

DRAGON



UPDATE

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The Gaffer's Bit.....

So what's new this month?...from where I am, not a lot. There's only a couple of interesting bits of news, Tim Hayton will be running some Micronet pages for us, as of now, and Ray Smith will be operating a Graphics Library, both of which ought to make very welcome additions to "Group Services", but other than that things are pretty dead. What I'd REALLY like to know is what has happened to all the cheap hardware.....A few months ago there were lots of potential "deals" around, printers, monitors, drives, modems, etc, all at virtually give away prices, but suddenly, NOTHING!. Even the contacts I usually BUY from are phoning to ask if I've heard of anything!. So where's it all gone?, if anyone out there knows the answer, PLEASE let me know and maybe we can get things moving again.

One final point for this month...one or two of you have been complaining that my "Bit" is getting too tame, that I haven't been insulting anyone lately. Don't worry, I just thought I'd try being all respectable for a while, but it won't last, I can promise you that!, and the next victim may well be YOU, so don't push your luck unless you're taking up masochism as a hobby!. Well, that's about the lot for now..I'm going to investigate the last of the Smirnoff supply and get on with answering today's mail...all 19 letters of it!. Don't be good, it's so damned boring...try being exceptional instead. *Paul G.*

THE EDITORIAL BIT

No moans this month, I don't have to, Phil Beed's done it for me in his article. Therefore this month, first of all I'll thank Neil (Scrimgeour that is) for his articles over the past months, at least someone kept sending me things to print. So, what shall I print on page 3 next month, perhaps the threatened second part of my MUG bit. Mind you, what about a topless picture of Paul, now there's a thought, if that threat doesn't get me inundated by three days after you get this, all I can say is 1) You haven't seen Paul at one of the shows or 2) You are all Masochists. Yes, that one I like, I've been sat here for 15 or 20 mins wondering what to write, now it's done.

Right, that's this month, the last though is about Redundant Information. I've had several queries about it and if I don't get some I may well start reprinting some from last year. Be warned. So now read on, the interesting stuff starts on the next page. *T.L.*

Any more suggestions like THAT one, Tim, and you may discover that "inundated" isn't QUITE the right word for what you'll get!....don't push your luck, I'm quite good at photo-montage work, and my version of "Lomas on Three" could get us banned!. ...The Gaffer.

LARGE COLOUR CGP115 DUMP... R.A DAVIS

Philip Beed suggested to me that a dump which uses the fast scrolling ability of the CGP115 might prove quicker than those we have. This is the result. The printer scrolls up to set the origin in line 200. I have made a silent scan routine in lines 270-310, the pen will not move if the line being scanned does not contain a pixel of the colour sought. The pens will not change colour until the correct colour has been found. As usual, only one colour is used for each complete scan of the screen, to save time also in changing the pens. When a pixel of the correct colour is detected, the pen will move to that position on the paper and print. It will stay there until the next pixel is found. This avoids a waste of time by moving the pen without drawing. As usual yellow is taken as the paper colour so it's better to have yellow as the background colour. As printing takes place every other line, the result is not as dense a colour compared to small dumps. You will find it easy to alter this routine to use the black pen instead of one of the others and also to amend it to do a PMODE4 screen in black. The high speed poke is used, if you have any doubts about your Dragon using this, you can delete line 80, but of course the routine scans the RAM, not the screen. As it takes 2 pixels per colour, only every other pixel needs to be tested which also speeds it up quite a bit.

```

10 CLS
20 PRINT" THIS IS A LARGE SCREENDUMP
FROM D32 TO CGP115 PRINTER PLOTTER
IT WORKS ONLY IN PMODE3 SCREEN1,0 IN
COLOUR, IT IS BEST TO HAVE YOUR
BACKGROUND COLOUR YELLOW."
30 PRINT" IT PRINTS ONE COLOUR AT A
TIME THEN GOES BACK TO THE START TO
PRINT THE NEXT ONE. THE ORDER IS GREEN
GREEN,BLUE,RED YELLOW =PAPER
PRESS A KEY.":EXEC34091
40 CLS:PRINT:PRINT" THE PAPER SCROLLS
UP AND DOWN TO GIVE AN ENLARGED DUMP
ALONG THE PAPER. THE PEN WILL NOT MOVE
OR CHANGE UNTIL A PIXEL OF THE CORRECT
COLOUR IS FOUND.PRESS A KEY":EXEC34091
50 CLS:PRINT:PRINT"POSITION TAPE ON
SAVED PICTURE AND PRESS PLAY. ENSURE
PRINTER IS READY. THEN PRESS A KEY":
EXEC 34091
60 PMODE3,1:SCREEN1,0
70 CLOADM
80 POKE65495,0:REM HIGH SPEED POKE
90 GOSUB170
100 POKE65494,0:CLS:PRINT" DO YOU WANT
ANOTHER DUMP OF THE SAME SCREEN(Y/N)
?":REM CHANGE SPEED
110 I$=INKEY$:IF I$="" THEN 110
120 IF I$="Y" THE SCREEN1,0:GOTO200
130 CLS:PRINT" DO YOU WANT TO LOAD
ANOTHER SCREEN TO DUMP(Y/N)?"
140 I$=INKEY$:IF I$<>"Y" AND I$<>"N"
THEN 140
150 IF I$="Y" THEN RUN110
160 STOP
170 'PRINT ROUTINE
180 Z=1
190 PRINT #-1,CHR$(18);'GRAPHICS
200 PRINT #-2,"R48-512"
210 PRINT #-2,"I";'SET ORIGIN
220 IF Z=2 THEN Z=3
230 X=0:Y=0:F=0:L=0
240 A$=INKEY$:IF A$="R" THEN PRINT#-2,
"A":RETURN
250 IF Y>192 THEN 410
260 C=PPOINT(X,Y)
270 IF F=1 THEN 320
280 FORP=X TO 255 STEP 2:U=PPOINT(P,Y)
:IF U<>Z THEN NEXTP
290 IF Y>192 THEN Y=0:GOTO430
300 IF U=Z THEN F=1:GOTO320
310 X=0:Y=Y+1:L=L+2:GOTO240
320 IF C<>Z THEN S=1:GOTO380
330 IF C=2 THEN S=1:GOTO410
340 IF C=1 THEN C=2:GOTO370
350 IF C=3 THEN C=1:GOTO370
360 IF C=4 THEN C=3
370 PRINT #-2,"C";C
380 IF S=1 THEN S=0:GOTO410
390 PRINT #-2,"M";L;",";X*2
400 PRINT#-2,"J0,2":F=0:GOTO410
410 IF Y>=192 THEN Y=0:L=0:X=0:GOTO440
420 IF X>=255 THEN Y=Y+1:L=L+2:X=0:
GOTO240
GOTO240
430 X=X+1:GOTO240
440 Z=Z+1:IF Z>=5 THEN 460
450 PRINT#-2,"M0,0":GOTO220
460 PRINT #-2,"M0,0":PRINT #-2"A":RETURN

```

DRAGON DIARY NEIL SCRIMGEOUR

My God!, I actually got a response to the PCOPY problem mentioned a couple of months back!. Well, only one, but even one is better than none. It was also quite a good one as well, the saviour is RA Davis and the best thing to do is quote from his letter, so here goes:-

'I have had a good look at the ROM in the 64 and 32 at the PCOPY routines. There appear to be two routines at the address, and, the 64 JMPs and BRs are of course to higher locations than the 32, also the second routine is slightly different in each case. But the main danger lies in the fact that the 64 ROM has been ammended to allow for the EXEC which puts the machine in 64k mode, so there must be major differences in any case. It's far too complicated for me to touch. (and me Neil).

