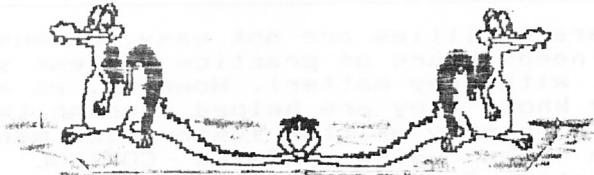


DRAGON



UPDATE

 * ISSUE 57. 'THE 1989 DRAGON SHOW : HOVE : JUNE 3RD, 1989' MAY 1989. *

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The Gaffer's Bit

This being my last chance to bore you with details of the Hove show I might as well let those of you who are busily thinking up excuses for not attending know just what they will be missing. Twenty six stands have been booked, and the list is as follows:-

Kouga, MacGowan, Protech, Sutcliffe, Dragonfire, D.U.D.E, Computeach, Dragonsoft, Eric Hall, Chris Rouse, 68 Micro, K.C.S, Jason Shouler, Dragonart, B.C.S, Nic Spiers, Greenweld Electronics, K.Coleman, Siegfried Computer Gruppe, 6809 User, Preston, Penn, Computape, Pulser, Harris, NDUGSoft, and of course the Group!. We have one "spare" stand left in case of a last minute booking as well. If you still think it isn't worth the effort of attending, then at least don't try to blame "lack of support" THIS time!. For those of you who have missed the details earlier, doors open from 10.00a.m. admission 1.00, or 50 pence for under 12's. Pensioners accompanied by their grand-parents, anyone named George arriving with drag on, and people presenting Paul Grade with a crate of Smirnoff admitted free.

If you're arriving by car, there's a large car park directly opposite the Hall (40p all day), so DON'T park on the nearest double yellows, Hove operates a tow-away scheme!. Easy access from Brighton or Hove railway stations, or Brighton bus station, or if you want to impress the peasants you can park your chopper or jet at Shoreham Airport. Those relying on a Yorkie and the first trucker to stop should alight at the nearest lay-by to Hove!.

Well, you know what it is, where it is, why you should be there, and how to get there if you need any more information you'll have to work it out for yourself!. Be there, we need your money!. Paul.

Paul G.

The Editor's Bit...

Right, you know where it is, and you know when it is, so you have absolutely NO excuse for not turning up. This may be one of the last Dragon shows EVER, so PLEASE make the effort to go and buy something (even if it's only a drink for Paul).

Apparently, my 'current affairs' piece in this very spot last month actually got through to some people and provided them with some useless information, so this month's big-news offering is that the people of Paraguay will be going to the polls on May Day to vote for a new president after 35 years of dictatorship (they should try working with Paul!). Thanks to Bryan Ewing and Harvey Grey for taking part in such a worthless exercise, and I hope you enjoy this month's aide memoire. @ Other news this month is in fairly short supply. There is another mention of the Dragon in the letters page of New Computer Express (I make that the third), which features some of the main addresses for Dragon groups and magazines, so hopefully there will be some response there. There have been quite a few enquiries about NDUG since I wrote a letter to NCE some weeks ago, so if you would like to support your Dragon, (a) write a letter to a magazine, and (b) GO TO THE SHOW!!!

Stephen.

