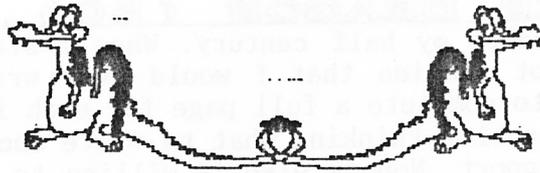


The Newsletter of the National Dragon User's Group

DRAGON



UPDATE

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The Gaffer's Bit

The 94th issue of Update do you think we'll be getting the traditional telegram from H.M. when we get to the century?. Somehow I doubt it, but you never know your luck, I suppose. Anyway, to more important matters. Many thanks to all of you who sent in cash towards the cost of the replacement copier ... we have now managed to cover almost two thirds of the outlay, thanks to your generous contributions, and this has done much to repair the dent that the purchase made in the Group account, and to ensure that the old Group keeps going for quite a while yet!. I really do wish that I could find a way to convince people that the purchase of a PC machine does NOT mean that they no longer need their Dragons. We've had another two "resignations" in the past month from people who have bought 386 and 486 machines (judging by their letters, complete with Windows 3.1, WordPerfect 6.0, and a BJ type printer), and they both seem to imagine that these magic boxes will solve all their computing needs and problems! ... they'll learn, in time, but by then their Dragons will be long gone, and the loss of face involved in having to tour the car boot sales for another one, and then rejoin the Group is usually too much to even consider!. I've seen it too many times before, but people never seem to learn from other's mistakes!. The amusing bit is when someone wants a special routine/program that isn't available for the PC ... and discover that programming one in ANY language is a sick joke! ... that's when they start to realise that disposing of their old Dragon equipment wasn't really such a good idea after all!. By the way, have you noticed that since the advent of the "Windows 3.1 standard" everyone's letters look exactly the same? ... same semi-American page layout, same set of type styles, same old spelling errors inserted by their "Europeanised" American spell checkers?. Boring, isn't it?. If it's supposed to "improve the image" it has the reverse effect so far as I'm concerned. Oh well, that's progress for you ... I think!. Paul Grade.

The Editor's Bit...

Once again, another Update, another ten minutes spent wondering what to write for the front page. It's not fair, really - a common excuse from the Group members who never write anything is that they don't know what to write about. Well, I don't know what to write about, but here I am having to write it anyway! And what's worse, you lot all sit there and read it! - I'm sure there must be a medical term for this kind of insanity! Although, somehow I doubt that you could stand more than the regular half-page before becoming terminally bored, so if you want to avoid the potentially life threatening situation of a 100% bat-crafted Update, it might be advisable to put your own thoughts to paper and send them to me. Try it! You might like it! (oh no, wait, that's 'QT Instant White Tea', isn't it?). Something! Anything! And yes, Ron Warrer, don't think you've got away with it - your piece is pencilled in for next issue, with thanks. See? All articles gratefully received and considered! Here's another thing that made me wonder. Has anyone else noticed the eerie similarity between our beloved Chairman Mao Grade, and the bloke on The Grassy Knoll? I Think We Should Be Told! SW.

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PEEKING THE DRAGON (50). MIKE STOTT

Well, I have finally reached my half century. When I started out writing this page many years ago I did not imagine that I would ever write fifty of them. I still wonder now how I manage to complete a full page for each issue of Update.

This month there is no problem thinking what to write about. Ossett has finally been killed off by lack of support. Nobody else is willing to put on a Dragon Show so, as Paul told you in the last issue, I am going to organise one on behalf of the Group.

To keep costs down I have approached one of my local schools to run a show in conjunction with one of their fund-raising activities. Because of this it is going to be held on a Sunday (25th September 1994) instead of the usual Saturday. It will start at 11am and finish about three o'clock. The venue for the show is **BLACKLOW BROW PRIMARY SCHOOL, TARBOCK ROAD, HUYTON, MERSEYSIDE**, which is on the south-east side of Liverpool. Access to the school from the M62 motorway is very easy and full details are on the sheet and map enclosed with this issue of UPDATE. If anybody has any problems understanding the instructions then please contact me and I will help them.

Due to the fact that parking is limited within the school grounds the only people who will be able to park inside will be those who have purchased advance tickets for 1.50 per adult (0.50 for accompanied children).

On the day admission will be 2.00 for adults (0.50 for accompanied children) and parking will be either outside the shops which are just a hundred yards further down the road on the opposite side or in any of the side roads which are around.

For those coming by train there are trains every hour to Huyton Station (less than five minutes walk away) from Manchester or else you can have a twenty minute bus ride from Liverpool Lime Street to the school.

