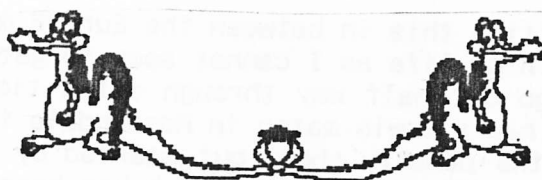


The Newsletter of the National Dragon User's Group

DRAGON



UPDATE

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Another Slimline Issue

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THE GAFFER'S BIT

I HAD been hoping to stretch this to the full fourteen pages this month, but it isn't going to happen, if only because I'm running out of new ways to say the same old things for the 99th time. I know membership numbers aren't what they once were, but we really should be able to get enough material each month to make up a full size issue if just two or three more of you made the effort to write something. Maybe you could give it a try?, word processors really have improved since you last wrote something you don't need to cart those heavy stone blocks around any more, and there's a thing called a keyboard that you can use in place of the old hammer and chisel, which makes the whole process far easier and quieter than it used to be. Anyway, to other matters. I'm sure the games enthusiasts amongst you will be pleased to know that Stewart Orchard (he of ROTABB and Balldozer fame) has decided to put away childish things like Windows95 and all that, and exhume his old Dragon ... not only that, he's treated it to a disc drive or two and made a start by converting his two best known programs to disc and presenting them to the Group to aid Group funds or at least, it will if you buy them!. New programs? you'll just have to wait and see!. Other than that, there isn't really very much happening anywhere on the computer scene, unless you count my self-inflicted PC problems You Too Can Be A Prat In Your Spare Time, especially if you decide to backup one hard drive to another, get the configuration wrong, and totally trash around 500Meg of assorted files and programs. Funny how you always realise EXACTLY what you've done almost half a nano-second after it's too late, isn't it?!. Oh well, putting things right again is all good typing exercise, or so I'm told my own description was slightly different. Enough of this rubbish Now Read On

The Editor's Bit...

Thought I might be an Update reader this month, and not write a bit for the front page because I don't know what to write.

Still, we do have just about enough material for Update this month, and maybe for next month with a fair wind and a few more submissions (hint), so thanx to all those who have put head pin to ribbon recently.

And yes, we do have a couple of PC bits inside. A regular thing from now on, but not one that will be allowed to encroach on the Dragon space. A new law was passed in Parliament recently decreeing that anyone writing a PC article for Update MUST write a Dragon article to go with it. Penalty for disobeying is to watch a whole night-time schedule on Carlton TV.

I'm a Mac fan, myself.

S.W.

[Stevikins, I THINK that threat is illegal something about "cruel and unusual punishment" or similar sentimental garbage, so perhaps we should just stick to the usual chains and whips for this offence?. PG.]

PEEKING THE DRAGON(64).MIKE STOTT

24th June 1996 - I am writing this in between the Euro96 matches.

Euro96 is causing chaos in my life as I cannot seem to get anything else done.

Last Saturday I had to go out half way through extra time in the quarter final match against Spain as I had a bowls match in Rossendale that night.

I was picked up just as the penalty shoot out started by a lad who does not have an aerial on his car radio. The next bowls match has been cancelled on the night of the semi-final.

Sotos Mandalos has written to me from Twyford saying that his kids love a game called THIRDERBIRDS on the Spectrum and he wonders if there was a similar game for the Dragon.

Unfortunately I do not know this game at all so I am wondering whether any of our readers know of it and can let us know if there was a similar game for the Dragon. If I had a description of the game I might be able to remember a similar game for the Dragon. He is also interested in the theme music from the game and wonders whether that may have been released on the Dragon.

Sotos also asked me about UP2DATE and whether anybody had evaluated it in UPDATE and how many Dragons did it get. I intend doing a review of UP2DATE the next time I do not have anything to write about in my article (which will not be very long probably) but until then all I can tell you is that it will be a very glowing review as I think that this is a very useful addition to my collection every other month and well worth the two pounds it costs. I will review the latest copy when I get around to it. I had started doing one a few articles ago but then there suddenly appeared other Dragon topics to fill my page.

