As of now there is going to be a change in the way that your questions are dealt with, and hopefully this will get YOU better answers and ME time to handle the rest of the work properly. In this issue you’ll find a "Helpline" list, which consists of a list of members who have volunteered to help by answering any questions on specific subjects. The idea being that if you have a question on any of the subjects listed you should write to the appropriate volunteer direct (enclosing a stamped envelope if you expect them to reply!!), and they will do their best to provide the answer. Now this doesn’t mean that I’m opting out....if you have a question on something not covered in the list, or for any reason you aren’t satisfied with the answer you get, I’ll still do my best to get things sorted out for you as always, but it DOES mean that you’ll have a chance to get answers from people who specialise in a particular subject, which has to be better than relying on me to answer everything....I know I’m a genius, but even so there are limits! Yes, I still want to hear from you; yes, you can still write or phone me whenever you want, no, I’m not losing interest....it’s just that the workload has got to the state where I simply can’t keep up, with the result that nothing is getting the attention it deserves, and this way everyone should gain. OK?. As you’ll see from the list, we still need volunteers on a lot of subjects....ideally we should have several volunteers for every possible subject....so how about YOU?. You can help just the same as anyone else, so why not?. Next point, I know that Tim and I are always nagging you to send in material for Update...and that still applies!, but I thought I ought to explain one important point.... If you’re sending in an article on anything remember that we’re limited for space.....we have to cover a whole range of topics in each issue.....so if your article HAS to run to more than one side of A4, make sure that it has a "natural break" point, so that it can be split between two issues if necessary. Usually the maximum space we can allocate to any one piece is two sides, and even that isn’t always possible. If you’re sending listings, the same applies.OK? Well, I haven’t left myself room for anything else now, so I’d better take my own advice!

THE EDITORIAL BIT........

This month I’ve commandeered a bit later on so here I’m just going to mention the thing I spotted in the latest Dragon User which qualifies for daintest price of the month.

H.Andersen Computers qualify for the Daft Price Of The Month Award. Charging 98 quid for a comms program has got to be a joke, even if it does support X-Modem protocols and an upgrade to OS9 to work with 80 track drives at 80 quid more!'. The Dragon is a computer which is not best known for its use in commerce! This sort of price is just what we don’t need. Can YOU afford it?, I can’t, I wouldn’t pay it anyway. What are they trying to do ??? This is the price you might expect for a business program, not for a home computer utility.

T.L.
EASY MACHINE CODE (3) ..... R.A. DAVIS

What you need to know about the 6800 microprocessor, the Dragon's heart is that it contains a powerful arithmetic logic unit and several BYTES which we can regard as it's own RAM. These are known as REGISTERS. What you need to know about the operating system is that it holds the Microsoft Basic comand in ROM, from location (address) &H0000 and up. It uses some of 'our' RAM from &H00 to &H3ff at the 'bottom' together with some of the RAM at the top. The text screen uses from &H400 to &H5FF and the graphics screen &H600 to &H7EFF if all 8 screens are in use. You can't alter the ROM from &H0000, but you can use it from your own machine code by jumping or branching to the routines in the ROM, saving you a lot of work! The lower RAM which it uses can usually be PEEKed to see what it holds and can sometimes be POKEed with new data to alter the effect of the ROM routines which use it. If you are still with me, the next subject is the registers, or some of them.

Helpline 87.................

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

FORTH: John Payne, 3, Siblland Close, Thornbury, Bristol.
FLEX: Jurgen Mitchell, 62, Victoria Grove, Lupset, Wakefield, Yorks. WF2-8JD.
PROGRAMMING LANGUAGES AND STRUCTURED PROGRAMMING METHODOLOGY: Stan Davies, 153, Allestree Lane, Derby DE3-2PG.
GAMES SOFTWARE (MAINLY ARCADE BUT SOME ADVENTURES): Stephen Wood, 52, Downsway, Springfield, Chelmsford, Essex CM1-5TH.
M/C (EXCLUDING FLEX & OSY): DRAGON MUSIC; ARTIFICIAL INTELLIGENCE; "C" (UNDER OSY): Chris Jolly, 4, Pinehurst Walk, Orpington, Kent.
TAPE TO DISC CONVERSIONS (DRAGONdos): Graham Smith, 3, Ashton Gate Terrace, Ashton Gate, Bristol BS3-1TA.
GENERAL HARDWARE AND UPGRADE CONVERSION PROBLEMS: Bob Hall, 22, Cumbria Close, Thornbury, Avon BS12-2YE.
CGP115 & MCP 48 PRINTER SOFTWARE QUERIES: Philip Beed, 27, Findon Road, Elson, Gosport, Hants. PO12-4EP.
WORD PROCESSING & GENERAL BASIC PROGRAMMING: F. J. Fisher, 29, Thornham Road, Gillingham, Kent.
BASIC PROGRAMMING: Ian Rockett, 2, Knowle Road, Burley, Leeds, Yorks. LS4-2PJ.
RTTY / RADIO: LISTINGS FROM INPUT MAGAZINE; SPRITE MAGIC; AMATEUR RADIO;
UPDATE ARTICLES / LISTINGS BY R.A. DAVIS: R.A. Davis, 39, Boxley Drive, West Bridgford, Nottingham NG2-79Q.
OSY SYSTEM AND UTILITIES: Jason Shoulter, 78, Victoria Road, Parkstone, Poole, Dorset. BH12-3AE.
BASIC PROGRAMMING AND TAPE TO DISC CONVERSION (DRAGONdos): John Cox, 3, St. Peter's Road, Portsdown, Sussex BN4-1LS.

A PLEA ...................

Martin Layley is searching for a copy of the Professional Programmers DeltaDOS Cartridge manual. There were not too many of these issued apparently, anyone out there able to help him??
He can be contacted at the following address: Martin Layley, 12 Starmead Drive, Wokingham, Berks. RG11 2HX. Phone 0734 780308
One of the few new companies at the 6009 show was Occult Software. Well, I presume they are new, although they were selling one of Wayne Smithsons games. Anyway, we picked up their Numerology cassette for review but it's not until now that I've been able to get hold of their address or the price of the program.