If anybody is coming this way let me know and I will give them fuller details of the buses and I will even inform the drivers of these buses where to drop them off.

If anybody uses AUTOROUTE to plan their journey use HUYTON WITH ROBY as the destination. So what will we have to offer.

If not many people turn up you will be attending the very last Dragon Show.

NDUG, UP2DATE, and PD LIBRARY will definitely be there as this was arranged even before a date was set. THE GRAPHICS LIBRARY will be there if Ray Smith can find somebody to run the stand for him on the day. Do not forget to bring a supply of disks with you so that they can put copies of your favourite pictures on them.

PSE and DRAGONFIRE are the only companies up to now to confirm that they are coming and Ian Jones hopes to be there with his Midi Interface. I suggest you contact as many of the other companies as you can and try to persuade them to come as this will only happen if they know a decent number of people will attend.

If anybody wishes to take a table for the day to sell any of their bits and pieces a limited number of tables will be available on a "first pay gets a place basis."

The cost is 5.00 for a table (without power).

If possible I hope to run a "BRING AND BUY" stand for you to sell odd bits on but this will be dependent on me having volunteers to run it and also if there is enough space left.

I believe that the ORIC USERS GROUP have asked Paul about the possibility of sharing our show but as yet I have not heard from them. I would like to keep it pure Dragon but if there is not enough support then I will certainly open it up to others.

It is up to you and the companies whether you want to keep it all Dragon.

Apart from the computer show there will be an AUTUMN FETE AND CAR BOOT SALE which will have many attractions and side-shows to make it a fun day out for all the family. If anybody wants to fill their car with unwanted items it will cost them 5.00 for a space at the car boot and there is usually quite a good turn out.

Refreshments will be available all day and there is a pub less than three minutes walk away. There will be a school raffle which usually has some very good prizes.

In the past we have always had good weather for this Fete so hopefully it will be the same this year. If the Dragon Show part is a success then hopefully we will be able to organise more in the future. If it flops then I am afraid it will be the last one.

As always I will put you in touch with someone to help you with your problems.

Hopefully there will be at least some of the Ossett atmosphere.

That is it.....it is up to you.....come in your droves.....persuade the companies to come.....help to keep the Dragon scene going.

OS9 Terminal Emulation.....M. Cowen

This is the second half of a report on a project I started over a year ago. Since then I have been distracted by restarting my own company, and working abroad. However, at last I have some spare time again, and progress has been made. The project is to enable a Dragon 64 under OS9 to operate as a dumb terminal online into another machine. In my case the other machine is an Atari also running OS9, although that does not affect the Dragon software.

The starting point was a program EMUL written by Chris Jolly. This is an excellent piece of PD software in its own right, which includes file transfer options in addition to the terminal emulation. I tried to make a dedicated emulation program which would:

- be as fast as possible in servicing the async port
- provide a better keyboard scan (less missing characters in the middle of words)
- be more adaptable for other host machines

To do this I have made compromises. The biggest one is that I disable the normal OS9 multitasking while the emulation software is running. Since you can't run another process and get any reasonable speed out of the acia anyway, I decided this was an acceptable sacrifice.

The software controlling the acia and the async line is basically Chris Jolly's original in C. I couldn't improve on it. This is the heart of the system.

```
char *acia = 0xff04; /* this could be changed for other computers */
```

```
char chs;
```

```
    for (;;)
    (
```

```
    (
```

```
/* first try to read from the ACIA */
```

```
    if (acia [1] & 8)
```

```
    (
```

```
        chs = acia [0];
```

```
        write (1, &chs, 1);
```

```
    )
```

```
/* Then try to read from the keyboard*/
```

```
    if ( (chs = key in(key work) ) !=0)
```

```
    (
```

```
        /* Don't transmit the ENDIT key */
```

```
        if (chs == ENDIT)    break;
```

```
        /* transmit a ch, wait till acia ready, then send it*/
```

```
        while ((acia [1] & 16) == 0);
```

```
        acia [0] = chs;
```

```
    )
```

```
)
```

This bypasses the OS9 acia handler. This has the advantage of speed, and the

disadvantage of being less portable. As I'm able to get up to 2400 baud out of it this way, I'm not complaining. The output to the Dragon terminal is still via the normal drives. I'm using the 80 column card, and if anyone knows anything about controlling the beast, then I could probably improve the display no end. As it is, screen mode programs (such as editors) give no end of problems, and don't really work satisfactorily. This is the biggest lack in the software at the moment.

The keyboard scan is the major change. Ideally I would have liked to have replaced the existing driver, but that seemed a rather drastic step. What I have done is turn off the clock interrupt, so disabling the normal interrupt driven keyboard scan, and instead have the emulator program constantly logging it round a loop, polling first the acia, then the keyboard, and back again.

