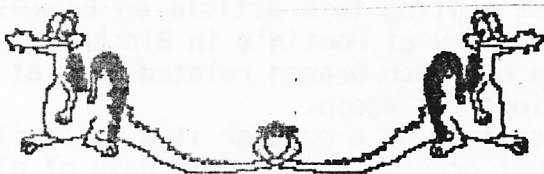


The Newsletter of the National Dragon User's Group

DRAGON



UPDATE

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THE GAFFER'S BIT

Now this really is a pleasant surprise!, He Who Edits has left me a mere dozen lines of front page to fill this month!. Actually, having just read his "Editorial" bit about "no-one wanting to go back to typewriters", I'm not sure I agree while computers have many advantages as word processors, they do have their snags as well ... how often did your typewriter crash just as you were typing in the last line of a letter?, and at least the old manual tripewriters could operate anywhere with the benefit of electricity ... all you needed was a ream or two of paper and a bottle of Tixex (no, you can't use it to correct errors on discs). The old beasts were faster, too ... I could manage 120+ on a good Hermes electric, as against around 80 on a Dragon or a PC. Oh well, that's progress for you. Anyway, we're back to the usual 14 page issue again this time, which leads nicely to the next point don't forget to send us something interesting to print in the Christmas Edition! I can't be bothered to work out exactly how many typing days there are left until Christmas, but they're getting less, so get started now!. And that's about my dozen lines filled, so have fun etc. *Paul.*

The Editor's Bit...

OK, so there I was last month telling you all why I like Super Writer II, and now here we are back down to reality with a bump, courtesy of the notorious Group Text Editor. Although, perhaps 'notorious' is a bit harsh; after all, it does the job it's supposed to do, it's just that it does it without any frills like 64 character display or any sophisticated editing facilities.

Which makes you wonder what's so great about being sophisticated in the first place. I mean, if it does the job, why tart it up unnecessarily? Sure, Super Writer looks nice with its 85x24 display (provided you have a TV or monitor large enough to enable you to read it without eyestrain) but it's not absolutely necessary. And all of this is strangely parallel to the current PC market, if you think about it. Everybody dead keen to sell you something which does the same job as the PC you bought six weeks ago, only in 16 million different colours, or with nice pretty displays to go with it. Do you actually need them? Do they serve any purpose other than to keep you up with the "current scene", which is so volatile that there'll be a new one along any minute now.

Perhaps the reason that the Group is still here is that some of you out there are not swayed by big, brash advertising campaigns, demanding you buy the latest because "it's the best". Progress by all means - who would really like to go back to typewriters - but progress in real terms, not just cosmetically, would be nice once in a while. Maybe I'll stick with the Group Text Program for a while longer. *Ned Ludd (alias S.W.).*

Can you have "16 million colours" now?, I thought they had to be "ethnics"? P.G

PEEKING THE DRAGON(59).MIKE STOTT

August 28th 1995 - I am writing this article on Bank Holiday Monday having just returned from a weeks holiday at Pontin's in Blackpool.

Unfortunately, there is not much Dragon related news at the moment so I will have to talk about other things yet again.

Skybuster cards still seem to be a popular item so I will let you know the latest news on them. I have just ordered thirty free days of all twenty-one Sky channels so I have not done anything more about one for myself. However, one of the lads from work went to a computer show with his mate who also works at our place. He bought one for forty pounds. At first he could not get it to work, but discovered that you had to switch your system off first if you had a legal card before inserting the Skybuster card connected to a PC or Amiga. He then had complete success, and even managed to pick up foreign channels which had not been mentioned in the advertising. I was surprised a few days later to see that this card was advertised for sale on the notice board at work for thirty five pounds. It turns out that it suddenly stopped working. He reckons it his only his computer that is at fault but I am not so sure. It went up for sale just before I went on holiday, but if it is still up for sale when I go back to work tomorrow then I will try to borrow it to test it on my computer and will probably buy it if it proves to be a success. Nobody who enquired about the cards has yet come back to me to let me know whether they have had any luck with their purchase but I hope to bring you more news in the next issue.

Earlier this summer Nora, David and myself went to Lancaster University for a week's activity holiday. We usually do sports orientated courses but I thought I would let you know about some of the other courses that are available. Most courses are spread over five days and take a morning or an afternoon although some do last all day. This means that you can have a go at two different things if you wish. You can also book accommodation and food or take part as a non-resident. Evening activities this year included Clog-dancing, Barn Dance, and Circus Skills as well as numerous talks etc. David was taken out ten pin bowling one night with all the other teenagers for no extra charge.

Last year David did Scuba Diving and obtained his Novice Diver qualification.

Walking, calligraphy, languages, croquet, fencing, car maintenance, yoga, photography and painting and drawing are just some of the items on offer.

Crown Green Bowls was one of my courses last year and I am now a member of the works team so you can get quite a lot out of a short course. It is very handy if you are not really sure if you are that keen on something as you can have a brief taster of it.

The real reason I mention these holidays is the number of computer related courses on offer. This year there was COMPUTERS FOR THE TERRIFIED (incorporating Word Processing, Databases, Spreadsheets and Desktop Publishing), WORD PROCESSING FOR BEGINNERS, DESKTOP PUBLISHING and KEYBOARDING SKILLS (to mend the ways of us two-finger typists or teach newcomers the correct way). I would expect to see more and more computer related courses as more people are forced to use them in work. Up to a few years ago we used to go to Millfield School, Street, Somerset which ran very similar courses but on a much larger scale. The sports facilities, in particular, there are really impressive with an Olympic standard running track.