Mr Davis continues;

".... The routine uses 16k to store graphics pages of 1536 bytes equivalent to PCOPY1 as it stands, the second half of the routine dumps them back to the screen. It uses addresses POKEd into locations 32766 and 32767 to determine the pages to be swapped from Basic. By using variables to define these addresses in advance, it should be quite simple to store and dump as many graphics pages as you need and dump them into any other screen page. If in 64 mode the routine would have to be moved into high memory locations of course, this is quite easy to do. 32118 is the EXEC to store the pages and 32100 to display them, in the routine as it stands. I see that we were misinformed about the 64 and PCOPY. It will take variables, even complex ones, in the PCOPY command, provided you keep it to pages 1-8. The 32 will PCOPY an additional 4 pages, 16-20, as well as 1-8 without any changes it seems, and the routine in INPUT makes it easy to copy 9-20! (Using extra CLEAR)'

Well, there you go members, it's all up to you now, you've got a program to do the hard work for you. If anyone modifies it to 64 mode or just modifies the prog in general then send in the listing.

This is my last Diary piece. Through the past months I've aired my views on everything I've wanted to and exhausted all the subjects I can think of. To those of you who've written in to Diary, many thanks, all letters have been appreciated. It's also the last issue that I'm mentioned as software editor. Most of you know that I own an Amstrad 6128 and because of this I haven't been able to devote as much time to the Dragon as I've wanted to. I will be popping up every now and then with the odd article, starting with a review of the DMP 2000 printer. Therefore please note the name of the new software editor next month. Dragon Diary may also appear under new management if anyone's foolish enough to take it on!

PS Many thanks to those of you who wrote or phoned regarding Occult's address, it is 1 Merrieleas Draive, NOT Merriedeas.

*** The following data should be poked to locations 32100 to 32135 for the routine mentioned in the articleTL

DATA 190,127,254,16,142,6,0,166,128,167,160,16,140,12,0,38,246,57,190
127,254,16,142,6,0,166,160,167,128,16,140,12,0,38,246,57

EASY MACHINE CODE (4) . . . R. A. DAVIS

What you need to know about the registers is that there are 8 of them, or 9 if you count the A & B registers together which make the D register. They are known as A,B,CC,DP,X,Y,U,S and PC. But for the moment the A,B,X and Y registers will be enough for us to digest. The first thing the 6809 'looks' for is a command, known as an OPCODE, which is a number. This could tell it to transfer data to another register, to process data, to point to data at a specified address, to test or branch, for input/ output, or for other controls. As well as indicating the type of operation to be performed, the OPCODE has to state the register or registers concerned. This means an awful lot of numbers to know or remember, but today almost everyone uses assembly language which makes the task much easier. You will find lists and explanations of OPCODES

and the assembly language equivalents in most good books about the Dragon. If you get a good assembler such as DASM/DEMON, you will get a handy reference card with that, Compusense used to supply a card separately and may still do so. If you want to carry on, you need to get such a list - NOW.

So a machine code program uses OPCODES to instruct the 6809E to load data into selected registers, move it, alter it etc. etc. This means that an OPCODE is usually followed by the data needed, or the name of the register with which the operation is connected, known as the OPERAND. To avoid having to remember the multitude of numbers which represent the OPCODES, a system of abbreviations, known as mnemonics (an aid to memory), is used. I know of 3 such systems for the Dragon, in machine code. Topsy by Pam D'arcy, Dream by Mike Kerry and DASM/DEMON from Compusense which I use. They all have slight differences. Having installed your assembler program in the Dragon, you can use it to make up your own machine code program, using some of the RAM not used for the assembler. The companion to an assembler is a disassembler. This enables you to see a machine code program in its assembler version. There are many of these, some in Basic; I use the machine code version supplied by Pam D'arcy. A further help is a Monitor program, which shows machine code as numbers, sometimes with the ASCII equivalent and allows alterations to be made. You get this with DEMON but it's fairly easy to make your own.

SP EDIT FLEX WP MIKE GANLEY

At the risk of opening up old wounds over the OS9 vFlex issue, one of the major attractions of running OS9 on a Dragon 64 must surely be the excellent word processor available for it; Stylograph. Until recently the Flex camp has not had a product of similar quality for their operating system. However, Compusense now have a Flex based, full feature word processor available! SP-Edit

Compusense have prudently made SP-Edit similar in operation to Stylograph, to enable easy conversion from one to the other. The main command menu is similar and embedded control codes follow a similar format (for example to set line length is LL). Text entry is fast and the current issue 8 of SPE fully supports the Dragonplus board, hence you can get 80 cols on screen. To be fair, SPE lacks the extra features that Mailmerge gives Stylograph. It's quite easy to produce a standard letter and merge addresses with Stylo, SPE has no facility for this. It also lacks a multi copy facility, on the plus side, Compusense supply source code for some parts of the program, enabling you to customise it to suit your particular printer (it comes configured for Epson compatibles). I was able to set it up for my Oki printer, yes, underline, double width and all, with little difficulty.

So, if you are in the market for a good wordprocessor program, and SPE is that, take a look at this one. Bearing in mind that it does lack the Mailmerge option of Stylo, but you may not want to use that. The SPE spell checker is just as good. SPE is available at 65.00 and needs a Flex system, with or without Plus board.

Ringing the changes!.

As Neil Scrimgeour has decided to resign as Software Editor, and someone HAS to do the job, as of next month Barry Caruth will be taking over this onerous task!. Neil says that his resignation has nothing at all to do with the resignations currently taking place at the BBC, Guinness, and the White House, and that he has never worked for the New Statesman under ANY name at all, so I suppose we'll have to believe him until the News of the World proves otherwise!.

