

THE NEWSLETTER OF THE NATIONAL DRAGON USERS GROUP.



DRAGON UPDATE



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The Gaffer's Bit.....

I'm not sure what I ought to be writing about this month....several matters that are worth mentioning, but none of them finalised yet, so I can't tell you anything definite about any of 'em!.

I've had several letters recently asking what has happened to the old "Redundant Information Column".....well, so far as I know, the only reason that it has been missed out of the last few Issues is that Tim has been a bit pushed for space. I do know that we have quite a bit of interesting material for it, and I'm sure that Tim will get it started again soon. (Yes, that IS a hint, Tim!).

Other than that, things seem to be in order...at least I haven't had many complaints!. Some of you have been enquiring about the next 6809 Show, and I'm afraid that the news isn't good at all..... I'm told that when asked the firm replied "What 6809 Show?????....so far as we know there isn't going to be one", so it looks as though those of you who missed out on Shows 1 to 3 have missed your chance.

I suppose WE may be able to arrange something at some future date, although not on the same scale, of course, and a lot would depend on how much commercial interest there was. I'm not making any promises, but if it can be done sometime, I don't see why we shouldn't, do you?. You never know, the Group might even make a profit!!. Anyway, think it over and let me know your ideas on the subject...but do remember that such things cost money, usually cash in advance, and that the Group has none to spare!!.

Before I forget....correction on last month's information. Anyone trying to contact Bob Hall re upgrades etc should dial 0272-294113, not 0271 as stated. Neil Scrimgeour is complaining that no one has been sending him any problems!!!! (he doesn't know when he's well off!!), so if you have any on his subject don't be shy, pester him with them!. A lot of you have written to me saying how much you liked John Martin's m/c articles.....so far as I know, John intends to continue them, so don't worry, we are trying to print what you ask for, it's just that sometimes we run short of space, or articles get delayed in the post....honest!!.

Well, let's get on with the interesting stuff.....Paul G.

THE EDITORIAL BIT

This month, a small request. I'm quite happy if you ring me for anything but it would be easier if you rang while I'm in, that is after 6 during the week or anytime after midday at weekends. During the week I have to earn a crust and as I am up at 5 in the morning I appreciate a long lie in at weekends so if you could avoid sat. and sun. mornings I would be ever so grateful. The other thing is that I've had a few calls recently who didn't leave a name, I play a lot of PBM games and tend to get a lot of phone calls about those as well so if you ring while I'm out please leave a name so at least I know that if it's not to do with a PBM game I haven't got a post deadline to beat.

BOARD WALK GARY COXHEAD

Before we start the nitty gritty, you will probably have realised that computing people love to use abbreviations and jargon. Well the communications field is no different, so here is a glossary of terms to help you sort the junk from the jargon.

ASYNCHRONOUS - Method of transmitting data from one receiver to another. Can be inefficient as each 8 bit character needs an identifying start and stop bit, but most common as both receivers do not need the same time clock.

ASCII - Industry standard alphabet code for transmitting letters, numbers and control codes. Stands for American Standard Code for Information Interchange.

BASEBAND - High frequency data transmission system which is slow due to narrow frequency range and allowing only one message to be transmitted at a time.

BROADBAND - High frequency transmission system, such as cable TV, which can have several channels transmitting data at different frequencies and at high speed.

BAUD - Measured rate of data transmission in bits per second.

CCITT - Body which establishes international standards for communication. ie. tone frequencies.

CUG - Closed User Group. Private information club within a public comms. system for access only to registered users.

DUPLEX - Description of the type of transmission taking place between two receivers:-

1) Full Duplex : Transmission of data both ways simultaneously. Characters sent from the keyboard are echoed back to the terminal to check that what was sent was actually received

2) Half Duplex : Transmission of data in both directions but only one way at once.

3) Simplex : Transmission of data one way at any time.

ELECTRONIC MAIL - Telecommunication system which receives, stores and forwards messages from one terminal to a system user address.

INFORMATION PROVIDER (I.P.) - Usually associated with Prestel and is a user who supplies and maintains pages on a database.

INTELLIGENT TERMINAL - A terminal which provides a user with computer processing locally rather than remotely.

INTERACTIVE - When a database is used in such a way that data can be manipulated once it has been transmitted or during transmission.

MODEM - Modulator/Demodulator. It converts digital data into analogue transmissions (audio) which the telephone system was designed for. Can be Synchronous or Asynchronous.

NUI - Network User Identity. Identifies a terminal when it first logs on.

PACKET SWITCHING SYSTEM - Technique for breaking long messages into small blocks or packets for onward transmission, which avoids congestion at different parts of the system.

PSS - Packet Switching System. Packet switching network.

PROTOCOL - Data transmission which meets an established standard between similar systems.

SYNCHRONOUS - Method of sending data when both terminals are regulated by a common clock. Once both are synchronised, transmission can be very fast without the need for start and stop bits.

TELETEXT - System which uses modified TV sets (in most cases) to receive text and graphics on unused lines of television transmission.

VIEWDATA - System allowing modified terminals to be used to receive and react to text and graphics held on a common database and sent over the telephone network.

VIDEOTEX - Collective term for viewdata and teletext.

X-MODEM PROTOCOL - System of data transfer which is a standard format of file transfer and control codes which most TBBS systems adhere to. Called the Christian system.

Gary Coxhead. (0375 672137). 54 The Sorrells, Corringham, Essex, SS17 7DS.