DESKTOP+ - REVIEWED BY GEOFF SMITH

Reviews of good software utilities are not easy, because to explore all facets of a particular program needs hours of practice (unless you belong to MENSA or are similarly endowed with grey matter). However, as all purchasers of any of Bill MacGowan's software know, they are helped through this learning process by the extremely well and succinctly written instruction manuals. This applies once more to Desktop+. I have been using PRINTER CONTROL as my favourite word processor for approximately 3 years and find it very user friendly. As all the MacGowan software appears to be complementary I was soon into the swing of things, 'sussing' out the differences between PRINTER CONTROL and DESKTOP+, (helped by a short tutorial from the man himself at the Ossett Show!). The main differences with DESKTOP+ are in the text formatting codes, some of these being completely new. The main ones are:- (a) BOXing of headings or important sections of text by simple 'start' and 'finish' instructions that produce a box conforming to the margins called for by the writer, (the BOX itself can be altered as described in the manual - CHANGE GRAPHICS & SAVE GRAPHICS - to give different outlines). (b) Printing in 1, 2, or 3 columns, these being mixed as required. The columns are printed simultaneously, it being unnecessary to reset the paper prior to printing the 2nd or 3rd columns. After calling up PRINTING the program pauses and gives a screen message - FORMATTING PAGE - just be patient, all will soon be revealed! (c) The Text Editor screen is improved by the additional information provided - cursor position grid reference at bottom left of screen, and the current keyboard mode at bottom right i.e. 't', 'T', 'g' or 'G' being lower and upper case text and graphics respectively. (d) The Print Parameters screen is improved particularly in the PICTURE mode. (e) The ability to switch between print characters and graphics characters and between print characters and 'bit image' fonts. The column printing facility, in particular, could be invaluable to someone writing instruction manuals, club magazines or a first novel. The program as it stands lacks the variety of fonts in the 'bit image' mode available with other DTP packages, there being two alternatives provided. However, as in PRINTER CONTROL, this program includes the facility to design your own fonts; and other software companies have produced different fonts for use with the MacGowan programs. Another facility shown at Ossett, was for producing 'Banners' with sideways printing of larger than normal letters. These, however, need to be called up from a separate disk and do not appear to be included with the DESKTOP+ package. As the price of the software is not cheap, (£35.00) in relation to other Dragon programs, I think the inclusion of the banner facility in the package would be a good selling point, along with two or three additional fonts.

DESKTOP+ available from MacGowan Consultants, 3, Beechwood Crescent, Broughton, Nr. Brigg, South Humberside, ND20 0SB. Please state your printer make and model when ordering.

Crossword 41 Answers...

| | | | |
|----------|-----------------|--------|---------------|
| Across:- | 1A). University | Down:- | A1). USSR |
| | 2G). Piranha | | A7). Nolans |
| | 3A). Stub | | C2). Mustard |
| | 3E). Warren | | D7). Ammonia |
| | 4D). Magic | | E3). Watts |
| | 5A). Ant | | E8). Silent |
| | 5J). Seal | | F4). Grand |
| | 7J). Nora | | G1). Sprite |
| | 7E). Snowdrop | | G10). Rats |
| | 9A). Loom | | H7). Weak |
| | 9E). Ideal | | I1). Trubler |
| | 9J). Moss | | J6). Primrose |
| | 10C). Solar | | K4). Aerosol |
| | 11A). Neon | | L3). Goalpost |
| | 11F). Daffodil | | M1). Canal |
| | 12F). Stetson | | M6). Fossil |
| | 13D). A Tissue. | | |

This month's winners are J. Rhys-Vivian and Robin Hemmings, who got a choice of programs from the Dragonfire list and a games tape from our own collection respectively.

You Filthy Capitalists!!!

So, the offer of a mere tenner isn't enough to induce you to risk the Official Secrets Act and tell me how "official" statistics are contrived!. I warn you, I have ways of making you squawk! if you don't believe me try ignoring the Hove Show as well!. Paul.

WIMP - Reviewed by Julian Osborne

For your 12.00 you receive a BOOTable disk and a detailed instruction manual (produced on one of those Amstrad PCW machines) covering the WIMP system and its two companion programs: MOUSEART (surprise, surprise - a drawing program) and ICON DESIGNER (speaks for itself!)

The background is set to Grey by the use of alternate black and white pixels giving a very Apple-Mac like appearance (this Grey effect is actually called "BLUE" by WIMP - an oblique reference to the tint of the Apple Mac's internal monitor screen). The cursor/pointer is controlled by the right-hand joystick (which must be potentiometer and not switch type) and is defined as an upwardly-pointing arrow. Its movement is rapid and flicker-free and its response to pressing the joystick button is also good (unlike some other mouse programs on the market!)

About half the options respond with "Option Not Available" possibly due to the fact that the author has left the Dragon scene.