Mike Townsend has now sent me a copy of his disk sector refresher program that I mentioned in my last article. He asked me to try it using my 3.5" drive as he only has 5.25" drives. This proved to be a very time consuming task.

My 3.5" drive is very rarely used so I decided to make sure that this was working before I tested Mike's software. It took me about two hours to get the drive to read a Dragon disk but then it suddenly read a directory and I was able to load programs from it without any difficulty. I prepared 80 track and 40 track disks, both single and double sided so that I would be able to give it a thorough testing. Then I decided that, as I needed to make a backup of Mike's disk I would use COPYCAT to copy all the files onto one of the 3.5" disks that I had prepared. Disaster. I was hit by an error message.

Although I did not really think that COPYCAT was causing the problems I decided to copy each file singly over to the 3.5" disk. Again I was unsuccessful.

Suddenly I remembered that Mike usually uses double sided disks whereas I usually have my single sided drives connected to my Dragon. I switched my system off and connected the 3.5" drive to the Dragon and the double sided drives that I bought from PSE many moons ago. Upon restarting the system everything appeared to be alright so I copied Mike's disk to a 3.5" disk.

Then I ran his REFRESH program and told it to work on my 3.5" drive which had been formatted to 80 track double sided.

It then worked it's way through the disk showing on screen the track and sector that it was currently refreshing. Since then I have tried it on other formats of 3.5" Dragon formatted disks without any problems.

It takes about half an hour to run through an 80 track double sided disk.

I will not go into detail about what it does as Mike has written a separate article to appear in UPDATE together with the listing.

If you subscribe to UP2DATE you should find an up and running version in one of their editions. Mike has also been working hard on trying to get his Hewlett Packard Deskjet 520 to work with the Dragon.

The following gives the HP end-of-line-wrap command together with the Dragon line feed. Mike intends to write an article for UPDATE on this subject but has asked me to pass this information on now in case it will be of use to anybody.

```
PRINT£-2,CHR$(27);CHRS(38);CHR$(115);CHR$(48);CHR$(67):POKE330,2
```

HenceForth (24) . . . Bob Smith

If you haven't thrown the last issue of Update away, then you'll know that this is the Forth version of the program I described in that issue. Here are a few necessary items before you can run the program. I use address 30000 as a buffer area.

With Forth up and running type HERE and print the top stack value. If the number is less than 29400 then you can use the program as written, otherwise you'll have to use the HERE value +600 as your buffer area. You will have to substitute this new value for all occurrences of 30000 on screens 300-303 and new value +2 for 32002 on screen 303. You will also need John Payne's DSKTORAM which should be on screens 13-14 of the Forth system disk. Check this, and take suitable action (eg buy a newer version) if it is not there. The program will compile DSKTORAM if necessary. Word IFD takes care of this. The program as given below is written for a two-disk system, and if you have such a system then you will need to define DR00 and DR01 which swap disk drives. If you have words for these swaps use them instead of mine, otherwise you can define them with : DR00 EMPTY-BUFFERS 1 235 C!; (drive no. 1) and likewise from DR01 etc, by incrementing the number in front of 235. If you have a one disk system then omit all references to DR00 and DR01 (screens 300 and 302) Screen 299 is the data screen with the consonants and vowels on lines 0 and 3 respectively. Lines 1,2 (consonants) and 4 (vowels) contain the weighting numbers, each of two digits. You will see that I have weighted nearly all the letters with 99. To illustrate how they can be changed, I have weighted J with 50, Z 30, and Y 10. I recommend that you begin with all values set to 99 and set in lower values as you see the nomomems emerge. Type in all the screens, and compile with 300 LOAD. To run, type NOMIS. I'll have to describe the program next time, so DAZENUF.