What is numerology? That's what I said when I first saw it. Numerology can best be described as your horoscope worked out by numbers. The basis of this 'fortune telling', not quite an accurate description but it's the nearest I can come up with, is that from your name the program gives a number to each letter. Your birthday is taken into account then all the numbers are added up and out of the other end comes a description of your personality. I find this type of program very hard to assess because in most cases they can only be used once, though this prog is a bit different, and this type of program is aimed at a specific market. I suppose the likes of Russell Grant would find this program very interesting. As I said, this program is a bit different, on the cassette inlay is a lengthy description of what numerology is and how you can use it. Apparently after some people used this system to find their personality, they changed their name to fit the personality they wanted to be, and lo & behold their lives changed for the better! Believe it if you will, I've always been a sceptic and this program doesn't change my mind, but I fully accept that there are people who firmly believe in this type of stuff and I'm not knocking their beliefs, it's a free world. So, how did the program cope with me? Well, I found out that it was very similar to a horoscope, very accurate in some places and very inaccurate in others. I tried all the rest of my family and roughly the same happened. That's about all I can say on the subject. No, I'm not telling you the results of my personality! What I would like to say though is that the program is very well written and well presented, I never came across any problems whatever. So, having written all that, what's the price? That's where I start to have doubts, the price is 6.95, and as far as I can find out it is only available on cassette. 7 pounds seems a lot to pay for a program that most of us will use only once, or mainly for entertainment at a party. For someone who is into astrology it could be good value, or even someone who researches their family trees (there is a special word for it but I can't think of it) (Genealogy Neil ... TL) and would like to know what their long lost relatives were like. As I said before, it is very well written and if as much care was put into games as has been put into this, the Dragon market would be a lot healthier. Occult did not print their address on the cassette or inlay but I managed to get it. The address is 1 Merrieleas (in Merriedeans, I'm not sure which) Drive, Chandlers Ford, Hants SO5 2FB. If anyone could put me right on the address, I'd be obliged.

A few weeks ago, I had a phone call from a distraught member who had managed to bet 98 out of 99 objects in JSW and then couldn't get out of a screen. It was about 10pm when he rang so he'd obviously been at it all night. He must have lots of patience. Anyway, it transpired that he'd never heard of the cheat mode in JSW, as I never heard from him again, I assume that he's finished the game. As I've got a few lines to fill and just in case there are others, the cheat mode is thus: When in the game, press the M, A and X together, the game should freeze. Then use the arrow keys to skip through the screens to the one you want. Press the space bar once and use the arrow keys to position Willy where you want him. Press the space bar again to start playing. Don't forget though, if you collect more than 99 objects, you are unable to finish the game. Apparently it's an untraceable bug.

*Only 348 shopping days to Christmas!*
Here are a couple of quick reviews of the utilities in issue 27.
Terje Olsen's M/C to DATA routine. Worked first time, no errors in the listing. Creates a BASIC listing of DATA statements rather like the listing given. (that's because I used the routine to make up the listing... TL) That is 3 digit decimal numbers but not the check sum at the end. The only problem I can see with running it is that the Basic program it generates may overwrite the M/C file if it is located in the normal Basic work area and most people prefer their DATA statements in 2 digit hex format as it is less to type in.
John Cox's DOS loader. Worked first time, but only because I noticed an error in the source code (Sorry, probably my fault... TL) The Hex printout is correct but at 1FEC 188E0000 should read LDY #C000 not 2000. Also it was not clear how you go about saving your existing DOS to disc although it may be obvious to some of us. Some people may be surprised to know that you can: SAVE "DOS", &HC000, &HE000, &HC000. If it is just the DOS that you are loading, I suggest that IFF4 is changed to 188E0000 CMPY #E000 and line 4 of the instructions to SAVE "DOS.BIN", &HFB00, &H4000, &HFB00 Other than those minor changes, I am quite happy with the utility and now have a couple of DOSes that I can interchange at will without swapping chips or cartridges. A good example of a use for this utility would be to do all the patches published in Dragon User for correcting the standard DragonDOS, remembering that a correction was published in a later issue (I can't remember which one).

DRAGON QUEST ........ CHRIS JOBSON

A lot of Dragon owners that I know are not content with one Dragon, they always keep a spare just in case. I suppose this makes sense when you think about it. If you use your Dragon a lot and something goes wrong with it, you can run the spare while the first one is away or you are contemplating the fault. They can also come in handy to verify whether it's you or the computer that's not running the program properly. (usually it's the human part that's at fault.) Now the next gem of information, there is a vast untapped source of Dragons in the country, owned by people who either couldn't get the hang of it, just bought the latest electronic gadget or lost interest. The now defunct Dragon gathers dust in a cupboard and the owner won't take the time or trouble to sell it. By using the power of your local paper classified ads, you could advertise for a Dragon, you'll be surprised at the response. The lethargic owner now only has to make a phone call to turn his computer into cash. Do not mention a price in the ad and be prepared to haggle, bearing in mind that before you advertised it was just a worthless piece of junk to the owner. As a rough guide, 25-35 for a 32, 45-55 for a 64 and should a disc drive be on offer, try 70-75.00, assuming it has a DragonDOS controller. These prices are quite feasible, don't let the owner bump up the price with bags of software, you probably have them anyway and so they're only worth the price of a blank tape. Try not to buy the books unless you really need them, again they're only worth 1.00 or so each. On 2 occasions people I know have placed this type of advert and have both ended up with 64s and disc drives plus the telephone numbers of 8 people with 32s to sell in that price range.