If anybody is fed up with run-of-the-mill holidays and would like something different then I can highly recommend this type of holiday, especially for a family. Children usually have their own special activities and Mum and Dad can go their own ways meeting up for meals and evening activities.

Lancaster University seem to be undecided whether they will be running the same type of programme in future years. It could be that they will run courses which are more tied in with diplomas etc which is not really what we want from a holiday as we go away to enjoy ourselves. If anybody knows of anywhere else that runs similar holiday courses (sport orientated preferably) then I would be very grateful to hear from them as we would like to take a similar holiday in 1996.

6809 vs 68000...Jonathan Baker

In Update 101, R.Bone was enquiring about running 6809 programs on a 68000 machine, either with or without a software emulator. The 68000 is a 32-bit processor, and the 6809 is only an 8-bit. Registers are numbered rather than labelled as in the 6809, so therefore I would assume no compatibility between the two. There are 6809 emulators available on several platforms, including the Atari ST and Commodore Amiga, although they do not provide a Dragon environment to run in. I have no idea if 6809 emulators are available for the Apple or QL, but a hardware emulator would not be hard to write on any machine which has a decent programming language such as C, C++ or Pascal. I expect you will all be pleased to hear that R.Bone will have read this article before everyone else as I have e-mailed it. I would be very pleased to hear from anyone else in the group who has access to e-mail: Jon@Kechb.Demo.Co.Uk

More Favourite Utilities.D.Cadman**SUPERDIR By A.Butler.**

Often when attempting a disc repair it is a help to know where a suspect program starts and finishes. After entering a title for the disc under scrutiny, this program will print to screen or printer the following information for each program on the disc: title, extension, tracks/sectors where it is stored, total number of sectors, and the load, end and exec addresses. I'm sure we all know by now the sequence of storage. On a single sided 40T disc it would be T18 (T16 skipped, being the backup directory) T14, T12 etc. But if the program is too long to be stored on one track it would go T18, T19, and if there is still more it would continue on T14. The program assumes this understanding, so a printout reading:

Track	Sector	No. Sectors
18	1	36
14	1	8

would mean that both T18 and T19 have been filled starting at sector 1 (hence the number of sectors reading 36) plus T14 7 full sectors and a part of sector 8. The load, end, and exec addresses are given in Hex. To find the length, subtract the load from the end address and add 9 for the header if you want to match the byte count given by DIR. The exec address for a BASIC program will always jump to 8B8D of course.

AUDIO SPECTRUM ANALYSER by R.S.

Originally written for the TRS80 in 1981, this is written in machine code, and gives a frequency display in the form of a moving bar graph of any audio signal applied to the cassette port. It has a nine octave audio range at 1/3 octave intervals from 31.5 to 12,500 Hz, with a dB scale from +5 to -20.

Changing the features of the program is done from the keyboard. There are two response times, fast and slow, giving peak and RMS readings respectively. The display can be frozen at any time, and a useful feature is the ability to lock onto the peak signal reached in each band and hold it on screen. There is an audio through TV on/off option, and the program is written in colour although it can be used in B&W.

Message to Brian O'Connor.

I've been asked by several VERY satisfied customers to pass on their thanks to Brian for his "Summer Sale" bargains!. It seems that a lot of people treated themselves and their Dragons to a DOS cartridge and/or disc drives, and quite a bit of other stuff as well, and still had enough money left over to pay the rent!. Try doing THAT in the PC machine market!!. Consider yourself thanked, Brian. Now what was that about a Grand Christmas Sale?! P.G.

