

The Newsletter of the National Dragon Users Group

DRAGON



UPDATE

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The Gaffer's Bit

There isn't really anything new to write about this month, so I may as well make use of the space to try (yet again!) to clarify a couple of points that some people appear incapable of understanding. Firstly, you may have noticed that Stephen, Mike, and I live some distance apart, which means that the only times we usually meet are at the "big" Dragon shows SO IT'S ABSOLUTELY POINTLESS SENDING UPDATE ARTICLES TO ME OR MIKE, SENDING ADDRESS CHANGES ETC TO MIKE OR STEPHEN, OR ADVERTS TO ANYONE EXCEPT ME!. Got that?. Good. As of now anything sent to the wrong person will be pointedly ignored, as believe it or not it costs us (and the Group) money to send it on to the correct address, and it also costs us time, which is even more important!. While we're willing to spend time on normal Group requirements, we DO still like to have SOME time for our own business, which means that totally unnecessary work is NOT, repeat NOT appreciated!.

Mike deals with software reviews and some software queries, Stephen types in and collates the main part of Update and deals with NDUKSOFT transactions, and I handle ALL admin work, advertising, printing and mailing Update, and all other Group sales, enquiries, etc. OK?. So please GET IT RIGHT!.

Second point is that I do NOT carry stocks of back issue Updates. If you need back issues read the advert from Eric Hall and you'll find all the necessary details ... don't ask me, I don't keep any!.

Having got that out of the way, it only remains for me to remind you about the Shows Ossett Town Hall on Saturday 21st. April, and Hove Town Hall on Saturday 2nd. June. PLEASE do your best to attend, and even if YOU can't possibly manage to get there make sure that both shows get maximum publicity ... tell EVERYONE about them, they aren't secret!!.

The Editor's Bit . . .

I've figured out why every month seems to be so dull. Some of the actual days are OK, but as soon as we get to the end of the month, and I have to type up this issue, things rapidly go downhill. Continually asking for articles, continually getting the barest minimum. If something interesting happened Dragon-wise, it'd be less of a slog, but the chances of that happening with a user group full of people who are more apathetic than Brookside viewers is nil.

The good news, however, is that the sequels (yes, plural) to yours and mine (well, mine anyway) favourite film^{are} are about to begin production back to back. Yippee! (stop bleeding moaning, Paul. It's the only thing remotely interesting this month)!. Stephen.

PEEKING THE DRAGON (23) - MIKE STOTT

For the second month in succession I am pleased to be able to say that I have received new software for review. Duncan Bryan of 74, Beeston Road, Dunkirk, Nottingham, NG7 2JP has sent me a copy of a game which he has written called "Buzzing Bertie" and obviously owes a lot to Jet Set Willy. Unfortunately I have not had much chance to look at it but it seems to be much easier than JSW as there is not so much happening on each screen. There is no mention of price with the review copy which came on cassette but it transfers easily on to disk and the letter says that there are 23 screens.

Dragsoft have sent me a copy of "Slow But Sure" (tape or disk 5.00) which is a Basic Screen Dump written for the Memotech DMX80 and Panasonic but should run on most 8 bit Epsom compatible printers.

Dragonfire Services have sent me copies of "Pop Up Print Master", disk only 4.00 and "Hole", disk or tape 3.00. Although both these programs have been reviewed in the past they will be sent out to a fresh reviewer, as is anything else that is sent to me.

To move on to adventures, I have received a letter from Ron Kilbride of Leeds who has come up with help for Patricia Hill. ADVENTURELAND : in the MAZE OF PITS is a THICK PERSIAN RUG. In this location GET RUG:SAY AWAY. In any other location (but 1) this will return to initial place. Exception is QUICKSAND BOG - fatal to take rug in here.

SECRET MISSION : the SABOTEUR has the manilla envelope (empty).

GOLDEN VOYAGE : ROCKY STRAND is not random providing you return to PERSIAN CITY from each of the 3 locations.

i.e. from PERSIAN CITY....SAIL SOUTH...ROCKY STRAND

thenSAIL NORTH...PERSIAN CITY

or SAIL EAST:SAIL EAST..SANDY BEACH

then SAIL WEST:SAIL WEST...PERSIAN CITY In each case after sailing you must CLIMB MAST:LOOK TELESCOPE.

Help is also offered for Robert Clemison in POSEIDON ADVENTURE - TIE ROPE:TO LEDGE:S. Ron also asks for help from you in two adventures. SORCEROR OF CLAYMORGUE CASTLE - is his copy bugged? CAST YOHO puts him on a box, but this should be used to get out of and back into THE HOLE. Has anyone any ideas? RIVER OF FIRE (one I have not heard of I'm afraid) - again the program appears bugged but he has got to the BOAT (by a programmer's shortcut) but cannot find a way to steer. i.e what bearing? every thing he enters causes sudden death. He also tells me that the program boasts a SAVE facility but there isn't one and he is finding it very frustrating having to retrace all his steps to the boat.

Once again Paul has asked me to run the Group stand at Ossett so I look forward to meeting old friends at Ossett Town Hall on Saturday 21st April. Stuart Beardwood, who helped me on the stand last year with his Dragon music, hopes to run a Group PD stand this year which should be of great interest to young and old alike if I know Stuart. There is an open invitation for everybody to come over to our stand, say hello, have a chat, tell me your problems - can't promise I will be able to help but I know a very nice man who can. If anybody is interested in reviewing I hope to have software on the day for review or write out a piece about an item of software that you enjoyed (or disliked) and hand it to me. If you have discovered some interesting or unusual things you can do with a Dragon (within reason) why not let everybody else see it at Ossett. A space and some time can always be found for items of interest. The Ossett show is always a good one so let's try and make this one even better. Mike Townsend of Dragsoft has now updated "Data and Loader Printer" so that it will now write directly to tape as well as printer. This program is available on tape or disk for 3.00 incl p&p and he can provide all his programs on tape in ASCII format for Tandy users. If ordering items from Dragsoft please make cheques etc payable to M. Townsend.

I look forward to seeing as many of you as possible at Ossett.