Anyway, many thanks for all the work, Neil, and I hope Barry makes at least as good a job of things. Paul.

INTRO TO FLEX G.C.

What I'm going to do over 2 articles is to give an idea what the FLEX Operating System can do, firstly 2 points, I am not an expert or a programmer, I can only tell you about my experiences and how a beginner can get to grips with it, I will also be assuming that you have read the Flex articles in the Feb and Sept '85 Dragon Users, if not I suggest you borrow them, I'm not going to reinvent the wheel.

What is Flex? To say it is an operating system is stating the obvious but what is an operating system? Well, it frees the computer from being tied down to one program or language, making it more flexible. How it does this is really quite straightforward. When the machine is 'booted' a small machine code program is loaded into memory which handles all the input, output and disc accesses. The rest of the machine is 'free' RAM to allow the user to do with as they please. This has the effect of allowing any program or language to be loaded or run, be it Basic, Machine code, Pascal or whatever. All these programs will require input and output routines, these are provided by the 'kernel' or 'shell' (the initial program booted in). All the programs have to do is talk to the kernel and it does the rest. Now, why should we want an operating system for a humble micro? Well, it's a bit like a Microwave Oven, you don't miss it if you haven't got one but when you do, you wonder how you ever managed without one. What this means for you and your Dragon is that you are no longer restricted to Basic but can load and run a program of any language you desire (provided it is available). Now, I know you are still having trouble with Basic (like me!) but there is more to it than this as I hope to show you.

Flex itself has been around since 1979, right from the start it has always had an 'open architecture' approach, which means that the producers were never secretive about the product and that all parts of the system were well documented. This meant that Flex became the 'hobbyists' OS for the 6809 as they were able to fiddle with it to their hearts content, for this reason, it was extremely popular. It's best feature however was that it was very easy to come to grips with, even for the beginner. This simple approach did not diminish it's power and performance, making it very attractive for the small business user. When the Dragon was launched, Flex was ready and waiting, making it the natural choice for Compusense to take up a licence and distribute for the Dragon. One disadvantage was that in implementing Flex for the Dragon, Compusense modified some of the system, making it incompatible with the earlier version. So much for history.

Flex itself is in 3 parts. The File Management System (FMS) which manages the files on disc, the Disc Operating System (DOS), which processes commands and the Utility Command Set (UCS) which are the user callable commands. The FMS and DOS reside permanently in memory while the UCS resides on disc, the command programs only being loaded in as they are needed. The beauty of this approach is that if you are so inclined, you only have to write your own program, save it to disc and it becomes part of the UCS. I must say I have never needed to do this, there are so many users here and in the US that if you need an program, you can bet that someone has already written it. There is one advantage of Flex which is not well documented, as Compusense market versions of Flex for both Delta and DragonDOS, once they are booted, Flex takes over and apart from a couple of minor exceptions, they are totally compatible, ie. the systems can read discs created on either system. This is because when the FMS and DOS are loaded they 'overlay' the area that would normally contain the DOS, Flex then talks directly to the drives, hence it makes no difference which system is used. This is impossible for OS9 as no one has yet written a bootstrap for DeltaDOS.

Next article, a look at the 3 parts of Flex, what they do and the more useful parts.

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IMPROVE YOUR VIDEO DISPLAY . . . BERND NEUNER

If you use your Dragon (as I do) with a monochrome monitor (or TV), you might be interested in improving the quality of the video display. There are two little hardware modifications to provide a better video output.

(the 1st mod was discovered by Roger Woods of the OS9 User Group)

1. If you hate the 'dot crawl' on the screen then try soldering a 100nF capacitor across the ends of the colour crystal, named XL1 (XL2 on a 64); it's the crystal with the number 4.433691). This should stop the colour signal on the video output socket. I wired the capacitor to a switch to get both colour and improved black and white displays.

2. Normally your Dragon has a black on green display. If you enter SCREEN1,0, the display changes to black on orange which is better for most monitors. Unfortunately, the Dragon switches back to SCREEN0,0 everytime it prints something to the screen (even the 'OK') If SCREEN1,0 is better than SEEN0,0 on your monitor (try it with the line 1 SCREEN 1,0:GOTO 1), the following modification exchanges SCREENS 0,0 and 1,0 by inverting the CS signal from the video display generator.

Get a SN74LS00

Disconnect the connection between the VDG MC6847 pin 39 (colour select signal) and the PIA (IC35) MC6821 pin 13.

Connect pin 14 of the SN74LS00 to pin 17 of the VDG

Connect pin 7 of the SN74LS00 to pin 1 of the VDG

Connect pin 3 of the SN74LS00 to pin 39 of the VDG

Connect pin 1 and pin 2 of the SN74LS00 to pin 13 of the PIA

Now, you should have black on orange display in SCREEN0,0 and black on green in SCREEN0,1.

MAIDSTONE SHOW REPORT . . . STEPHEN COGAN

I was late to the show after taking a wrong turning and heading back towards London. When I arrived there were perhaps five people inside (not including exhibitors) so I could tell it wasn't going to be a very busy show!. The companies who attended were; Computape, Compusense, Grosvenor/PNP, John Penn, Harris, Occult, Smithson and David Makin who was showing a number of products he is about to release through John Penn, including Music Maker which includes an option for interrupt sound where you load the program, EXEC it, then you could be typing in something else (provided it doesn't overwrite it in memory) while listening to the Music. He suggests you only use one voice as the more you use, the slower the Dragon gets. Anyway, back to the show. Ted Opyrchyl (sic) of Compusense showed how removing the colour chip from the Dragon improves the display by some very high percentage, you lose the colour but that doesn't matter if you use a monochrome monitor. I must stress that you need to know exactly which chip you are removing, as if you remove the wrong one and damage it, it could be very expensive. Computape and John Penn were showing their massive selection of Dragon software, Harris were showing Basic42, Occult had their numerology program adding an atmosphere of mysticism, and Smithson were showing Frankie, Gordon Bennet and Electronic Author.

Most people were a bit disappointed with the show, only the hard core of the Dragon companies go to these shows, but it does give them a friendly air. if the Dragon is to survive these shows MUST be supported. It's no use going just to the 6809 show every year. If a show was cancelled near you because companies pulled out, it would be your fault for not supporting the other shows.

THE DRAGON AS PC CLONE?... JOHN PAYNE

I found out something I thought rather interesting (nay, useful even) the other day. Did you know that the Dragon (DragonDOS, I don't know about Delta) can read MSDOS (IBM PC) discs? The method is as follows:

1. Format a disc on the PC, specifying a single sided format (This may not be necessary if you have double sided drives).
2. Using MSDOS, copy the files you're interested in onto the new disc. A particular file will occupy continuous sectors as the disc has just been formatted. This avoids having to master the MSDOS sector allocation (which scatters sectors all over the disc if a file is modified).
3. Move the disc to the Dragon and you can reread the sectors, obviously you can't use DragonDOS directly because the directory is on a different track and its format is different, but using Forth to do direct sector accesses, I have successfully read (and written to) existing MSDOS files.