Directory Listing. Eddie Freeman

Here is a program readers might find useful. It is also on the Group's Disc Utilities 2, so if you are lazy and don't want to type it in then why not buy the disc. I have used this to catalogue my discs under various headings such as Arcade, Adventure, Business, Music etc. It can be adapted to suit your needs and is set up for an Amstrad 2000 printer, though it can be customised in lines 240-360.

```

10 'DISK DIRECTORY LISTINGS (C) DEL BONHAM, REVISIONS BY EDDIE FREEMAN
20 CLEAR200,&H7FD8:CLS:GOSUB390
40 DEFUSRO=&H7FD9:W=150:PRINT&-2,CHR$(27);"I";CHR$(10);CHR$(27);"4";CHR$(27); "N";CHR$(1);:PRINT&-2
50 CLS:POKE&H15A,W:V=USRO(0):GOSUB500
120 PRINT@137,"printer codes";:PRINT@163,"TO SET YOUR PRINTER TO THE";:PRINT@195,"TYPE OF PRINT THAT
YOU WANT";:PRINT@227,"ENTER THE APPROPRIATE";:PRINT@259,"SYMBOL WHEN YOU ARE
ASKED.";:PRINT@291,"DETAILS OF THE TYPES SHOWN";
130 PRINT@323,"ARE FOR AN amstrad 2000";:GOSUB510
140 A$=INKEY$:IF A$="" THEN140
150 GOSUB520:GOSUB500:PRINT@131,"4 - italics.";:PRINT@163,"E - bold";:PRINT@195,"G - double
strike.";:PRINT@227,"M - mini.";:PRINT@259,"W - double width option.";:PRINT@291,"X - nlq
STANDARD.";:GOSUB510
160 A$=INKEY$:IFA$=""THEN160
170 GOSUB520:GOSUB500:PRINT@196,"IF YOU WANT TO CHANGE THE";:PRINT@228,"PRINTER OPTIONS THEN
YOU";:PRINT@263,"WILL HAVE TO CHANGE";:PRINT@296,"LINES 150 AND 240";:GOSUB510
180 A$=INKEY$:IF A$="" THEN 180
190 GOSUB520:GOSUB500:PRINT@228,"PLEASE ENTER THE DATE";:PRINT@260,"IN THE FORMAT
DD:MM:YYYY";:PRINT@274,"";:LINEINPUTDA$:DA$="- AS OF "+DA$+".";ZZ=0
210 POKE111,0:IFZZ<>0GOSUB380
220 ZZ=1:GOSUB520:GOSUB500:PRINT@132,"";:INPUT"NUMBER OF DISK ";DK$:V=USRO(0)
230 V=USRO(0):PRINT@196,"";:INPUT"NAME OF DISC ";ED$:ED=LEN(ED$):V=USRO(0)
240 V=USRO(0):PRINT@260,"";:INPUT"PRINT CODE ";P$:V=USRO(0):IF
P$="X"ORP$="W"ORP$="4"ORP$="E"ORP$="G"ORP$="M"THEN250:ELSE240
250 PRINT&-2,CHR$(27);P$:CHR$(1):PRINT&-2,"DIRECTORY OF DISC ";N=LEN(DK$):PRINT&-2,DK$;" - ";ED$;"
";DA$
270 N=N+ED+41:PRINT&-2,STRING$(N,"*"):PRINT&-2
280 PRINT@324,"";:INPUT"NUMBER OF TRACKS ";T:V=USRO(0)
290 V=USRO(0):PRINT@388,"";:INPUT "NUMBER OF SIDES ";S:V=USRO(0):IFS=1ORS=2THEN300:ELSE290
300 V=USRO(0):PRINT&-2,"FORMATTED";T;"TRACK - ";:IFS=1THENPRINT&-2,"SINGLE SIDED.";ELSE IF
S=2THENPRINT&-2,"DOUBLE SIDED.";IFS>2THEN300
320 PRINT&-2,STRING$(34,"*"):PRINT&-2,CHR$(27);"H";:PRINT&-2
330 PRINT&-2,"SIDE 1. TYPE DISC NO. SOFT-HOUSE
COMMENTS":PRINT&-2,STRING$(70,"-"):POKE111,254:DIR
340 POKE111,0:PRINT&-2:IF S=1 THEN370:ELSE 350
350 GOSUB520:GOSUB500:PRINT@164,"";:INPUT"DIRECTORY OF SIDE 2
";AB$:IFAB$="Y"THENV=USRO(0):PRINT@228,"SWAP DISK SIDES NOW":PRINT@292,"ANY KEY TO CONTINUE
";:V=USRO(0):EXEC41194
360 IFAB$="Y"THENPRINT&-2,"SIDE 2. TYPE DISC NO. SOFT-HOUSE
COMMENTS":PRINT&-2,STRING$(70,"-"):POKE111,254:DIR:PRINT&-2,CHR$(12);:PRINT&-2:GOTO210:ELSEPRINT&-2,C
HR$(12);:PRINT&-2:GOTO210
370 PRINT&-2,CHR$(12);:GOTO210
380 V=USRO(0):PRINT@452,"";:INPUT"ANOTHER DIRECTORY ";AN$:V=USRO(0):IFAN$="Y"THENRETURN:ELSE490
390 ST=&H7FD9:EN=&H7FFF:FOR M=ST TO EN:READ BYTE$:POKE M,VAL("&H"+BYTE$):NEXT M
450 DATA C6,20,B6,01,5A,8E,04,00,A7,80,8C,04,1F,26,F9
460 DATA 8E,05,E0,A7,80,8C,06,00,26,F9
470 DATA 8E,04,20,A7,84,A7,1F,3A,8C,06,00,26,F6,39
480 RETURN
490 CLS:PRINT@192,STRING$(32,131);CHR$(128);STRING$(6," ");"PROGRAM TERMINATED";STRING$(6,"
");CHR$(128);STRING$(32,140);:PRINT@0,"";:PRINT&-2,CHR$(27);"I";CHR$(0);CHR$(27);"5";CHR$(27);"N";CHR
$(0);:END
500 PRINT@67,"directory";CHR$(128);"printing";CHR$(128);"utility";:RETURN
510 PRINT@419,"PRESS ANY KEY TO CONTINUE";:RETURN
520 CLS:V=USRO(0):RETURN

```


HenceForth(20) . . . Bob Smith

While working on DIR - the prototype you were privileged to get last time - it occurred to me that it would also be useful to have a program that did the opposite of DIR, a program to list out blank screens. This was also useful for me because it enabled me to try out a few ideas that would be useful for DIR. The program is called DIR-BL and works on the principle that it will list the numbers of all screens where both the first and the second characters on the screen have the ASCII value 229 - E. The program needs the number of the screens that start and finish the area of interest.

100 199 DIR-BL will list screens 100 through 199.