A few points to remember, agree a tentative price beforehand. Be quick off the mark and get to the owners house before he has time to think about it or you may have stirred him from his lethargy into thinking he can advertise it for more. Ensure that the unit works before you part with money since you may have difficulty after the deal is done. Be sure to pass the other potential sellers telephone numbers to your friends to increase the circle of Dragon owners, it can only be to your advantage. Although it may vary, the price for a nominal advert is around 6.00, don't let the paper con you into putting it into a fancy box or lines above and below since you want to keep your gamble to a minimum.... Good bargain hunting.
In previous issues we have seen two views of Dragon User, for & against. I would
like to present you with a third view, that of a Dragon User. I have
purchased every issue since buying a Dragon 2 years ago, with the exception of
one which I have since regretted missing (Nov '85s edition, which I now have).
I didn't buy it initially because I thought it was becoming less value for
money, since then I have wished I could refer back to that issue for various
reviews and articles. I have also regretted ditching a dozen of the earlier
editions when I thought I had read all I needed from them. I have also
obtained copies of these! Little did I realise what a great source of
information they would be at a later stage as my knowledge grew and I
attempted greater things. If we look at the early editions ('83'/84) we will
find quite thick mags, full of all the goodies a computer mag should hold.
Perhaps not as thick as some of the mags for other machines, but if you have
read any of these, you will find a lot of it is geared towards complaints
about the machine or service for it. Now although it's not the worlds best
machine, the Dragon was released with no major bugs & reasonable back up, that
would account for some of the loss in size. The second thing about other mags
is that a large portion is dedicated to reviewing games. The Dragon does not
have the sort of games software available for other machines (in quantity, not
quality) so obviously there would be less reviews. I expect a lot of us would
consider that to be good. I gather games are no longer the trend amongst us.
What a pity! Well, since July, DU has been subscription only, I
gather that despite this move readership has not fallen too drastically,
although I do know people who are no longer getting it or are sharing
subscriptions. In some ways I am pleased with this, you never knew which day
it would come out, at least this way you get it as early as possible without
dropping into the newsagents every day to see if it has arrived. Over the last
18 months we have watched the number of pages drop significantly but it now
seems to have stabilised at 32. Since going mail order, the glossy cover has
been replaced by a card one with the index and editorial on it, it's not so
attractive but if it keeps the cost down, I suppose it's for the best.
Contents wise, they do seem to be dredging the barrel, program listings are
now given in hex dumps and source code, I wonder if that's to fill the pages
or a requested feature? Looking at things in perspective though the greater
part of computer mags has always been announcing new products and firms. As
far as the Dragon is concerned you could list the new products and firms of
'86 on the back of a postage stamp, so really DU is breaking new ground as a
computer magazine. The other reason for buying a magazine is the adverts. In
the last few months this has been restricted to a handful of firms still
supporting the Dragon, who have already dropped their prices as low as they
are going to and are unable to offer anything new as there isn't anything to
offer. It should also be remembered that DU is not the only Dragon publication
suffering from lack of material to print, Update for one has months when it is
pretty thin on the ground (but still worth every penny of course!).
In summary, I think DU has stuck with us for longer than most publishers would
consider a viable and economic proposition (remembering that making a profit
is a primary requirement for them to stay in business), Lack of material is a
concern, although they have enough imaginative ideas to keep filling the
pages. I must admit to not liking the software reviewers wit, he seems to
enjoy cracking the 'not very funnyes' more than reviewing, I would like to
know what the software under review is like. Perhaps others like it? I don't.
Whilst I for one would like to thank DU for it's continuing support at a time
when it might have been easier to give up, I think the feeling is that they
can't go on for ever. Then it will be up to us, the users & user groups. I
would hope that when this time approaches, they can be honest & announce well
in advance, return unfulfilled subscriptions, publish the addresses of all
known user groups and pass on mail recieved afterwards to appropriate groups.
I for one hope that this doesn't occur for a few years yet, and will continue
to renew my subscription as long as Dragon User exists.
REVIEW OF A REVIEWER .... P. BEED

Do you remember the days when a review of a piece of software was just that, an informative piece of text which told you descriptively what you would get for your money, the quality of the program, its strengths and limitations, a general idea of the type of game/adventure/utility it is, perhaps a comparison of it's attributes and those of similar programs. I enjoyed these reviews on reflection they seemed fairly accurate and assured that my hard earned money got me what I wanted and avoided the rubbish.

It seems that trends are changing, the reviews of 1986 seem to have been used as an opportunity for a juvenile sense of humour to attempt to entertain, it wouldn't be so bad if he really was funny, but he isn't!! If I want to read half witty stories I would buy a college rag mag, not a technical magazine!

Although one expects to see a little of the reviewers opinion in the review, it should surely not be totally opinion orientated, after all, the fact that I like or dislike a program doesn't mean that the next person will have the same tastes. Perhaps if the reviewer realised this he would give a more objective view of the program he has the privilidge of telling prospective customers about. Rather than writing the funny letters column. I don't think I need to bring update into any more unwarranted disputes by mentioning names, all I will say is if the cap fits, wear it.

THE LISTINGS .... AT LAST

Finally, the listings for the article in issue 27, the one on adventure writing that is. Sorry for the delay.

10 CHK=0;CHR$="**:CC$=CHR$;VB=0;VB$="**:NO$="**:NO=0;TL=0;TW=0
20 PRINT:PRINT " WHAT NEXT?";
30 EXEC34891
40 K=PEEK(135)
50 IF TW=0 AND TL=0 AND K=33 THEN CHK=CC$:TW=2:TL=4:PRINTCHR$=":GOTO30
60 PRINTCHR$(K)
70 IF K=13 THEN REM PARSER
80 IF K=0 THEN 10
90 IF TL=0 AND K=32 THEN 30
100 IF TW=1 AND TL<4 AND K<>64 AND K<>91 THEN CHK=CHR$+CHR$(K):TL=TL+1:GOTO30
110 IF TW=1 AND K=32 THEN TW=2:TL=0:GOTO30
120 IF TW=2 AND TL<4 AND K<>64 AND K<>91 THEN VB$=VB$+CHR$(K):TL=TL+1:GOTO30
130 IF TW=2 AND K=32 THEN TW=3:TL=0:GOTO30
140 IF TW=3 AND TL<4 AND K<>64 AND K<>91 THEN NO$=NO$+CHR$(K):TL=TL+1:GOTO30
150 GOTO30