DRAGON DIARY NEIL SCRIMGEOUR

Now that I've got all my moans out of the way, I'll continue with subjects more interesting. But before I go on, it's probably worth mentioning that as yet I've had absolutely no feedback which means one of three things, 1) You totally agree with me, 2) You think I'm a lunatic or 3) Nobody reads this column and I don't want to speculate which one it is.

One of the real puzzles in life for me is the dearth of female computer owners. I've never really understood why. I can understand why there are so few women programmers because girls at school have never really been encouraged to get to grips with computers, or at least that was so in my day. It's only in the last 3-5 years that computing opportunities have opened up for the fairer sex even though it may be on BBC's!! Another answer could be that to be a good programmer you need to be logical and men have always been regarded as the more logical of the sexes but maybe that's just a chauvenist view. The lack of female computer owners is more puzzling though.

When home computers first came out, everyone regarded them as technical things and women were not interested. But when games started to arrive how come their interest wasn't swelled? Some could argue that blasting things was not a woman's idea of fun but there were alternatives like adventures and board game conversions. I have only ever known three women owners and one of them is my colleague Pauline Hampson. Come to think of it, when I went to night school just over 4 years ago, the class was full of men. Maybe women feel intimidated by these sort of classes and therefore build up a hate relationship with computers. Maybe for some reason women just don't like computers although I can't see why (maybe that's the problem).

As far as I'm concerned the more women the sooner the better. Women are far more creative and inventive than us guys and the software market has become very dull and boring. It needs and injection of fresh new ideas from somewhere. We do have a handful of female members in this group so is there anyone out there who would like to express their ideas on the subject. I'm sure Tim would publish your comments on this as he's as puzzled as I am.

ASCI CORNER PALINE HAMPSON

This month I had a letter from Barry Caruth in northern Ireland who has given me some hints and addresses in the USA for Madness and the Minotaur. Thanks Barry, to be truthful, I haven't played M&M for ages, I've been having too much fun with Barons of Ceti V and Trekboer. The name Trekboer put me off as I didn't fancy fighting in the Boer war, but no, it's the name of a spaceship. You soon find the purpose of your missions is to find a Xendos plant - The miracle cure for plaque. Hopefully you will learn to fly your ship to several locations including another starship unfortunately wrecked, a frozen planet and a beautiful planet (guess where the plant is?). The locations on the planet scroll and the graphics are quite nice if you go for that sort of thing. You have many problems to solve like how to open the access panel, get the ice, activate the robot, cross the force field, keep the plant alive and how to get rid of a maddening spider who moves faster than you and tends to be hungry. I played the game to the end and really enjoyed it. With Barons and Trekboer I'm hoping that things are looking up for Dragon adventurers.

CROSSWORD NO. 8 ANSWERS

ACROSS:-

1A) Complement 2J) Wrap 3A) Malady 4G) Jigsaw 5A) Lasso 5H) Nouns 7A) Cleavage 9G) Orbital 11A) Eventually 12F) Mnemonic 13A) Concentric

DOWN:-

A3) Malachite B2) Manacles C1) Molasses C9) Stern E6) Evict G1) Mahjong G10) Rant I7) Embalm J1) Twos K4) Animation M1) Spring Balance

Crossword 8 winner was Martin Denman.

First correct entry to Crossword 9 wins Microdeal's "Space Wrek".

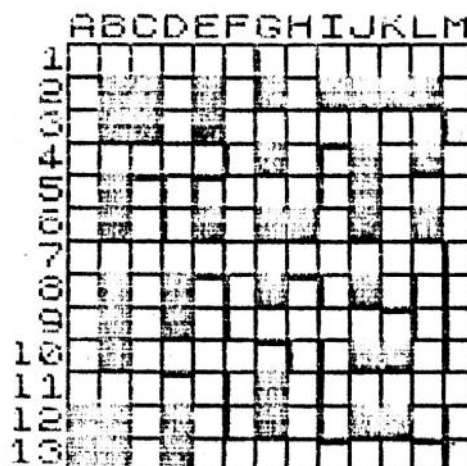
CROSSWORD NO. 9

Across :-

- 1A) This utility could be used on a building site
 1G) Interception of light by another body
 3F) Sloping print 4A) Question hotly
 5E) Musical instrument 5K) Born (in France)
 7A) Great authors give a word processor
 9F) Gone off 10C) Clear 11A) A broken ship
 11I) A record 13E) A Microdeal adventure

Down :-

- A1) This sounds as if it could inflict a nasty wound
 C5) Emblem of the mounted policeman's country
 D1) Musical introduction E8) Pail
 F1) Screen enhancer H1) Pursue H8) Dash undressed
 I4) A great number K3) Middle L7) Guard
 M1) This game could almost start a race



TROJAN... Neil Markwick.

I just thought that I would tell you about the latest offering from Trojan. They have just brought out a new LIGHT-PEN package available exclusively via Microdeal.

The package can be used on a 32 or 64K machine. The new advanced program included with the pen include the following facilities-

High res draw, draw box, draw line, draw circle, draw pictures freehand, colour in designated areas, save and load pictures, full erase facilities. All in Hi Res screen in any of four different colours.

Programming hints and tips are included in the program supplied with each pen and full instructions are also enclosed..

I have the package sitting here next to me, and I personally think it is a really good package, but, the same old story applies. Although the pen is of high quality, unfortunately I think Microdeal have overpriced it just a bit.

The complete package costs 17.25+75p P&P per order.