SCR £299

```

0 B C D F G H J K L M N P R S T V W X Z
1 99999999999950999999999999999999
2 999930
3 AEIOUY
4 9999999999910
5
6
7
```

SCR £301

```

0 ( NOMONEM £2 )
1 B[ I=RND(19):POKE30000,I ] ;
2 : FETCHWT ( ADDR — N2 )
3   DUP C@ 48 - 10 * SWAP 1 + C@
4   48 - + ;
5
6
7
```

SCR £303

```

0 ( NOMONEM £4 )
1 C@ DUP 3167 + C@ SWAP 2 *
2 3198 + FETCHWT ENDIF
3 B[ I=RND(99):POKE30002,I ]
4 30002 C@ ( WHILE REPEAT EMIT
5   LOOP ;
6
7 →
```

SCR £300

```

0 ( NOMONEM £1 )
1 : IFD IF DROP DROP ELSE DR00 13
2   LOAD DR01 ENDINGS ; -FIND
3   £CHK IFD
4 : RDM6 ( — )
5   B[ I=RND(6):POKE30000,I ] ;
6 : RDM19 ( — )
7 →
```

SCR £302

```

0 ( NOMONEM £3 )
1 : GETNOM ( —n1 n2 n3 )
2   DR01 299 299 DSKTORAM ;
3 : NOMONEM ( —n1 n2 n3 )
4   8 1 DO BEGIN I 2 MOD IF RDM19
5     30000 C@ DUP 3071 + C@ SWAP
6     2 * 3102 + FETCHWT ELSE RDM6
7     30000 →
```

SCR £304

```

0 ( NOMONEM £5 )
1 : NOMIS GETNOM 1 BEGIN WHILE 10
2   0 DO CR NOMONEM SP! LOOP CR
3   ." OK TO GO ON?" KEY 78 = 0=
4   REPEAT ;
5 ;S
6
7
```


Deskjets & Dragons..Rob Schofield

In principle, the connection of a number of pieces of standard peripheral equipment to a Dragon is not so difficult as you might think, at least from my point of view to a D64. Over the years, peripherals such as V34 modems, laser printers, and serial port mice have become highly refined and vastly cheaper. This does not include specific items like VGA cards, which require a particular bus architecture (the PC in this case) but the more general things using standard connectors. Logitech, for example, sell extremely popular mice which basically plug into a serial port and then require a piece of software specific to the operating system to drive it. You see Logitech mice badged for use on all sorts of machines, using basically the same mouse hardware. The common point of reference here is the RS232 serial port, available on most computers including the D64. But that's another story... (**and one we would be most interested to hear, Rob...please?**)

So, back to our Deskjet. If only you could connect one to your Dragon. Well, why not? A great deal of modern printers are sold with either a Centronics port or a serial port for connection via a 'standard' cable to the IBM PC 'standard' port, usually a 25-pin D connector. The D64 has both, albeit in vestigial forms, so where's the problem? Well, it falls into two parts here...cabling, and (next time) software.

As for cabling, I've done this by pressing up a flat cable assembly. This is a method where you can, using a press, crimp a cable into a special type of connector; for most modern parallel port connectors, this is the Centronics type. The other end is a different matter. The D64 demands that you solder up a special cable header for the Dragon end (The Dragon was around before IBM established the de facto D25 connector standard). This box-header type connector has a pin-out all of it's own and does not match the flat cable crimp order for the Centronics end. Achieving this is a relatively simple matter; you can match your printer's Centronics pinout (look in the manual) to the various sources at the D64's pinout. You should then be able to work out which signal to connect at each end. The ability to solder is useful here; additionally, a multimeter and soldering iron would come in handy. I've successfully used a cable made like this with a number of parallel port printers.

Note that I haven't said much about serial connections to the printer - this is deliberate as it is fractionally more difficult. The major problem is one of voltages and shielding, which could make things messy unless you know what you're doing.

Additionally, it can't achieve the theoretical transmission speeds of a parallel connection anyway. Still, if you're itching to do it this way, all you've got to do is apply a little common sense and use the general advice I've just given for the parallel port. Just research your pinouts, buy a cheap serial cable, and cut to fit.