The keyboard scan is done by a module KEYIN written in assembler. It doesn't allow autorepeat at present, but does give far better performance than the standard driver. It does not miss keys, or suddenly provide you with both upper and lower case characters at the same time. The keyboard can be redefined if you want, and there's a lookup table in the module. It even handles rollover. The only problem remaining is that every time I exit the emulator and re-enable the clock, the frustrated keyboard driver generates a rubbish character of keyboard input, which I have to backspace over. For linking to an Atari, I have developed a Termcap entry, which works very well in teletype mode, although as I said above the screen mode software generally doesn't work. On the whole I think it's been a worthwhile project, and if anyone wants to link to any other terminal, I could recommend this as a good starting point.

The software is available as PD, just contact me on + 44 (0) 61 225 4674 or send a disc and postage to 23 Bristol Ave, Levenshulme, Manchester GB-M19 3NU

Files 2...Roy Cashmore.

Files of data on magnetic tape or disc have great advantages. For a start, at least in theory, they are permanent and, providing the correct sequence is used, the information can be saved from one program and read into another. (writing a BASIC program on a word-processor and saving it in ASCII format to load as a program is similar).

When saving a file to tape, it is wise to use POKE 144,1 (either as a direct command or from within the program, to give a better header. It is also more reliable if MOTORON is used before the data is written to the tape, followed by MOTOROFF at the end.

Suppose we have information to save as a file on tape. First
1000 OPEN O, £-1, filename: REM O for OUT, £-1 for TAPE

- that's the easy bit! The books then say use

1010 PRINT £-1, output list

but you need to be clear in what order you are going to save the data (otherwise you have problems when you come to read it back). For a simple array you might use

1005 FOR X = 0 TO 19: REM or whatever length your array is

1010 PRINT £-1, A\$(X)

1020 NEXT X

1030 CLOSE £-1

Add 995 POKE 144,1:MOTORON

and 1040 MOTOROFF

To read the data back in, use

1000 OPEN I, £-1, filename :REM I for IN

1005 FOR X=0 TO 19

1010 INPUT £-1, Z\$(X): REM a different array name may be used

1020 NEXT X

1030 CLOSE £-1

With two-dimension arrays, care needs to be taken to use the same loop structure to read in as was used for output, e.g. for an array B\$(g,h) use

1005 FOR A=0 TO g:FOR B=0 TO h

1010 PRINT£-1, B\$(A,B)

1020 NEXT B,A

(This saves in the order Row 0, col 0: Row 1, col 1: etc)

Use the same loop structure for reading in, so 1010 becomes

```
1010 INPUT £-1, B$(A,B)
```

To safeguard the information (not foolproof, but it makes life difficult for snoopers) add this to the save routine

```
1002 INPUT"PASSWORD"; PW$
```

```
1003 PRINT£-1, PW$
```

and this to the read in routine

```
1002 INPUT"PASSWORD"; PW$
```

```
1003 INPUT£-1,CD$: IF PW$<>CD$ THEN PRINT"ACCESS DENIED":CLOSE£-1:CD$="": END: REM
CD$ IS CLEARED TO PREVENT IT BEING FOUND
```

Another advantage of using magnetic files is that they can be used for question and answer programs to prevent the answers being discovered by using LIST or LLIST. The same basic program can also be used to ask a whole range of questions.

Take A Test Drive... Tony Shellard

About a year and a half ago I received a present of a twin Canon disk drive, as advertised by PSE. It is a smart, self-contained unit and comes complete with ribbon connector and IEC mains lead. Installation is a simple matter of putting a plug on the IEC and fitting the ribbon between the drive and the DOS cartridge. The only thing that puzzled me was the legend EPSON TF-16 on the front of the Cannon unit.

Apart from the convenience of performing backups without disk swapping and the increased capacity of using disks double sided, I had the benefit of faultless operation, especially compared to the rickety secondhand single drive I had used previously - I kept the cage permanently unscrewed because the head carriage often needed a prod to get it moving. Then, a couple of months ago, I inserted a disk wrong way round in a fit of distraction and discovered that it wouldn't eject because the seam of the disk jacket was caught on something. This gave me pause for thought: do I poke something in the front slot or dismantle the case to free the little blighter? Since the warranty had expired I reasoned that I would be less likely to cause damage if I could see what I was doing and opted for the latter.