160 DIMVB$(38),V(26,2)
20 FOR N=1 TO 38:READVB$(N):NEXTN
30 DATA ASK,BUY,CHO,CUT,DIS,DRD,EAS,ENT,EXA,FIR,FOL,FOR,GIV,HAR,HEL,HIT,INV,
   KICK,KIS,LOG,MOU,NOR,REP,SEL,SOA,SOU,SOV,STA,SUC,TEN,THR,UNH,UNP,USE,WES,WER
40 FOR=1 TO 26:READV(N,1),V(N,2):NEXTN
50 DATA 1,1,1,22,32,5,3,7,3,18,2,13,3,15,1,18,0,0,2,19,1,21,22,1,25,0,0,0,0,0,0,0,
   24,7,25,2,32,3,34,0,0,2,37,9,0,0,0,0,0
60 IF VB$="" THEN 480 ELSE L=ASC(VB$)-64
70 IF V(L,1)=0 THEN 100
80 IF V(L,1)=1 THEN L=V(L,2):IF VB$=V(L,1) THEN VB=L1
90 IF V(L,1)=1 THEN FOR N=V(L,2) TO V(L,1)+V(L,2)-1:IF VB$=V$(N) THEN VB=N:NEXTN
   ELSE NEXTN
100 IF VB=0 THEN 480
480 PRINT ' WHAT NEXT?";REM NEW INPUT
GROSVENOR SUPERDOS ........ KEN GRANT

Although the standard Dragon Disc Operating System (DOS) is quite a good system, there are several bugs and also room for improvement. This is where Grosvenor Software have stepped in to rectify the problem. Through the efforts of Mike Kerry (who also wrote ALLDREAM) they have brought out SUPERDOS, which is on a replacement chip to fit inside the DOS cartridge. The most noticeable improvement is seen when you want a directory of your disc. Superdos gives you a screenful, then will wait for a keypress before continuing - no need to take a course in speedreading any more! It also gives the drive .5 of a second to get up to speed before accessing the disc, which ensures no corruption from writing to the wrong track/sector etc. Superdos also ensures that when saving a backup file, the BAK file is closed correctly, saving the problems which can occur by having too many files open and problems when changing discs within a program. It also ensures that it keeps a correct account of OPEN files on different drives. Other bugs removed are File Information Block numbering, and also taking note of READ errors during BACKUP (Dragondos sometimes ignores these with fatal results). On the latest version of Superdos (E6) there are also patches to correct errors on reading double sided discs and enhancements to enable it to handle well filled discs with fragmented files, it also allows 168 files rather than the original 127.

The chip costs 18.00 if you fit it yourself or you can send your cartridge to Grosvenor and they will fit it (and return the original) for 12.00. Both are supplied with documentation.

Grosvenor Software are at 2, Beacon Place, Seaford, Sussex. BN25 2JZ.

DRAWEZEE EXPLAINED ........ R.A. DAVIS

As I would have got the wrong impression about Drawezee from what has been published to date, I would like to put the record straight. It is primarily intended to enable you to copy accurately on to screen from a drawing made on graph paper, and not just for doodling attempts. It’s main innovation is that it keeps track of the X,Y coordinates of the drawing and lets you examine and update these to new positions. It includes all the graphics commands of the Dragon, with the exception of GET & PUT, with the addition of a small print routine of limited use, for a few words or numbers. Suitable graph paper needs 10 squares to each larger square, and must have at least 256 squares horizontally and 180 vertically. Smith’s graph paper does not comply with this specification, but most good stationers do have suitable pads of the paper costing about 1.00. You need to number it yourself, 0-255 and 0-180, when drawing. Apart from free hand design on the graph paper, you can of course use carbon paper to copy onto the graph paper, and easily transfer this to the screen with Drawezee. You can work in PHONE 3 or 4, and save the finished article, or save it part completed and reload it later for completion. As it proved popular with my friends, I donated it to the Group to help towards getting a few pennies for the photocopier and I have no financial interest myself. Although designed for cassette, disc users should have no difficulty in changing the save routines to the addresses needed for disc, as it’s all in Basic.

Any ideas?........

I thought it might be a good idea to liven things up with a bit of graphic work occasionally, cartoon type. If you agree, why not send me YOUR cartoon efforts and we’ll run ’em as a regular feature. PLEASE send them on tape or disc though...hard copy gets creased in the post, and as result doesn’t photocopy at all well. PMODE4 please.

DECIMAL OR BINARY FRED!

FLINTSTONES COMPUTE
A MESSAGE TO ALL DRAGONEERS

My first paragraph is addressed to all members. The commercial big boys have by and large let us down. You all know this, it is vital that we do not let each other down. There is a wealth of talent in the group, producing software of a very high standard as Payne Forth, 13th Task and some arcade games in Dragon user bear witness. We could produce even more software of higher standard if we pool our resources and knowledge, co-operation should be our motto. That is what friends are for and we should all be friends within the Group. A register of skills and interests would be a good idea. My message to you all is to get together, work together and produce more software so that we are less dependant on the big boys. You will enjoy yourselves as well.

Fellow adventurers, we are on our own now. A section on adventuring falls into 2 sections, programming aid and solving aid.

Programming aid- I think I can answer most questions about Basic and the overall structure of adventures, I would be pleased to help any strugglers. However, I am incompetent in machine code and hi res graphics. Is there anyone out there willing to help us in these 2 areas? (see the article Helpline 87 ... TL) Please let me know, I would be most grateful.

Solving aid- I am willing to publish any problems which bring you to a grinding halt in the hope that another member will come up trumps. (Always have been, all you have to do is write or phone & tell me .... TL) Personally I spend too much time programming to do as much solving as I would like to but I do have the full solutions to the Ket trilogy. Has anyone else completely solved any other adventures and so able to help?