DIAMOND MANSION - PHIL CHATFIELD

This is not a game for the devoted horticulturist as one of the features of this adventure is a particularly annoying gardener. On the plus side for the rest of humanity, who regard the garden as some sort of no man's land that has to be crossed at cost to your conscience to reach the outside world, the good news is that you can kill the mud bespattered individual if given the time to gather the tools. I will go on to say that I never managed, and believe me I tried!!! This adventure boasts all the merits and failings that any Dragon adventurer will have encountered in similar versions. In other words - the same old story with only the names changed to protect the innocent (guilty??). To give one example, which will not release the secret of the puzzle, the phrase 'SPRAY FLY-SPRAY' is not a natural one for me. I would hope that 'USE FLY-SPRAY' is acceptable but not in this game. To obtain the prize will not present any long term difficulty if you employ all the usual methods of mapping etc. To get the finish/success message is quite another matter. I just don't see anyone realising what is required. Of course it could be me, I don't mind admitting to being exceptionally thick!!! In summation, this adventure will bring you several hours of amusement (frustration) but will not go down as an all time great. It is somewhat weakened by the end requirement which completely escaped me.

DIAMOND MANSION available from Dragonfire Services, 8 Ingleby Road, Wigston, Leicester, LE8 1DQ but check with Robin first for prices etc as he has not sent me a full price list yet.

JSW+ GRAPHICS - KEITH STUART

When I reviewed JSW+, an excellent screen editor for the infamous platform game, my only real criticism was that the graphics could not be altered and you had to use the same background graphics as the original. Paul Burgin, author of JSW+, has rectified this. JSW+ GRAPHICS must be used in conjunction with JSW and JSW+ to create entirely new versions of the game. You are presented with four options EDIT, EXIT (used to load up the JSW game section to see your graphics in action), TAPE (to save or load separate files) and CHEAT (start a game with infinite lives or total immunity).

When you enter EDIT you are presented with a new screen consisting of an 8x8 grid in the bottom left hand corner and a set of details in the top right. You can alter background objects, hazards, objects, lettering, number style, arrows, conveyor belts, monsters, and even the title screen. You edit the graphics by, firstly, choosing which aspect of the game you wish to change. The details in the top right tell you what graphics you have selected. Examples of the actual size are shown and you can edit within the grid by moving a flashing cursor and toggling the pixel underneath by using 'space' and '/'. It is possible to clear graphic frames entirely so as to completely redesign them, a frame can be inverted and also the boldness can be changed. Also in this section is a useful library function which allows you to temporarily store graphic frames in memory. This is especially useful when designing animated graphics (such as monsters) as the 4-8 frames needed to accomplish this can be saved independently and transposed onto one another so as to avoid having to redraw completely for each frame. Pressing 'X' in Edit mode displays a new menu which allows saving/loading of each individual graphic type or title screen. When editing is finished you can use your efforts together with JSW and JSW+ to create a whole new platform game.

I was a little confused when I was confronted with all the menus but found the best way to understand the software was to experiment with the graphics on a trial and error basis. I must admit that I cannot think of a more suitable method of graphics editing and found the instructions adequate (if a little short) and the presentation is well designed. A must if you have the patience to redesign dozens of graphic frames as the end result more than compensates for the long editing process.

JSW+ GRAPHICS available on cassette for 3.00 + 50p p&p (or 5.00 if you want JSW+ as well) from Paul Burgin, 18, Moorcroft Road, Sheffield, S10 4GS.



Fishy Business Eleven...

Yes, vassals, prepare for a roller coaster of a ride through the fun and whacky world of Dragon games. Did I say world? I did of course mean island, no make it a village, no for strict accuracy make it a small, semi-detached 3 up 2 down on the outskirts of Basildon. Yes, we are talking SEVERE recession. Where have all the games writers gone? Probably to the land-of-no-apathy if they've got any sense. The word apathy seems to crop up quite a lot in these hallowed pages, doesn't it? It'd probably be a good epitaph for Update in fact.

Of course, you don't have to be able to write games to help keep things afloat. Look at me, I thought a DragonDos meant sitting on your Computer with your feet on the cassette drinking coffee and smoking pot.. (That's what comes of living in Norfolk!..SW**). Yet I still manage to do something, however insignificant. And even if you can't manage writing something for Update, a letter to me would suffice, with a few handy hints, hi-scores, POKES, or interesting photographs of semi-naked guppies. Why, you may be asking, is His Magnificent Magnitude Dudley babbling on about apathy? Could it be he hasn't got an awful lot to write about? Dead Right!

Remember last month's promise to talk about JSW+? Well, I've hit a rather unfortunate snag; called an I/O ERROR. I'm afraid it turned up during the compiling process, so if you want to see how good it is you'll just have to buy it won't you! See previous months for Paul Burgin's address. But, do not fear, I still have Total Eclipse. I'm afraid the game itself is far too complex to explain here, but suffice it to say you have to fly around lots of planets trading, shooting pirates, and generally having fun and making money. What's it like though? Well, personally, I like it. Once you've got into it, it's pretty good. You just have to sell that one last load of cargo or buy another upgrade for your ship. Perhaps its only drawback is that it's a little tough to get into in the first place, but it's worthwhile persevering. Total Eclipse is available from John Penn, but 'phone on 04203 5970 before you send away, to check the price, as the fiver I paid may only have been a special Weston show price. Look below for how I've marked it.

So, without further delay, onwards to this month's reviews...

	G	S	P	D	OVERALL
TOTAL ECLIPSE	7	-	6	8	7
CASCADE '50' TAPE	0	0	0	3	1
GALACTIC GUS	4	6	6	7	6
MANDRAGORE	8	8	7	7	8
JUXTAPOSITION	8	-	8	9	8

P.P.P

That's it then. I'm off now to observe a 28 day period of official mourning for my Comp. Pro 5000 joystick, which went to the great joystick factory in the sky during the writing of this column, after 3 years of faithful service (should use a Konix then!...SW**). See what I sacrifice for you people? Would a couple of letters really be too much to ask? If it is, then this is one fish who might soon find it too much to write this column every month, and where would that leave all you games lovers (if you still exist...).

Group New Releases!!!!!!

Thanks to the efforts of that well known genius, R.A.Davis, we now have two MORE programs to offer you.

The first is "EZEE ADVENTURE WRITER", a kind of "Adventure Writer for Beginners" program, ideal for all of you who found the Cowen Adventure Writer a bit too heavy to cope with. The second is the sequel to The "EASY MACHINE CODE TUTORIAL" disc, and continues where that one left off.