Removing the top cover reveals a steel chassis, folded to enclose the drives and power supply in separate compartments. The open side of the drive section is covered by a thick piece of aluminium foil, electrically connected to the steel with conductive tape to provide continuous shielding. The mains inlet is deeper than a normal IEC connector and also filters the mains supply. The PSU board holds the normal rectifying and smoothing components but the IC plus extra inductors and transistors indicate a switched mode configuration instead of the usual monolithic regulators, as used in the Dragon's PSU. I can also hear a faint high-pitched whine if I listen close enough.

Of interest to anyone whose drive and power light appears dead is a fuse situated in the middle of the top edge of the PSU board, covered with a blue plastic sheath. This is rated at 800mA and is a 20mm Antisurge type.

The data connections are taken to the drives after being passed twice through a ferrite ring which suppresses high frequency noise in order to both protect your data and prevent the unit causing interference. The drives themselves are slim Cannon (mystery solved) units with neat surface mount device (SMD) populated boards; quite breathtaking compared to some of the discrete-logic modification ravaged monsters of yesteryear. The write-protect system uses an LED and opto sensor rather than a mechanical switch, so you won't hear the tell-tale click as the notch engages. Having got this far I freed the trapped disk and commenced the straightforward re-assembly. They have continued giving trouble-free operation ever since (touch wood!) and I insert disks more carefully now.

As someone who works in electronic assembly I appreciate the high standard to which these units were built. The way they are shielded indicates thoroughness in design and care in construction. I would recommend them as items of as high a quality as I have encountered.

APOLOGY

Sorry the layout isn't all it might be this time ... too many pieces running onto "the next page" always looks untidy, I know, but there simply isn't any way of avoiding it sometimes, and this month nothing seems to fit!. Also, my printer driver flatly refuses to print hash signs, and substitutes £ instead. Sorry. *Paul Grade.*

Two Drives With Forth—John Payne

First, a correction to the previous article. The definition of LDXT should have a DROP after LOOP. It works without this, but leaves rubbish on the stack. The DROP leaves the stack clean, which is good Forth practice.

Now to the article proper. NDUG Forth only allows one disk drive (because I only had one drive when I wrote it). However, nowadays you all have at least two drives, and want Forth to access both of them. A rough solution, for the DragonDOS version is to define HEX : DR0 1 EB C! ; : DR1 2 ED C! ; which sets a byte in the DragonDOS workspace which holds the drive number that the ROM routine reads or writes when called by R/W (see previous article). For DeltaDOS, a subroutine at C375 sets the drive number. This means resorting to machine code. Probably, this definition will work, and set the drive number from the stack:

```
CREATE SETDR ( num -- ) HEX 3704 , 3460 , BD C, C375 , 3560 , AEA1 , 6394 , SMUDGE
```

The snag with the rough solution is disk buffering; to speed up disk access, Forth keeps the most recently read disk sectors in RAM, and when a sector is wanted it looks to see if it is already in memory, thus saving the disk access time (which is typically a fifth of a second, or much worse if the disk isn't spinning). The problem is, with two disk drives, sectors from the first drive could get muddled with sectors from the second, so edited screens could get written back to the wrong drive. Standard fig-Forth has a rather sophisticated mechanism to deal with this, but I can't see any serious snags with the simpler solution of clearing out the disk buffers whenever the drive is changed. (A minor restriction is that you can't load screens on one drive from a screen on the other drive). The Forth word FLUSH writes the contents of any buffers that have been altered to disk, and marks all the buffers unused. One should therefore define

```
HEX : DR0 FLUSH 1 EB C! ; and : DR1 FLUSH 2 ED C! ;
```

Incidentally, numbering from zero is a Forth convention, but there's nothing to stop you from defining DR1 and DR2 rather than DR0 and DR1 - one of the nice things about Forth is that you can set it up to suit yourself.

You might sometimes want to copy a group of sectors. This can take a long time unless you use an efficient method. When copying between drives, the standard disk buffers can't be used because they get emptied when you use DR0 or DR1. DSKTORAM and RAMTODSK are used instead (screens 13/14 of the Forth disk have definitions). COPYM (below) moves a whole track of sectors at once, minimising delays in sector access. (Writing is still rather slow, unless you turn verify off). Copying between drives needs another version with DR0 and DR1 inserted at appropriate points - this is left as an exercise.

