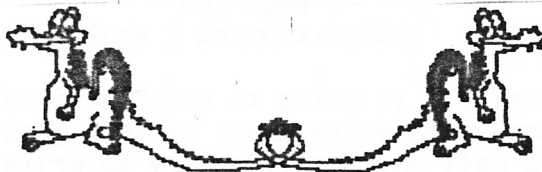


DRAGON



FEBRUARY 2000

The Editor's Bit...

The date may be unfortunate, but there is no fooling this time - one more and then no more. Go on, go mad - write a whole page for us all. Stephen.

PEEKING THE DRAGON(85).MIKE STOTT

I am afraid that this article is going to reach Stephen late again as I have been struggling to think what I can write about in this penultimate issue. Eventually I decided to wait until 1st January to write it in case there were any Y2K problems I could mention.

Apart from the HSBC swipe machines refusal to accept cards in the period between Christmas and New Year I have only heard of one other glitch.

In England all time is set by the official clock at Greenwich and the Americans have a similar system. Their official timekeeper has its own website and at the midnight rollover it correctly told the time to the many millions who must have been connected to the site. Unfortunately it stated that the year was 19100. There must have been a few red faces in that organisation.

Mind you the Americans always think that they are years in advance of the rest of the world anyway. By the time you read this article there could well have been many more problems encountered. I was the Y2K officer in our company and the only major change was the purchase of a new ticketing machine system for the buses although several new computers were purchased to replace older machines and these were moved down to do other jobs. Although I was forced to use a Pentium running under Windows98 I am still able to use a Dos based accountancy package running within the Windows environment. I have watched a few programs about the New Year and am fed up hearing about the Millennium. Has maths changed since I was at school?. How can one thousand nine hundred and ninety nine equal two thousand?

One TV presenter actually said that 1st January 2000 was the first day of the second Millennium which means that 1999 = 1000. Centuries also appear to be getting shorter if we are now in the 21st century (and not 2001 to 2100).

Does this mean that cricketers will reach their century when they score ninety nine runs?. My last article will be number 86 but if maths changes even more will I have reached my century by April 2000. Fidel Castro is the only World leader who has come out publicly and said that 2001 is the start of the new Millennium so he cannot be all bad can he??

Paul tells me that several people have been asking for my E-mail address.

Well, I am sorry, but I can only be contacted by snail mail, as Paul puts it.

As yet I only have access to the Internet through work, and this is only very occasionally. I have thought about purchasing a new computer complete with modem but I cannot really justify the expense of a new machine for what I want to do with one. In fact a lot of what I do can still be done on my trusty old Dragon 64. I expect I will still be using my 64 and non-compliant 486 in the year 3000 unless I win the Lottery which is highly unlikely as I have never bought a ticket yet and I do not intend to start now. If I did would I be using LOTUS 1-2-4 under the new maths system.

Once NDUG has finished I will still be glad to hear from any old members and will be prepared to help anybody in any way that I can. I am still working on making a list of my Dragon software and have discovered that I have acquired many duplications over the years. There are still quite a few items of software that I have not been able to find so please think of me if you decide to dispose of your collection. I will definitely not be getting rid of my Dragon and am looking forward to retirement in about nine years when I can get down to some really serious "Dragoneering", especially solving many of the adventures that have stumped me in the past.

Must get myself ready to return to work as I know that everybody is going to say that there was no need to worry about the Millennium Bug as everything is all right. I can then reply that it was only my work (and a few others) that prevented a major Y2K disaster.

I am sorry that my article is slightly shorter than usual but I could only have written more if there had been a load of disasters and I do not think anybody would have wanted that, would they?. The only other thing that could have helped me would have been the arrival of some new software for the Dragon and it has been many years since that has happened.

HenceForth, The Last .Bob Smith

Well, here it is, the last episode of HenceForth to be published in Update. I thought it would be a good idea to summarise the history of this series, which has appeared intermittently over the last ten years or so. It was an issue of the American magazine Byte that sparked my interest in Forth. Byte devoted its August issue to a programming language every year, and August 1980 was the turn of Forth. Reading about it gave me a burning desire to try it, but home micros were still three years in the future. All I managed to dig up was a Forth simulator written by a high school student that could be run on a mini-computer. Up until then I had been happily, but not very creatively, writing programs in Fortran, assembler, and the very basic BASIC found on mainframes.