One word of warning: it is my personal experience that a lot of the "advice" you will receive from computer shops these days is absolute garbage. Do not consult a shop for information or advice unless you have extremely good reasons for trusting them. Most of the 'technical experts' are untrained, inexperienced Oiks with little or no knowledge of value. Large pinches of salt are advised if you do - listen at your own risk! (For all "oiks" out there, no apologies - I have worked as one and could relate some stories that would chill your blood...)

Next time, driver software.

**** Very interesting, Bob, but why not include the odd (or even peculiar if you like) pin-out diagram maybe for the Deskjet AND the Dragon end of things you'd be surprised just how many people don't have such details handy, and I'm sure you know how "reliable" the information in the standard printer manuals is the "translated from the original Japanese into Fractured American English by an illiterate Tiwanese taxi driver" type as supplied with almost all computer peripherals.*

Paul.

The Future Of NDUG...Clive Scott.

I am sure that I am not alone in wondering what the future of the Group will be. The Dragon's diminishing numbers means that it can no longer expect commercial support, as it is regarded as an antique in the computer world. Unfortunately, it may be an antique but it has not yet made it onto the Antiques Roadshow on television, although I predict that some time in the future all old computers will do so. Old valve radios and other consumables from the 50s and 60s are already considered valuable. Cars go through a phase of losing their value and being considered as old bangers. Eventually, those that remain become classic cars; owner's clubs spring up, and even cars which were commercial disasters when new become classics.

When computers become such classics, and are collectible again, the future of such groups as NDUG will be secured. Who knows, in the next millennium people may look back at computers like the Dragon with some nostalgia and wonder how they worked with so little memory and such puny processors. They may even say "my toaster has more memory than a Dragon". Reunions will be held,, and owners will swap memories of how they coped with temperamental cassette recorders.

It's up to us to keep NDUG going until such a time, and to keep our machines in working order. I am sure that I am not alone in having a more modern computer for day to day use whilst keeping the Dragon for things like writing articles and playing games. They are not in regular use, and should last for years.

Finally, as an update to my article "2001 a Pace Odyssey", I read that Digital, makers of the Alpha processor, have a die making plant that can produce chips with 100 million transistors per square inch. A new processor is expected soon from it, which will run at 433MHz and be capable of processing 8 computer instructions simultaneously. How's that for power.

Dragons In Ham Radio.Johnny Brown

Slowscan, Duoscan, and Uniscan programs are really fax programs, in spite of their names. They allow reception and transmission of pictures from Dragon to Dragon, and they can also be used to show and transmit pictures from the Dragonart library run by Ray from one machine to another. With a little switchery, I think, they could be adjusted to incorporate voice or pictures, just like "real" SSTV.

To do this, though, the transmit and receive sides must be stable, with no drift. The connection instructions are included with the program, and everything can be selected by a single keystroke. This brings me to a system similar to Packet, which was available through the Group. I think it was for 2 metres and for Dragon to Dragon., and there may even have been a net running in the Notts/Derby area.

We have now virtually covered the ham side for the Dragon, and therefore probably for the Tandy Co-Co. As far as I am aware there was only one "real" SSTV program, and that was the BMK one. I only saw it on cassette, and I thought it was OK, given the limitations of the grey scale, but you could certainly see the pictures OK, and they could even be printed out reasonably well. I have also heard of a Spanish amateur producing a transmit/receive program some time ago, and an American SSTV program was available for the Co-Co, but I never saw either of these. However, there are a pair of discs called Amateur Radio Utilities, available from the Group.

*(**As reported last time, Johnny Brown passed away recently, and the above article was only one of many items he had sent us for publication over the years, for which we are very grateful. He still managed to write articles for us despite having been involved in a serious accident, and all of us at Update were well served by his efforts. SW**)*

Operating Systems...Malcolm Cowen

I suspect the reason that people find Flex or OS9 strange to understand at first is that there is a basic difference between ROM-based operating systems such as DragonDOS (and its rivals) and more advanced operating systems which are used on disk based machines (whether Dragon or super commercial Unix systems). It's in the way the system is designed; Flex, OS9 and Unix are open systems, DragonDOS is closed.