The price for either EMC2 or EZEE A.W is 3.50. Both programs are on DragonDOS disc ONLY, and are available from Paul Grade at the usual address.

Basic Fractals III... Roy Cashmore

Mr Spock and his Fractal Trees

In part II, I referred to the pictures produced by fractals as reminiscent of natural objects. Because of the inbuilt random factors, the program will draw many different trees. You may, therefore, wish to incorporate a screen dump so that you can record and compare the results. Unlike the previous two listings, this one takes less than 15 minutes to run.

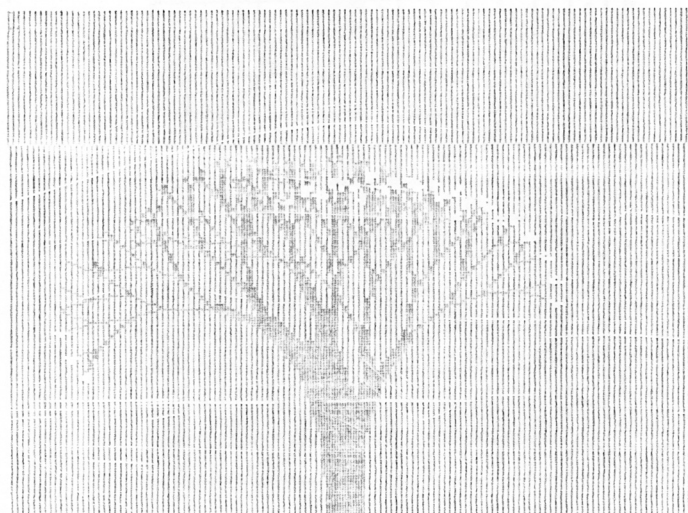
Altering the values of LE, WI, WD and/or CL in lines 100 and 110 will give different effects. After a branch has been drawn, new parameters are set (lines 360-420) and then put into an array (4430). They are 'shunted' up the array by the subroutine (500-550). More branches will be drawn if the size of the array is increased (50) AND the value near the end of line 430 (394 as written) is increased to 6 less than the array size.

Similar programs can produce realistic fractal landscapes. Fractals were used for some of the effects in Star Trek II and, so I am told, for landscapes in a James Bond film.

Further information about Fractals can be obtained by subscribing to Fractal Report from Reeves Telecommunications Laboratories Ltd., West Towan House, Porthowan, Truro, TR4 8AX (10.00 for six issues), or in the book Engines Of Creation by Eric. K. Drexler (11.20 inc postage) from the same address.

If you cannot face typing in the listing, send a clean tape (only) and 1.50 to me at Church Farm Cottage, Blaston, via Market Harborough, LE16 8DE; and I will put a copy of each listing onto it.

```
50 DIMK(400)
60 ST=1:EP=ST+3
100 FT=0.5:F#="":LE=30:WI=30:WF=0.5
110 WD=10:CL=10:AI=10:RF=0.85
120 FG=3:K(1)=120:K(2)=0:K(3)=45
150 PMODE3,1:COLORFG,2:PCLS
160 LINE(0,0)-(255,50),PSET,BF:SCREEN1,0
200 IF F#="" THEN FT=FTX2
210 W=WD/2-WD*RDND(0):CT=CL/2-CL*RDND(0):LE=LE*RF+CT:WI=WI*RF+
WF
220 'DRAW LOOP
230 FOR F=0 TO FT
240 AN=3.141593*(K(ST+2)/70):C=COS(AN):S=SIN(AN)
245 XS=K(ST):YS=K(ST+1)
250 FG=4:IF LE<4 THEN FG=1
255 COLOR FG,2
260 FOR I=0 TO WI:FOR J=0 TO WI
270 PX=XS+I:PY=191-(YS+J)
280 DX=PX+LXC:DY=PY-(LE*Y):IF DX<0 OR DX>255 OR DY<0 OR DY>
191 THEN GOSUB 500:EP=EP+3:GOTO 450
290 'DRAW BRANCH
```



```
291 'RELATIVE MOVEMENT
292 LINE(PX,PY)-(LE*Y+PX,PY-LE*Y),PSET
300 'END OF BRANCH
301 NEXTJ,I
350 IF F#="" THEN 410
360 FI=WI-WI*WF*RF:XS=XS+LXC:YS=YS+LE*Y:X1=XS+FI*Y:Y1=YS+FI
YC
370 A1=K(ST+2)+A1+W
380 IF A1<0 THEN A1=A1+180:GOTO 380
390 IF A1=180 THEN A1=A1-180:GOTO 390
400 A2=K(ST+2)-A1+W
410 IF A2<0 THEN A2=A2+180:GOTO 410
420 IF A2=180 THEN A2=A2-180:GOTO 420
430 K(EP)=XS:K(EP+1)=YES:K(EP+2)=A1:K(EP+3)=X1:K(EP+4)=Y1:K(
EP+5)=A2:EP=EP+6:IF EP>394 THEN F#=""
440 SUB 500
450 NEXTF
460 IF EN#="" THEN 630 ELSE 200
500 'SHIFT
510 FOR Q=ST TO EP-3
520 K(Q)=K(Q+3)
530 NEXT Q
540 IF EP-4<=ST AND EN#="" THEN 600
550 EP=EP-3:RETURN
600 CLSO:PRINT"PROGRAM FINISHED","FINAL NO. BRANCHES=":FT
610 PLAY"L2GARGP2":EN#=""
620 PMODE3,1:SCREEN1,0:RETURN
630 GOTO 630
640 END
```

With the DASM assembler it is quite easy to reserve bytes for data with RMB, these can then be filled with the data with the FCB or FDB commands. The data may be ASCII codes for printing, graphics or numbers, or they may be zeros to retain spaces for storing the results of calculations. Fortunately with DASM you don't have to keep referring to tables to find the ASCII codes for the letters or numbers etc., which you want to use. If the letter etc. is preceded by an exclamation mark (!) DASM will interpret it as the hex ASCII code of the letter etc. Try this assembly on DASM:-

```

10 CLEAR 400,&H6FFF
20 EXEC &HCFFA
30 ALL
40 @START EQU *
50 BRA @BEGIN
60 @DATA EQU $7003
70 RMB 16
80 FCB 0,!T,!H,!I,!S,$60,!I,!S,$60
    ,!U,!P,!D,!A,!T,!E,00
90 @LEN EQU *
100 @BEGIN JSR $BA77
110 LDX #$0508
120 LDY #@DATA
130 @PRINT LDA ,Y+
    140 CMPA #$00
150 BEQ @END
160 STA ,X+
170 BRA @PRINT
180 @END RTS
190 END