I think that the package would be slightly better priced if the price-tag could be 15 quid, so Microdeal, sit up and take notice!!! There is one major fault that doesn't seem to get mentioned at all in the advertising.....the pen does NOT work at all when used with amber or green screen monitors, and doesn't seem to work too well with certain colour televisions either..... it is much happier when used with a black and white television, so if you are a monitor user, be warned...this pen is NOT for you.

KUNG FU-THE MASTER .. STEPHEN DENMAN

As I expect you have guessed from the title, this game is a kung fu variant of that popular newish arcade game. The general idea of the game is to complete the 5 levels and so rescue the maiden in distress. You must fight other men who try to strangle and throw knives at you. There are also dragons who try to breathe fire over you, small worm like creatures who crawl along the bottom of the screen and balls on the ceiling that explode and shoot debris at you. To complete the game you have 3 lives which gradually decrease as your energy is sapped every time an enemy object hits you. The game uses joystick control which is very difficult to get used to as there are loads of different moves. The game uses PMODE 1 graphics which are very blocky and simple by todays standards. I feel that the graphics are the main let down on this program which could have become very promising if more thought had gone into them. Despite the graphics let down, this program is still quite addictive, although I thought 5.00 was a bit pricey for a program of this nature, 2-3.00 would have been more appropriate.

Graphics-40% Sound-50% Playability-70% Value-70%

Further to last month, there are a couple of things I didn't mention about using pipes with 'dsave'. Firstly, the form of the command which I gave always defaults to '/d0' as the source disc, which can catch you out if you try to copy from drive '/d1'. The other problem is it's not too easy to keep track of errors if they keep coming in thick and fast. The following command line will copy all the commands from disc /d1 to /d0 and also keeps a record of any errors generated:

```
chd /d1/cmds; dsave /d1 ! (chd /d0/cmds) >>/p
```

This month I'm going to try and sort out some of the pitfalls which await the newcomer to OS9. It's only natural for anyone who first uses OS9 to try and compare it to DragonDOS. OS9 itself acts in a totally automated fashion, being analogous to the RUN of DragonDOS without the RUN. However the 3 commands DIR, SAVE and LOAD have the same name and the same basic operation in both systems.

DIR:- The first thing you notice about the DIR command of OS9 is just how long it takes to operate; in contrast, the DIR of DragonDOS is almost instant. This is because DragonDOS holds all its disc commands in memory, whereas OS9 has to load each command from disc each time it is used. The most obvious advantage of a system like DragonDOS is its speed of operation, linked with the fact that it acts independently of whichever disc happens to be in the drive. The disadvantage is that commands tend to be brief, limited and not very friendly. The disadvantage of OS9 is the time delay before commands are operated, and the fact that the system must be told where the commands can be found, further to which, you must make sure the commands stay where the system expects to find them! The advantages on the other hand are considerable. Since commands are not restricted by limited memory, they tend to be both friendly and comprehensive in operation. The biggest advantage lies in the total number of commands available to OS9 (limited only by disc space). In comparison to DragonDOS, this number is vast (how many commands could you fit on a double sided 80 track drive?).

SAVE:- Save under DragonDOS simply saves a complete program (or part) to disk. The save command of OS9 is much the same except that you must specify which program module you wish to save. This is because only one program may exist at once within DragonDOS, whereas OS9 may have many program modules in memory all at once. To see what modules you can save, use the 'mdir' command.

LOAD:- Once again, this command is similar to DragonDOS except that under OS9 you are not restricted to loading just one program. Notice that I've referred to loading a program. More correctly, I should refer to loading command modules, since it is in this area that the load command is most useful. It is the strength of OS9 that enables it to duplicate a system such as DragonDOS by simply loading all the commands in one go. If you ever find you're feeling homesick for DragonDOS, try entering this command line:- 'load dir copy del load rename save free backup format'. Having done this you could now generate a customised module called 'dragonDOS', if you wanted, with the command: 'save /d0/cmds/dragonDOS dir copy del load rename save free backup format'. Before you get too excited about this, let me say that you won't be able to use any memory-hungry programs, such as stylo, without first unlinking many of the commands that now exist in memory. What does 'unlink' mean? Unlink is like the NEW command of Microsoft except that once again, unlink only clears a single module from memory and not the entire memory area. When you load and unlink modules from memory, try and remember the 'last in first out' rule. In other words, the last module you load into memory should be the first that is unlinked if you're trying to free memory to run another process (check with mdir). OS9 itself has got a pretty good memory when it comes to modules loaded. If you load a module into memory twice then OS9 thinks you must be pretty keen to keep this module in memory and takes due note of the fact. In this case, you would have to unlink the module twice, to get rid of it. In actual fact, of course, you would never link a module twice just for the sake of it, but there are times when you might decide you want to keep a module in

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memory after you've finished using it. A typical example might be Stylograph. Suppose stylo is up and running and you decide you want to keep it in memory (after doing a 'save and return'), then all you have to do is use 'PASS' to 'link stylo'.

If you're using OS9 with a single drive you should make good use of the save, load and unlink commands for these will offer the easiest method of transferring program modules from one disc to another. At the start, I said that one disadvantage of OS9 is that you have to tell the system where it can find the CMDS directory (CMDS) whenever you change a disc. There is a very simple (and like many simple ideas, often overlooked) method of fooling the system into thinking that the system disc is never changed. This is done by arranging for the command directory to be in the same position on each disc. The easiest method of doing this is to make several copies of your original system disc which you then customise by deleting unwanted commands and directories (delete the DEFS directory on all but the 'asm' system disc, and the os9boot file from every disc except the one you BOOT with). Having freed some disc space you can then proceed to transfer the major program modules from your application discs to the customised versions (remember: use save load and unlink).