To list the whole disc: 0 719 DIR-BL

The actual nitty gritty of getting Forth to do the work is quite simple. A DO loop using the starting number and the finishing number +1 as parameters takes care of incrementing screen numbers. The first line of each screen is then loaded and the two first characters compared with ASCII value 229. An IF statement checks the first character, and if this agrees, then a second IF statement compares the second character. If both agree then the screen number is printed on the display. (I use the word display to refer to the TV screen to avoid confusion with Forth "screens"). Just using the basic program outlined above does not give a very friendly output on the display. If there are too many screen numbers displayed then the first ones disappear off the top of the display before you get time to note them. If end of line is encountered in the middle of a number it is broken onto two lines. Most of the programming effort went into making it more friendly. 8 three-digit numbers fit onto a display line. I decided that each line should only have 8 numbers and that the program should pause when the first line has just reached the top of the display. One problem was that 8 three digit numbers cause an automatic CR-LF. The program should only output a CR-LF when one or more of the numbers has less than three digits. To use the program it first has to be typed in onto five continuous screens. Make sure that the number of characters correspond exactly in the text printouts (between "." and ") especially the spaces. The BASIC command (CLS) has to be enclosed in square brackets. After running the program, check the stack as there can be one or two numbers left on it depending on how you exited from the program. Next time, how to scatter a program among several isolated screens.

SCR £407

```
0 ( LIST OF SCREENS NOT USED )
1 0 VARIABLE JBL 0 VARIABLE NSCR
2 0 VARIABLE NOLN 0 VARIABLE 1ST
3 : DIR-BL DECIMAL EMPTY-BUFFERS
4 B[CLS] CR CR 1 1ST !
5 ."      LIST OF UNUSED SCREENS"
6 CR ."      FROM " SWAP DUP .
7 ." TO "      —>
```

SCR £409

```
0 ( LIST OF SCREENS NOT USED )
1 ENDIF 0 I (LINE) DROP DUP JBL !
2 C@ 229 = IF JBL @ 1 + C@ 229 =
3 IF I . 1ST @ IF NOLN @ DUP 7 >
4 IF CR DROP 1 NOLN ! I 99 > IF 0
5 1ST ! ENDIF ELSE DUP 1 = IF I 99
6 > IF 0 1ST ! ENDIF ENDIF 1 +
7 NOLN ! ENDIF ENDIF      —>
```

SCR £411

```
0 ( LIST OF SCREENS NOT USED )
1 ;S
2 ( N1 N2 — )
3 LISTS SCR.NOS. THAT ARE NOT IN
4 USE FROM N1 TO N2. WHEN DISPLAY
5 IS FULL, ASKS YOU TO PRESS ENTER
6 TO SEE MORE SCR.NOS. PRESS ANY
7 KEY TO EXIT WHILE RUNNING.
```

SCR £408

```
0 ( LIST OF SCREENS NOT USED )
1 SWAP DUP . CR CR ."      PRE
2 SS AND HOLD ANY KEY" CR ."
3 TO BREAK WHILE RUNNING" 10 1 DO
4 CR LOOP ." *** PRESS ENTER TO S
5 TART ***" KEY DROP CR 1 NSCR ! 1
6 NOLN ! 1 ROT ROT 1 + SWAP DO
7 GETKEY 0 > IF LEAVE CR      —>
```

SCR \$410

```
0 ( LIST OF SCREENS NOT USED )
1 NSCR @ 1 + DUP NSCR ! 112 > IF
2 1 NSCR ! CR
3 ." *** PRESS ENTER ***" 0 1ST
4 ! KEY CR DROP ENDIF ENDIF ENDIF
5 LOOP CR ;
6
7      —>
```

Information Highway. Malcolm Cowen

You've read the hype (unless you're lucky), you've read the cynical remarks as well. How good is the information highway?

The real answer, as far as I can see after a short trial, is what most people would have expected. It's a new tool, used properly it's OK, puffed up with hype and exaggeration it's a pain in the neck.

One of my clients put it best: "It's like CB radio," he said, after reading some of the over the top articles on how to talk to each other in an online forum. He's right as well.

I've got a linkup for work, for a one year trial period, mainly because I do a lot of work from home and I wanted to try out the possibilities for teleworking. I've not explored every part of the system, but I've used enough to form some opinions.

There are two ways into the Inforbahn: Direct into the Internet via one of the Internet providers such as Pipex, or via Compuserve. Internet providers such as Pipex tend to offer a direct link, which basically offers four services:

1. Email. This is the best part, especially if you are doing anything to do with international correspondence. It is fast, cheap, and a very good way of exchanging data of any kind.

2. TCPIP. This is a protocol which offers a way to login to any remote host machine which will accept you. If you want to log into NASA, to impress your friends, or if you need it for work to access a specific host machine, then it's great. Otherwise it seems not a lot of use.

3. FTP. The same sort of idea, except that with this option you can down or upload files into any accommodating machine anywhere. Again, great for techno-nerds or for work if you need that sort of thing, for example like my mate who is doing research at university.

4. WORLDWIDE WEB. A bit like Prestel. Lots of short pages, each of which points you to several more, and each one takes several times longer to download than it does to read. The worst problem is that the addresses are unbelievably long, and there is no structure to the thing. Great if you know exactly what you're looking for and really do need it, otherwise techno-macho nerdery at its worst.

Compuserve offer an Internet service, and also an online set of Discussion Forums, Reference Database, and an online feed from organisations ranging from Reuters to airline reservations. Their basic service has a cheap monthly charge, and as much online time as you can afford from BT. For most of the more interesting services, though, there is an extra charge per minute. Watch it, that can add up.