This is not quite as easy as it might be, IBM/MSDOS use 512 bytes per sector instead of the Dragons 256. The disc controller reads all 512 bytes automatically but you have to ensure that the disc buffers are enlarged to 512 bytes long. Since the sectors are double length, there are only 9 of them per track (eight in early MSDOS). This means that the conversion of 'logical sector number' (ie Forth screen number) to track and sector number has to be modified. Otherwise the controller winds up looking for say screen 11 as the eleventh sector on track zero instead of the second or third sector on track one, and reports it can't find it as only sectors numbered 1-9 are on any track. MSDOS allocates 32 bytes in the directory for each file. Bytes 0-10 have the file name and extension and bytes 26 (low byte) and 27 (high byte) have the cluster number of the start of the file. 'Cluster number' = logical sector number - 7 on a single sided disc. Logical sector number 5 is the start of the directory.

SCR # 13

```

0 (MULTI BLOCK TRANSFERS ) HEX
1 : #CHK OVER OVER SWAP - B/BUF *
2   C00 + 33FF ( BUFFER END ) *
3   IF ( NOT ENOUGH MEMORY )
4     SWAP . . ." TOO MANY" QUIT
5   ELSE C00 ( BUFFER ADDRESS)
6     ROT ROT 1+ SWAP ( SET UP
7 LOOP PARAMETERS) ENDIF ; -->

```

SCR # 82

```

0 (SWITCHING DISC FORMAT )
1 : DSKFMT (STACK DIAGRAM:
2 SECTORS/TRACK BYTES/SECTOR --- )
3 ' B/BUF ! ( ADJUST NUMBER OF
4 BYTES/BUFFER ) ' R/W 41 + !
5 ( ADJUST SECTRS/TRK IN R/W )
6 EMPTY BUFFERS
7 FIRST USE ! FIRST PREV ! ; -->

```

SCR # 14

```

0 : RAMTODSK #CHK
1 DO DUP I 0 R/W B/BUF +
2 LOOP DROP EMPTY-BUFFERS ;
3 : DSKTORAM #CHK
4 DO DUP I 1 R/W B/BUF +
5 LOOP DROP ; DECIMAL ;S
6 BOTH THE ABOVE WORDS HAVE
7 (STK: STARTBLK ENDBLK --- )