BASIC09 MODEM PROGRAM ... BARRY KNAPP

Now for yet another of those modem programs, the following program will allow you to access a bulletin board, but will not cater for any control character. If you wish to do so then you should do a check on the input value of CH\$, and branch to a subroutine to handle the character. This program however has two advantages:-

- i) It allows the use of the G051 character screen
- ii) It can be piped to produce a simulated downloading

Unfortunately the first character in a line may occasionally be lost, this is not due to lack of speed in the program but the slowness of the G051 routine in scrolling the screen.

```
PROCEDURE MODEN7
PRINT CHR$(12)
DIM A,B,C,D:BYTE
POKE 65286.,75
POKE 65287.,54
PRINT "Before running enter the following command..."
PRINT "TMODE -echo -pause"
D=8 / WHILE D<>0 DO
  IF LAND(PEEK(65285.),8)>=8 THEN
    PRINT CHR$(PEEK(65285.));
  ENDIF
  RUN INKEY(CH$)
  IF CH$<>" " THEN
    POKE 65284.,ASC(CH$)
  ENDIF
ENDWHILE
```

Once you have saved the program you should 'PACK' it to achieve maximum speed. This will create an executable module in the commands directory which can be run using the RUNB <filename>.

If you should wish to alter the program then do not include line numbers if you wish to pack the program. This program should be fast enough to cope with up to 9,600 baud UNPACKED.

To alter the baud rate then alter the 5th line as shown.

POKE 65287, 50,54,56,58,60,61,62=75,300,1200,2400,4800,7200,9600 baud

CORRECTION... BOB HALL'S PHONE NUMBER IS 0272-294113, NOT 0271 ETC.

7.

KEYBOARD RESPONSES.....R.A.DAVIS

You will often come across a nice listing, or perhaps have made one yourself, in which too little attention has been paid to setting out requests for keyboard responses, and which therefore is lacking the final 'professional' touch. Take for instance, EXEC41194, which I suppose we all now use to hold information on the screen whilst it is read by the user, who is requested to 'HIT A KEY' for the next page etc., instead of the old INKEY\$ routine. The EXEC routine gives a flashing cursor and this can be used to better the effect. Try this:-

```
10 CLS:PRINT@490,"HIT A KEY";:PRINT@490,"";:EXEC41194
40 GOTO40
```

and now you have a more interesting display, due to the fact that the cursor flash is brought about by inverting whatever character happens to occupy the screen address.

If you are using this as a subroutine to be accessed several times, it should be placed near the start of the BASIC, not as is so often found, tagged on the end. You can also use the INPUT or LINEINPUT, cursors in the same way:-

```
10 CLS:PRINT@103," JOYSTICKS  Y";
20 PRINT @115,"22::INPUTI$
30 IF I$<>"Y" THEN PRINT @117,"N":GOTO60 ELSE PRINT @117,"Y"
40 PRINT "YOU CHOSE YES"
50 STOP
60 PRINT "YOU CHOSE NO"
```

```
10 CLS:PRINT@103," JOYSTICKS  ?";
20 PRINT@115,"";LINEINPUTI$
40 GOTO40
```

```
10 CLS:PRINT@103,"JOYSTICKS  ?";
20 PRINT@115,"";:EXEC41194
40 GOTO40
```

Note that 4 spaces are used between the S of joysticks and the Y for the input sequence, but only 2 spaces for the LINEINPUT sequence and the EXEC41194, so that the cursor flash comes at the correct place. The INPUT sequence may be used in a display which requires more than one alternative choice to be made, i.e. where the PMODE, PCLS and SCREEN have to be chosen, provided that the whole range of choices is displayed to begin with, and the INPUT cursor made to move down these in sequence as each choice is made. A very attractive way of displaying a screen which allows one choice out of several, as in a menu, using the up/down arrow keys to choose and the spacebar to select is:-

```
200 CLS:PRINT:PRINT"      CHOICES"
210 CH=1
220 PRINT@103,CHOICE NO.1           CHOICE NO.2
CHOICE NO.3           CHOICE NO.4           CHOICE NO.5
                CHOICE NO.6           CHOICE NO.7"
250 PRINT:PRINT"USE ARROW KEYS TO SELECT AND      SPACEBAR TO CHOOSE"
260 POKE1094+CH*32,63
270 IF PEEK(341)=223 AND CH=1 THEN POKE 1094+CH*32,96:CH=CH-1:GOTO220
280 IF PEEK(342)=223 AND CH<7 THEN POKE1094+32*CH,96:CH=CH+1:GOTO220
290 IF PEEK(345)=223 THEN 310
300 GOTO 270
310 ON CH GOTO .....etc..
```

Letters, (in this case 'C') appear in a vertical column, one under the other and the '?' cursor moves up/down to the left of these. Line 310 sends the program to the required choice. Very often, the choice is restricted to a plain y/n and the simplest routine seems to be the one which uses the logical AND statement:-

```
10 CLS:PRINT @103,"PLEASE CHOOSE [Y/N]"
```

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```
20 I$=INKEY$:IF I$<>"Y" AND I$<>"N" THEN 20 ELSE IF I$="N" THEN 50
30 PRINT "YOU CHOSE YES"
40 STOP
50 PRINT "YOU CHOSE NO"
```

You are not restricted to just the two alternatives with this method:-