The main advantage is the cheap basic charge and a more organised structure; the disadvantage is the extra charges for extended services, which you collect quite fast.

I wasn't that impressed with the information database. It's OK, but is it really worth that much? The forums struck me as useful if you need them for work, but not much use otherwise, which I think is a pretty fair overall summary of the Infobahn; OK if you need it, overpriced if you don't.

True, you can't get it on your Dragon, but if you've got that much money to throw around on showing off, then obviously you won't have a Dragon, you'll have a new 20Mb Pentium with laser printer, digitising scanner, sound blaster, CDROM interface, and special go-faster stripe. At least!

Which reminds me; heard the one about how many Pentium users does it take to change a light bulb? Three, one to hold the bulb, and one to hold the ladder. Think about it.

By the way, someone mentioned about Radio hams and Dragons. If you are interested, try contacting Butz Kinsel in Cologne (00 49 2235 410 69) or write to him at Leipziger Ring 22A, Liblar, Erftstadt, bei Koln, Germany.

Update 101... Gareth Tutieltt

The Worst Newsletter in the World? Really? Well, it certainly brightens up my morning, when the postman brings Dragon Update.

It's a pity that the next instalment about the Dragon from Sotos Mandalos failed to appear as it has been most interesting. However, I do know a thing or two about the Dragon's early life. My late father worked for Mettoy's in Fforestfach, Swansea in the P shop (plastic injection moulding). Most of the Dragon cases were moulded there, even after the move to Kenfig. Many cases were just not up to it and broke easily during assembly of the computer - too brittle! Mettoy didn't have very good quality control at the time which angered my dad quite a bit.

When my dad first said about Mettoy building and selling a home computer I was a bit skeptical to say the least, especially since they'd had "fun" with electronic toys earlier. So when my dad brought home an early promotional booklet (which I still have) I was surprised, and the specifications were excellent for the time. 32K may not sound a lot today, but at the time I'd only ever used an early BBC model A with 16K and a ZX81 with 1K! Can't remember the RAM on the VAX!

So I awaited delivery of the first Dragons at my computer dealer. As soon as they'd arrived, I was there. Tried the keyboard, the legendary Telewriter word processor, and was convinced. I remember the date very well, 9th September 1982, and parted with 199.95 (and I've got the original invoice to prove it). Considering the price of a BBC at the time, some 400.00, it was a good deal.

This machine worked well for four weeks and died - screen jumbled up with rows of random characters! Never fear, my dealer replaced it with what proved to be a sound, reliable machine. I also brought one of the great little Tandy CGP115 printer - plotters, which was on special offer at the time at 149.95, and about six months later I bought a Tandy DMP100 dot matrix printer for the same price.

Now eventually, the old 32 was traded in for a Dragon 64 in April 1984, and I went in person to collect my new beast from Kenfig and have this exchange on film! It's still in use now, with the addition of Dragon Data disc drives and some OS9 stuff in July 1984. I bought my last "Dragon" printer in April 1984 for the princely sum of 249.95, and the old Mannesman Tally Sprint 80 is still fully working.

When the crunch came for Mettoy's, Dragon Data was the only apparently profitable part of the firm and was taken over by GEC (with lots of wonderful promises) but it didn't help Mettoy who eventually folded. However, thanks to a management and employee buy out, Corgi Toys (as they're now called) went back to doing what they were best at: die-cast toys and models. Mind you, GEC's takeover of Dragon Data didn't help the Dragon either! I find it interesting to compare the wonderful promises of GEC with those of Eurohard.

And what's happening on the Dragon front for me then? Well, my 64 is sitting idle, awaiting a new set of drives, which I expect to get installed shortly, fingers crossed. I still use Telewriter, but now with Gordon Twist's disc version. By the way, are there and Stylograph drivers for either and HP Laserjet II or Star LC10 printer? I seem to have read somewhere in Update about drivers? I haven't the room to set up three printers, but I want to print from Stylograph to my two PC printers.

Anyway, my 64 will be up again soon, and perhaps the old D32 I picked up a few years ago may be brought into play too! In my house, the Dragon definitely has a bright future. OK, so my DIY built 486 is used more (mostly for work, but my trusty beast is my favourite machine and is extremely useful.

There we are, my little article comes to an end. I couldn't think about what to write, so wrote anyway.

**** OK Gareth, panic not!, Sotos is back once more, I've just finished typing his piece in, and so far as I know he intends keeping on with the reviews until he's caught up with the present time (or even the future?!). Thanks for the article, I never know what to write either, but write it anyway. It works, doesn't it?. PG.*

Dragons In Radio . . . Johnny Brown

A query from an Update reader - how does the computer know what it has to do? This is all controlled by the actual program writer, and there are various ways it can be done.

MORSE or CW as hams call it: The transmitted carrier is switched on and off by the Morse key manually or the computer automatically. Short pulses produce the dots whilst longer pulses produce the dashes, e.g. "B" is one long pulse (dash) and three dots. Audio-wise it would sound DAAH DIT DIT DIT, the carrier being switched one long, three short. Basically, it is just an on/off system.