```

SCR # 83

```

0 : MSDOS ( SWITCH TO MSDOS DISK
1 FORMAT ) 9 512 DSKFMT ;
2 : DRAGONDOS ( SWITCH BACK TO
3 NORMAL DRAGONDOS FORMAT )
4 18 256 DSKFMT ;
5
6
7

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DRAG MAG!!!

What is it?...Drag Mag is a Dragon Magazine, run by Simon Jones, on Micronet 700110021. It covers news, arcade and adventure tips, reviews, competitions, interviews, and a whole lot more, so if you've paid your Micronet subscription, take a look, and if you like what you see, give it your support!.

OS9 Addiction ROB SCHOFIELD

Well, you've booted up and you're faced with that doom laden prompt, so, what do you do next?

Usually, there's a set of possible options, in my case these are: 1) Sit staring at the screen with a blank mind because you've forgotten what you were going to do, 2) Pop the top of a bottle of beer then execute option 1 again and 3) Panic because you've forgotten what you were going to do. Usually I opt for option 2, at least that way I get to drink some beer.

Yes, the truth is out, OS9 users are not really mega geniuses with bulging foreheads and blood shot, reddened eyes; most of us are ordinary weirdos with nothing else to do but give ourselves headaches, from continuous frenzied staring at a flickering TV screen, and wrist cramp from having to retype the last command because of the slow keyboard scan that doesn't give any quarter to idiots who think they can get away with typing faster than it can scan. However, the behavioural traits associated with OS9 addiction are easily recognised, here's how to spot a developing addiction before it's too late. The beginnings are usually small but insidious; you first begin to feel as if your current OS and DOS are driving you mad. This can be caused by operating systems or DOSs doing similar things, such as not letting you get at that vitally important file you saved correctly last week, even though it appears in the directory or eating your directory and making your disc useless until a re format (thus losing your last 3 months work, unfortunately, you forgot to back it up the last 4 updates). This leads to a second symptom, known as 'the cravies', a vague yet insistent feeling at the back of your mind that you can't stand it any longer, immediately followed by the 'search through the back issues' stage, a painful and prolonged period as the (now painfully addicted) body searches for an alternative solution. This often accompanied by the 'what do you recommend?' which leads to your friends suddenly finding it embarrassing to be around when you start talking. About this time, desperation sinks in as friends stand back and watch you desperately thrash about trying to get rid of the hallucinatory feeling that your wallet is full of pieces of blue paper. Words such as disc drive , high step rate and 40/80 track tumble from your mouth in frothy cascades. The suddenly, all the pain stops- Your Dragon is kitted out with all this glittering hardware, big boxes of software lie all around; the rosy glowing feeling of contentment sets in and you don't care anymore, even though the real pain is about to begin, suddenly it's alright again.

This is the beginning of the end, OS9 addiction; the addict begins to spend sleepless nights muttering concurrent execution, multi tasking. I/O redirection and other such arcane incantations in order to bewitch his hardware. Family and friends shun him in their distress, his face becomes haggard and the flesh melts from his body. The OS9 addict sells possessions to fuel his addiction, buying assemblers, editors and compilers to send him irrevocably futher and further do down the road to exhaustion.

So, be warned, should you see this developing in yourselves then: Give in, you're in for a lot of fun!!!

(Next time he might even talk about OS9 TL)

HOW TO WRITE ARTICLES PHILIP BEED

One of the Group's difficulties is a lack of material to publish; if everyone in the Group were to write an article every couple of months and submit it then we could soon amass a stock of articles from which the contents of each Update could be drawn, to produce a balanced and informative newsletter.

WHAT SHOULD YOU WRITE ABOUT?

Anything related to the Dragon or to do with computing if it applies to the Dragon. Printer reviews I'm told are in short supply (except the CGP115), but any piece of hardware or software with which you have had experience, or less usual applications you have tried to put your Dragon to, it needn't

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necessarily have been successful either, as other readers might be able to benefit by learning what you couldn't do, or even suggest an alternative solution. How about some general theme on computing or peripherals you have some knowledge of? Try to think of some of the things you wish people had told you before you attempted them, or parted with cash, then try to help others to be the wiser for your experience. Remember also that the group's membership spans from raw beginners to professionals, it doesn't matter what level you write at, you are sure to interest someone within the Group.

HOW TO WRITE YOUR ARTICLES

Just because you hated English at school and always got D for your essays doesn't mean you can't write! You don't even need a printer, plain old pen and paper will suffice. Just put down your thoughts the best way you can, if you are an expert on the written word, so much the better but don't worry if you're not, we have an excellent editorial staff!!! (Well, one of me anyway....TL) who are adept at formatting and editing your work to make it fit the page and make precise interesting reading. So, lack of expertise in writing is no excuse. Tim would far rather have to correct and amend an interesting article for publication than have no article at all. Likewise, don't worry if you have difficulty in spelling, that can soon be put to rights, corrected if there are mistakes (or mistakes added if you are an expert speller) (Hmmm, I thought this was too good to continueTL). **WHAT'S IN IT FOR YOU?** The pleasure of seeing some of your work in print for a start, also the knowledge that you are helping others. this has a knock-on effect if everyone writes something then you get the benefit of their articles as well, the end result is a bigger and better Update which can only be good for the group and its members.

So, don't sit there waiting for someone else to write Update for you, get out the pen and paper and start making Update the newsletter you want it to be.

Helpline 87.....

If you have queries on any of the subjects mentioned here, write to the appropriate volunteer, enclosing a stamped envelope for reply. If you need help with a subject that isn't included in the list yet, or you aren't satisfied with the reply that you get, then contact Paul Grade as usual.

FORTH: John Payne, 3, Sibland Close, Thornbury, Bristol.

FLEX: Jurgen Mitchell, 62, Victoria Grove, Lupset, Wakefield, Yorks. WF2-8JD.

PROGRAMMING LANGUAGES AND STRUCTURED PROGRAMMING METHODOLOGY: Stan Davies, 153, Allestree Lane, Derby DE3-2PG.

GAMES SOFTWARE (MAINLY ARCADE BUT SOME ADVENTURES): Stephen Wood, 52, Downsway, Springfield, Chelmsford, Essex CN1-5TU.

M/C (EXCLUDING FLEX & OS9); DRAGON MUSIC; ARTIFICIAL INTELLIGENCE; *C* (UNDER OS9): Chris Jolly, 4, Pinehurst Walk, Orpington, Kent.

TAPE TO DISC CONVERSIONS (DRAGONDOS): Graham Smith, 3, Ashton Gate Terrace, Ashton Gate, Bristol BS3-1TA.

GENERAL HARDWARE AND UPGRADE CONVERSION PROBLEMS: Bob Hall, 22, Cumbria Close, Thornbury, Avon BS12-2YE.

CGP115 & MCP 40 PRINTER SOFTWARE QUERIES: Philip Beed, 27, Findon Road, Elson, Gosport, Hants. PO12-4EP.

WORD PROCESSING & GENERAL BASIC PROGRAMMING: F.J. Fisher, 29, Thornham Road, Gillingham, Kent.

BASIC PROGRAMMING: Ian Rockett, 2, Knowle Road, Burley, Leeds, Yorks. LS4-2PJ.

RTTY / RADIO; LISTINGS FROM INPUT MAGAZINE; SPRITE MAGIC; AMATEUR RADIO;

UPDATE ARTICLES / LISTINGS BY R.A. DAVIS: R.A. Davis, 39, Boxley Drive, West Bridgford, Nottingham NG2-7GQ.

OS9 SYSTEM AND UTILITIES: Jason Shouler, 70, Victoria Road, Parkstone, Poole, Dorset. BH12-3AE.

BASIC PROGRAMMING AND TAPE TO DISC CONVERSION (DRAGONDOS): John Cox, 3, St. Peters Road, Portslade, Sussex. BN4-1LS.

MODEMS, BASIC ELECTRONICS, ADD-ONS, and FLEX: Tim Hayton, 36, Laurel Drive, Willaston, South Wirral L64-1TW.
 DELTA PROGRAMMING: Stuart Mills, 49, Templegate Crescent, Leeds, West Yorkshire LS15-0EZ.
 DRAGON HARDWARE PROBLEMS AND MINOR REPAIRS: Alan Butler, 16, Barnston Green, Barnston, Great Dunmow, Essex.
 MODEMS AND BULLETIN BOARDS / GENERAL COMMS. Gary Coxhead, 54, The Sorrels, Corringham, Stamford-le-Hope, Essex.

DISC HANDLER ALLDREAM (DELTA) .. S. MILLS