That is not a claim to superiority, unless you're one of those people who want a fight regardless of whether there's a genuine reason or not. They are different pieces of software for different situations, and each one is well designed for its own situation.

In a closed system, like DragonDOS, all the commands are built into the DOS. A good DOS has a large repertoire of different, highly flexible commands, with which a competent user can do a great deal. A bad system has a poor repertoire, and is a pain in the neck, but either way the important point is those commands are all you've got; you can't add to them. The best you can manage is to wangle a couple of hooks into the system, but that's all.

On an open system it's the complete opposite. The operating system is usually very poor on commands, and on OS9 there's only about half a dozen or so. In fact, on many systems (including OS9) the operating system proper doesn't have anything to handle even the few built in commands, which instead are dealt with by a "command shell", a program which gets started by the boot sequence, and which handles the keyboard input. You can change the command shell, or even in some special cases do without one if you want. It won't affect the operating system, only the commands you can put in.

The key aspect of an open system is the ability of the command shell to accept commands which it doesn't recognise itself, and then go and look somewhere in the machine for a piece of code to handle that command. That's what makes it powerful and flexible.

For example, suppose on an OS9 system you type in "DIR". It's a valid command, but the shell will not recognise it as such. What it will do is recognise it as a possible command. It will then scan all modules of code in memory and all files in the special command directory (usually /d0/cmds) for a piece of code named DIR. If it finds one, then it will load it (if it's not already loaded) and pass the command to it, with all its parameters. That command could be something simple (like DIR) or a complex piece of software.

You can do that with any command. You can rename existing commands and change "find" to "chwilio" or "suchen" if you're a Cymro or a Deutscher. You can buy new code modules, or write your own, to do new things that the existing system doesn't cater for, so it's the ultimate in adaptability.

Of course, there's a price. Every time I type in a command, the machine has to go off and start searching the disk for a file. It takes time, and that's the disadvantage of an open system, and the corresponding advantage of a closed system, which does less but does it faster.

If you want to run OS9, I would advise loading as many of the small, frequently used utilities (such as DIR, DEL, and so on) permanently into memory. If you can get a machine with a 128K upgrade, you can set up a ram disk in the extra 64K and put more modules there (there's a version of the shell which will search the ram disk when looking for code module). If you really want to go fast, try for a hard disk - I hear some people have succeeded with that.

My favourite is OS9; I like it to use, and I like it internally. It's fun to write programs for, and it's got a good C compiler. What more could anyone ask?

**** Just a thought, but there WAS another OS once, one that seems to have almost been forgotten now, so how about someone out there writing us an article about FLEX. It may not have been in quite the same class as OS9, but a lot of people liked it. So, any FLEX experts about? Paul*

Dragons, Amigas, & Update..K.Nash

When I saw the game Pinball Fantasies running on an Amiga in a local shop, my eyes nearly popped out of my head, and I decided to buy both an Amiga and this excellent game. I have not been disappointed by either. I now use the Amiga and the Dragon side by side. The highlights of my Dragon are programming - it is much easier to control every aspect of the Dragon than the Amiga, because of the Dragon's simplicity - and the superb disk magazine Up2Date, which is far superior to any Amiga disk-based magazine that I have seen. Anyone with a disk system who has not tried Up2Date should find out what they are missing. Anyone without a disk system might seriously consider upgrading (see PSE's occasional advertisements) just so they can read Up2Date.

The Amiga is, needless to say, a far superior machine to the PC, and was commercially less successful mainly due to poor marketing and because it did not carry an IBM badge. It has a true multitasking operating system, and a graphical user interface not unlike Windows 95 (though with fewer colours) and -wait for it- these run perfectly well on a 68000 (16-bit CPU) clocked at the same speed as the Dragon! This confirms what many say about the hopeless inefficiency of Windows - the unexpanded Amiga 500 or 600s speed is quoted at 7MHz, but there is one CPU memory access and one video memory access per 88 clock cycles, so the actual speed is the same as our favourite machine.