SCRE 714

```
( COPYM - COPY MANY SCREENS ) 0
: 2DUP OVER OVER ; 1
: >NXTRK ( sectf -- nxtrksectf ) 2
  18 ( sectors/trk) 2DUP MOD 3
  ( sectf 18 sectfmod18 ) - + ; 4
( >NXTRK returns the number of 5
the first sector on the next 6
track ) 716 LOAD 7
```

SCRE 716

```
: COPYM ( 1stsrc lastsrc 1stdest 0
) ROT SWAP ( last 1stsrc dest) 1
OVER - >R (offset on Rstk ) 2
BEGIN ( lastsrc 1stsrc ) 2DUP 3
  >NXTRK 1- MIN 2DUP DSKTORAM 4
  SWAP R + OVER R + RAMTODSK 5
  1+ 2DUP < ( last<nextsect?) 6
UNTIL DROP DROP R> DROP ; 7
```

SCRE 715

```
COPYM (pronounced "copy 'em" )
has a stack order decided by the
following rules:
sources precede destinations
sources are kept together
first source before last source
```

SCRE 717

```
>NXTRK 1- MIN makes stack:
lastsrc 1stsrc last.sector
(last.sector is last sector on
track or last sector to copy)

DSKTORAM and RAMTODSK are on
screens 13-14 of FORTH disk
```

Go51 Screen Dumper-David Linsley

For my AS level Computing course, which I took in the sixth form, it was a necessity to undertake a programming project. Rather than use the school's Archimedes, I decided to do the programming in BASIC 09 - OS9's marvellous version of BASIC (but so structured that there's no Global variables - grrrh!)

For the program testing it was required to print out the screen displays and this is easily done on the Acorn, but alas - OS) has no program to do this. I could have mocked them up in Stylograph, but this would be cheating and would take a helluva time to do, and so I wrote this short and simple program.

Using Build or Stylo or Basic 09, enter the following code and then compile it with the Basic 09 PACK command. You must be using version 2 of OS9 as it requires Eurohard's GFXE module.

To run the program, type "Hardcopy &" at the OS9 prompt and it will then load and multitask with your other programs. When you wish to have the current Go51 or Go40 screen printed out just press the left and right joysticks fire buttons simultaneously and hold them until the printer jerks into action. If you want to redirect the output to a disk file or the serial printer, change the line OPEN fPath,"/P" to OPEN fpath, "Pathlist" where Pathlist is the path to send the screen to (and printer commands!). Files can be printed later by sending the file to the printer e.g. Copy File /p

```

Procedure      Hardcopy
Rem  When both left and right joystick
Rem  fire buttons are pressed, dumps
Rem  terminal screen to printer.
DIM   Path:Byte
DIM   sticka,stickb,firea,fireb,x,y:Integer
OPEN  fPath,"/P"
REPEAT
  REPEAT
    sticka: = 0
    stickb: = 1
    RUN  GFXE("JOYSTK",sticka,firea,x,y)
    RUN  GFXE("JOYSTK",stickb,fireb,x,y)
  UNTIL firea<>0 AND fireb<>0
  RUN  GFXE("HARD",Path)
UNTIL TRUE=FALSE
END

```

Batchat...

The thing about bats, you see, is that their vision isn't all that. They use this radar thing instead of actually SEEING things...a bit like "Rommel's Revenge", I suppose. So you see, if I had proper eyes, instead of this dodgy monitoring and reconnaissance system (sold to me at half price by the US Army after they'd finished with it in the Gulf) then I'd have actually spotted the problem with last month's Framer lisiting. Well, that's my excuse anyway, and apologies to Keith Redhead.

Hopefully it should be all right this month, but that is in the lap of the Gods i.e. Paul. Yes, he IS a God, didn't you know?

Apologies too to Jon Bird, who SHOULD have had a piece in this time, but limitations on space due to advertising means there's not enough room - next issue, June.

However, as it goes, the June issue does not look to healthy. We have the piece from Mr. Bird, and the aforementioned submission from Ron Warren (or should that be Tinkerbell? Tune in next time to find out!) but other than that, not a lot else.

And you know what that means...

YOU, yes YOU, have the chance to WIN not very much at all actually but give everyone else something to read and enjoy, when YOU enter the FUN world of WRITING SOMETHING FOR UPDATE. Otherwise, we might end up like you local paper, a half inch of news tucked away in between adverts of unshiftable houses and knackered portable TVs, 25.00 ono vgc. "The Worthing And Chelmsford Advertiser"? I don't think so.

Comprenez?

Bats.