```

If you EXEC &H7000 you will see the result. If you EXEC &HC000 with DASM, you will be in the monitor and can examine the bytes from &H7000. There you will see the letters stored as hex characters, pressing <clear> will show the actual letters stored. Line 40 above starts the program at &H7000 but line 50 tells it to jump to the actual commencement of the routine at @BEGIN. In between is the data already stored in place by the assembler, taking bytes &H7003 to &H7011. At @BEGIN the screen is cleared by jumping to the ROM routine. Next the X register is loaded with the number of the screen location at which we want to start printing, using immediate addressing and the Y register which is similar to the X register, is loaded with the address of @DATA, again with immediate addressing, in this case &H7003. PRINT loads the A register with the data pointed to by the Y register and increments the Y register to point at the next item of data. We have ended the data with 00 which does not need to be printed out, so we compare the A register with the number 00 to see if the routine has ended, if so the program will branch to the end at @END. Otherwise the data now in the A register is stored at the location pointed to by the X register in line 160 and the X register is incremented to point at the next location, ready for the next item of data. Line 170 sends the program back to @PRINT to get the next item of data and so on. Other assemblers may differ slightly and if you haven't got one yet and wish to try this out with the Basic poke routine given in previous articles, the data is:-

I=LH7000 J=1 to 39

The data is 20,10,00,54,48,49,53,60,49,53,60,55,50,44,41,54,45,00,BD,BA
77,8E,05,08,10,8E,70,03,A6,A0,81,00,27,04,A7,80,20,F6,39

for the whole routine. A further step forward is to use a string of characters as data instead of single characters, we will look at this next.

Crossword Number 51. J.D.Bateman.

ACROSS: 1A. Miss Collins actress in Shorley Valentine; 1J. Sacred bird revered by ancient Egyptians; 2B. Roundhead leader who fought the Cavaliers; 3D. The act of joining two metals together by fusion; 4D. Total or partial lunar interception of the sun; 5A. Deciduous tree; 5J. Nothing; 6D. Holed piece of round metal placed between head of a bolt and surface against which it is tightened; 8A. Estimated price for a future service or contract; 8H. See K1; 9I. To long for food when on a diet; 10D. Deep narrow gorge worn away by a stream; 11A. Fizzy (sweet) powder maybe found in a fountain; 11H. Faint luminous mass of misty matter in the sky; 13A. Remove water from; 13J. Sounds like an expensive family of ruminant horned ungulates.

DOWN: A1. Mr. Collins one time drummer/singer with Genesis; A7. Crash into a racquet game; B1. Having a low pH; C2. To draw off wines or spirits from one vessel to another; C7. Cheese loving computer aid?; D1. One of the smaller stretches of water in the Lake District; F4. To pay aural attention; F10. Remove the compass point between West and South from a mixed up swerve and you will still move off course; G3. This piece of crockery is starting to appear on buildings all over the country; H8. Headwear worn by women at Easter perhaps; I4. Motorists should go to a garage for one of these, not a church; J9. Description of a dog suffering from hydrophobia; K1 & B8. Carpenters tools for drilling holes; L1. Period of time between two acts of a play perhaps; L9. A device which usually allows the flow of liquid or gas in one direction only; M1. Common see thru sticky tape.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	P	A	U	L	I	N	E				I	B	I
2	H	C	R	O	M	W	E	L	L		R	N	E
3	I	I		W	E	L	D	I	N	G	A	T	L
4	L	D		E	C	L	I	P	S	E	C	E	L
5							I	S		E	Z	E	R
6				W	A	S	H	E	R			V	T
7	S		M	A	T			V			A	A	
8	Q	U	O	T	E		R	I	T		L	P	
9	J		V	E	N	O	C	R	A	V	I	E	
10	A		S	R	A	V	I	N	E	A	A		
11	S	H	E	R	B	E	T	N	E	B	V	L	A
12	H					E	E		I		V		
13						R	T			D	E	R	R

GET & PUT with BASIC 42. K.Redhead

The following information may be of interest to anyone using Bob Harris' excellent BASIC 42 Operating System. Some time ago, I had occasion to write a fairly complex program for my office, part of which involved displaying a pie chart showing the breakdown of various departmental costs. The problem I faced with this was in finding a way to label the segments of the chart other than the tedious method of defining the required characters as strings and drawing them on the screen.

It then occurred to me that, since BASIC 42 is in effect a hi-res screen driver, it ought to be possible to use the GET and PUT commands to place letters etc at any desired point on the screen, irrespective of the normal print positions. The following listing is a shortened and edited extract from the program to show how it was achieved. It will repay typing and running to see the effect, seen below.

Line 10 dimensions required arrays, including (L)etter, since each character occupies a 5x7 grid. Lines 20-120 print titles and example data. Lines 130-250 construct the pie chart. Note in particular lines 220 and 230, which step down the lefthand side of the screen a line at a time, GETting each key letter in turn (220), and PUT them in their correct position beside the chart (230).

Lines 270-420 contain the department and percentage data.