Starting the Forth simulator opened heaven's doors for me even though the simulator was very slow and paused between each instruction to show the contents of the stack. I still think Forth is the best language ever invented, and as the inventor Charles H. Moore says, "there are people who love it and people who hate it. It's just like religion and politics." The very fact that you only needed to re-compile the offending bits of a Forth program freed me from the drudgery of having to re-compile a whole program, taking maybe an hour to find out that a correction had one wrong character, thus necessitating another hour's compilation as often happened with Fortran. In addition, the Forth programming environment had the compiler and the editor loaded alongside the program, so the numbing cycle of loading an editor - loading a compiler - making a test run - then back to the editor was eliminated.

Then came home micros. The first reasonable micro to arrive in Norway was the Oric 48K. To my delight, a Forth system was available for this which gave me many happy hours of programming. The system and the manual were written by Mr. Anonymous, but were both very good. The only serious drawback was that the only input device was a cassette player. Then salvation arrived when the local bookshop sold me a Dragon 64 with disc drive for half price.

Then, having joined NDUG, I bought John Payne's excellent system on disc, accompanied by documentation about everything on the disc, but assuming that you have a description of the language. This has given me all that I need for the last 12-13 years, even though I have a Forth system for the PC.

Now, about the literature; the Forth bible is "Starting Forth" by Leo Brodie. This assumes no prior programming knowledge, but a reasonable insight into how computers operate is an advantage. If you are only interested in possessing one book, then this is the one to have.

A book that I personally found very useful is "The Complete Forth" by Alan Winfield. This has the advantage that it demonstrates how to write complex programs, and also has comprehensive appendices for reference.

Steve Oakley, in his book "Forth For Micros", teaches the language, but the main interest is that he compares the various implementations of Forth, including Dragon Forth.

"Exploring Forth" by Owen Bishop is a beginner's guide, and has some amusing programs that can be built up.

The best reference work is C. Kevin McCabe's "Forth Fundamentals", in two volumes; volume 1 is "Language Usage" where detailed explanations are given, grouped according to function, and volume 2 is "Language Glossary".

The Dragon Forth manual is a very brief description of the language followed by a brief description of each Forth word laid out in alphabetical order.

Among the periodicals, Byte August 1980 contains four articles (including one by the inventor of Forth, Charles H. Moore) and the editorial about Forth, and a glossary albeit in alphabetical order. The other periodical worth trying to get hold of is the September 1984 issue of "Micro For The Serious Computerist". Part of the editorial and three articles were devoted to Forth.

That's it, folks, the end of HenceForth, but not the end of Forth programming. If you subscribe to Up-2-Date you will almost certainly get some Forth material.

Updated e-Address List

Alan Greenwood: alan.greenwood@sgcs.co.uk
 Dave Bateman: dave@bateman.freemove.co.uk
 Dave Cadman: dave@davecad.freemove.co.uk
 David Linsley: dlinsley@microsoft.com
 Duncan Purves: dpurves@yahoo.com
 Dragon List: dragon-list@grempc.demon.co.uk
 Gareth Tuttiett: GTuttiett@aol.com
 Graham Kinns: graham@grempc.demon.co.uk
 Jon Bird: jon@onasticksoftware.co.uk
 Keith Nash: k.j.nash@usa.net
 John Payne: j.f.b.payne@tesco.net
 Martin Tiller: Em_and_M@compuserve.com
 Paul Burgin: BurginP@Logica.com
 Peter Smith: p_graeme_smith@compuserve.com
 Richard Sutcliffe: jrs@sutelec.freemove.co.uk
 Ken Grade: ken@grade2.freemove.co.uk (or grade2@bigfoot.com)
 Paul Grade: paul@grade1.freemove.co.uk (or grade1@bigfoot.com)
 Ray Smith: RAY@smithr.freemove.co.uk
 Steve Denning: s.denning@cableinet.co.uk
 Ron Bone: rbone@houdini.cix.co.uk
 Philip Bass: philb4@tinyonline.co.uk
 Thane Duffield: thane_duffield@breathemail.net
 Tudor Davies: tdavies@lucent.com
 Spencer Davies: spencer.daviess@bt.com
 Eddie Freeman: eddie@eddiefreeman.freemove.co.uk
 Tony Drewitt: javelin@javelin-one.netlineuk.net
 Alan Ford: alan@ford9.freemove.co.uk
 Bob Hall: bobh@n-cantrell.demon.co.uk
 Sotos Mandalos: user@ast01.pass.theplanet.co.uk
 Stephen Ross: sross17086@aol.com
 Bob Schofield: schofiel@xs4all.nl
 Robert Smith: robert.smith@mitransport.no
 IDUG (E-Group): dragonuser@egroups.com
 Marcus Ambler: marcus_ambler@yahoo.co.uk

This is the address list to date. Any more additions?. It's your last chance!.