Monte Carlo Integration, Chris Jolly

The term Monte Carlo is used to refer to a collection of numerical methods that rely on probability and statistics to solve complex problems quickly. A common example of this is Monte Carlo Integration, which provides a very simple method of calculating the numeric value of a definite integral - for those who left school a long time ago, a simple idea of integration is that it gives the area underneath a curve plotted on a graph. If you ever need to calculate an integral this is an extremely quick and easy method and you don't need to remember any complicated formulae that are required for more conventional methods such as Simpson's method. The program below allows you to define your own function to be integrated in line 10 using the DEF FN statement. When you run the program you are asked for the lower and upper limits of integration, then you will see the value of the integral on the screen which is continuously updated, getting more and more accurate the longer you leave it until you press a key. The only disadvantage of the Monte Carlo method is that it is difficult to predict exactly how accurate the answer is, but as you watch the screen you will see that the figure quickly settles down and you will have a good idea of how accurate the answer is from the size of the fluctuations - initially the first digit will fluctuate then settle down, then the second and third and so on. The way it works is pleasantly simple. The average value of a function over a range of values x_1 to x_2 is simply:

$$\bar{f} = \frac{1}{x_2 - x_1} \int_{x_1}^{x_2} f(x) dx$$

which can be rearranged so that the value of the integral is given by:

$$\int_{x_1}^{x_2} f(x) dx = (x_2 - x_1) \bar{f}$$

We can get \bar{f} , the average value of $f(x)$, by generating random values of x between x_1 and x_2 (line 50) and averaging the value we get from applying the function to them (lines 60-80). Then just multiply by the size of the interval and you have the answer - much simpler than any other numerical or symbolic method, and gives a very short program for the Dragon that is very useful if you need to evaluate an integral

```

10 DEF FNA(X)=X^3+2*X^2-X+7
20 CLS:INPUT"LOWER LIMIT";X1
30 INPUT"UPPER LIMIT";X2
40 N=0:YS=0
50 X=X1+RND(0)*(X2-X1)
60 YS=YS+FNA(X)
70 N=N+1
80 PRINT@64,USING"EE.fff^";(X2-X1)*YS/N
90 IF INKEY$="" GOTO 50

```

Gremlins : The New Batch...

**OK, so we're on a roll with programs not working recently. First, the Shaper listing, and now last time's Frammer thingy. Here's Keith Redhead to explain...

Humble apologies all round; some of the program lines for Frammer don't make sense because I didn't inform Stephen that it's necessary to BOOT the disk and RUN Frammer before attempting to LLIST it, otherwise peculiar errors occur. Don't ask me why, because I don't know! Please amend the following lines:

```

220 TP=(HEIGHT-C)/2:IF TP<>INT(TP) THEN TP=INT(TP)+1:ROW TP
230 LP=(WIDTH/2)-(LN/2):IF LP<>INT(LP) THEN LP=LP+0.5
290 ROW TP:COLUMN LP:PRINT STRING$(LN+2,32);
300 PP=((WIDTH/2)-LEN(SM$(I))/2)+1::IF PP<>INT(PP) THEN PP=PP+0.5
310 COLUMN PP:PRINT SM$(I);

```

By the way, if anyone would like a copy of Frammer and the demo program, drop me a line at 21, Baxter Avenue, Newcastle Upon Tyne, NE4 9QD, or 'phone 091 273 9248 and I'll send you a disc FOC. Now, as they say, read on...

Pardon me, but WHO actually says that, apart from Terry Pratchett?...SW

Framer For BASIC 42..Keith Redhead.