SSTV: Slow scan television started with AM transmissions but soon turned to an FM system to minimise interference etc. The 'grey scale' covers 1500 to 2300 cycles, arranged to produce some 5 shades from black (1550) to white (2300). The images are kept in step by pulses at 1200 cycles, known as the sync pulse, which tell the picture scan where to appear in step with the transmitted frequency at the receive side. The introduction of commercial equipment has produced a great many changes in SSTV, such as slow to fast scan converters, which used large memories and held the transmitted data for long periods of time, which opened up the computer as a display device. Originally, we used 7.9 seconds for the pictures to appear, as we used ex-govt. long persistence CRTs. Memory chips were never thought of then, so when ICs appeared, everything changed.

RTTY: This needs two different tones for what is known as Audio Frequency Shift Keying. The tones are called Mark and Space, for when a mark is sent we get a character, when a space is sent we get a space. There is also Frequency Shift Keying, where the actual frequency of the carrier (produced by the transmitter) is shifted by approx. 170 cycles.

PACKET: This is just another mode similar to RTTY but the transmit side is pulsed. It needs a lot of rather expensive gear, and even the software is not cheap.

AMTOR: Not for the mainstream, but this mode controls itself. It can be arranged to automatically switch to receive or transmit, but it requires a transceiver, a computer, an interface and the expensive program. It is not for the faint hearted as a wrong keypress will lose contact or even wreck the system!

The Dragon will do all the modes with the addition of interfaces, but it is best to stick to the minimum of requirements. By this we mean a first class receiver with a decent terminal unit and good programs.

For RTTY, we have to use internationally agreed setups, commonly 170 cycles shift and 45 baud, although some hams still use 50 baud speed and perhaps Lower Side Band instead of Upper.

Before finishing, mention should be made of RAD (Tony Davis) and his efforts, which seem to have been left out. There are a couple of Dragon programs, UNISCAN and DUOSCAN, which allow pictures to be transmitted and received using the Dragon and pix from Ray Smith's library. They are similar to SSTV.

With a bit of ingenuity one can use both audio and video, switching from one to the other. The picture quality is very good, especially on VHF (2 metres). There are also a couple of other programs from the same source, namely DRAGNET and DRAGPAK, with the latter being a similar setup to Packet but solely for Dragons, allowing communication between two machines.

If anyone is interested, I will go into these in more depth, as I have used them all with great interest.

****** I don't know what response Johnny has had to his series of very interesting articles, so far, but feedback on them here has been virtually nil, so I HOPE some of you have been contacting him. After all, I had DOZENS of requests for information, articles, etc on the Amateur Radio subject, so I trust that those of you who were so anxious for information will have followed up by writing to him. It's depressing to spend a lot of time and trouble writing a whole series of articles only to be rewarded by a deafening silence!. Paul.*

Adventurer Returns. Stephen Ross

Mike Stott recently sent me a disc with some useful programs on, amongst which was one which enabled Mountains Of Ket and Temple Of Vran (two parts of the Ket Trilogy) to load. I have since managed to set up a disc with all three parts of the Trilogy, thanks to another disc sent to me by Brian O'Connor. Mountains Of Ket had been a favourite of mine which I had almost completed, but I then started having tape deck problems and the cassette got damaged. I had taken backups, but these wouldn't work either (I later discovered the problem was a break in one of the cassette lead cables).

My excursion back into Mountains Of Ket led me back into adventures in general, and the main reason for this article is to recommend one in particular, Juxtaposition - Barons of Ceti V, which many of you may know well. It begins as a text adventure on the hi-res screen, but once you manage to find your way outside the city the game really comes into its own. When you leave the city, gameplay changes, and you can move in eight compass directions with a graphic display of your progress. There are forts, towers, shafts and pyramids to explore, and I would advise using the save game facility as it is quite extensive. If you get badly stuck, Dragon User ran some help pages on the game. I have tried to be fairly vague about the game in order not to spoil it for you, and if you want to try and get hold of it, I would suggest asking Brian O'Connor at PSE Computers as he can usually get most secondhand computer software.

Not now, but later...

If I kick off in a good mood, then maybe I can slip in a request for more material a bit later on without anybody noticing. A big thank you to everybody who has written articles and sent them in (I'm sure the ... "I've written it, I just haven't got around to buying a stamp yet" ... type excuse is still in circulation somewhere) recently. Please be reassured by the fact that your efforts are appreciated and welcomed, and that the fruits of your labour will be appearing in future Updates.

If anyone would like to contribute any more articles, we'd be most grateful! Previously, back in the dim and distant past when submissions actually outstripped available page space (yes, it DID happen once...believe your granny when she tells you these things) and we didn't have to limit the size of Update simply to guarantee enough material for the next issue, I wouldn't have been wasting paragraphs saying this, but any Dragon-related articles would be most welcome nowadays. It's not that we object to reading about computing in general, and if it provokes some discussion then that's good, but I think the readers of a Dragon publication would like to see something about Dragons now and then. It doesn't have to be an epic, just your favourite ten-line Dragon routine, or something which you've got your 32 to do which may not have occurred to anyone else (keep it clean, please!). Yes, we KNOW it's difficult to think up something new, but give it a go - the readers of this Dragon publication are also the WRITERS of this Dragon publication. You can't have one without the other anymore, I'm afraid. (So we need more of the other!).

Windows 95? Don't get me started... S.W.

A Brief Explanation.....