Just let me know at grade1.bigfoot.com. Paul.

REMNANTS SALE.

FINAL CLEAROUT of assorted disks, manuals and a couple of books, going for the price of the postage.

DISKS:- Telewriter - 2 COPIES. Rainbow Writer 1 COPY..... 75 pence each.

MANUALS:- ACETRACE, DEMON (M/C monitors).Telewriter; Filemaster; Printer Control; DRS(photocopy); Space Shuttle(!); Music Maker.

Information for m/c users; D64 supplement; original Basic programming for D32.....0.50 pence each.

BOOKS:- Dragon Companion (Jarvis).....0.50

Discover Forth (Hogan).....1.00

If you want any of these, phone me on Worthing (01903) 207585 most evenings to check it's still here or e-mail Ken@grade2.freemove.co.uk

Ken Grade.

DECIMAL/BINARY CONVERSION. K. Grade

This is a short and very unstructured program to convert ordinary decimal numbers to binary. It saved me a lot of work. Maybe it will help someone else?

```

5  RESTORE: CLEAR 2000: CLS: REM CONVERTS DECIMAL NUMBERS UP TO 16 BIT BINARY
10 DATA 0000,0001,0010,0011,0100,0101,0110,0111,1000,1001,1010,1011,1100,1101,
    1110,1111
20 DIM B(20), H$(16), A$(20)
40 RESTORE: INPUT "(1) A DECIMAL NUMBER (2) HEX/BINARY CONVERSION(3)QUIT";Q
42 ON Q GOSUB 45, 150, 200: GOTO 40
45 INPUT " A DECIMAL NUMBER;-"; D
46 PRINT HEX$(D): D$ = HEX$(D): PRINT D$
47 L = LEN(D$): ON L GOTO 50, 60, 90, 110:
50 RESTORE: FOR I = 0 TO D: READ A$: NEXT: PRINT A$: RESTORE: GOTO 40
60 R$ = RIGHT$(D$, 1): PRINT R$
65 R = VAL("&H" + R$)
70 FOR I = 0 TO R: READ A$: NEXT: PRINT A$: R$ = A$: RESTORE
75 L$ = LEFT$(D$, 1): L = VAL("&H" + L$)
80 FOR I = 0 TO L: READ A$: NEXT: RESTORE: L$ = A$: PRINT L$ + R$
82 H$ = L$ + R$: RETURN
85 PRINT "BINARY NO.="; H$: GOTO 40
90 REM 3 FIGURES
95 GOSUB 60
98 M$ = MID$(D$, 2, 1): M = VAL("&H" + M$): PRINT M
99 FOR X = 0 TO M: READ A$: NEXT: RESTORE: M$ = A$: PRINT M$
100 H$ = L$ + M$ + R$
106 PRINT "BINARY NUMBER:- "; : PRINT H$: ' L$; " "; M$; " "; R$
108 GOTO 40
110 REM 4 FIGURES
105 GOSUB 60
114 M$ = MID$(D$, 2, 1): M = VAL("&H" + M$): PRINT M
116 FOR X = 0 TO M: READ A$: NEXT: M$ = A$: RESTORE
118 M2$ = MID$(D$, 3, 1): M = VAL("&H" + M2$): PRINT M
120 FOR X = 0 TO M: READ A$: NEXT: M2$ = A$: RESTORE
121 L$ = LEFT$(D$, 1): L = VAL("&H" + L$): PRINT L
122 FOR X = 0 TO L: READ A$: NEXT: L$ = A$: RESTORE
125 PRINT "BINARY NUMBER:-"; : PRINT L$: " "; M$: " "; M2$: " "; R$
130 GOTO 40
150 INPUT "PRINTOUT"; Q$
151 IF Q$ = "y" OR Q$ = "Y" THEN 175 ELSE 154
154 FOR X = 0 TO 15: READ A: B(X) = A: NEXT X
157 FOR I = 0 TO 15: H$(I) = HEX$(I): NEXT I
159 FOR X = 0 TO 15: PRINT B(X), H$(X): NEXT X
170 RESTORE: GOTO 40
175 CLS : PRINT " TURN PRINTER ON!"
176 FOR X = 0 TO 15
178 READ A: B(X) = A: NEXT X
180 FOR I = 0 TO 15: H$(I) = HEX$(I): NEXT I
182 FOR X = 0 TO 15: LPRINT TAB(30); H$(X), B(X): NEXT
190 RESTORE: PRINT " PRESS A KEY"
192 Q$ = INKEY$: IF Q$ = "" THEN 192
195 GOTO 40
200 END

```

Net Safety (2). Sotos Mandalos

Having a safe Internet is beneficial for the whole world. It helps us getting what we want and need at a click of a button. And we have seen nothing yet. We are in the process of supplying push channels via satellite, ADSL technology and of course cable media with a view to get more information from the web and faster.