The programs to accompany WIMP are very comprehensive and easy to use - a quick look at the instruction manual to get the gist of the various menu headings and away you go. With Icon Designer, icons can be edited pixel by pixel, flipped and generally pushed about by just the use of your joystick, and the program (written in WIMP BASIC) is slick and well thought out. MOUSEART could do with a completely separate review of its own - basically it is an icon and mouse controlled drawing program - but for ease of use combined with the facilities it provides, it takes some beating - the usual features for lines, boxes and circles are there together with the ability to fill areas with a single colour or a pattern (from a range), move and overlay areas of the screen, add text and a choice from three types of "brush" (including a spray-can) in a variety of shapes and sizes. All of these options are neatly rounded off by the (often-used!) UNDO facility. My main criticism of this program is that it lacks a screen-dump facility - although pictures can be saved to disk and printed later using your own dumper program.

Problems? Well if you attempt to load the Icon Designer or MOUSEART when the WIMP disk isn't in the drive, the system tells you (after the initial ERROR message displayed - very user friendly error message huh?) that every subsequent icon chosen is unavailable - even if you put the WIMP disk back in the correct drive... there seems to be no way to escape from this without exiting WIMP. @

To use the WIMP system in your programs you would first decide which icon to use for a pointer (using the *POINTER command), display the pointer (using #POINT) and select the condition on which the *POINT routine will exit (using #MOVEPOINT n - where n=0,1 or 2:exit when button pressed, exit when button released or exit straight away) The ease of use so far comes to an end as far as for testing for which icons have been selected by the pointer is concerned. This must be done by peeking two addresses for the X and Y locations of the pointer and systematically checking these co-ordinates against the locations of all the icons on screen (eg IF X>A AND X<B AND Y>C AND Y<D THEN.....) for each icon! Very scrappy and inefficient. In contrast to the pointer problems, the windowing commands are very simple to use eg *STORE stores an area of screen and *UNSTORE replaces it! Despite my reservations about how complete the package is, I was, on the whole, impressed with the facilities on offer for the price. @@ WIMP available from Dragonfire Services, Unit 3, Rising Sun Enterprise Centre, Blaina, Gwent, NP3 3JW. 12.00 disk only for Dragon 64K. Mike Stott-This review originally spread over two pages and has had to be edited for space reasons. Anybody wanting to see the full review should send me an SAE.

Want to make money?.

We have twenty six stands booked for the Hove show, but there is still ONE spare available, so if you think you have a product that would sell, and you want to try marketing it at the show, PHONE ME NOW!. It's a two table stand complete with power point, and it could be YOUR chance to make money. You have only a few days left to decide, so make your mind up now, it wont cost you a fortune, and it might even make you one!! Paul.

Logic Loss

Does anyone know what has happened to Dragon Logic magazine?. Personally I haven't heard or seen anything from Donald Morrison since Ossett, and people keep asking me if it has followed in the paw prints of Dragon User, so if YOU know what has happened to either Donald or his publication please let me know and I'll pass on the news to anyone interested.

HOVE TOWN HALL. 3RD. JUNE 1989.

BE THERE!!!

OS9/2 on a 128K Dragon(6) . . . Bob Hall.

Last time I described how I'd divided my software between two discs (one DragonDOS and the other OS9) and explained how to move the contents of the Tandy bootstrap file and a patched version of BOOT from DD OS9 LI V1.2 on to the DragonDOS disk. This time I'm going to describe the patches that have to be made, with outline reasons why, to BOOT and other modules.