Clearly, this method of controlling the precise positioning of characters on the screen has advantages over the alternative one of defining character strings, especially if you need to save memory. The disadvantage is that you can't alter the size of a character. I see no reason why this method can't be used with other hi-res drivers, like EDIT+ for instance.

```

_1 'ASSUMES BASIC 42 INSTALLED
10 DIM$(14),DP(14),L(30)
20 PCLS1:SCREEN1,1:COLOR0,1
30 M$="METERED POSTAL COSTS: MONTH ENDED 291089"
40 PRINT1,M$:UNDERLINE1,LEN(M$)
50 PRINT88,"DEPARTMENTAL PERCENTAGE BREAKDOWN.":UNDERLINE88,34
60 PRINT170,"DEPARTMENTS":PRINT185,"%S":UNDERLINE170,11:UNDE
RLINE185,4:PRINT:PRINT
70 FORI=1TO14
80 READ D$(I), DP(I):
90 PRINTCHR$(I+64);PRINTTAB(2)D$(I);LN=(16-COLPOS):PRINTSTRING
$(LN,46);
100 P=268+(I-1)*42:PRINT42,USING "##.##";DP(I)
110 NEXT
120 UNDERLINE813,6:PRINT847,"TOTAL:-":PRINT855,"100.00":UNDER
LINE847,14
130 XO=193:YO=96:R=53:TH=0:DX=R:DY=0:PI=4*ATN(1)
140 CIRCLE(XO,YO),R
150 FORI=1TO14
160 IF DP(I)<1.00 THEN 240
170 XR=DX*COS(TH)-DY*SIN(TH):YR=DX*SIN(TH)+DY*COS(TH)
180 LINE(XO+XR,YO+YR)-(XO,YO),PSET
190 DX=XR:DY=YR:TH=PI*DP(I)/100
200 XR=DX*COS(TH)-DY*SIN(TH):YR=DX*SIN(TH)+DY*COS(TH)
210 XT=INT(XO+1.1*XR):YT=INT(YO+1.1*YR)
220 GET(0,47+((I-1)*81))-(6,55+((I-1)*81)),L,6
230 PUT(XT-3,YT-3)-(XT+3,YT+3),L,PSET
240 DX=XR:DY=YR
250 NEXT
260 M$="CUMULATIVE 7-MONTH AVERAGES"
270 PRINT931,M$:UNDERLINE931,LEN(M$)
280 GOTO 280
290 DATA PUBLICITY,9.52
300 DATA MARKETING,2.01

```

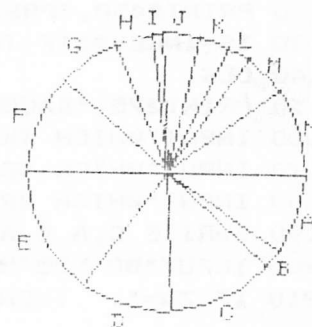
```

310 DATA PREMIUMS,12.31
320 DATA CLAIMS,10.64
330 DATA CASHIERS,15.32
340 DATA LEGAL,11.67
350 DATA INVESTMENTS,7.21
360 DATA PERSONNEL,4.31
370 DATA RECRUITMENT,1.15
380 DATA PAYROLL,4.42
390 DATA BRANCH ADMIN.,3.53
400 DATA STATISTICS,2.50
410 DATA PRINTING,5.43
420 DATA MISCELLANEOUS,9.98

```

METERED POSTAL COSTS: MONTH ENDED 291089
DEPARTMENTAL PERCENTAGE BREAKDOWN.

DEPARTMENTS	%S
A PUBLICITY....	9.52
B MARKETING....	2.01
C PREMIUMS....	12.31
D CLAIMS.....	10.64
E CASHIERS.....	15.32
F LEGAL.....	11.67
G INVESTMENTS..	7.21
H PERSONNEL....	4.31
I RECRUITMENT..	1.15
J PAYROLL.....	4.42
K BRANCH ADMIN.	3.53
L STATISTICS...	2.50
M PRINTING.....	5.43
N MISCELLANEOUS	9.98
TOTAL:- 100.00	



CUMULATIVE 7-MONTH AVERAGES

OS9 STYLO Filter...Jeff Purcell

One of the features of OS9 is the ability to redirect the output of a program. By writing a 'filter', output data can be further processed before being passed to a standard output such as the printer or a file.

OS9 is instructed to set up a Pipeline with the '!' symbol, telling it to pass data from the operation before the '!' to that after it.

One of the archaic frustrations of our Dragon version of the otherwise very professional Stylo word-processor is that it isn't set up for Epson type dot-matrix printers.. So, what we have all been waiting for is a Stylo filter. The late Siegfried Computer Gruppe in Germany wrote a real scorcher, and it is demonstrated on the OS9 Newdisk number 21 by Burghard Kinzel. A typical print instruction might be: `MM letter_header letter_to_p.Grade ! DEC it >p`

MM is the Stylo MailMerge program. Letter_header is my standard header which automatically inserts the date. Then the pipeline instruction to redirect the output into the customising program DEC. The parameter 'it' would tell the printer to use italic font. The beauty is that any instruction your printer can cope with can be added here.

In operation there is no discernable delay. The quality of OS9 support from the German group is most professional. If there are any OS9 addicts who haven't joined please do so without delay. Their address is:

Leipziger Ring 22a, D 5042 Erftstadt,
West Germany.

PIV ERROR continued...R.F. Roach

This is different to the program featured in the October '89 issue of Update, which only enabled you to view the sector contents of the disk.

If you wish to copy from one sector of a disc to another sector of the same disk, or even from another disk, the following program will meet your needs. It is self explanatory on screen.

```
10 CLEAR2000
20 CLS
30 PRINT@75,"PARENT"
40 PRINT:PRINT
50 INPUT"WHICH TRACK";X
60 INPUT"WHICH SECTOR";Y
70 INPUT"WHICH DRIVE";Z
80 SREAD Z,X,Y,A%,B%
90 PRINT:PRINTA%
100 PRINT:PRINT
110 PRINTB%
120 PRINT@450,"PRESS SPACEBAR TO CONTINUE"
130 I$=INKEY$:IF I$="" THEN 130 ELSE 140
140 CLS
150 PRINT@75,"DAUGHTER"
160 INPUT"WHICH TRACK";A
170 INPUT"WHICH SECTOR";B
180 INPUT"WHICH DRIVE";C
190 SWRITE C,A,B,A%,B%
200 INPUT"DO YOU WISH TO CONTINUE (Y/N)";Z%
210 IF Z%="Y" THEN 20 ELSE END
```

"Puff", The Magic DRAGON...

The story begins some four years ago when a knock came at the door of Westgarth, a short stay home for children with a mental handicap. A generous young man who lived nearby presented us with a large box containing a Dragon 32, cassette player and four or five games. "Oooh, a computer" everyone exclaimed, "let's plug it in and play with it". After much manual reading, knob twiddling, and sounds of "Oi, I was watching that!", we got all the right wires in the right sockets, and achieved the magic 'OK'!