Indeed, I would like to hear any comments and questions on adventures. My address is:- P.C Asbury Smith, 73 Guiness Court, Lever St, London EC1. Phone 81-253-2696

ANOTHER EDITORIAL BIT .......

Yes, you are treated to me once more, whenever I have something to say, Paul writes reams, when I don't he leaves me loads of space on the front page & I have to waffle. Still never mind, this month you come unexpectedly on me in the middle.

The reason for this is a request I got the other day for 'editorial guidelines', what was meant was what do I want & how do I want it. To answer the questions in reverse order, how I want it is hard copy, be it written, printed or whatever. If you don't have a printer, feel free to send it in longhand but please make it legible. If you do have a printer, even better, send me a printed copy, that's easier to read still (if possible switch of the right justification if you use a word processor, it's harder to copy type if it's justified). As to what I want, anything at all so long as it has something to do with Dragons, I'm not going to tell you what to write, you probably know better than me what you want to read, that's probably what others want to read too. OK, not so much guidelines as lack of guide lines.

It's your newsletter, you write about what you want to write. Now, the thing I really wanted to talk about was FLEX, not an article but a question. Why has no one sent me a FLEX article, we've had OS9. Does no one use FLEX at all ?? I don't normally actually ask for articles on any subject but I think it's time we had something on the subject, anyone out there capable (and willing) to write something on FLEX for beginners, either an article or a series, if so get in touch, drop me a line or give me a ring. OK, that's me done for this month, back to the interesting bits.

If you DO give Tim a ring, don't let his wife see you do it!, she might get suspicious!...P.G.
MAIL ORDER ........... P. J. BEED

I'd like to say a few words in response to Chris Jobson's letter in Dec Update. Of the commercial concerns who still advertise in Dragon User I have used all of these at some time or other (except Compusense), and have heard stories of good service when things go wrong from other users. All offer a fairly prompt service, but one should remember that although many firms will despatch your goods on the same day they receive your order, or very soon afterwards, you are then at the mercy of the Post Office, who seem to route urgent goods via the Outer Hebrides yet can get bills to you the same day they are posted! Of Dragon firms still operating I can recommend John Penn, Computape & Peaksoft, to name ones who have paticularly pleased me. In particular Peaksoft despatch light goods 1st class the same day, hence when my TV lead broke, I recieve a replacement straight away, costing little more that I would have paid for the parts to make one myself. So, the mail order firms are OK, but now the warning..... Beware of classified ads, having sent money to two of those, and recieve nothing in return, I've learned the hard way. Unlike full ads, the publishers accept no responsibility for these (a publishers fund exists to compensate anyone losing money to a full ad) it is impossible to obtain any information about who placed the ad. I'm sure they are not all cowboys but it's impossible to tell who is whom. They have the upper hand so it usually involves too small a sum of money to warrant legal proceedings and in any case, you don't always know who you are dealing with. They take advantage of the distance between you and them by refusing to answer your mail etc. If you must get something in this way, my advice would be to do it following a recommendation, otherwise exchange a few letters enquiring about the goods offered and perhaps ask about sending the cash after recieving the goods. It is an unfortunate state as one of the best sources of cheap hardware etc. is a magazine called micro mart, but rather than risk losing a cheque for 100.00 or more for a printer, I would sooner travel 100 miles or so to collect it or miss a bargain. It's a pity as I expect most ads are genuine. Of course the printer owner would be just as wary of sending his printer and getting no cash, it works both ways. If anyone has a solution to this problem of remote buying, I would be interested to hear it. Another point to consider is that of using crossed cheques, the cost of stopping these can be almost as much as the value of the cheque, and trying to trace the name of an individual who banked your cheque is futile. Perhaps someone with a knowledge of the banking system can tell me what advantage crossed cheques bring me. If anyone knows anything of CIA Soft in Ireland or Pegassoft of Sheffield, I would like to hear from you. The last point is that I would imagine your money is secure in Updates classifieds, they must have come through Paul and will invariably be from a respectable Dragon owner.

# Crossed cheques can only be paid into an account, while open cheques can theoretically be encashed. Simple, no? Paul.

X-Word 18 answers.

ACROSS: 1c) Amphitheatres. 2c) Address. 3a) CPU. 3i) Tart. 3m) Sea. 4h) Bus. 5a) Rain. 6k) Viva. 7e) Strum. 7k) Ace. 8a) Coy. 8h) Tracy. 9a) Tic. 9k) Puma. 10e) Brandy. 10k) Sigo. 11d) Plate. 11i) Sweetex. 12b) Spreadsheets. 13k) Tired. 14b) Winchester. 15a) Carthorse. 15k) Seven.

DOWN: a) Incorrectly. 2c) Audio. 3c) Cyclops. 4h) Sprint. 5e) Assemble. 5f) Rabbit. 7g) Rota. 7k) Subroutines. 8i) Stump. 10i) Shut. j) Erase. 10j) Titanic. 11b) Yuletide. 11l) Reserve. 15b) Babbage. 15c) Carbondioxide.

Winner of X-Word 18 was Ian Rockett of Leeds. X-Word 19 winner gets......no, I'll keep you in suspense!
REDUNDANT INFORMATION DEPARTMENT

If you save a machine code file in the following format:
SAVE "FILENAME.BAS",START,END,EXEC
The important bit being the .BAS, you will find that you can reload the file
with LOAD"FILENAME" (or RUN) which gives you a saving of a whole 4 or 5
keypresses as the ROM assumes the .BAS and doesn’t give you a NE error.
Thanks to Graham Smith for that bit.

Reply from Wayne Smithson.....

Dear Paul, after reading the article "Were you conned" in the last Update I
feel I have to reply...and I thank you for giving me the chance to do so.
I can understand why Eddie Freeman and others feel as though they have been
conned. What can I say?...I set out to help Dragon Owners, I put in a lot of
work on Dragon Monthly, it took up a lot of my time and I got virtually no
help from anyone except a few regular writers. There were 176 subscribers and
maybe 4 or 5 bothered to write something. Don’t get me wrong, I’m not
complaining, I just want people to know that I gave it a go and that I really
did try to make DM something worthwhile. I couldn’t pull it off, but I did NOT
set out to con anyone, only to help the Dragon and its owners. The 7.50 charge
only just covers the cost of producing something like DM...ask Paul!.

