the problem. We'll happily
  accept subs that are paid in some way other than cash.
  (Members at addresses outside the UK pay slightly more)

Please make all BANK DRAFTS, CHEQUES, POSTAL ORDERS, etc.,
          payable to EINSTEIN USER GROUP.

An information pack -- including details of our range of
EINSTEIN SOFTWARE -- will be sent on receipt of TWO STAMPS.

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!

BACK NUMBERS are available TO MEMBERS at £1 each for single
    copies (or £5 for 6) incl.p+p. BUT SEE OFFER, ABOVE!!!
        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 - 74
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                BUMPER BONANZA 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! Around 50 are still in print.
They'd normally cost you AT LEAST £40, but our special
    half-price offer -- £20 for a copy of every issue
      still in print -- is now open to ALL MEMBERS.
                        SOFTWARE
Enclosed with this magazine you should find the first part
of our QUALITY HERITAGE SOFTWARE list, plus update info on
the software library volumes. PLEASE NOTE THAT volumes 217,
322, 323 & 336-341 ARE WITHDRAWN (but may be available as
heritage software). Volumes 353/357 are now combined as 353.
  If you already have either 353 or 357, return it (with
    suitable packing & return postage) for a free update.
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.