Half an hour later we had Devil Assault up and running on our TV screen, and quite enjoyed the noises as we got blasted out of existence with alarming regularity. Katerpillar Attack proved a bit more manageable for those kids who could keep a finger on the joystick button for any length of time, but the repetitive sounds and graphics only provided short-lived enjoyment without the skills to move on to the next 'screen'.

At our next staff meeting it was decided to acquire another TV to provide a 'computer corner' at Westgarth, and I was appointed 'computer person' mainly because I knew how to plug it in! At that time I was completely computer illiterate. So off I went in search of some software which might be more suitable for our particular charges. Fortunately, a local newsagent who owned and used his Dragon for business had cheap software for sale and supplied us with several games and educational tapes.

After a week or so working with the children at the computer, it became apparent that for children who can neither read nor write, and have physical problems as well, the commercial software we had wasn't really suitable. My brother-in-law had owned a Dragon for some time, and after explaining to him the problems we were having, he came up with the obvious solution...write your own software! So I set about learning the rudiments of computer programming, achieving this despite the Dragon manual!

In the meantime, I wrote a letter to Dragon User (RIP) asking for help. The response was truly magnificent, and with the help and advice supplied I was able to start some enjoyable and rewarding computer activities with the children at Westgarth. I am forever grateful to those Dragoners who helped (and are still helping) in various ways.. My Composer music library, over 300 tunes, is still on offer FREE to anyone who wants six disks full of music (now upgraded with Composer-X) as my way of thanking the Dragon community.

As my meagre programming skills improved, I was able to turn 'Puff', as the Westgarth Dragon came to be called, into a very useful tool for enriching the lives of many of our children who usually have very little control over what happens around them. Computers are in use at schools, but mainly as educational instruments, so the joys of being let loose on a whole horde of alien beasts ripe for the slaughter, or even just 'messaging about', are very often denied children with so called 'special needs'. So, 'Puff' provided a means of self expression and an opportunity to enjoy a 'normal' leisure activity. Being bitten by the computer bug, I spent many hours at home developing programs for Westgarth, eventually buying a disk drive and printer. After many requests to print out reports, letters, invitations etc, and lugging my drives and printer back and forth from home to work, it was decided that perhaps Westgarth should have a system similar to my own. We have managed to acquire everything except a DOS cartridge! Where are they all? Is there a European DOS mountain somewhere?

Recent developments include a Tandy Electronic Book which has provided a much needed alternative to keyboard input, and is easier to use by the more profoundly physically handicapped children, needing less pressure and having a larger target area to aim at. I have created some picture and shape recognition programs, with musical rewards, using the Book, which have proved very popular. If any other E.B. owners want to swap ideas, do get in touch.

For the past three months I have been on 'secondment' at our local Adult Training Centre, where my own Dragon has been put to good use helping adults with learning difficulties to improve their literacy and numeracy skills. I'm more into music and graphics, but the experience has been well worthwhile, working alongside an educationalist and creating specific programs for individual needs. I was a little apprehensive at first, but felt much easier when I was greeted by the manager of the centre who, pointing to the BBC Master, Taxan printer, and twin drives (which nobody knew how to use) asked "Can we write letters on this thing?" This was perhaps only slightly more amusing than the look on the BBC software salesman's face when he arrived a few days later and saw the Dragon in use. He was even more upset when I asked him to take back the half a dozen printer drivers that he had left the week before!

The Dragon is STILL a good machine, with one of the easiest to use BASICS. It is perhaps no longer a 'quality' machine, but for me it's the quality of the users that counts, and Dragon owners are second to none. The remaining companies deserve EVERYONE'S support, they can't be in it for the money! So it must be out of respect for the machine and it's users that people go to so much trouble. Buy the software, go to the shows, help to keep the Dragon alive! I will do all I can...will you?

Stuart Beardwood.

DAY OF THE KNIGHT BY R. F. ROACH

Before you groan - "Oh, not another DTP!" - be sure to read on. I have tried out many DTPs. I must say that this is the best that I have tried. Each one has special features which endear it to one user or another, and each has its own particular special place, but this one by Steve Knight, I feel, is top of the list.

PUBLISHER TRUE DTP by KCS is on disc only and requires 64K. It BOOTS, with speed up keys, very quickly and is entirely MENU controlled. A comprehensive instruction manual comes with it, and that should be read before you load the disc. You may not follow all that the manual says, but it will fall into place when you later BOOT the disc. I can tell you, from my experience with it, you will not find out all its secrets until you have explored it for some time. There are 30 single width fonts, 6 double width fonts, and 2 symbol fonts, plus facilities for creating your own. You can change the height of the fonts, spacing between letters and vertical spacing between lines. There is a great variety of shapes you can call on, you can cut and paste, paint with a large number of patterns, magnify (to fine tune a picture), rotate, mirror, scroll etc. There is the possibility of using Tabs when laying out a page and copying, deleting, swapping, moving or inverting portions of the page, using joystick and fire-button control. When pasting you can Invert, Overlay or Background the portion being pasted, so good effects can be obtained. The disc also comes with 23 cut-out designs and 3 Screens for use as you wish. The present programme has Epson compatible Dumps, but the author has allowed for extension of the range of printer that can be used. (My Panasonic works perfectly from the programme) Nothing is perfect and, although Steve has overcome all the objections I had to the first discs he sent me to review, I still have some difficulty in accurately defining the BLOCK I wish to move, copy etc, since the whole page is shown on screen one quarter size for this purpose. The programme also gives you a 'what you see is what you get' layout, because the Dragon uses a 32 character screen and not 80 chars, but you need to scroll sideways to see the whole screen. (Being a little dim, this fooled me until I got to know it) I give this DTP the highest recommendation. You'll have hours of fun learning all it contains, and at only 15.00 from Knight Computer Services, 76 Etwall Road, Birmingham, B28 0LE, it is an absolute must for all D64 owners with printers, and great fun for those without printers.

Afterthoughts 67...

Well guys, that's a rap. Another month of superb articles and a great newsletter. Well, it never hurts to dream... Incidentally, with all this talk of ?IV ERRORS, why not try buying Disk-Kit, from the group? It is an excellent sector editor and can help revive KILLED files. Anyone with a stack of (DragonDOS) discs shouldn't be without it. See the classifieds for details. Well, if I can't plug our own products, what can I do??!!