In reply to Paul's article "What do you think?", I would not mind seeing articles in Update on subjects other than the Dragon, but it should be remembered that the magazines available from newsagents provide a plentiful source of information on the PC, Mac, Amiga, Archimedes, and Atari STs. I suspect that Update's readers would find these magazines to be both a deeper and a broader source of information on the non-Dragon world than Update could possibly hope to be. To keep its remaining readers, Update should remain primarily a Dragon publication.

Retro Dragon Games...D.A.Lamb.

I'll start by saying one of my favourite games of the 80s was Rommel's Revenge, a remake of the old Atari classic Battle Zone. When I first bought this game in 1986 it cost 2.99 on the bargain shelf (by that time, the Dragon was in decline). The game is brilliant, with no bugs or glitches. There are a few differences from the original, such as a diamond-shaped flying saucer instead of a plane, and air to surface missiles which cast shadows when fired at you. The tanks and super-tanks move relentlessly around the 3D landscape, and you can hide behind crystal outcrops to escape them. Although the graphics are nowhere near what they could be today, they are the same vector graphics style as in the original arcade version.

Another fave game is Barmy Burgers, a platform game from Blaby Computer Games. The object, as you may guess, is to make burgers by climbing the platforms and collapsing the pieces of the burgers onto each other, whilst being chased by mad eggs.

I think the game is quite original, unlike some of the fodder on offer today, so blow the dust off of your Dragon and play some of the old favourite games.

**** If Games are your interest, take a look at the ads page this month two re-releases of Dragon tape games, now converted to disc by the original author, and on offer to Group Members at absolute bargain prices!.*

What are they? ROTABB and BALLDOZER even if you already have them on tape it's worth buying the new disc versions, if only to load them in quicker and leave more time for playing!. Prices? see the ads page. OK?.

The IBM PC...Sotos Mandalos

The introduction of the IBM Personal Computer in August 1981 legitimised the use of personal computers in the corporate environment and changed for ever the face of computing. It is worth thinking that other computer manufacturers, like Commodore with the Pet, tried to do the same as IBM, but failed pretty miserably to make anything other than an initial impact to universities and home use. Other computer manufacturers, including Dragon, concentrated on home use, but with the IBM PC, the personal computer was no longer a novelty, but a competitive necessity. Also, the use at home today, with all the software bundled in, makes this device a tool that all must have.

But we have seen nothing yet. The PC phenomenon has come upon businesses so fast that corporations are only beginning to look at how PCs fit their overall business strategies. And this is a major part of the IT departments within such corporate markets.

I will be able to give you some figures later on, and I will also make some comparisons on what the home market with people like us who have invested in Dragons can expect and the impact this has. But let us remain on the subject of the original IBM PC and some important and interesting history.

Today, the IBM PC must be credited with the creation of a \$25 billion a year industry. Within 5 years of the first installation of the IBM PC, over four million units with a range of software far greater than that of mainframes or minicomputers were installed in the corporate market place. A number of people still believe that there is plenty of mileage in the minicomputer and mainframe industries, and anyone who thinks differently must be mistaken, but no-one knows what will happen in the future - we only have a vague idea. If you think about it, the most innovative application software and hardware devices now belong to the personal computer world. Paul Grade, our chairman, mentioned in the last Update that he needs articles from hardware people who can use the Dragon to drive other hardware devices. This idea is taken directly from the PC, for example mice, scanners, robots (and I could almost mention...satellite devices...) Products written for the PC like Ashton Tate's dBASE, Supercalc, and Lotus123 have brought a revolution to the lives of corporate workers. Does it sound silly? Well, it is not. Ashton Tate is no more, and how many companies made so much money because of the PC? Compaq has already overtaken IBM in terms of sales, yet IBM was the inventor of the PC. Dedicated word processors are now a thing of the past with general purpose machines like the PC being the choice for most office productivity needs. The IBM PC has changed life for all of us.