```
10 CLS:I$=INKEY$:IF I$<>"1" AND I$<>"2" AND I$<>"3" AND I$<>"4" THEN 10
20 I=VAL(I$):ON I GOTO 30,40,50,60
30 PRINT"1":STOP
40 PRINT"2":STOP
50 PRINT"3":STOP
60 PRINT"4":STOP
```

but there are better ways and ON INSTR is much better:-

```
10 I$=INKEY$:IF I$="" THEN 10. 20 ON INSTR(1,"1234QWERTABCD",I$) GOTO
100,200,300,400,....etc.
```

and as you can see, this can be used with mixtures of letters and numbers, returning the position of the character in the string as the number to be acted on. Note that the string must follow the I\$=INKEY\$. The usual methods of returning a number from a string input are the VAL or ASC functions, these are two common methods:-

```
10 CLS:PRINT@103,"CHOOSE A NUMBER [1-9]" [10] CLS:PRINT @103,"CHOOSE [A-D]"
20 I$=INKEY$:IF I$<1 OR I$>9 THEN 20 [20]I$=INKEY$:IFI$<"A"OR I$>"D" THEN 20
30 I=VAL(I$) [30] I=ASC(I$)-64
40 PRINT"YOU CHOSE ";I [40] PRINT I
50 ON I GOTO 60,70...etc. [50] ON I GOTO 60,70...etc.
```

For keyboard responses to be made while the program carries on without noticeable interruption, eg. to return to a menu, detect the arrow keys, or any other key, it is best to use a loop to peek the keyboard. If you type this listing in before you start programming, you can RUN 10000 anytime to ascertain the PEEK and number required to detect any key you need, which saves you the chore of looking up the keyboard table.

```
10000 I$=INKEY$:IF I$="" THEN 10000
10010 FOR I=338 TO 345
10020 A=PEEK(I)
10030 IF A<>255 THEN PRINT "FOR";I$;" PEEK(";I;")= ";A
10040 NEXTI:GOTO10000
```

Location 337 contains the rollover number of the last key pressed and would be 255 if no key had been pressed. Here is a simple demonstration of the PEEK loop, using the A & B keys:-

```
10 PA=251:PB=PA
20 KA=PEEK(339):KB=PEEK(340)
30 IF KA=PA THEN SOUND 20,2 ELSE IF KB=PB THEN SOUND 200,5
40 GOTO 10
```

The variables for the numbers to be returned (PA,PB) can be set early, but the loop must contain the variables for the PEEK's if you intend to use variables for these. One last word on displays, I often find that a display of instructions etc. has been spoilt by word 'wrap around', splitting a word from one line to another. When using PRINT, i.e. starting at the left hand side of the screen, always start with a space after the '"' to get a nice margin effect. Then make sure that, as you type in the statement, now word overlaps the '"' at the start. If it does then you have a 'wrap around' word. Use spaces to position the start of this word after your original " + space. An unnecessary comment? Apparently not. Programmers far superior to me seem to make a hash when it comes to the simple PRINT.

Is there any particular subject that you think we're missing out on?.....
if so write in and tell us, or better still write an article yourself for us.....
You write it, we'll print it.

9.

Linking Dragon 64's.....Alan Butler.

I have had a couple of enquiries lately from people having difficulties communicating between 2 d64's, so I thought I would have a go myself. I borrowed a D64 from a good friend of mine and set about connecting them together. First I made the necessary cable as follows:-

p6 Tx - p2 Rx
p2 Rx - p6 Tx
p4 DTR - p5 CTS
p5 CTS - p4 DTR
p1 GND - p1 GND

Then I wrote the following short program:-