```

10 'DISC HANDLER ALLDREAM (DELTA ONLY) 720 INPUT* SELECT OPTION*;A
20 'VERSION 2.0 30:10:86 730 IF A<1 OR A>7 THEN 710
30 'MAIN PROGRAM 740 ON A GOSUB 1000,2000,3000,4000
35 PCLEAR1 ,5000,6000,7000
37 CLEAR30,5000 750 RETURN
40 GOSUB100 1000 'SAVE TEXTFILE
50 GOSUB700 1010 GOSUB 510:PRINT"SAVE TEXT FILE"
60 GOTO30 1020 GOSUB550:GOSUB600
100 'WRITE MENU 1030 ST=PEEK(22521)*254+PEEK(22522)
110 CLS :EN=22653
120 PRINT @46,"MENU" 1040 SAVEMF$,ST,EN
130 PRINT@78,"****" 1050 RETURN
140 PRINT@TAB(4)*1:-SAVE TEXT FILE" 2000 GOSUB510:PRINT "LOAD TEXT FILE"
150 PRINT TAB(4)*2:-LOADTEXT FILE" 2010 GOSUB550:GOSUB600
160 PRINT TAB(4)*3:-EXEC ASSEMBLER" 2020 LOADMF$
170 PRINT TAB(4)*4:-EXEC MONITOR " 2030 RETURN
180 PRINT TAB(4)*5:-KILL TEXT FILE" 3000 'EXEC ASSEMBLER
190 PRINT TAB(4)*6:-LOAD ASSEMBLER" 3010 EXEC22654
192 PRINT TAB(4)*7:-DIRECTORY" 3020 RETURN
200 RETURN 4000 'EXEC MONITOR
500 'UTILITIES 4010 EXEC27650
510 'STATLINE1 4020 RETURN
520 PRINT@388,""; 5000 'KILL TEXT FILE
530 RETURN 5010 GOSUB510:PRINT"kill text file"
550 'STATLINE2 5020 GOSUB550:GOSUB600
560 PRINT @14*32,""; 5030 X$=F$:PRINT@15*32,"";
570 RETURN 5040 GOSUB 600:IF X$(<>)F$ THEN 5060
600 'GET FILENAME 5050 KILLF$
610 INPUT* ENTER FILENAME";F$ 5060 RETURN
620 RETURN 6000 'LOAD ALLDREAM
700 'SELECT OPTION 6010 LOADM"ALLDREAM",22654
710 GOSUB510 6020 RETURN
7000 'DIRECTORY
7010 DIR
7020 PRINT:PRINT* <<PRESS A KEY>>"
7025 B$=INKEY$:IF B$="" THEN 7025
7030 RETURN

```

Crossword 19 answers.

ACROSS: Accordion. VAT. Sort. Graph. Vin. Etna. Covens. Viola. Whirlpool.
 Singe. Talc. Tarot. Sector. Chip. Sleep. Down. Barcode.
 DOWN: Archives. Sand. Ciskei. Wise. Croft. Lightpen. Digital. Tripe. Cob.
 Photocopier. Topic. Valve. Insulator. Transducer.
 The winner of Crossword 19 was Graham Strong, who wins an Alldream cartridge.
 Sorry there will be no crossword this issue, but it hasn't arrived in time for
 inclusion. It will be back as usual next month.

BROTHER M1009 DUMP STUART MILLS

The following hex dump should be entered from Hex 2710 to Hex 2920. We've published plenty of hex loaders in the past so there's no point in listing another one here.

01- 16,00,BD,16,00,FE,16,01	34- ED,6D,FF,01,17,FF,25,17
02- 73,06,00,00,00,00,00,FF	35- FF,5F,17,FF,7E,AE,8D,FE
03- 00,00,00,C0,01,00,01,80	36- F0,C6,18,8D,08,30,89,01
04- 00,00,00,00,00,00,80,00	37- A0,5A,26,F7,39,34,36,C6
05- 00,00,20,FF,00,02,08,0A	38- 20,E7,8D,FE,F4,17,FF,18
06- 20,22,28,2A,80,82,88,8A	39- 17,FF,6F,86,80,A7,8D,FE
07- A0,A2,A8,AA,34,02,86,1B	40- E5,86,08,A7,8D,FE,E0,1F
08- BD,80,0F,86,41,BD,80,0F	41- 12,86,08,A7,8D,FE,D9,4F
09- 86,08,BD,80,0F,35,02,39	42- E6,A4,48,E4,8D,FE,CF,26
10- 34,02,86,1B,BD,80,0F,86	43- 01,4C,31,A8,20,6A,8D,FE
11- 4B,BD,80,0F,A6,8C,C3,BD	44- C7,26,ED,17,FF,5A,43,BD
12- 80,0F,A6,8C,BE,BD,80,0F	45- 80,0F,64,8D,FE,B8,6A,8D
13- 35,02,39,34,06,EC,8C,A1	46- FE,B5,26,D3,30,01,6A,8D
14- C3,17,E0,ED,8C,A2,35,06	47- FE,AF,26,BF,86,0D,BD,80
15- 39,34,16,EC,8C,97,E3,8C	48- 0F,35,36,39,17,FE,B5,EC
16- 92,10,83,01,E0,2F,0E,CC	49- 8D,FE,93,ED,8D,FE,86,17
17- 01,E0,ED,8C,93,A3,8C,85	50- FE,D9,17,FE,E4,17,FF,03
18- ED,8C,80,20,03,ED,8C,88	51- C6,20,AE,8D,FE,7A,8D,06
19- 35,16,39,40,06,EC,8C,80	52- 30,01,5A,26,F9,39,34,36
20- A7,8C,80,E7,8D,FF,7B,35	53- AF,8D,FE,78,10,8E,27,34
21- A6,39,34,12,4F,AE,8D,FF	54- 86,C0,A7,8D,FF,75,17,FE
22- 62,8C,00,00,27,07,BD,80	55- 97,17,FE,EE,E6,84,C4,F0
23- AF,30,1F,20,F4,35,12,39	56- 54,54,54,54,A6,A5,17,FE
24- 6D,8D,FF,53,27,01,43,39	57- F7,BD,80,0F,4F,17,FE,F0
25- 17,FF,71,EC,8D,FF,4B,ED	58- BD,80,0F,30,88,E0,6A,8D
26- 8D,FF,42,17,FF,95,17,FF	59- FE,51,26,E0,86,0D,BD,80
27- A0,17,FF,BF,C6,20,AE,8D	60- AF,AE,8D,FE,3F,10,8E,27
28- FF,36,8D,06,30,01,5A,26	61- 34,86,C0,A7,8D,FE,3C,17
29- F9,39,34,16,17,FF,61,17	62- FE,5E,17,FE,B5,E6,84,C4
30- FF,B8,E6,8D,FF,20,A6,84	63- 0F,A6,A5,17,FE,C2,BD,80
31- 17,FF,C5,BD,80,0F,30,88	64- 0F,4F,17,FE,BB,BD,80,0F
32- E0,5A,26,F2,86,0D,BD,80	65- 30,88,E0,6A,8D,FE,1C,26
33- 0F,35,16,39,EC,8D,FF,0C	66- E4,86,0D,BD,80,0F,35,36

We're on Line!!!

Well almost!. Thanks to the efforts of Tim Hayton we now have our own Micronet "Gallery" pages.

The NDUG Micronet pages started on February 2nd. They are on page 700110037 in the Gallery section. They will be updated every Sunday, and will contain information about the Group, Dragon news, reviews on s/w and hardware, etc. Anyone who would like to contribute to the pages should mailbox Tim Hayton on 513274641. Those of you without modems should refer to the special offer on this month's "classifieds" page. Please note that to access our Micronet pages you need a Prestel/Micronet subscription.

PLEASE NOTE: We have decided to take these pages as an experiment. A lot of you asked why we didn't make use of Prestel facilities, so we've decided to give it a three month trial. IF there is enough interest and support to make it worthwhile, we will continue and probably expand the idea, but if not, well, you'll have only yourselves to blame if we have to drop it. OK?. Paul.



Are You a Wiz at Graphics?

If so we'd like to have a glimpse at one of your creations. Even if you're not the Michelangelo of the computer, we'd still like the opportunity of seeing one of your Hi-res mode pictures.

Search through your drawers or wherever it is that you've hidden those gems on cassette or disc and send us a sample of your creativity. We will feature the best pictures we receive in Dragon Update. (Depending on the response!).

What is more (there is more?) we will present one of Microdeal's latest games on cassette to the designer of the best screen we receive each month.

All we ask is that they are your own work. We won't mind if Auntie Mabel did give you a hand, as long as they are original. (If your Auntie Mable is anything like mine, now there's an original for you!).

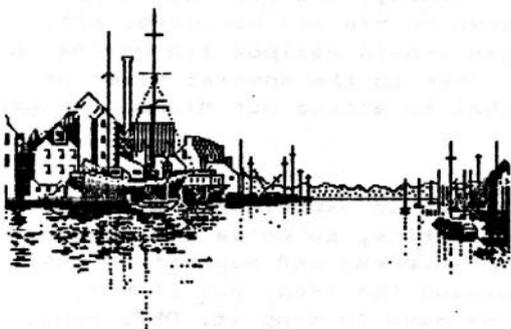