The last time I mentioned the four main technology issues that companies using the Internet need to focus on. These issues are, encryption, integrity, non-repudiation and of course authentication.

If we take one at time it will help you see what the business world actually believes. The reason I mention this is because I am working for a large corporate and I am aware of the issues and the discussions we are going through. When it comes to consumers, we have to educate them that the Net is Safe and it is not a simple task.

Encryption technology is used to ensure that information exchanged between the customer and supplier cannot be read or tampered with by other external parties who are surfing on the Net or access the same web site. Also messages and the traffic (not all) are in fact encrypted using software algorithms by the sender and decrypted by the recipient.

As far as I know, there are two types of encryption. One is called SYMMETRIC and the other ASSYMETRIC. The first uses a single key of a mathematical algorithm to encrypt and decrypt electronic information. The latter uses two keys, which are a public key for encryption and a private key for decryption.

Of course by default, the second option is most secure; they are both relying on 56-bit key algorithms. Newer encryption algorithms, such as the secure socket layer (SSL) and advanced encryption standard (AES) provide a 128-bit and it is safer.

For your information, it is worth knowing that the use of such high-powered algorithms remains limited. For instance, the US government only allows the export of 128-bit encrypted messages to a handful of European countries including the UK and France.

The second issue is ensuring the integrity of transactions through the implementation of end-to-end security architecture. Don't forget that when it comes to web sites there are internal and external. It is worth mentioning here that the majority of people believe that the biggest risk is from Internet transactions and that most major breaches are internal!

It is therefore that when it comes to e-businesses, implementation of role-based authorisation systems to control employee access to back-end systems is required.

So any company trying to provide services on the Internet which have value needs applications and systems that provide end-to-end security. And of course a lot of companies do not do that. Companies are being advised to put up firewalls but still do not.

Any Experts Out There?

Or more specifically, anyone know anything useful about USR (now 3Com) "Sportster" type modems, the internal variety?. Reason being that I've got one here that insists that it is on "Com5", and strangely enough the machines refuse to agree!. OK, so I don't have the correct drivers for it (33.6 Sportster Winmodem), but even if I had it wouldn't do a lot of good if the card insists it is in a location that doesn't exist, now would it?. So presumably there has to be some kind of configuration routine included with the original drivers ... or does anyone know better?. Usually I can manage to persuade such beasts to at least agree to call themselves Com 4 or something useful, but this one is determined not to cooperate at all!. Anyone know anything useful about the things? ... or should I just continue to use it as a paperweight?. Please let me know. Paul G.

Why 2K?? - S.Wood.

OK, we are all here, present and correct, which can only mean one thing - the Millennium Bug failed to live up to the hype and produced, at the latest count, just 67 errors worldwide (rather less than W95 produces in the average office. P.G.) , rather than the catastrophic tragedies predicted by sundry rent-a-quote experts whenever you turned on the television or opened a newspaper.

How different it could have been - there we were, fearing visitations of doom and destruction, stocking up on food for the freezer despite the fact that there would be no electricity to keep it running, withdrawing all our cash from the cashpoint because all the banking systems would crash and then getting robbed in the street because a bin liner full of crinkly paper always looks suspicious, and making backup after backup of vital software (read: headed paper template) at the office for fear of losing important and essential information (read: this year's office Christmas dinner invitations).

Yet, disaster was not forthcoming, and the whole affair was almost entirely a resounding success. Well, for some it was, certainly. The government got to spend millions of pounds setting up the Action2000 quango to serve a useful role. Action2000 got to spend millions of pounds printing and sending out an incredibly useful handbook on surviving the Y2K nightmare.

Not seen it? It's the one with the Bug on the front, looking more than a little like a Colorado beetle. Inside, you can find helpful and informative suggestions about dealing with the Y2K problem. At one point, it exhorts you to much as thorough a preparation as possible to be ready for any eventualities. And at another point, it suggests that you will not be ready no matter how thorough your preparations.