More next time.

Strange Stuff From Alan Greenwood

Presenter: Good evening, welcome to another half hour with Bob Fleming.

Bob: Today we will be looking at the lesser known features of the Windows File manager. A strange but somehow necessary little F1 hybrid. Firstly, though, we'll have a look at a well hidden little routine called shift click left mouse button (Latin name) or shift click to us experts. It's a wonderful little thing to have around. Simply open a drive on the tool bar with it and a mass of luvly directories and sub-directories are instantly displayed. B'utiful...

Director: OK, Bob, let's go for a take. Camera rolling; sound; action.

Presenter: Good evening, welcome to another half hour with Bob Fleming.

Bob: Today we will be look...cough...splutter..bark..cough...splutter...

Presenter: PS Try experimenting with the shift and Alt keys on files and directories. You may end up as speechless as Bob....!

- Another idea stolen from Mike Hardaker. Thanks Mike.

(**What does it all mean? The truth is out there...S.W.**)

The Gas Man Cometh! . Dave Cadman.

Ever thought all those gas bills, especially the "estimated" ones, might be just a little bit inaccurate, and that you couldn't really have used THAT much of the stuff?. Well, this simple little program will let you check just how accurate those bills really are did you really use £9,999.99 of gas this quarter or did whoever typed in the figures add the date and her bust measurement?!.

```

1 CLS
2 PRINT,,"          GAS CALCULATOR          == ====="
3 PRINT" DOES YOUR METER READ CUBIC          METERS ? Y/N"
4 R$=INKEY$:IF R$="" THEN4
5 PRINT,," ALL THE INFORMATION REQUESTED  BY THIS PROGRAM IS CONTAINED  ON
YOUR GAS BILL.          IF ANY REQUEST DOES NOT APPLY  PRESS <ENTER>."
6 PRINT:INPUT"PRESENT READING";A
7 PRINT:INPUT"PREVIOUS READING";B
8 PRINT:INPUT"CALORIFIC VALUE";C
9 PRINT:INPUT"PENCE PER KWH  ";D
10 PRINT:INPUT"AMOUNT OF CREDIT,IF ANY";E
11 PRINT:INPUT"NUMBER OF CHARGING DAYS";F
12 PRINT:INPUT"CHARGE PER DAY (IN PENCE)";G
13 PRINT:INPUT"RATE OF VAT";H
14 IF R$="Y"THEN 15 :ELSE 17
15 I=A-B
16 K=I*C:KK=INT(K+0.5):GOTO 19
17 I=A-B:J=I*2.83
18 K=J*C:KK=INT(K+0.5)
19 L=KK/3.6:LL=INT(L)
20 M=LL*D/100:PRINT USING"£££.££";M:CLS
21 N=M-E
22 O=F*G/100
23 P=N+O
24 Q=P*H/100:PRINT USING "££.££";Q:CLS
25 FIN=Q+P
26 CLS
27 PRINT@104,"TOTAL = ";:PRINT USING "£££.££";FIN
28 PRINT,," THERE MAY BE A DISCREPENCY OF  A FEW PENCE DUE TO DIFFERENT
METHODS OF ROUNDING UP AND          DOWN. THE GAS BOARD COMPUTER  IS AT FAULT, DO
NOT ADJUST          YOUR DRAGON. A MINUS RESULT  INDICATES A CREDIT."
29 PRINT,,"          **RUN AGAIN FOR MORE **"

```

A Note from Gareth Tuttiett.