You may think from the above piece that Your Editor is in a strangely polite and undemanding mood this month, but my Secret Sources have revealed the REAL reasons behind this apparent tranquillity [a] he has just returned from a holiday far, far away from hordes of Package Tour British Tourists (and even Germans with beach towels!), and [b] he has solved a problem that has been driving him up the wall for the past year or so. Don't worry, I'm sure he'll be back to normal soon, probably by the next issue surprising what a few weeks of being back in UK and back at work can do to people!. Paul G.

The Year 1987. Sotos Mandalos.

Some years start exceptionally well, with good software bargains even after Xmas, and this one was no exception. CompuTape as always had their offers, Microdeal of course and also Incentive software were all to be picked up at bargain prices. Also some news about OS/9, in that H C Andersen got the licence to distribute the operating system. Quickbeam had some very good titles to their list. They also took over Smithson Computing and distributed all the software they had released. On the hardware side some attempts were made for a better power supply unit (PSU) by Peaksoft.

Browsing through some old issues of the DU I read that R.A Read & Co produced some loose leaves called 'News From The Dragon'. Apparently a number of well known Dragon contributors compiled this newsletter, but I have never seen it. My guess is that it died after its first three issues. (Two, actually. Paul).

This year there were quite a few shows, but by now quite a few Dragon owners felt that it was about time to change. There were a lot of used Dragons sold at bargain prices. I bought myself for the first time a Dragon 64 and I never looked back at the old 32. A lot of us have done this I guess.

Microvision was another company very dear to my heart. The people running it (like Roy Coates) were quality people with very good knowledge of computer products. I am grateful to him for all the support he has given to the Dragon micro. Microvision did invest in releasing products for the Flex operating system, but to be honest I never had the chance to even load them on my Dragon. On the Dragon User front, I enjoyed a lot of good articles, mainly on the hardware side and the memory maps. Also the Expert's Page provided to me a lot of tips and maps on various adventures which helped me to solve some of them. John and Helen Penn organised a Dragon show in April that year at Ossett. I went to it after a long drive, but it was well worth it. This was in fact the only time I went to Ossett, mainly because of the distance.

By May 1987 Bob Preston took over Blaby's stock of software. I spend a lot of money with Bob. He really did well out of me, but the prices he had were excellent. Mike Gerrard who also contributed a lot to the Dragon micro left Dragon User, but luckily his brother took over. Peter wrote a number of computer adventure games and the service and his experience was evident from the very first articles. He also started a course on how to write adventures on your micro.

Update also had quite a lot of members (perhaps Paul can give us some numbers), and a lot of very interesting articles including a write-up on Dragon User by the unforgettable Philip Beed! The information was plentiful in the Update!. As it eventually turned out, Update proved to be the only Dragon publication to be alive today. In that year Paul Grade the chairman of Update attacked Group members for copying the group's software and quite rightly so!

METASOFT was another company that decided to invest belatedly in the Dragon micro. Their software was in fact based on OS-9 and published a 5th generation language (whatever that meant) for applications that demanded built-in intelligence, called Prolog. The company was formed by Chris Jolly and one of the major software contributors was Alan Colmerauer. I have never seen or used it as OS-9 was not my operating system. Well, that's all on that year, guys. It is very late again and I have to go out for a fag!. More next issue.

***** 1987? at that time the old Group had around 1600 members and a lot more money in its account than it does now. As to me attacking members, well, I don't recall actually chasing anyone with the family sabre, or anything like that, but I do seem to remember that some prats were buying Group software and then distributing copies to all & sundry, thus playing Hell with our profits!, and that ALWAYS makes me peevish, so a little verbal remonstrance may have been made about it. I'm still waiting for Sotos to review 1997, to find out if the Group is still around!.

Advertising Standards? Paul G.

Maybe it has nothing to do with Dragons, but a lot of Dragon owners also have to use PC machines as well, so I make no excuse at all for this piece.

Can anyone tell me why Mr. Gates and his company appear to be fireproof when it comes to deliberately misleading advertising?. You've all seen those ridiculous Windows 95 commercials, haven't you, telling you how this wonderful new software could make *YOUR* PC perform miracles?. How many of you also noticed the information that to perform at all your PC needed to be at least a 486 (true 32 bit interfacing), and have a minimum of 16 Meg of RAM to handle even the most basic, cut down, Windows 95 configuration?, or that it would need at least 32 Meg to run the whole all singing and dancing package at a reasonable speed?, or that you'd need around 57 Meg of spare hard drive to park it on?. What, none of you?!. That's funny, nor did I, possibly because it wasn't there!. Anyone notice that all the "miracles" being performed during the said commercials had nothing to do with Windows anyway, but were other software running UNDER it?. Again, not a mention of the fact that Windows 95 is just another version of a grotty GUI that has been around for years and still doesn't work properly, still fills up your drive with unwanted (and often well hidden!) files, still crashes at the slightest excuse, still has full incompatibility with a lot of mouse, scanner, printer drivers, TSRs, and other necessary odds and sods!. The best I've heard anyone say about '95 is that "it's not much worse than 3.1 or 3.11". Also, when did Microsoft ever bother to explain to all those gullible prospective punters it was hoping to hook, that Windows is only a GUI, or even explain what a GUI actually is and/or does?. More to the point, how come the Advertising Standards Authority didn't jump on them, hard?. For that matter, how come ITN allowed such misleading material to go out?. Maybe money still talks loud and long, especially when it's dollars?.