It also lists the possible effects of the Y2K bug; from the obvious ones, like what do I do if my computer fails?, to the slightly less pertinent: what do I do if my staff fail to arrive as normal? Since when has that been a problem solely related to the coming of the new millennium??

If you actually read any of the literature or hype surrounding the Bug, you begin to think that it might not be all it's cracked up to be, and may have been put in place solely to cover the tracks of company directors (a role that one or two MPs do in their spare time), who fear their personal assets may become liable in the event of some form of breakdown in their company's dealings with others. Of course, covering your tracks by fiercely brandishing a piece of A4 paper which says 'my company is Y2K compliant' may not actually get you anywhere...

Perhaps it's not an IT bug after all, perhaps it's more of an infection of people. And seemingly, anybody can be affected, regardless of background, status, etc. After all, you get respected computer workers fearing the worst kind of global meltdown scenario on the one hand, and on the other you get some bored office junior fearful that their high scores on Minesweeper will be eradicated for ever.

And where has it left us? A multi-million pound bill, some mumblings about being better safe than sorry from all concerned, and your average computer user more paranoid than ever that their latest shopping spree and Amazon.co.uk has been raided and now everyone knows their credit card details.

And another thing...why were there no movies or TV mini-series about the whole build up? Surely it would have been ideal for Hollywood - major disaster threatening the whole planet, humankind rescued by valiant computer saviour (probably Sylvester Stallone)? Maybe it never really existed at all, and Those In Charge simply thought it would be a good wheeze to irritate everyone. Hmmm...

*** Personally I took every precaution with MY machines sprayed all the main boards with best quality flea spray, booked them in at the local surgery for anti-'flu injections (well, I was going to, but the surgery had just installed a new system to ensure Y2K compliance, and it wasn't working), scanned in the New Labour New Leaflet (as described above) so that they could read it themselves, and it worked!. Which proves there MUST have been a Bug, doesn't it?. P.G.*

NDUG Drags On No More...

There's barely been a month goes by at Update Towers without someone proclaiming doom and gloom and the End Being Nigh for all Dragon owners everywhere. And you have to admit, it's been a pretty impressive track record: 1984, Dragon Data folds, disaster predicted. 1986, Dragon User goes subscription only, collapse in owner numbers imminent, 1989 Dragon User finishes, relegation to joke-computer status certain.

And on and on. Software companies leaving the scene, Update going bi-monthly only, etc etc. But, no - a small group of barbarians valiantly held out against the PC invaders, insisting that only a black-on-green screen would do, and overlooking the mockers who derided the measly 4 colours available in high-res graphics.

There could be several reasons for this; insanity leaps to mind, obviously, but curiously it could have been something as simple as Fun. Yes, Fun. Making a computer do what you wanted it to do rather than the computer making you do something you didn't want to do in the first place.

Good, old-fashioned fun. Going through the errata in the original manual and correcting all the mistakes, that was a good laugh. Dragon Data asking £145 to upgrade to a Dragon 64 - we couldn't get enough of that one. Home Computing, rather than Computer that you've borrowed from the office to use at Home, those were the days.

With the emphasis on WERE.

Yes, everyone has said it before, and Yes, the abyss was gazed into and it gazed back and said "not yet, there's snooker on the telly, come back later." But this time, however, it really is, as they say, it.

The next issue of Update, April 2000, will be the last. No doubt you are all aware of this, and hopefully you will be aware of the Golden Opportunity that this presents to you. The Last Chance to appear in Update. All of the excuses have been peddled out over the years - don't know what to write about, can't think of anything interesting, not sufficiently skilled in computers to interest other readers, etc etc etc. And those excuses can be wheeled out again, if you wish.

It's just that, after April, there won't be anyone to hear them.