These pictures will then form the nucleus of the National Dragon Users Group Graphic Library. We hope to build up a large library of Graphic Screens which will be available to members for use in their own programs.

Please send the disc or cassette containing your Graphic Screen(s) saved in the normal 6K Binary form to:-

Ray Smith, 5 Glen Road, Parkstone, Poole, Dorset, BH14 0HF.

We would appreciate a short note from you telling us the method or the program you used in creating the picture. (PMODE3 or 4 ONLY please). Hopefully this will lead to an article or two in later Updates comparing the popularity and the usefulness of the various programs.

Here's a sample screen to be going along with...



POOLE HARBOUR



UPDATE

Basic Programs Listed. 1 Program Listing...75p. up to 4 pages.
Additional pages 5p. each.
2 or more Programs...50p. each.
ALL tapes and listings will be returned as far as possible the following day...
G.W.Hale, 'Rose Cottage, Hungerhill, Coolham, NR.Horsham, W.Sussex.
RH13 8QE.

SPECIAL OFFER!!: Tandy intelligent modems (Racal-Niigo CP2123), with auto answer, autodial, multispeed selection (up to 1200/1200), including 1200/75 for Prestel and 300/300 for normal BB use, and Bell 103. Direct connection unit, Telecom Approved. Current list price of these modems is 115.00 (was over 400.00), but special offer to Group members my price is just 80.00 inclusive of postage. Only a few available.
Also for sale, ONE ONLY Toshiba MSX (64k) computer for 50.00 and a Tandy Acoustic coupler (110/300) for 30.00.
Orders and cheques to: Jason Grube, Amberwood, Market Place, Penkridge, Staffs. ST19-5DH.

MEMESIS PROGRAMS! DRAGON55 and MEDDLER utility programs on cassette. Special price to Group Members only 3.50 each inclusive. Cheques and orders to Paul Grade, payable to the Group.

SELLING UP!!: Dragon 64 complete and with manual 75.00.
Dragon 32 complete plus a 'vandalised' 32 for spares, (result of failed upgrade attempt!), plus set of 8 64K RAM chips and NBUG Upgrade Manual 30.00 the lot.
Tandy Speech / Sound cartridge, works well with Dragon, (cost 60.00+) 30.00
Premier Sprite Generator card with built in PSU and manual. Plugs into cartridge slot and uses a TMS9929A and 16K onboard RAM to give enhanced text display and 32 sprites in 16 colours. WORKS ON D32 ONLY. (cost 100.00+) 20.00
Radio package consisting of: Eddystone EC10 Mk2 SW receiver with mains PSU, one RDU RTTY demodulator card, one homebrew Morse demodulator, Grosvenor RTTY, Morse, and Slowscan software, Amateur Radio Operating Manual, World RTTY frequency list, UK Listeners frequency list. 80.00 the lot.
DELTA discs...FORTH and Telewriter upgrade.
Akai 20" colour monitor, PAL/SECAM/NTSC 4.32 & 3.58 Composite and RGB inputs, plus Stereo sound!. 200.00 (local delivery only).
TAPES: Acetrace, MST Calc, DRS, Sprite Magic, Printer Control + Dumper...all 5.00 each.
ASSORTED GAMES TAPES ALL AT 1.00 each...too many to list!
BOOKS: Inside the Dragon, Complete FORTH...2.00 each. Hackers Handbook, CoCo Technical Reference Manual...1.00 each. All Dragon Users from June 1983, plus 2 Rainbow mags...offers.
Write to:- D.Clark, 5,Cintra Road, Norwich, Norfolk NR1-4AE. (or Phone 0603-31791).

WANTED!:- Salamander Graphic System, Gemini Dragon Cala, SNU Artist Designer, both Melbourne House 'Enter the Dragon' tapes, Cheshire Cat Basic Tutor (beginner and advanced), Oasis Petite Pascal, and Whirlybird Run.
Contact J.A.Shepherd, 18, Templewood Road, Pitsea, Basildon, Essex SS13-3JA.

COWEN SOFTWARE Ltd. Colossal Cave (with game save)...6.00. Adventure Writer (full documentation)...8.00.
Both available on cassette from Cowen Software Ltd, 23, Bristol Avenue, Levenshulme, Manchester M19-3NU.

FOR SALE: As new D.Data OS9 software, RMS, Dynacalc, Cash/VAT, and Stock Control...all at 10.00 each.
OS9 Advanced Programmers Manual 5.00. Sony Printer/Plotter, four colour, Dragon compatible. 25.00.
WANTED: NSA Mailer/Address book, cassette version preferred. Will swap for any of the above software.
Contact Mike Ganley on 0272-332411.

MODEM PACKAGE SPECIAL!!!. Complete package for B64 owners, comprising of a Prism Modem 1000, connecting lead and software to access Viewdata and all scrolling type BB's. The modem will operate on 1200/75 baud for Prestel, and on 1200/1200 for user to user

operation. The price for the complete package is ONLY 35.00 to Group Members, 40.00 to non members.
Cheque/PO or cash (registered post) to T.Hayton, 36, Laurel Drive, Willaston, South Wirral L64-1TW.

Games to disc transfer...Unprotected game code of any game sent in return for a blank tape and 22p stamp, but you MUST include the inlay card to prove you have bought the original.
Contact M.R.Vine, 120, Auriel Avenue, Dagenham, Essex RM10-8BU.

WANTED!!. Contact with anyone using a Dragon for medical or nursing applications or study, to help me make more use of my Dragon with Ophthalmic Diploma studies.
Contact Philip Beed at 27, Findon Road, Gosport, Hants.or phone:-0705-504340. (evenings).

THE ADVENTURE RELEASE OF THE YEAR!. '13th Task' from ARC Software. Only 2.50 + 30 pence postage.
ARC. 272, Wearn's Road, Newton Wearn's, Glasgow.G77-5LY.

FORTH OPERATING SYSTEM: Simply the best there is. Written by John Payne, and available for DragonDOS or Double density BetaDOS.Available ONLY through the Group. 8.50 inclusive. Orders/cheques to the Group, 6, Navarino Road, Worthing, Sussex.

STICK IT!!!!. Dragon User Group self-adhesive stickers available in two sizes, 2.25"x1.5" or 3.25"x2". Price 10p and 10p each. Include a stamp with your order please.
Orders to Paul Grade, 6, Navarino Road, Worthing, Sussex.

Circuit Sheets: Available for D32 (most variants), B64, Dragon DOS controller, and Cumana DOS controller. All the same price 1.00 each. Cheque/orders to the Group, 6, Navarino Road, Worthing, Sussex.

Dragon Upgrade manual: 32/64 conversion method fully explained so that you can update your 32 yourself without difficulty. Written by Bob Hall and available only through the Group. Price 2.00.