One bit of Dragon news which might possibly be of interest to fellow Dragon users ... I can now confirm that it IS possible to use old PC disc drives with a Dragon!. I have now successfully installed a double sided 360Kb PC disc drive in my Dragon Data drive box, and it worked first time!. Only one problem when fitting it: the drive is about 1/8" wider than the original Dragon Data drives, but with a little persuasion (!) I got it to fit. For your information, the drive was an Epson SD521 with push-button disc lock/release. The drive had a Beckman terminating resistor just like the Dragon ones, so I configured it just like the existing second drive and removed the resistor block. The only jumper required was on D2. Of course I forgot one thing ... DSKINIT defaults to single sided 40 tracks, so I felt a little let down to find 175Kb after typing DIR. Then after a little thought and a quick glance at the DragonDOS commands list in the manual, I realised that I had to use DSKINIT 2,2,40 to get 360Kb. Now to try 720Kb drives

The Late, Late Bit

Got YOUR 26% pay rise yet? funny, nor have I. Whatever happened to that Great One Class Society the Major Disaster and his gasworks gang used to waffle on about?. In any civilised country someone would do us all a favour and shoot the lot of 'em, which is probably why they're working so hard to ban anyone except their private army (otherwise known as the Police) from owning weapons, just in case someone gets public spirited. Of course, they do really deserve the extra money how could any reasonable person expect the son of a thousand fathers who runs the Ministry of Social Security, for example, to manage on less than £45K when he has to work so hard at persecuting anyone who might try to make a tenner or so on top of the £45 (no, no K this time) dole money "the State" so generously provides?. Only thing is, I'm damned if I can see why one is supposed to be "defrauding the taxpayer" and the other isn't, can you?. I'd say that the lot of them make me sick, but that would strain NHS funds, so I'd better not.

What's all this got to do with computers? not a lot really, but I felt like writing it, and if it offends anyone they'll just have to sue me though that would be a brilliant way of losing money!. Extracting blood from stones, or turning lead into gold would be far cheaper and more likely to succeed.

Anyway, the computer scene is almost as bad when it comes to conning people ... I was talking to some poor innocent at our Friendly Local Computer Shop a couple of days ago, and he was explaining to me that buying a computer was such an expensive business that he would have to go and try to get a loan first it seemed that having explained to the sales type what he required, the cost was far higher than he had expected a Pentium 160 full multi-media, with a 2.1 Gig hard drive, and 16 Meg of RAM, Win 95, Microsoft Office, WP7.0, and of course a HP Laser printer, adds up to a load of loot where-ever you buy it. Only thing I couldn't quite understand was that he insisted that he had explained to the sales type that he only wanted a machine because he was thinking of trying to write a book and he'd heard that with a word processor you could correct your mistakes on the screen before printing the pages, which would be easier than using a typewriter. No-one, it seems, cared to mention that virtually any computer made in the last fifteen years could do the job, probably better than the plastic overdraft generator they were trying to sell him, or that if he specifically wanted a PC (he didn't know one type from t'other) he could have got an old XT system complete for under a hundred quid just about anywhere. OK, OK, so business is business, and there's one born every minute so grab him before someone else does, and a fool deserves to be parted from his money sure, I know all that, and suitably provoked I can make Jaws look like a minnow that lost its false teeth, but this kind of rip-off con job seems to be becoming the norm now, and personally I find it all bloody insulting, because the prats doing it appear to imagine that this is how normal business should be conducted, that this is how things should be. It isn't business at all, it's obtaining by deception. It isn't a real con job, there hasn't been one of those since the last time someone sold Nelson's Column to a Japanese tourist. It's just sick (rather like the games MP's play). Don't YOU get just a little tired of it as well?.

Off subject (sort of) I suppose most of you will have heard the current "silly", but for those who haven't it goes something like this: Following complaints from various political and media morons, a certain 'Net Server firm decided to clean things up, and spent a minor fortune on software to monitor subscribers communications and shut down any which contained "naughty words". Unfortunately no-one told them that a computer doesn't know what a "word" is, that it can only recognise groups of characters, and they were most surprised and rather embarrassed to discover that all their subscribers in one particular area were complaining about it it seems there are snags to being a Net subscriber and living in Scunthorpe!. It's a mad, sad World out there!.

Oh well, looks like I've just about drivelled through to the end of the page, so you'll have to wait until the next issue for more demented ranting from me. Of course, you could always send us more material to print instead, no?. Paul G.

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