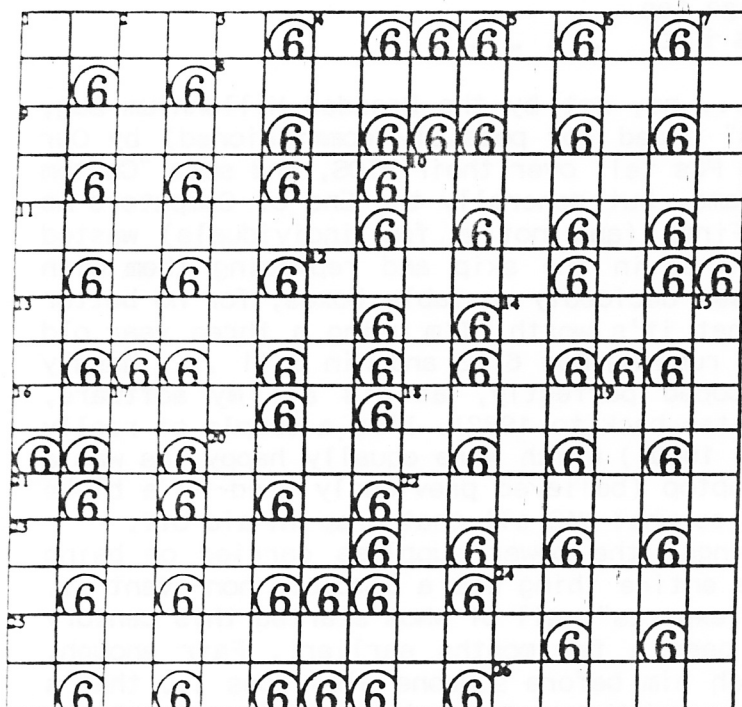
So, for the last time, here's a request for material to print in Update. It doesn't have to be epic, technical, of earth-shattering importance to Dragon owners (although submissions fulfilling all of those categories will certainly be considered) - it can be as simple as a few paragraphs about how you've used your Dragon over the years.

Yes, years. Nearly 19 of them, in fact, over 16 of which have been documented in Update by ordinary Dragon users. Some of you have made contributions over the years (thank you), some are still waiting for The Right Moment. Well, this is it. Not so much the Right moment, as the Only moment, your one final chance to have your say on Dragon issues.

The deadline for submissions is March 10th. Please send something in for us all to read, because if nothing else it'll be infinitely more pleasurable than having to wade through pages of dirge by Paul and myself for one more time.

One more Update, and then No More Update. Contributions to the usual address, please. Just Do It. SW.

*** You know, Stephen does have a point (no, NOT to his head!), I can think of at least half a dozen people who have been promising to write something for Update for at least six years, and one or two for even longer!. Yes, I know, you've been really busy at work lately, and the cat had puppies, and you were savaged by the goldfish and can't write because of the terrible injuries, and the house was invaded by hordes of Alien Mutant Hamsters which ate all your discs can't you at least be a little more imaginative with the excuses!. Well, if you're going to write, you'd better do it now, because like the man says, One more, then No more!. Repent!, the End of the Group is Nigh!! ... ever so nigh now!. Paul G.



ACROSS

- 1,10dn I, ex-poet, act! (Hams it up in strange adaptation of classic serial, actually) (5,12).
 8 Purely symbolic, having nothing to cover over with shroud (5,6).
 9 Foremost on circuit, it's arguable (5).
 10 Discharge last of bilge on unknown island (7).
 11 Lacking authority, appears somehow lost in this area (7).
 12 Though drained, secretary prepared to type second letter (5).
 13 Girl goes to top – only one of class with an A (7).
 14 (see 3 down).
 16 Wader is engulfed, causing bother on fishing trip (5).
 18 I cure external disorder of immense proportion (7).
 20 Forceful one who gives spin to feature on front of local paper (5).
 22 Carries refreshment to consume right in middle of river (7).

- 23 Covering over a portion of uncooked food is quite usual here (7).
 24 Relative succumbs, at last, to yen for decoration (5).
 25 Fargo man, in a convertible, collects letters and redirection instruction (7,4).
 26 Brownie who could earn point at hut? (5).

DOWN

- 1 Make unexpected entry using crate found in rubbish (9)
 2 Clear up after decorating, perhaps? (7).
 3,14ac Sorry, not got such total recollection, essentially (2,3,1,4,5,5).
 4 Tale where Tolkien's central characters initially find ring – small item of little value (6,6).
 5 For a conjurer losing his props? (6,9).
 6 Site of confusion? We have to conclude otherwise (7).
 7 In crash, reduced to scrap (5).

- 10 (see 1 across).
 15 Leading colourist has yet to finish banal display in gallery – black, opaque glass (9).
 17 Some transport across the pond (7).
 19 Leaves thus, plainly to anarchist's delight (2,5).
 21 Container for instrument, say (5).