```
10 POKE &HFF06,75:POKE&HFF07,54
20 IF (PEEK(&HFF05)AND8)=8 THEN 30 ELSE 40
30 PRINT CHR$(PEEK(&HFF04));
40 A$=INKEY$:IF A$=""THEN 20
50 POKE &HFF04,ASC(A$):GOTO20
```

So with 2 D64's connected with the above cable and with the above program running on both machines, BINGO, anything that is typed on one Dragon came out on the screen of the other and vice versa.

With a little modification, almost anything is possible.

A little explanation of the program:-

Line 10: POKE &HFF06,75 - set ACIA to, amongst other things, no parity

POKE &HFF07,54 - set ACIA to 300 baud, 7 bit, 1 stop bit

Line 20: check for receiver full, if full, print incoming character, else check keyboard for input

Line 30: print incoming character

Line 40: check for keyboard input

Line 50: if keyboard input, output it via ACIA

Module Man (Microdeal).....Barry Caruth.

This is yet another of Microdeal's new releases. For those of you with a Tandy Speech/Sound cartridge you can also have the "thrill" of speech. The idea is to find a magic sword and return it to the King. The sword is hidden in one of 15 screens. To exit a screen you go out of a door by pushing up the right joystick when beside it. Often a door will be locked unless you have a certain object. Of course all this would be simple except for one small fact that I have neglected to mention so far.....there are a few monsters!. The place is crawling with them!...They are even worse than your Mr Average Monster because they can shoot at you, and it takes three shots to kill them!. The controls are so bad I won't mention them....right J-stick.

Now can I cut the game into little pieces and bury them quietly somewhere?...No?...Oh alright then, if you insist.

The graphics are moderately awful and the sound is worse (good job they haven't invented smell for computer games yet!). Despite trying several of my joystick collection, the control was just as bad as ever. You are only allowed a black or buff screen, and all I'll say about THAT is let your headache decide! (or do NOT select buff). The game is not worth 8.00, it might just have sold on the "Pocket Money" label. You'll now probably all go and buy it just to prove me wrong, I suppose.

Available only from Micropost @ 8.00 + 75p post/packing. (DOS upgrade 3.00 extra).

SOMEONE LEND ME A GUN!!!!

I ain't kidding, I'm going to declare an open season on Editors who forget to put a disc in the drive when making up the Master Copy!!!!. If you are reading this, Tim, you missed out THREE full articles, and included one file so corrupted I could only salvage 20% of it!...The missing ones aren't even on your directory checklist, so YOU can have the job of answering all the complaints about the February newsletter not being delivered until March!....Paul.

.10.

TANDY MULTI-PACK CONVERSION . . J.E.SLADE

For those who are interested, the Tandy Multi-Pack offered for 49.95 at the 3rd 6809 show can be fairly easily converted for the Dragon, provided that one has the courage to start hacking about a new unit. This is not really a mod for amateurs, but should be easy for anyone who has had experience with soldering on printed circuit boards. Tools required, one small pozidrive screwdriver, 15-25 watt soldering iron, a small pair of pointed nose pliers would be helpful but PLEASE READ THE INSTRUCTIONS BEFORE DOING ANYTHING.

First clear a bit of space to work in, it is surprising how many bits you end up with. A small container for screws etc. is handy.

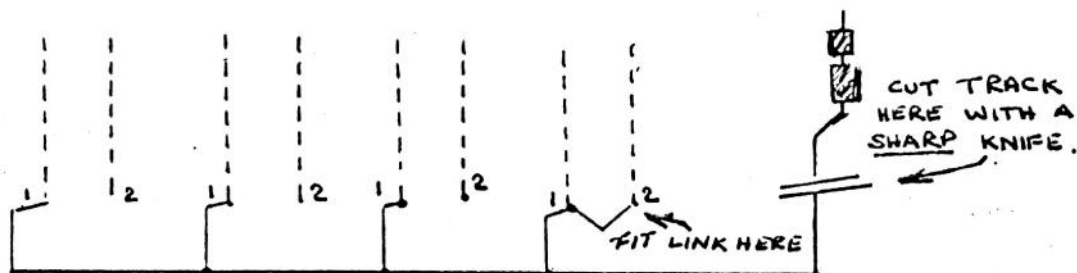
First, turn the Multi-Pack upside down (Here endeth the guarantee). Remove the four screws holding the case together, one of the screws is underneath the black label. Remove the top of the case and the switch slider. Before undoing the 3 screws holding the PCB to the case, remove the push-on connectors from the transformer end of the board. Next locate the small split clips (12 in all) and carefully push them through the PCB (the small pliers will help here), these clips hold a shield under the PCB, so don't lose them. Now remove the PCB and move all the other bits out of the way. Turn the PCB upside down with the large black heatsink towards you and the edge connector away from you, look at the diagram and locate the track shown on the PCB. Make a small cut right through the track where shown. If you have a multimeter it would help to check that you have cut the track right through. If not then make 2 cuts, about 1/16 of an inch apart and scratch the track away between them. IT IS VERY IMPORTANT THAT THE TRACK IS CUT RIGHT THROUGH. Now solder a small link between the pins marked on the diagram. MAKE SURE THAT YOU DO NOT SHORT ACROSS TO THE PINS ON EITHER SIDE. NOW CHECK EVERYTHING AGAIN.

Now to reassemble. First place the screen on the PCB (it only fits one way) and insert the small split pins in the holes with your thumbs (tools should not be necessary). Replace the board in the case and screw it down. Reconnect the cables at the transformer end as follows:

A1 - ORANGE; A2 - YELLOW; A3 - RED; A4 - BLUE; A5 - BLACK

Now check everything again before finally placing the switch lever in position and fitting the top of the case. Turn the whole unit upside down and screw the case back together (the shorter screws should be at the front). That is nearly all, except to obtain a piece of wood large enough to support the Dragon and approx. 3/4 inch thick, to bring the Dragon port up to the same height as the Multi-Pack. Finally, read the instruction booklet that come with it, noting the CAUTIONS about switching off before connecting anything to anything. (My son managed to kill a DRAGON by knocking out a home-made interface while it was on, so don't think that it can't happen to you, it can.) The poke numbers supplied for the Tandy are correct for the Dragon. If you do decide to go ahead with the conversion, take care and follow the instructions, but if in any doubt please ring me on Thanet (0843) 47340 and I will do my best to help. I bought mine on the Saturday at the show and had it converted and running by Sunday afternoon so the actual conversion is not as long-winded as the instructions would make it appear. Again, good luck, and don't hesitate to call, I'm in most of the time.

CONNECTORS
VIEWED FROM
UNDERNEATH
THE P.C.B.



DISCMASTER

Discmaster is a disc utility for the D32&64 from Richard Robinson. The program comes on disc with a disc fact sheet listing some useful DOS locations and a short piece on DragonDOS.

The program itself has 10 options allowing the user to scan the disc, sector by sector, dump the directory tracks to the screen, edit sectors, list the files on the disc to screen, printer or both, list the 'killed' files (provided the space has not been overwritten), swap the directories (in case you have corrupted one), protect all the files on the disc, turn off protection on all files, print the details of any file on the disc (name type and the sectors it is stored on) and lastly access and rename unnamed files (those you accidentally saved without a filename and can't delete).

All of these options work well, the only real problems are the directory dump which has a habit of being over 1 screen long, when the 'press a key' appears, it may overwrite some of the data on the screen and the file listing which is not paged, hence if you have a lot of files on the disc then you may have to play with the shift and @ keys to stop the list while you list it.

Diskmaster is available from Richard Robinson, 6 Norwood St., Shipley, West Yorkshire at 4.00 to group members.

REDUNDANT INFORMATION DEPT.

To redefine the cursor (on the 32) POKE 363, (ASCII code of the character required) POKE 364, 167 POKE 365, 159 POKE 366, 0 POKE 367, 136 the to activate this POKE 362, 134 and to deactivate POKE 362, 57 (and you try translating that from Spanish)