What made the situation worse, as Eddie so rightly stated, is that Issue 1 of
Dragons Tail (the magazine replacing DM) said that Dragons Tail was going to
be FREE!. This took ME by surprise. As it happens, DT is NOT going to be free
after all...how could it be?...it would cost thousands to run every year.

I’m sorry that it didn’t work out with DM. I’ve tried to make amends by
transferring everyone to Dragons Tail...and just in case you think I’m sitting
on a giant wad of subs money, I pay for all 176 copies of Dragons Tail every
month with money I can’t really spare, just so I don’t let anyone down more
than I have done already. I don’t see what else I can do.

Something else that I find upsetting is the fact that virtually no-one has got
in touch with ME about their grievances, yet plenty of people have taken it on
themselves to "slag me off" behind my back. With the last Issue of DM I sent
out a letter saying to get in touch with me if they weren’t happy, but only a
couple of people did so.

I would only hope that Eddie and others change their minds about boycotting
Quickbeam and myself. The Dragon is a first rate computer and I would hate to
stop writing for it. I’ve always thought that Dragon owners were the
friendliest set of people, so please, let’s keep it that way.

By the way, Eddie has received his refund without any trouble...but why did he
feel that he had to DEMAND it? I don’t know, but if anyone else feels
strongly about it I will refund their money too........Wayne Smithson.

### Last word on the subject, I hope, but I can tell you WHY Eddie and others
feel so annoyed, Wayne...people object to having subscriptions diverted to
another publication, however good, unless they are consulted FIRST....I think
that if you’d ASKED whether they preferred a refund or a transfer you’d have
avoided a lot of bad feeling...and you have to allow for the unpleasant fact
that almost every Dragon owner has been victim of a con job* from fake Groups
or magazines at one time or another, and it has made everyone VERY suspicious.
Anyway, hopefully subject closed. OK?. Paul G.

Apology..............

Sorry there is no 05-9 page again this month, but Jason tells me that owing to
other commitments he will not be able to write his page over the next few
issues. Would anyone care to volunteer?.

---
Drive on!......Paul Grade.

Now I didn't really intend writing anything this month, but I've had several queries from somewhat mystified members who have bought second disc drives to add to their original one, and discovered that peculiar things happen when they connect the things up...things like both drives firing up at the same time, or total failure of either drive to do anything useful at all.

So, to save myself the tedium of writing the same thing several times, I've decided to inflect it on you here instead. Those of you who know it all anyway can go back and help your Grandmother to suck eggs, this is for the benefit of the others!

Most people seem to have Dragon Data type drives as "first" units, but most of the following will apply to other types as well.

The first thing to do is decide which of your drives you wish to be "number one" or default drive, and I would suggest that you use the original for this purpose, but it doesn't really make a lot of difference. Once you've reached this momentous decision, open the drive unit by the simple method of removing the casing, and take a look at the drive you'll find inside. Horrible looking thing, isn't it? Now assuming that this is going to be number one, first locate a double row of pins sticking up at the rear of the drive circuit board. Some of these will be joined together with plastic covered "bridges". Found 'em? Good! Now take a closer look and you'll see that each pair of pins has some letters beside it on the board. Some will be "D1" to "D4" (or "D0" to "D3" depending on the make of drive). If yours start at D1, then make sure that this pair has a bridge on them, and that none of the other "D" pairs are bridged. If they start at D0 then ensure that it's D0 that is bridged and none of the others. OK so far?. You should also find a pair marked either MX or MS (or sometimes ME), and if these are bridged, remove it. Done that?, then take a look at the number two unit. Treat this in EXACTLY the same way, except that D2 should be bridged instead of D1 (on units where the numbering is 1 to 4) or D1 instead of D0 in cases where the numbering is 0 to 3.

Now on some makes you may not find the MX pair in the same row of pins as the "D" ones...so if it doesn't appear to be there take a look around the top of the board. If it isn't there at all, don't worry, there are exceptions!.

Once you've got this sorted out, the rest is simple. On a Dragon Data unit you'll find a second edge connector already on the lead, so all you need to do is plug it in to the second drive, on other makes you may have to add one to the lead yourself. Again on Dragon Data units, you will find a second set of power leads tucked under the front of the PSU. These have a "one way only" connector, so you can't connect it the wrong way around....just plug it in. Or another thing to do...at the back of the drive circuit boards you will find what looks like a white chip (with BECKMAN printed on it) or what appears to be a black, shiny ceramic one.

By convention only the last drive on the cable has one of these ballasts fitted, so remove the one from the TOP drive. When you've done that, make sure that the units are securely screwed into place and connect up, power up, and test. If one drive seems to be reluctant to initialise a new disc try removing BOTH balast resistors...that usually solves the problem, but allow for the fact that a new drive is always a bit tight and sticky at first, and takes time to settle in and do everything 100% perfect first time.

And that, I hope, should get you going with no nasty happenings. Of course, if you have an original unit other than Dragon Data, then your second drive will need a power supply. This isn't anything elaborate, just a 12v-9v-5v DC unit, with a maximum rating of 2 amp on the 1 volt line and 750 ma. on the 5 volt.....Make or buy, the cost will be about a tenner either way.

Well, hopefully this will save me some letter writing. I certainly hope so!.

Good luck.
Classified and Special Offers Page.