And on the subject of NDUGSoftware, all orders for this should be sent to me, please, NOT Paul, as we all know how overworked he is (honest, Guv!). Also, cheques/P.O.s to be made payable to the NATIONAL DRAGON USERS GROUP, as usual, and not NDUGSoft or any derivations along that line. Post and packing is included (I bill it back off Paul), so no worries in that department.

Don't put yourself out at all, but if you feel like writing an article (on ANYTHING), please do so. Who knows, when I've got through the thousands of articles I haven't used yet, I might get round to reading it! See you next month.

Stephen.

P.S. Don't forget - HOVE, 2nd JUNE 1990.

OSSETT TOWN HALL ... 21st.APRIL.

HOVE TOWN HALL ... SATURDAY 2nd.JUNE.

Sampling in your games. Geir Hovland.

One feature of the Dragon hardly ever found on other computers is the D/A converter. This part of the Dragon makes it ideal for sound sampling. Other computers need additional hardware for this, and this feature has several of my PC owning friends really envious!

The assembler (Dream) listing in this article was cut from Wayne Smithson's excellent piece of software, Sound House, which appeared in one of the last Dragon Users (Nov.88). In his article he explained how to use the program but NOT how he wrote it, so I am going to explain here how to use the samples in your own games to create really fantastic effects. (Remember Superkid?).

At the top of the listing you will find two EQU statements. SADDR is the start address of the sample, and EADDR is the end address. These addresses have to be poked before calling the play routine. To check if you have entered the correct addresses type PRINT PEEK (251)*256+PEEK(252), and the same for 253/254. Then call the routine and listen to the sample.

SADDR	EQU	#251
EADDR	EQU	#253
PLAY	JSR	SETS
PLAY2	LDB	SADDR
PNB	LDB	#8 ;8 BIT TO PLAY
	STB	231 ;STORE HERE
	LDA	,X+
	CMPX	EADDR
	BHS	POUT ;POUT=END
PRB	CLRB	
	RORA	
	BCC	SKIP ;0 FOR LOW
	LDB	#S7F ;7F FOR HIGH
SKIP	ST5B	SFF20 ; STORE IN D/A
D2	LDB	#11 ;TEMPO VALUE
PZ2	DECB	
	BNE	PZ2
	DEC	231 ; 8 BIT PLAYED?
	BNE	PRB ; IF NO, NEXT BIT
	BRA	PNB ; IF YES, NXT BYT
POUT	LDB	#1
	JSR	SETS
	RTS	
SETS	LDU	#SFF01
	BSR	#+2
	LDA	,U
	ANDA	#SF7
	RORB	
	BCC	JSB7
	ORA	#8
JSB7	STA	,U++
	RTS	

The code is position-independent and can be loaded anywhere in memory. Wayne decided on a strange format for the sample data. He gets one byte from memory and starts playing from bit 0, then 1, etc through to 7. I am used to thinking of bit 7 as being the first bit of a byte, and this caused problems when I first started looking at his code. If a bit is set (1) then the byte &H7F is sent to the D/A converter (&H7F=01111111). If a bit is zero then the byte &H00 is sent. The "sample resolution" is one bit, so a 1 will give a rise in frequency and a 0 will decrease it. In the assembler listing you will also find a line which has the comment TEMPO VALUE. If you experiment with this value you can increase/decrease the speed of the sound. In most situations 11 will be the best value. At the bottom of the listing you will find a sub-routine called SETS. I am not quite sure what this one does, but I think it has something to do with the setup of the D/A converter. By experimenting I DID discover that this routine was necessary!. So now you have no excuses for not including samples in your games. If you don't have a Dragon, buy one (if you don't, why are you reading this?!. P.G). If you don't have a copy of D.User for Nov.88 write to me at the address below and send me a blank disc and I'll send you a copy of Soundhouse (it IS P.D), but it will HAVE to be on DragonDOS/SupoerDOS disc as I don't use a tape recorder at all.
Geir Hovland, Stubbsvingen 67B, 7036 TRONDHEIM, Norway.

Thanks!.

You may be intersted to know that Geir has sent me a VERY good graphics PD disc which I will be passing on to Stuart Beardwood and Ray Smith for the Group Libraries shortly. VERY many thanks, Geir, hopefully others will follow your example!. Paul.

Crossword Number 50 Answers.

ACROSS: 1A. Ghostbusters; 2A. Cartoon; 2I. Wish; 3H. Holmes; 4I. Shire; 5B. Arkansas; 6E. Rucksack; 7A. Romance; 8E. Shell; 9E. Saucer; 10C. Antidote; 11A. King; 11F. Radon; 11K. Ant; 12A. Entrance; 13A. Stradivarius.

DOWN: A1. Cairn; A7. Rubik; B1. Hanger; B9. Flint; C5. Ruminant; D1. Stack; D8. Kong; F1. Bosuns chair; I5. Skeleton; J8. Trent; K6. Friesan; L1. Sherlock; L9. Menus; M1. Reservoir.

As usual the first correct entry out of the box gets a choice of programs from the current Dragonfire Services list, the second correct entry gets a tape from Group stock. They should have arrived by the time you read this.

DESKTOP-Printer Dumps...Ken Grade.

There have been a few enquiries lately about using the Group's Desktop program with printers which are not "Epson compatible". The main advantage with the graphics screen dump used by Desktop is that it has a variable left hand margin, or tab setting.

The routine for doing this is quite simple. It consists of checking the contents of location 156 (decimal), which keeps track of the printhead position, like POS(-2) in Basic, comparing it with a given value and outputting a space to the printer until it is equal to this value.

```

      ORG      30000
TAB    LDA     #32 ;character code for space
      JSR     $800F ;printer output routine
      LDB     156
      CMPB    30010 ;contents Poke'd in by the Basic program
      BEQ     FIN
      BRA     TAB
FIN     RTS

```

That's it! The awkward job is finding the point in your printer dump at which to insert the routine. It must come before the graphics control codes are sent to printer, and obviously, the routine must be called before the start of each screen line. Printers of the Epson/Shinwa type need to receive the graphics codes before the start of each printer line in any case. I put the sequence in at the beginning of the program as a sub-routine, which is then called by the main program when needed, but it could just as easily be put at the end of the program. The other obvious point is that this is only useful for graphics dumps which print out the screen from top to bottom. If anyone tries this and gets stuck, write to me (same address as Paul) enclosing a printout of the dump and I'll try and help.