Solution to Puzzle No. 3

I sincerely hope some of you are enjoying solving these puzzles of mine. I am new to this particular craft – these are the first puzzles I have ever compiled – and I would greatly appreciate receiving any comments or criticism from any aficionados out there. PETER SMITH

12 Brunel Rd. SOUTHAMPTON SO15 0LQ – 01703 861113 – p_graeme_smith@compuserve.com

The Late, Late Bit

Didn't we all get buggered, then? no, not by the Dreaded Millennium Bug, but by a flock of so-called "experts" aided (or possibly commissioned) by Our Beloved Leaders!. Sure, a few antique PCs fell over their BIOS, and some "Custom Software" rather came apart at the seams, but generally the End of Computers As We Know Them just didn't happen. Firms (and not a few individuals) wasted thousands dumping perfectly good machines in the skip and replacing them with later, more expensive, and in many cases decidedly unstable boxes, for no better reason than acute gullibility. For what it's worth, I'm using a three year old Asus board machine, with a K6 CPU and running Dos 6.22 and Win 3.11 hardly state of the art, yet the machine coped perfectly, as did all my software, including some DOS based stuff that dates back to 1982!. I've a couple of really ancient 486 machines around too (circa 1990!) which were equally happy, as was a six year old P100 and a Compaq 386 laptop (believed previously used by a bloke named Moses to list some Commands on), so what WAS all that crap in aid of?.

It didn't suddenly start raining Boeings, the power supplies carried on being just as inefficient as normal, and the entire thing was a complete non-event ... except for computer manufacturers and "experts", all of whom started this century distinctly better off than they had been a few months earlier!. Fair enough, there's one born every minute, so catch him before someone else does ... that's business, but why all the political hype and threats? ... it couldn't possibly be that any of our Squeaky Clean Leaders made anything out of organising the panic, could it? makes one wonder just how many contributions to Party Funds were involved, or how many "loans" and "hospitality payments" were flying about or it might if we all didn't know such things are quite unthinkable, of course. Actually, was I the only one to get the impression that the New Century, New Millennium, etc was supposed to be directly attributable to New Labour? ... I admit Blair didn't actually SAY "You didn't get a New Millennium under the Tories", but the implication definitely seemed to be there. Actually, it doesn't seem much different from the old one ... same lousy weather, same lousy taxation, same depressingly familiar political inanities ... so what's supposed to be so good about it all?. I suppose anyone daft enough could fork out a minor fortune to visit Tony's Tent at Greenwich and queue to gawp at a load of old rubbish, or take a walk along the Embankment to see the Inverted Unicycle that doesn't work ... but somehow the thought doesn't seem to generate a great deal of enthusiasm. Well, one thing's for sure ... next millennium I'm going to ignore the whole thing!. (Come to think of it, I did this time too!).

Right, let's change the subject ... PLEASE!. Firstly, I really must thank all concerned for the cards that arrived at Christmas and also everyone who sent in Group subscriptions accompanied by notes saying either "no refund required" or "keep the change" etc ... a very pleasant surprise, as were the letters saying how much the old NDUG had been of help over the years it's always nice to know that it wasn't all a complete waste of time and effort, and that we actually did manage to achieve something useful. Many thanks to all of you ... and thanks for sticking with us for so long ... I know a lot of you haven't seen your Dragons for so long that you can't even remember what they looked like, but you've still kept on subscribing ... and its much appreciated.

Well, one more Update after this one, and that's it you'll just have to take out subscriptions for Readers Digest or Time Magazine, I suppose ... they're the next most boring publications I can think of offhand. Snag is they're more expensive, but at least they're printed on better quality paper. Of course, there's always Bob Smith's IDUG available to anyone with Net/e-mail access, which probably means most of you these days, and while it may have got off to a slow start the IDUG shows signs of being distinctly promising, especially Bob's plans for setting up "magazine" type pages etc. Like Update, it will need input, of course, but you'll be providing plenty of that, won't you? you'd better!, there's absolutely no way I'm going to spend my new-found spare time writing "padding" for that! ... it's YOUR turn!. Have fun. Paul G.

GROUP ADVERTISING PAGES

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LETTER WRITER UTILITY PROGRAM NOW FREE!. JUST SEND A DONATION TO COVER COSTS!.
BASIC 42 FOR DOS V1.0 OR E6 ALSO AVAILABLE, SMALL CHARGE FOR PHOTOCOPYING MANUALS.
QUERIES AND ORDERS TO: J.SUTCLIFFE, 15, WEST STREET, HOTHFIELD, ASHFORD, KENT.