FOR SALE... COPIPS Printer Plotter... New pain & paper roll. Good condition. 30.00.
See Gear Tel.E9274-97906

Basic Programs Listed: 1 Program Listing... 0.75 each 4 pages.
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All tapes and listings will be returned as soon as possible following the day...
BH11 3BE

Software For Sale... Edit disk including 120K version... 15.00
Teletext disk version... 5.00
Teletext tape version (with Telaid tape)... 5.00
Teletext disks... 5.00, Teletext tapes... 5.00.
All above are ORIGINALS with instructions. Contact David Rothbery, 1 Heath Road, Glossop SK13 8AY Tel E6 4574 3912

SPECIAL OFFER!!! 440 intelligent nodes (Rascal-Nilo CP2123) with auto answer, subdi, multiloo speed selection (up to 2680/1280), including 128X/75 for Prestel and 384/288 for normal 380 use, and Bell 191. This is a direct connection unit and 16 Telecom Approved. The current list price of these nodes is 115.00 (originally over 400.00), but as a special offer to Group members my price is just 50.00 inclusive of postage. Only a few of these available, don't wait long to get your order.
Also for sale, one only Toshiba RTX 440 (44) computer for 380.00 and a Teletext acoustic config (1190/90) for 380.00.
Orders and cheques to: Jason Grube, Amberwood Market Place, Penriddle, Stafs. ST31-5960.

NEMESIS PROGRAMS: BRAGUIN and MESSO utility programs on cassette. Special price to Group Members only 3.50 each inclusive.
Cheques and orders to Paul Grade, payable to the Group.

WANTED!!! Contact anyone using a Dragon for medical or nursing or any other programs, to help us make more use of my Dragon with Optimal Diploma studies.
Contact Philip Reed at 27,Finch Road, Gosport, Hants or phone: 0970-505436.(evenings).

WANTED: Dragon DOS version of Elitecalc, preferably complete with manual.
Chris Jobs, 0978-416415.

THE AVERAGE RELEASE OF THE YEAR: "11th Task" from ARC Software.
Only 2.50 - 3 1/2 price postage.
MC 278,New Road, Houston, Neasden, Glasgow, G27-3NL.

FEELING STRONG!!! If you can have THE disc drive offer of the century... prived you can carry it away. All you need is do a call in and buy me a drink! What does it get you? A case of PBRs and a chance to win a new Dragon...

FORTH OPERATING SYSTEM: Simply the best there is. Written by John Payne, and available for DragonDOS or Double density DragonDOS. Available ONLY through the Group. 0.50 inclusive.
Orders/cheques to Group, 6, Navarino Road, Worthing, Sussex.

STICK IT!!!... Dragon User Group self-adhesive stickers available in two sizes, 2.25"x1.5" or 3.25"x2" Price 1.25p and 1.50 each. Include a stamp with your order please.
Orders to Paul Grade, 6, Navarino Road, Worthing, Sussex.

Circuit Sheets: Available for K2U (most variants), K4A, Dragon DOS controller, and Canasa DOS controller. All the same price 1.00 each. Cheque/orders to Group, 6, Navarino Road, Worthing, Sussex.

Dragon Upgrade manual: 32/44 conversion method fully explained so that you can upgrade your 32 yourself without difficulty. Written by Bob Hall and available only through the Group. Price 2.50.
Cheque/orders to Group, 6, Navarino Road, Worthing, Sussex.

Delta DOS utility: A micro utility to copy all BASIC and micro files from disc to tape in one operation. BASIC listing of loader and hex dump 1.00 or on cassette for 2.50.
J.C. Russell, 55, Teneroy Avenue, Clevedon, Avon BS21-7JH.

Set of master programs: 1. Cost 105.00 for 20.00 or will supply revisions as required. Also basic version of Calc spreadsheet. Stock control program. 1.00 each. Also original games 1.00 each.
Contact Hans Hargreaves 070-774-2477.

OSF WORK PROGRAM: Up and downloading of files. Any baud rate from 1200/2400/9600/110 baud (but not multiple rates). Download buffer from 4 to 32k or program will adapt to largest capacity available. All other options supported. Price 1.00.
Please phone Barry Knapp, 0972-243900 evenings only.

BRAGUIN DISC EDITOR: Easy to use. Two operational modes, examine and edit. Will read and edit ANY disc including those written on other systems. Includes killfiles, accesses and changes files directly on disk. Includes BRAGUEX which can be used with any of your own disks. Written by John Cox. Price 4.50 inclusive.
Cheque/order to the Group, 6, Navarino Road, Worthing, Sussex.

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

Introduction to BASIC 1.00. IC for the absolute beginner 1.00. Chess 2.00. Sprite Magic 2.00. Dragon Selection 2.10.
Phone 01-253-2846.

BRAGUIN EPRONS: Your DOS 2764 returns to 'patched' V1.4 specification, or to Eurohard V4.0 or V4.1, or to PETER WILLIAMS TRANSLATED & RENAMED ENGLISH VERSION OF V4.1. Price for any version just 1.50.
Complai, 22, Grove Park, Burbage, Hinckley, Leic. LE10-23U.
BACKDATE UPDATES: Copies of all earlier Updates available from either John Cox, 5, St.Peters Road, Portslade, Sussex. (0273-422492) or Chris Channing, Main Road, Dunstable, Mr. Bourne, Lincol. PE18-9DB.

Disc Diary: A new program written for the Group by Tony Simons. A disc drive of dates and events without having to keep track of all those bits of paper you wrote them down on. Available on DragonDOS for 3.50 at only 3.50 inclusive.
Orders and cheques please to the Group at 6, Navarino Road, Worthing, Sussex.

AUTOROL: New, and available ONLY through the Group. This unit operates via the Dragon cassette remote port without interrupting with its normal use, and enables you to dial direct from your keyboard or via a menu, and includes a relay facility. For use with any modem, or just as a memory dial unit for your phone. NOT 81 app. Not one of phone accessories... we know you never dream of offending Telecom), but complete with software for ONLY 13.50 plus postage.
Phone 1.Rees on 01-998-8519 for further details.

DICALY: DragonDOS to OSF file copy utility. Includes 'Teletext' & BASIC conversion filters.... 0.50.
COMPO: OSF commons program. Xonoon (CRC & SUM), multiple upload modes, monitor buffer, function keys and more. Suitable for any OSF system (OSF needs K1A-P and includes extra files... 0.50. PS-PAX: Selection of useful public domain OSF utilities on one disc.... 5.00.
Jason Shoulter, 78, Victoria Road, Parkstone, Poole. BH12-3A6.
(0202-7722559).