The Late, Late Bit

As you may have gathered, I'm NOT in the best of moods at the moment, but there isn't a lot to write about just now, so you don't have to put up with too much of my bad temper!. What's it all about? ... well, not really anything to do with the Group at all, just too many irritating idiocies this month, plus cashflow problems (it flows in the wrong direction!). Idiocies? politicians, moronic conservationist types talking total garbage, anti-smoking campaigns (when are we going to have an anti-eating campaign?!), Community Charge stupidities, The Budget, not having enough time to get anything done properly, lousy local drivers who haven't taken the car out since last summer staggering about all over the road there are times when I can quite understand why some people occasionally go "over the edge" and start shooting up the place!.

Anyway, other than a "Final reminder" to attend Ossett, and an apology for yet another late issue of Update, there isn't really anything to say, so I wont say it!.

GROUP SERVICES.

DRAGONART GRAPHICS LIBRARY. Contains THE biggest and best collection of graphics screens for the Dragon, all available at nominal charges. The Library also wants YOUR original graphics efforts. Full details and list available from:-
The Librarian, 5, Glen Road, Parkstone, Poole, Dorset.

TX Lo-res screen editor and manipulator. Written by Ian Rockett. Price 2.75 inclusive.
The Librarian, 5, Glen Road, Parkstone, Poole, Dorset.

BACK ISSUE UPDATES. Reprints of all issues of Update (from original master sheets) available at ONLY 95 pence per copy inclusive of postage. 14 page index of Update articles only 2.50. Single articles 50p each. (sae for details). @ Send to Eric Hall, 32, Thackeray Hall, Fareham, Hants. PO16 0PQ. Cheques made payable to "Back Issues Dept. (NDUG)".

THE PD LIBRARY: Stuart Beardwood is attempting to restart the Group P.D. Software Library, formerly operated by Lee Cooke. However, Lee is being rather obstructive about handing over the material, so Stuart is having to build up a new stock virtually from scratch. If YOU have any genuine P.D. material you could spare, or programs / routines of your own you would be willing to donate (Dragon, CoCo, OS9, Flex, etc) PLEASE CONTACT STUART AS SOON AS POSSIBLE so that we can get the service running again.
Stuart Beardwood, 38, Salisbury Place, Boottown, Halifax. HX3-6ND.

GROUP SPECIALS!

UPGRADE MANUAL. Full DIY instructions for upgrading your DJ2 to 64K. Written by Bob Hall. Price 2.00.

CIRCUIT DIAGRAMS. Available for DJ2, D64, Dragon DOS controller, Cumana DOS controller, and CoCo DOS. All the same price 1.00 each.

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ALL THE ABOVE ARE AVAILABLE FROM PAUL GRADE AT 6, NAVARINO ROAD, WORTHING, SUSSEX. CHEQUES PAYABLE TO M.D.U.G. PLEASE.

GROUP & MEMBERS PROGRAMS etc.

NDUG DESKTOP!. The Group's DTP package. Based on a FALSOFT program (produced under licence) this package is available on either Dragon DOS disc (with Epson type screen dump) or CoCo DOS (with DMF10S dump). Produce your own small posters, advertisements, magazines, program title screens, video title screens, etc. 17 font version 12.50. Orders to:-
Ray Smith, 5, Glen Road, Parkstone, Poole, Dorset. Cheques made payable to NDUG.

OS9 MODEM PROGRAM. Up & downloading of files, any Baud rate from 50150 to 960017600. (NOT split rates). Up/downloader buffer from 4 to 32K. All 6551 options supported. Price 8.00.
Phone Barry Knapp on 0932-242800 evenings only.

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J. Russell, 33, Tennyson Avenue, Clevedon, Avon. BS21-7UJ.

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Formula One ... 7.95; Disk-Kit ... 8.50; Sourcemaker ... 8.50; Lightpen (disc only) ... 2.50. @ We can also offer the Malcolm Cowen programs, Colossal Cave Adventure and Adventure Writer. Available on cassette only Colossal cave is 5.00 and Adventure Writer 7.50. (Disc version of A.W. now available at the same price).
NDUGSOFT(MW). 52, Downsway, Springfield, Chelmsford, Essex. CM1-5TU.

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Cheques / POs to Mike Townsend (Dragsoft. Dept.D.U.). 41, Hereford Street, Presteigne, Powys. LD8-2AT.

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Randy Longshore, 15547 Chaguer Drive, Chesterfield, No. 63017, U.S.A.

DOS ADAPTOR KITS to fit your DOS inside the Dragon leaving the port for other uses. A fresh batch of these units is now in production, still at the old price of 16.68 each inclusive.
Sutcliffe Electronics, 15, West Street, Hatfield, Ashford, Kent. (0233-634191).

WANTED FOR GROUP USE!. Shinwa CP80 Hx1 printer. MUST be Hx1 ONLY, and reasonably priced. Paul Grade.

PUBLISHER!. New from KCS. Full WYSIWYG D.T.P package for D64's. Includes 38 fonts and clip-art. DISC ONLY. 15.00.

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S.Knight (KCS. Dept MDG), 76, Etwell Road, Hall Green, Birmingham, B28-0LE. (021-777-2477). PLP (UK) 50p; Europe 1.00.

FOR SALE: Various Dragon discs and tapes (originals), plus books. Tapes 2.00 each, discs 7.00 each; books 1.00 to 4.50. Please phone for details.

P. Poon. 7, Worthington Drive, Collegefields, Shrewsbury, Shropshire. Phone: 0743-240289.

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WANTED!. DRAGON AND TANDY OWNERS TO ATTEND THE OSSETT SHOW ON SATURDAY 21st. APRIL. OSSETT TOWN HALL.

Help Wanted!!!!!!

My D64 is showing signs of senile instability!. The video output has deteriorated badly, and with more than a few lines on the screen the edges become ragged and a cyclical pattern runs down the display. Could anyone who has managed to solve this problem please assist?. Either a note to me at Beech House, 36, Ridgwood Road, Alderholt, Fordingbridge, Hants. SP6-3DF. or via Prestel MBX 819993365. or phone 0425-55611. Jeff Purcell.