UP-2-DATE COMPILATION DISCS

THE UP-2-DATE COMPILATION DISCS ARE STILL AVAILABLE!. DISC 1: MAINLY DUMPS FOR EPSON PRINTERS AND INCLUDES THE ABILITY TO PROCESS COMPRESSED GRAPHICS. DISC 2: COLLECTION OF UP-2-DATE "SHOWCASE" PROGRAMS. DISC 3: COLLECTION OF GRAPHICS PROGRAMS, MANIPULATORS, EDITORS, CREATORS, ETC. DISC 4: HUGE COLLECTION OF COMPRESSED GRAPHICS, PLUS "PAKKER" PROGRAM FOR COMP./DECOMPRESSING. *PRICE IS £3.50 INCLUSIVE PER DISC, FULL SET OF FOUR FOR JUST £12.00.* AVAILABLE FROM RAY SMITH, 5, GLEN ROAD, PARKSTONE, POOLE, DORSET. CHEQUES PAYABLE TO N.D.U.G.

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(SAE WOULD BE MUCH APPRECIATED).

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D64 MOUSE DRIVER SOFTWARE, ALL YOU NEED TO RUN A STOCK PC TYPE MOUSE WITH YOUR D64 ON ONE 5.25" DISC FOR A MERE £3.00 INCLUSIVE. IT JUST HAS TO BE A BARGAIN!

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DRAGON 64 SERIAL PORT TO 9 PIN "D" SERIAL MOUSE PLUG ADAPTOR LEAD, READY MADE AND READY TO USE. MADE AND SUPPLIED (AT MATERIALS COST ONLY!) BY STEWART ORCHARD FOR JUST £3.00 INCLUSIVE.

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ALSO ONE "BRAND NEW" DRAGON MAINS TRANSFORMER!.

PLEASE CONTACT: DAVID BATEMAN, 35 FITZ ROAD, COCKERMOUTH, CUMBRIA. CA13-0AN.

OR ON: jdbateman@england.com.

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THE ABSOLUTE BARGAIN OF THE CENTURY AT ONLY £50.

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JUST TO REMIND YOU: VIRTUALLY ALL GROUP SOFTWARE etc WILL STILL BE AVAILABLE FROM PAUL GRADE AFTER THE CLOSE-DOWN OF NDUG ... DETAILS IN NEXT ISSUE.

NEW LOW PRICES! .

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PC. ONLY £3.50 THE SET! . NOW WITH
PC-DRAGON DISC UPGRADE. STILL £3.50
A DISC DRIVE D64 ON YOUR PC!! .

 ALL CHEQUES & ORDERS TO PAUL GRADE.
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 CHEQUES PAYABLE TO N.D.U.G. PLEASE.

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CONTACT THE LIBRARIAN FOR FULL DETAILS AND VERSIONS AVAILABLE.

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Reprinted to order at just 7 pence per side copied. (average cost still only 98p per issue inclusive.). Please send your cheques & orders to:

ALAN GREENWOOD, 132, WENDOVER DRIVE, ASPLEY, NOTTS. NG8-5JN.

THE EMULATOR UPGRADE

THE ONE THING MISSING FROM THE DRAGON EMULATORS WAS DOS EMULATION, BUT NOW THAT PROBLEM HAS BEEN SOLVED, THANKS TO A LOT OF HARD WORK BY STEWART ORCHARD. NOW YOU CAN HAVE THE EQUIVILANT OF A FOUR DRIVE DRAGON 64 ON YOUR PC! . THE LATEST VERSION OF THE EMULATORS DISC NOW INCLUDED THE DISC UPGRADE FOR THE PC-DRAGON EMULATOR, AND A DRAGON DISC FORMATTING UTILITY! AND IT'S STILL THE SAME BARGAIN PRICE! . ALL YOU NEED IS A 5.25" DRIVE ON YOUR PC (OR A 3.5 (720) ON YOUR DRAGON TO COPY YOUR SOFTWARE ONTO!) AND YOU RE IN BUSINESS! . SO GET YOUR ORDER OFF NOW! .

ORDERS TO PAUL GRADE. AS USUAL, CHEQUES PAYABLE TO THE GROUP (N.D.U.G).

WANTED !

CASSETTE SOFTWARE WANTED! . BUZZARD BAIT, JET SET WILLY, DOWNLAND, CASHMAN, CUTHBERT IN SPACE/JUNGLE/MINES, AND ALMOST ALL DRAGON SOFTWARE AND HARDWARE. DETAILS PLEASE TO: I. RIHMAN. 128 CARR ROAD, NELSON, LANCASHIRE. BB9-7ST.