First some tricks of the trade:- I patched the modules using DEBUG under OS9 Level I, saved, then verified (VERIFY/U) to reset the CRC, and then set their attributes (ATTR) to include 'e pe' (or else you can' reload them!) (There may be some advantages to using MODPATCH from the Tandy disk instead of DEBUG because you can update the CRC before saving it)). Some modules increase in size, or become unuseable by the system during modification - to work on these first change the size if required (where needed this patch is numbered 0) below), save a copy to disk (using save!), (reverify etc if needed), then patch the name of the module in memory to something else (and in the case of DDISK also patch the name in the device descriptors D0 and D1) finally, reload the new module (find its start using the L command in DEBUG) and got to it. Where possible below I've given the old contents of the register as well as the new; the offsets are relative to the first byte of the module (always 87). Where code is added to the end of a module the original contents (apart from the first 3 bytes, old CRC) are uncertain, so here I've grouped the code in machine code statements thus b7,ff,80; to give a little more structure and hence lessen errors. I'll describe the patches in classes.

THE DEVICE DESCRIPTORS: (from Level I, V2.0)

These form a particularly simple class - they can all be modified without saving and reloading. It took me some time to find out they needed patching - the reasons are given in "Inside OS9/2" by Kevin Darling (\$20 from Frank Hogg Labs), recommended reading for hackers. Basically we need to change the first byte of the 24-bit device address or else the system allocates memory mapping registers for impossible addresses (greater than 512K).

In detail for P,TERM,P1,T1,D0,D1(etc) :-

change 0E from FF to 07

and for TERM also

change 0F from C0 to FF and 10 from 00 to c0

for P

change 0f from 00 to FF and 10 from 00 to 02

THE DISK DRIVERS, BOOT AND DDISK

Here the problem is to hook the NMI interrupt routine into the new vector table at 00fc - unfortunately the first bit of the routine is OS9P1 clears the DP register from FF to 0, so this has to be reset to FF. In addition, BOOT needs its size changing so that REL can jump over it to find OS9P1, and also needs some temporary workspace to store the position and size of OS9BOOT file (I've stolen some from the bottom of MMU block 3F). Note that I've not patched DDISK to make format work correctly; I need an SW12 38 somewhere, I think.

A) BOOT (from Level I V1.2)

0) Chnage 03 from 82 to d0

1) change 31 from 00 to 01 ; 32 from d2 to 4c

33 from bf to 9f 34 from 01 to fc

35 from 0a to 12 36 from 86 to 12

37 from 7e to 12 38 from b7 to 12

39 from 01 to 12 3a from 09 to 12

17f from 8c to 86 180 from 92 to ff

181 from c7 to 1f

and add at 182 on (original contents unspecified) 8b;20,80;12

2) change 52 from 9e to cc ; 53 from 20 to e0

54 from de to 00 55 from 22 to 12

56 from 10 to 12 57 from 3f to 12

58 from 12 to 12 59 from 25 to 12

5a from 41 to 12 5b from 1e to 12

5c from 89 to 12

70 from 28 to 36

Save BOOT, as explained last time, to a .BIN file on the startup disk.

AIRBALL KIT / J.S.W. SCREEN DESIGNER

Obviously as both these programs are screen designers you need to own the original cassette game to transfer onto the supplied disc. To load to disc is simple enough and gave no problems.

The advertisement for these games states that you can re-design these games with ease. This is not strictly true as you can design new screens from scratch with the objects originally used in the games but you CANNOT REDESIGN OR EDIT the original screens or objects. (Soft. Ed. - Copyright prevents using the original screens) Therefore having spent a fair amount of time designing your new screens knowing where everything is, are you going to find much interest in playing it? In the very limited Dragon sphere what is the market? Only, we think, where several people are involved, one designing and one playing to give these old games a short lease of life.

We have the following comments on the basic program itself:

1. If you accidentally press BREAK whilst constructing screens you lose everything unless you type "CONT"!
2. When you wish to create a screen a prompt is given for a filename prior to designing. If you type an illegal filename then the error is not flagged until you have finished your design and tried to save!
3. The NEW tune supplied for you appears to be a Jean Michel Jarre copy.

GENERAL COMMENT

These designs will be welcomed by fans of the original games but we feel they are overpriced when compared with other new releases even if they are 19.99 on the Atari ST!

The two above programs were reviewed by Howard and Stephen Knight and are available at 5.00 each, Disk only, + 50P p&p from Dragonfire Services, Unit 3, Rising Sun Enterprise Centre, Blaina, Gwent, NP3 3JW.