To switch between lower and upper case without shift 0, poke 329, 0 for lower case and 255 for upper

To update the joystick readings, EXEC &H8012, the new readings will then be in locations &H15a-&H15d

I'm sure you all know to EXEC 41194 instead of INKEY\$ to wait for a keypress, with the 64 in 48k mode, EXEC 57578

If your printer does not give an automatic line feed with carriage return or you have turned it off then POKE &H14A, 2 for automatic line feed on and POKE &H14A, 1 to turn it off

To alter the 'comma field width' on the printer, POKE &H99 with the new field with and &H9a with the last field. ie. for 5 fields of length 10, POKE &H99, 10: POKE &H9A, 50

Finally, location 111 holds the output device description, 254=printer, -1=tape, 0=screen so to answer one question that keeps cropping up POKE 111, 254: DIR will list a disc directory to the printer

THE END BIT

This month, I'm going to ask a question that has been puzzling me for some time. Why do people keep spelling disc with a 'k'? I know that it's the American way but does that mean that English companies and computer users have to use it?

All right so it doesn't make that much difference, but it seems to me that it's just one more step on the slippery slope to Americanisms being accepted as part of the English language. Do we really need them, I think I should copy CAMRA and start the Campaign for Real English, mindyou, CAMRE doesn't really have the same ring.

Tim Lomas London February 1986

Classified & Special Offers Page

TOUCHMASTER SPECIALS:-

Dynacalc.....25.00 Cash / VAT.....20.00 Basic 89.....20.00 Stock Recording.....25.00
RMS.....25.00 Pascal.....30.00 Edit / Assembler.....30.00 C Compiler.....30.00
Stylograph (+Spellcheck / Mailmerge).....35.00 Touchmaster Touchpad, complete with leads and Software.49.50 inc.
All orders direct to Touchmaster Limited. PO Box 45, Port Talbot, West Glamorgan, mentioning the Group.

5.25" DISCS. SS/DD.....14.50 per box. DS/DD.....15.50 per box. These are top quality 40 track discs. We can also obtain 80 track if required.

All prices PLUS 15% vat, but inclusive of postage. Orders to Paul Grade, cheques payable to the Group.

DREAM ASSEMBLER (tape).....4.00 and TYPIST on Delta format disc only 4.00. Contact: H. McDonald, 9, Loxwood Close, Bexhill, Sussex. Phone Cooden 4500.

DUCKWORTH COMPUTING: Duckworths are offering members a 50% discount on the following books:-

Pocket Handbook for the Dragon..usual price 2.95....our price 1.50.

Exploring Adventures on the Dragon:-usually 6.95....our price 3.50.

Dragon Programs, by Nick Hampshire:-usually 6.95....our price 3.50.

There is also a cassette of Adventures on the Dragon usual price 7.95, but only 4.00 to you.

All orders to Paul Grade, cheques made payable to the Group. P/P 30 pence per item extra.

DRAGONDOS: Peter Williams of Computil is offering to reblow your Dragon DOS chip to include the correction patches published in Dragon User for only 3.50 inclusive. Send your chip and a cheque to: Computil, 22, Grove Park, Burbage, Hinckley, Leics.

32 to 64K UPGRADE INSTRUCTIONS: Bob Hall has written a comprehensive manual on converting your 32 to 64, and copies are available to members at 2.00 each. Orders to Paul Grade. Cheques payable to the Group.

32 and 64 CIRCUIT SHEETS: We can now supply photocopies of these for 1.00 each. The 32 sheets are applicable to the series 2 board ONLY. For other types please phone for details.

BACKDATE UPDATES: We can now supply copies of back issues of Update. Please contact John Cox at 3, St. Peters Road, Portslade, Sussex. (0273-422492) or C.J. Channing at 63, Churchfield Way, Whittlesey, Peterborough. PE7-1JZ ... (0733-200409) for price and availability.

GO FORTH!!!.....Bewildered by OS9?....Fed up with FLEX?....then this ought to be just the thing for you!. We can now offer you a REAL FORTH O.S that you can BOOT into either a 64 or 32, and which isn't just the usual "language only" type rubbish!. This is a genuine O.S, and includes an 85 column word processor and a full Turtle Graphics mode as well as the usual FORTH compiler etc. The system has been written by John Payne and is ONLY available via the Group. We now have DELTA as well as DRAGONDOS versions available, and all you need is 8.50 and a working knowledge of FORTH!. Send your order to Paul Grade..cheque for 8.50 made payable to the Group.

BANK MANAGER PROGRAM...Holds details of bank current accounts. Options include add, edit, view, print, save (disc), load. Monthly statements can be produced of all credits and debits. Disc version only. Price 5.00 or 4.00 to Group members.

DISC DIARY PROGRAM...Holds data for every day of the year on a 48k disc file. Each day has 4 lines. Output to screen and printer, with daily steps back and forward, and absolute jumps to any particular date. Price 5.00 or 4.00 to members. Orders and cheque to:-R.Watts. 6/105, Brighton Road, Worthing, Sussex BN11-2EG.

PRINTER for SALE...Brother HRS printer. Prints on thermal or plain paper, cut sheet or roll feed. Battery or mains operated. Text and Graphics. Price including supply of plain paper and mains power unit 80.00. Contact:-H. McDonald, 9, Loxwood Close, Bexhill-on-Sea, Sussex. Phone Cooden 4500.

DRAGONDOS DISC EDITOR / MENU...Disc utility written by John Cox. Simple to use and has two operational modes, Examine and Edit. Will read and edit discs including those from most other systems, and will allow you to reclaim a KILLED file (provided you haven't overwritten it, of course!!). Access and change files directly from disc. Also includes DISC MENU which you can load and save onto any of your own discs, and which reads the directory and lists the files 26 at a time on the screen and allows you single key "running" of your files!.

Further details from John Cox (0273-422492). Price 6.50 inc. Orders to Paul Grade, Cheques payable to the Group.

WANTED: SOMEONE out there must have a spare DragonDOS or Cumanados cartridge that they'd sell cheap, surely?...even a dud one will

so nicely. Would consider swap for Touchpad if required. If you can help please phone Paul on Worthing 287585.

PEAKSOFT SPECIALS....Dragon external power supply units (transformer unit) complete with lead and "D" plug. Price 14.95 post free.
Peaksoft "Prostick" joysticks (potentiometer type) only 9.95 per PAIR post free.

Aerial and cassette leads only 2.50 each, post free.

Sunshine Books....Advanced sound and graphics, Artificial Intelligence on the Dragon, Dragon Gamesmaster, Working Dragon, and Dragon Trainer....the lot for only 6.95 post free.

All the above are available from Peaksoft at 48, Queen Street, Balderton, Newark, Notts.NG24-3NS. Please mention the Group when ordering.

PRINTERS FOR SALE:-OKI Microline 82A 120cps dot matrix printer, with dot addressable graphic option fitted. Centronics and RS232 interfaces. Complete with manuals.....75.00. Diablo 1610 daisy wheel with sheet feeder and RS232 interface.. 100.00
o.n.o. Write or phone:-Alan Butler, 16, Barnston Green, Barnston, Gt. Dunmow, Essex.....Phone:-0371-4234.(evenings only).

Much as I hate to have to admit to being slightly less than perfect, I have to apologise for the fact that recent newsletters have been arriving late.

There is no one reason for this.....on two occasions the Post Office has lost / delayed the master disc somewhere between London and Worthing, and this month Tim had to be away for a couple of weeks, which made things a bit late, and to finish it off the master disc turned out to be corrupt, which meant more typing, and of course more delay.

I can only apologise and promise you that we really are doing our best to get back on schedule....although the Group is so big now that we never seem to have time to catch up with ANYTHING!!!

Anyway, I thought I ought to explain.....Paul G.

Paul G.

Screen inverter listing