More Books Revisited. R.A.D.

TRS-80 Color Computer Assembly Language Programming. By William Barden Jr. Published by Radio Shack. 294 pages.

Originally a very expensive volume, the sharper eyes found it redundant on the shelves for about £1 in later years, with many other older Tandy Books. This uses the Tandy EDTASM package for assembly and is intended for tuition with that Editor / Assembler / Debug system. Allowing for the differences in the commands between that and the DASM assembler for the Dragon, the book is very easy to follow, taking the reader through the 6809 step by step in all facets of its then powerful capabilities from the ground up. The first 18 chapters cover assembly language basics, the instruction set of the 6809, and use of assembler. The following 3 chapters show how to link the results with Basic programmes, how to pass parameters, and where to put the Machine code in Ram. Chapter 22 explains how to use some of the Basic ROM with assembly language routines, and Chapter 23 delves into the more advanced addressing modes of the 6809. The next two Chapters are classed as 'fun' with some graphics and sound assembly while the final one, Chapter 26 is devoted to guidance on making larger programmes. There are six Appendices of useful data to conclude.

Getting Started on your Dragon. by Tim Hartnell & Robert Young. Published by Futura. £3. 174 pages.

Tim Hartnell is a widely published author of computer manuals and founder of the British ZX Users' Club and magazine Interface. He is more than complimentary about the Dragon. From the Keyboard explained the chapters take the reader -computer switched on, please - from printing on the screen, to Graphics in gentle stages. Written in an enthusiastic, friendly, easy-to-follow, manner with more than enough short examples to make for easy understanding, it is one of the more readable introductory books on the Dragon.

The Late, Late Bit

Sod's Law is operating at 120% efficiency lately. It doesn't seem to make the slightest difference what I try to do, anything that hasn't already gone disastrously wrong immediately does so. The whole world (and probably the rest of the bloody universe as well) seems to be going out of its way to foul things up at the moment. Paranoid?, Me? of course I am! it's enough to make anyone paranoid. I suppose you think the copier will work well enough to print this lot out, don't you? ... my guess is either it will smother the lot in toner, blow the entire Worthing power supply, or be bombed by NATO. (Well, it's unarmed, and Yanks NEVER knowingly attack anything that can fire back).

Anyway, to get on to more computer related matters. Stephen tells me that a couple of members have sent in articles that are causing him problems not that we aren't VERY grateful for anything you care to send for publication, of course, but it does help if the material can be used without major alteration, as it's all too easy to edit an article into something the author never intended!.

The main point is length with the format we use, a full page is roughly 770 words long, give or take half a dozen, and in order to cover as many different topics as possible we try to keep any single article within that limit we can usually make an exception and run to a page and a half, if necessary, but anything longer than that is best run as a series, which is where the snag comes in. If your magnum opus runs to a couple of dozen pages, that's fine, but in that case PLEASE split it into roughly page size episodes, because YOU can run each part to a natural "break point" far better than Stephen or I can. So long as you remember that, there is no problem a couple of lines or a couple of dozen pages will always be very welcome. OK?. Right, next item is a request for help/information about an ancient Dragon User listing which Gordon Talbot has typed in but which doesn't appear to produce the promised results (yes, I know we've all had that problem!). The program in question was a Peter Whittaker one in the October 1985 (so OK, some people type more slowly than others) DU, and consisted of two listings, one titled "Splitz", the other "Flicker Screen", and the object of the exercise, it seems, was to provide a split screen graphics/text facility. If you ever typed these in, and found that they worked, or alternatively why they didn't, or could help in making them do so, how about getting in touch with Gordon?. His address is: 81, Leighton, Orton Malborne, Peterborough, PE2-5QD. Go on, look back through all those old DU's and all those old listings you typed in so laboriously!. Next on the list is a bit of news ... I've just received the current Bargain List from a firm called First Surplus, that I've dealt with a few times in the past, and while they concentrate almost exclusively on PC hardware some of it, like disc drives, could well be of use to Dragon keepers too 360K floppies (that's double sided double density when used on a Dragon) at £10.00 each (guaranteed), 1.2's at the same price, 1.4 3.5" for £22.00 new ... 9 pin printers for £59.00, and for anyone wanting to play with a PC without spending a fortune, XT systems (including colour monitor and keyboard but with no hard drive (those are cheap enough, too!) for £39.00, or for the more extravagant, 286 PC's complete with colour monitor and 20 Meg hard drive, etc for £99.00, and assorted other machines/systems at all prices in between!. If you want to get a list from them, the address is: Unit 22, 106A, Bedford Road, Wootton, Bedford. MK43-9JB. (01234-765026). Now don't say I never tell you anything!. By the way ... with all those people who bought disc drives, DOS cartridges, etc from Brian O'Conner's Summer Sale, I was expecting a mad rush of orders for disc based Group software I know you didn't want to appear ill mannered by all rushing at once, but honestly, I won't complain if you rush just a LITTLE bit harder disc sales since the last Update come to exactly FOUR discs, and those were all to the same person!. You aren't the NHS, you know, you don't have to make THAT many spending cuts!. Oh well, I'd better finish this page before Sods Law catches up with THAT and crashes the bloody computer!. All imagination? ... then why did my van windscreen shatter yesterday?, why did half a ton of rubble just fall down my chimney?, why did the Oh Hell!, what's the use of asking, we all KNOW why!.. Paul G.

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