Andrew Hill says "the reviewers have no idea of the cost involved in producing software." and "We have had comments on how useful and professional-like the system is in use - perhaps they know how to use it properly because they read the instructions !!". Any comments from anyone who has used either of these.

X-WORD 42. Compiled by J.D. Bateman.

ACROSS: 1A, Soft fruit used in jam, pies, tarts, etc. 2A, Drying implement found in the bathroom. 3A, Shrimplike crustacean. 3I, An asagai is one of these. 4B, Scottish John. 4E, Going on forever. 6B, Garden tool. 6K, Male swan. 7A, To sing or hum softly. 8E, Chemical spoon. 9A, Adhesive. 10B, State in U.S. having a river and beetle named after it. 11A, One over the eight. 11G, Cut off thin shavings or slices with a knife. 12A, Eighth part of a semibreve. 12H, Musical parts of a three piece suite. 13A, Common form of calcium carbonate.

DOWN: A3, 12 sided figure. B1, Pertaining to stones or the art of cutting and polishing them. C3, Used for loading old guns. D2, Drying implement found in the bathroom. E8, Broad bladed spade. F1, To regulate or keep in check. F10, Scarce. G9, Dogs feet. H1, Sort out an error when stocks become low. I4, Void or empty space. J3, The kneecap. J11, Domestic one is usually hot or cold. K6, Painful muscular contraction. L3, To permit. M1, Soft fruit used in jam, pies, tarts, etc.

As usual the first all correct entry out of the box gets a program from the Dragonfire list, second one gets a games tape from our collection. ALL entries to Paul Grade please.

| | A | B | C | D | E | F | G | H | I | J | K | L | M |
|----|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | B | L | A | C | K | C | U | R | R | A | N | T | S |
| 2 | B | A | T | H | T | O | W | E | L | | | | T |
| 3 | | P | R | A | W | N | O | S | P | E | A | R | |
| 4 | | I | A | N | E | T | E | R | N | A | L | L | A |
| 5 | | D | M | D | R | D | U | T | | | | L | W |
| 6 | | A | R | T | R | O | W | E | L | E | C | O | B |
| 7 | | C | R | O | O | N | L | | R | L | L | R | W |
| 8 | | Y | D | W | S | P | A | T | U | L | A | | R |
| 9 | | G | L | U | E | H | | R | | | A | M | R |
| 10 | | O | C | C | O | R | A | D | O | | P | | I |
| 11 | | N | I | N | E | V | A | W | H | I | T | T | L |
| 12 | | G | R | A | D | E | R | | | | A | | S |
| 13 | | | | | | L | E | | | | | | P |

General notice.

In view of some of the rather "bitchy" comments flying around I think I ought to remind all concerned that a "Review" is NOT an objective evaluation of a program, it is the opinion of ONE person, and should be read as such. We all have different standards and preferences, so don't get the underwear twisted if a "review" doesn't agree with YOUR opinions!. Paul.

Fishy Business Too...

Well, here we are again, with another lively month on the Dragon games scene gone by. Okay, so nothing much has happened, but that's never stopped us before has it? At the time of writing I've yet to receive any mail from you games fans, but that's probably because my first article has yet to appear. Confusing stuff this writing a month in advance (**Tell me about it!...Stephen**). Actually, it would be nice not to have to base next month's installment on letters. (This is a thinly veiled hint to all you programmers out there. Don't deny it, I know you're there, hiding under your little stones. I've seen your programs in Update. So why not have a go at a game, please. I'm not going to grovel, as his mmajesticfullness Dudley The Incredible Gamesplaying Goldfish does not resort to grovelling himself to mere humans, but let's face it; if a fish like me can lower himself to impart words of piscine wisdom to unenlightened mortals, I'm sure you serious programmers can stoop low enough to write a game. You might even get some cash.)