```
0 PRINT@260,"SCREEN INVERTER LISTING":FORQ=1TO800:NEXTQ
1 CLEAR200,32580
2 FOR I=1 TO 184:READA$:Z=VAL("&H"+A$):CS=CS+Z:POKE I+32580,Z:NEXT
3 DATA 8E,7F,63,BF,1,68,8E,7F,DE,BF,1,6B,8E,7F,F6,BF,1,A1,86,7E,B7,1,67,B7,1,6A,
B7,1,A0,39,7D,0,6F,27,1,39,32,62,34,16,8E,FF,C0,A7,84,A7,2,A7,4,A7,6,A7,A,A7,C,A
7,E,A7,88,10,A7,9,86,D,B7,FF,22,35,2,34,2,BE,0,88,81,8,26,8,86
4 DATA 20,A7,84,A7,82,20,1C,81,D,26,4,8D,32,20,14,81,80,24,E,81,20,25,C,81,60,24
,4,84,BF,20,2,80,20,A7,80,BF,0,88,8C,5,FF,23,12,8E,4,0,EC,88,20,ED,81,8C,5,E0,25
,F6,BF,0,88,8D
5 DATA 2,35,96,86,20,A7,80,1F,10,C4,1F,26,F6,39,81,C,27,1,39,34,12,86,20,8E,4,0,
BF,0,88,A7,80,8C,6,0,25,F9,35,92,27,1,39,32,62,20,E66 IF CS<>17105 THEN PRINT"DA
TA ERROR":SOUND 1,2:STOP
7 EXEC 32581:CLS
```

Nothing much.....

As I've got a bit of space to spare for once, and no one to have a moan about, I thought the most practical use for it would be to make a couple of requests.

Quite a few of you have asked why we can't print a program listing each month....there are two reasons really, [1].Most of the more interesting ones are simply too long to fit in with our format, and [2].None of you seem interested in sending any in to us!!!

If any of you feel like making the supreme effort of staggering over to the Dragon and typing something of suitable length, and the further effort of posting it in to us, then so long as it checks out OK, then we'll print it.

Only one point.....NO "Noughts & Crosses" routines, PLEASE!!!. The Dragon really outgrew that sort of stuff years ago. OK?.

Oh well, it looks as though I didn't have quite as much spare space as I thought. Not to worry, at least it saves me from boring you to death!.

Paul G.