WANTED: OSF cartridge and disc drive wanted for my Dragon; any make considered if the price is right, also cheap printer and connecting lead wanted.
Please phone Colin on 0272-226953. (evenings only).
Although this routine has been located in 32 Mode, it should work if placed higher in memory in 64 Mode. Alter line 48 if you wish. The routine as printed will copy Page 3 of PMODE3,1 to memory at $668000. In line 180 the variables P1 and P2 hold the address, to be loaded into the X register. The Y register is loaded with the start of Page 3, $612200, defined by the variables P3 and P4 in line 186. The routine loads the A register from the address pointed to by the Y register, and stores it at the address pointed to by the X register, incrementing both X and Y until X points to $66801 (1537 bytes), which is defined by the variables P5 and P6 in Line 186, which is a subroutine. You can make your own further subroutines for other pages, re-defining P1 to P6 as needed. You will see from the subroutine at lines 130/140 that the addresses to be POKEd with the variables are also defined as variables, and occur 1537, 586, and 899 Bytes after the start of the machine code routine. These must be re-calculated by you if you move the routine from its present location, and substituted for those in the listing. The subroutine at line 190 does the POKEing, and can be called at each change of P1-P6 variables, for different pages. The memory map at the rear of the handbook gives all the needed addresses, but notice that in Line 70 you must clear sufficient memory for the stored Pages with a CLEAR command, to avoid the space being overridden by basic. Line 260 re-defines the variables P1-P6 to PCOPY the stored page back to the screen, and goes to the subroutine at Line 190 to do this. The demonstration merely clears PMODE3,1 to yellow, copies page 3 to memory, then clears PMODE3,1 to blue, and PCOPYs the stored page three, which is yellow, onto the new blue screen, but this should show the effect. The number of pages you can store and copy will depend on the memory you can hold to the store and the memory you need for your Basic program, of course. DOS users will have to amend P1-P6 to suit their system.

18 DATABASE,00,00,18,8E,00,00,8C
20 DATABASE,00,24,06,A6,A6,A7,00
28 DATABASE,F3,39
40 FOR I=H70B8000,H7012
50 READ AS:A=VAL("H+"+AS)
60 POKE I,A:NEXT I
70 PCLEAR:CLEAR200,$668000
80 GOTO120
90 REM SUBROUTINE FOR PAGES
100 P1=H460:P2=H800:P3=H121:P4=H08:
P5=H660:P6=H801
110 RETURN
120 REM ADDRESSES TO BE POKED
130 AI=H70801:A2=H70802:A3=H70803
140 A4=H70806:A5=H70807:A6=H70809
150 REM PCOPY PAGE 3 TO MEMORY

18 'MOSAICS ...... GERALD HALE
20 '1ST PATTERN
30 X=0:XI=2:XR=63:XL=0
40 Y=2:YI=2:YT=3:YB=31
50 M=56
60 GOSUB580
70 '2ND PATTERN
80 X=0:XI=1:XR=62:XL=0
90 Y=2:YI=1:YT=1:YB=30
100 M=248
110 GOSUB580
120 '3RD PATTERN
130 X=0:XL=1:XR=62:XL=0
140 Y=0:YL=1:YT=0:YB=31
150 M=252
160 GOSUB580
170 '4TH PATTERN
180 X=0:XI=1:XR=63:XL=0
190 Y=0:YL=1:YT=0:YB=30

18 REM PCOPY PAGE 3 TO MEMORY
20 M=251
210 GOSUB580
220 '5TH PATTERN
230 X=0:XI=2:XR=63:XL=0
240 Y=0:YL=1:YT=0:YB=30
250 M=126
260 GOSUB580
270 GOTO30
280 GOSUB580
290 *DRAWING ROUTINE**
300 CLS
310 GOSUB580
320 FORC=1 TO 8
330 FORM=1 TO M
340 X=XX:IF X>XR OR X=XC THEN X=:
350 Y=YY:IF Y>YB OR Y=YT THEN Y=:
360 SET(X,Y,C)=:NEXTZ
370 NEXTC
380 FORZ=1 TO 1500:NEXTZ
390 RETURN
XWORD 19...Compiled by J. D. Bateman.

Across:
8. Musical instrument. 9. A type of tax. 3. Linear representation of data. 4. French wine. 5. Famous volcanoes. 6. Assemblies of witches. 7. Another musical instrument. 8. A vortex in a river or other stretch of water. 10. To burn slightly. 12. Remove a pair of l's from a certain style of print to obtain a perfumed white powder. 19. Cards used by fortune-tellers. 20. Part of a disc. 21. Common name for an integrated circuit. 22. Condition in which the eyes are closed and the nervous system is inactive. 23. Type of feathers found on ducks for example. 24. A set of lines read with a light pen.

Down:
1. All place where old records are kept. 2. A minute fragment resulting from the wearing down of rock. 3. African homeland. 9. One of this type, once followed a star. 10. Cillian's original weapon. 11. Scottish farouche. 12. Trojan product. 13. Pertaining to numbers or figures. 14. Italian food of rubber to be eaten with onions. 15. Type of lost. 16. The gaffer would like a new one of these. 17. This chocolate bar could be the subject of a conversation. 18. Device preceded by the transistor, 14. A material which prevents the flow of electricity. 19. An affirmative answer from a tradesman to obtain a device that converts energy from one to an electrical form. 20. A loudspeaker.

How I know there were a couple of errors in the last crossword clue list, and I have to admit that it was entirely my fault. The way the winner was decided was to pick the first correct set of answers received, as usual, and allow for the fact that due to my busy typing there were two possible answers to a couple of the questions. OK?

So far as I know THIS month's crossword is all correct, so don't waste time reading any more of this, get on with it! Paul.

---

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