This is the second of two articles on my FRAMER utility for the Basic 42 Operating System. Framer operates as a series of subroutines, and should be placed at the beginning of your program. This is assumed to commence at line 400 unless, of course, you have other subroutines in use also, in which case line 80 will require editing accordingly. To use Framer, you simply assign the message/prompt you wish to display to a string, N\$, indicating where you wish a new line to begin with the up-arrow key. To display it, GOSUB100. To restore the original screen, GOSUB 370. The only restrictions you need to observe are that only five lines of text are allowed (although you could increase this if you wish, amending lines 80 and 100) and that your message/prompt must not be too large to fit into the window chosen to display it. BOOT your system disc, load FRAMER and type in and run the demo program given below. This actually starts at line 500 and uses the pre-defined windows of Basic 42. Lines 430 to 490 are simply subroutines which fill each window in turn with lines of random characters, wait for a key press etc. Page 26 of the Operating Manual lists the various addresses used by Basic 42, and from this you should be able to see how Framer works. A final point: because it is written in BASIC, Framer tends to be rather slow in use, especially if long messages are used. It would be much improved if someone could convert it to machine code or assembly language and add it to Basic 42 as per page 27 of the Operating manual.

```

400 REM DEMONSTRATION PROGRAM
410 REM
420 GOTO 500
430 CLS
440 FOR R=1 TO HEIGHT
450 IF R< HEIGHT THEN PRINT STRING$(,65+RND(26)); :ELSE PRINT STRING$(-1,65+RND(26));
460 NEXT:RETURN
470 K$=INKEY$:IF K$=""THEN 470 :ELSE RETURN
480 WAIT 2000:RETURN
490 WAIT 1000:WINDOW 0:CLS:RETURN
500 WINDOW 0:GOSUB 430
510 N$="WELCOME TO FRAMER^A SUB-WINDOW UTILITY^FOR BASIC 42^PRESS ANY KEY TO^CONTINUE
    THE DEMO":GOSUB 100:GOSUB 470:GOSUB 370:GOSUB 490
520 WINDOW 1:GOSUB 430
530 N$="DISPLAY NON-DESTRUCTIVE NOTES^WITHOUT USING WINDOW 9^ ^PRESS A KEY TO
    PROCEED":GOSUB 100:GOSUB 470:GOSUB 370:GOSUB 490
540 WINDOW 2:GOSUB 430
550 N$="HIGHLIGHTED MESSAGES^CAN GIVE PROGRAMS^SOME EXTRA POLISH.^ANY KEY WHEN
    READY...":GOSUB 100:GOSUB 470:GOSUB 370:GOSUB 490
560 WINDOW 3:GOSUB 430
570 N$="PRESS ANY KEY TO^RESTORE ORIGINAL DISPLAY":GOSUB 100:GOSUB 470:GOSUB 370:
    GOSUB 490
580 WINDOW 4:GOSUB 430
590 N$="WORKING^PLEASE WAIT":GOSUB 100:GOSUB 480:GOSUB 370:GOSUB 490
600 WINDOW 5:GOSUB 430
610 N$="SORTING DATA^READY IN^ONE MOMENT":GOSUB 100:GOSUB 480:GOSUB 370:GOSUB 490
620 WINDOW 6:GOSUB 430
630 N$="MAXIMUM NO. OF^LINES ALLOWED^PER FRAME IS^>>>FIVE<<<^PRESS ANY KEY...":GOSUB
    100:GOSUB 470:GOSUB 370:GOSUB 490
640 WINDOW 7:GOSUB 430
650 N$="PLEASE WAIT^I'M BUSY":GOSUB 100:GOSUB 480:GOSUB 370:GOSUB 490
660 WINDOW 8:GOSUB 430
670 N$="MESSAGES CENTERED^AUTOMATICALLY^ANY KEY...":GOSUB 100:GOSUB 470:GOSUB 370:
    GOSUB 490
680 WINDOW 9:GOSUB 430
690 N$="END OF DEMO.":GOSUB 100
700 GOTO 700

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Got a Modem on your Dragon?

Yes, believe it or not there IS still a BBS with an exclusive Dragon section!, but according to Joe Pilz, who set it up some time ago, it isn't getting the use it deserves!. I think the best thing I can do is quote from Joe's letter:

"... I bought a machine from the old 6809 Users Group and have their FLEX and OS9 disc and Group newsletters here (on disc only, no hard copy) so I'll put some of that in the Dragon area eventually. The BBS is on 0932-821690...333 (the "...333 is extension 3 of the switching unit, the other extensions are the faxes and a phone, the "." are standard pauses). Its 2400, 8 bit, No Parity, 1 Stop, and file transfers should use Xon/Xoff. Give it a try!."

As well as running the last surviving BBS to cater for Dragon owners, Joe is considering whether it would be practical for him to resurrect Ossett (or a similar show at some point slightly further South), but that depends on whether Bob Preston would be willing to collaborate in such a venture, and of course on whether or not there would be sufficient support from YOU, both as punters AND exhibitors, to make it worth while. If you think it would be a good idea, why not get in touch with him (or Bob Preston!) and make your views and/or suggestions known. You could contact Joe via the BBS, or if you don't have a modem, why not drop him a line at 19, Albert Road, Addlestone, Surrey. KT16-2PX.

Attention all CoCo Enthusiasts!

Two late bits of news that should be of interest to you, one from Mike Stott, and one from Ray Smith.

Mike's news is that he thinks he knows a source of Tandy CoCo hardware and software!. It appears that some little while ago he met someone named Alec at one of the Stafford shows, who claims to have vast supplies of CoCo things ... like service manuals, DOS cartridges, games cartridges, and sundry other CoCo essentials!. The telephone number he has for Alec is 021-354-5409. Now please note that it is absolutely NO use at all asking Mike or me for more details, for the simple reason that we don't have any, but if you're in the market for CoCo bits and pieces why not give the number a try?.

The bit from Ray Smith is really a late advert he is passing on for Simon Davis. Simon has the following for sale, and is open to (sensible) offers: "Superb CoCo3 system, consisting CoCo3 with 1 Meg on board, double sided twin drives, Disto Super (no halt) controller, with parallel printer port and real time clock, All manuals, including OS9 Level 2, Stylo, C Compiler, EDTASM, and complete set of OS9 Euro Group discs!". Interested?, then call Simon on 0204-33473.