Cheque/order to the Group, 6, Navarino Road, Worthing, Sussex.

Delta DOS utility: A m/c utility to copy all BASIC and m/c files from disc to tape in one operation. BASIC listing of loader and Hex dump 1.00 or on cassette for 2.50.
J.C.Bussell, 33, Tennyson Avenue, Clevedon, Avon BS21-7UJ.
(0272-875320).

OS9 NODEM PROGRAM: Up and downloading of files. Any Baud rate from 50/50 to 9600/9600 (but not multiple rates). Up/Download buffer from 4k to 32k or program will adapt to largest capacity available. All other 6551 options supported. Price 8.00.
Please phone Barry Knapp, 0932-242000 evenings only.

DRAGONDOS DISC EDITOR: Easy to use. Two operational modes, examine and edit. Will read and edit ANY disc including those written on other systems. Reclaims KILLED files. Accesses and changes files directly on disc. Includes DISCMENU which can be used with any of your own discs. Written by John Cox. Price 6.50 inclusive.
Cheque/order to the Group, 6, Navarino Road, Worthing, Sussex.

DRANEZEE! A graphics drawing program, on tape, which we think is one of the best!. Written by R.A.Davis, it must be a bargain at 2.50 including postage. Orders to Paul Grade, 6, Navarino Road, Worthing, Sussex.

DRAGONDOS EPROMS: Your DOS 2764 rebloated to "patched" V1.0 specification, or to Eurohard V4.0 or V4.1, or to PETER WILLIAMS TRANSLATED & DEBUGGED ENGLISH VERSION OF V4.1. Price for any version just 3.50.
Computil, 22, Grove Park, Burbage, Hinckley, Leics.LE10-2BJ.

BACKDATE UPDATES: Copies of all earlier Updates available from either John Cox, 3, St.Peters Road, Portslade, Sussex. (0273-422492) or Chris Channing, Main Road, Dunsby, Nr.Bourne, Lincs.PE10-0UB.

... AND STILL MORE ADS!

For Sale: New, tested B32, no leads or transformer...45.00 inc postage and packing. B32, New and tested, complete with leads and (German supply) transformer...55. inclusive.
Contact Harald Beck, Reinerzer Strasse 42, D-8500 Nurnberg 50, West Germany.

FOR SALE: 16K DragonDOS EPRON containing 12 routines to write on the PMODE4 screen. Also supports LIST, EDIT, DIR, and OLD commands, plus three printer routines and 25 function keys etc...Price 38.00 DM. Further information from Clemens Sartori, Rutkamp 11, D-2300 Kiel, West Germany.

Unused circuit boards for extention port...18.00DM each
Edit+ original discs 18.00DM each.
Dragon Data games cartridges with games 6.00DM each.
Contact Clemens Sartori, Rutkamp 11, D-2300 Kiel, West Germany.

Interface for switch type sticks...only 7.00 inclusive postage/packing.
Lightpen (Trojan compatible) with button...7.00 inclusive postage/packing.
B32 Upgrade as described in MDUG manual....tell us which issue 32 you have and we'll quote you the price for the upgrade.
Contact Alexander Groschel, Grafstrasse 2, D-8523 Baiersdorf, West Germany.

Disc Diary: Program written for the Group by Tony Simmons....keep track of dates and events without having to keep track of all those bits of paper you wrote them down on!. Available on DragonDOS for B64's at only 5.00 inclusive.
Cheques and orders please to the Group at 6,Navarino Road, Worthing, Sussex.

AUTODIAL: Available ONLY through the Group!. This unit operates via the Dragon cassette remote port without interfering with its normal use, and enables you to dial direct from your keyboard or via a menu, and includes a redial facility. For use with any modem, or just as a memory dial unit for your phone!. NOT BT app. (but nor are 98% of phone accessories....we KNOW you'd never dream of offending Telecom), but complete with software for ONLY 13.50 plus postage.
Phone I.Rees on 01-908-0519 for further details.

DTCOPY: DragonDOS to OS9 file copy utility. Includes 'Telewriter' & Basic conversion filters....8.00.
COM99: OS9 comm. program. Xmodem (CRC & SUN), multiple upload modes, monitor buffer, function keys and more!. Suitable for any OS9 system (CoCo needs ACIA-Pak) and includes source files....8.00.
PD-PAK: Selection of useful public domain OS9 utilities on one disc....5.00.
Jason Shouler, 78,Victoria Road, Parkstone, Poole. BH12-3AE. (0202-722599).

ACHTUNG!!!!!!!!!!!!!!

Stop the press, switch off the copier, let the peasant out of the treadmill!...We have some late, Late NEWS!

I've just heard from Jenny Pope that there is to be another London 6809 Show on March 28th. (Saturday), and as usual of course, the Group will be there. Now I know you'll all be attending, so I won't bother to hire the heavy mob to make sure you turn up, but there are a couple of points I'd like to ask you to help with as well...one is make sure everyone who might be interested knows about the Show, and two, I could do with a couple of volunteers, preferably local to Victoria, to give us a hand on the stand. OK?.

Now for the other bit of news....John Penn have just informed me that they are holding a show at OSSETT (Yorks) on April 11th, and while it won't be possible for the Group to be there, I hope all of you who can attend will do so...the greater the attendance at these shows, the more chance there is of firms continuing to take the Dragon seriously. Also, if anyone attending either show thinks they could write us an article on it, a nice detailed one preferably, it will be very much appreciated not only by me but by those who for one reason or another can't attend. (Come to think of it, Helen Armstrong might appreciate reports for Dragon User as well.).

Sorry there's no crossword or ASCII Corner this month, but they didn't arrive in time for inclusion, but they WILL be back next month. Paul Grade.

VISIT THE NEXT 6809 SHOW

ROYAL HORTICULTURAL OLD HALLS, WESTMINSTER, LONDON

SATURDAY 28th MARCH

10.00 a.m. - 5.30 p.m.

Admission: Adults £2.50 Children £1.75

Reduction for Advance Ticket:

Adults £2.00 Children £1.00

Cheques payable to JPPR

Forward to: 28, Treverrick Road, St. Austell, Cornwall

Further information from **Jenny Pope** at the above address