A Word from The Management

You may have noticed that we seem to have been including more "correction notices" than usual recently. Now I accept that some of this can be blamed on Slippage of the Editorial Typing Finger, and on my lousy page setting and proofing. However, errors could be significantly reduced if, when you send in a program or routine for publication you send it on tape/disc AND a hard copy. This gives us a double check and greatly reduces the possibility of your work being printed incorrectly. We don't insist on this, but it really would be a great help. Also, please note that Stephen and I both use standard D64 systems (even if I do have to transfer the files over to the IBM in order to use the only suitable drivers I have for this printer!), so whatever you send in HAS to be "Dragon compatible" ... it's no good typing something in at work on a machine with a "scientific characters" keyboard and expecting us to be able to duplicate it on the D64!. OK?. This *isn't* a complaint, I'm just trying to improve Update!.
Paul Grade.

The Late, Late Bit

As you will notice from the ads on the following page, there's at least TWO shows for you to attend, even if one of them is not exactly Dragon orientated. Mike Stott's Liverpool Extravaganza is quite a bit later on in the year, I know, but we're giving you all the information now so that you can't use some of the more popular excuses for not turning up "... I didn't know about it until the day before, and I'd arranged to take the goldfish for a perm", and "... I'd love to go but I've booked a week in Cognito and we won't be back in time". DON'T WORRY!, Mike's ad WILL be included again closer to the actual date, so feeding this issue to the dog still won't let you get away with "... I lost the page with the advert on so I didn't know the location"! You can't win, so you might as well just accept that the Show is inevitable, and relax and enjoy it!. If you're worried about people finding out that you are a secret Dragon user and selling the story to the Mirror, forget it! post yourself to Liverpool in a plain brown paper wrapping, and I'm sure that Mike will guarantee that your presence will be treated with the utmost confidentiality (unless you are a Member of Parliament, in which case WE will ensure that the story is taken down, dirtied up, and used as evidence in the Daily Mail!).

Off subject, but have you heard the current rumour about the new "virus" that doesn't just attack the machine's operating system, but works on the OPERATOR as well?!. Did you ever wonder about that peculiar flicker you see on some SVGA screens? the story goes that someone discovered a way to introduce "sub-lim" messages into the display cards, and after a few hours of staring at the screen these are "absorbed" by the operator and have a hypnotic effect!. Improbable?, agreed, but then how come "repetitive strain injury" never happened to typists but is increasingly frequent with computer operators? and what makes someone who has just spent a major fortune buying the latest in 486DX outfits suddenly decide about a week later that he MUST go forth and spend his overdraft on a Pentium?. Are you QUITE sure that your PC REALLY only has "Intel Inside"?!.

I reckon a lot of people who work in dispatch departments must have been over exposed to a similar sort of virus a few weeks ago I ordered some computer bits and pieces from a firm in Wootton, Bedfordshire, specifying that they should be sent by normal post. When they hadn't turned up after a week I contacted the firm and was told that they had been sent by courier!. Contacted courier firm, who at first couldn't trace the package, but eventually (several phone calls later) discovered that "Worthing, Sussex" had moved to somewhere near Guildford ... at least, they'd sent the stuff to "Sutton, Surrey"! It DID eventually get here, days late and looking as though it had been used as a wheel chock by the delivery driver but it really does make one wonder just what is controlling the brain cell of the moron who routed the thing!. Our local motor factor is just as good ... I ordered a cylinder head gasket and a pair of track rod ends for my van last week "guaranteed" to arrive by Monday!. They did, too by Monday evening they had managed to produce the WRONG rod ends and a head gasket that looked as though an elephant had used it as a substitute for Andrex!. Another firm that orders/dispatches via computer terminals CAN it all be coincidence?!.

On a more pleasant topic you'll see in the ads that we have a new program on offer, "Super Quiz". Now this one really IS well worth having ... it's amusing, educational, and if any of you are "pub quiz" addicts this program should provide the answers to ANY question you're ever likely to run into at the local!. (and I'm not even asking for a percentage of your winnings!). If you can score 100% on this you're the next Mastermind champion for sure!. The program was "final tested" too late for us to get a review written for this issue, but there will certainly be one in the next, but meanwhile I can assure you that it really is a disc that you ought to add to your collection.

Well, that's all for now. I'll leave you with a question: If a Politician says that all Politicians are liars, is he telling the truth?. *Paul Grade.*

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TICKETS CAN BE OBTAINED FROM MIKE BY SENDING YOUR PAYMENT
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