So, down to business. Firstly, I've seen the demo of Revenge of The Alien Bongo Beast etc, and it is brilliant (**You don't have anything to do with it, do you, Dudley?**) Doubtless many of you saw it at the Ossett show, and for those who didn't, believe me it is going to be a smash, barring a major cock-up. I can't wait to get my fins on the finished version. It should be out by the time you read this, and you can expect a review in Update before long.

I have now discovered that Pulsar's new game is called Impossible! (**I told you last time!**) Sadly, yours truly has not got a colour TV (it is a little known fact that most electrical shops refuse to sell colour tellys to fish), so I won't be getting a copy, as the advertisement clearly states 'colour only'. I'm glad that Pulsar have done this, as I would have been very annoyed to have brought the game and then discovered that I couldn't play it. Some would say printing a warning is bad for business, but if you ask me (and if you don't it's tough luck because I'm going to tell you anyway), it's just a good old fashioned bit of customer service. For that matter, Dragon software houses can't be in it for the money anyway. There have been several 'colour only' games in the past. I remember buying Alcatraz II and then finding it impossible to play because I couldn't see the obstacles. Transylvanian Tower was another one. More rights for people with black and white tellys, that's what I say!

Well, that's the lot. Don't forget the letters etc. See you next month unless MGM snap up the film rights to my life story (well, you never know your luck, do You?).

Write Then...!

Some time ago, Paul asked for some 'simple' material to publish in Update, as the majority of articles were getting very heavyweight. I have had some articles come in, which I will try to run shortly, but unfortunately some are not suitable for publication.

We can't print BASIC programs which go on and on for ages, it's simply not practical, because it would mean splitting the program over several issues, which would just add to the confusion. The ideal article is one which explains or reveals aspects of the Dragon, accompanied by SHORT programs so that the reader can see what is going on. A good example is the 'Multi Colour Paint' article written by Roy Cashmore a few months back. I'd love some more articles like that, so if you have something stored away, please drop me a line.

Your article need not adhere to these guidelines of course, but we are looking for 'easy' items at the moment, and an article which explains as it goes along is of great use to the inexperienced programmer. @ Stephen.

Micronet Gallery Pages.

I've been asked by Tim Hayton to tell you that as of now our Gallery page number is 811220058, so consider yourself told. I trust that you are sending Tim plenty of material for the pages ... you ARE, aren't you?!

PEEKING THE DRAGON (14) - MIKE STOTT

To start my article this month I will answer a question I have been asked by a few people. "Where do I get my Dragon repaired or modified if I live North of Birmingham and don't want to post it?" Here in the North West a few of us have been lucky enough to take ours to Frank Philbrow and now he is willing to offer this service to any Dragon owner. The usual SAE to me or phone call will get you his address. In the North East I am sure Chris Jobson (091 4165415) and the NE Dragon User's Club will be able to help you out. I have also been asked about adventure hints and 'cheat' pokes for games now that DU has gone. Well, I do not want my article to be just about games but I do feel that the people who like these types of software are being a bit neglected so let's give it a try through this page. Anybody needing help, just write to me and I will put your question in PEEKING and hopefully get the answer for you from one of our other readers. If you want a quickish answer do not forget the SAE, otherwise it could be several months before it is published. I promise not to reveal any POKE or HINT that I have been given in the past or the future by writers or Companies to help me review software but will only use readers' replies or what I have found out myself. To get help please be as specific as possible when stating your problem.

Andrew Hill telephoned me the other night and informed me that he hopes to organise another Dragon Show in Weston-Super-Mare possibly on November 5th. Details should be confirmed in the very near future.

Whatever happened to the old Dragon User reviewers. I expected to be inundated with offers of help when DU ceased publication but the response has been nil. They, and anybody else, are always welcome to join our band of reviewers. As I have not done a review myself for a while here is one I have done because the original reviewer has only a B&W tv. @ IMPOSSIBALL

This game is introduced by Neil O'Connor using a speech (or music) digitiser very effectively. There is also the usual George Cartwright musical introduction. Joystick control only, you steer a ball through a mass of coloured tiles which produce differing results - speed up, slow down, bounce, carry on, or lose a life. You are given five lives and five jumps (apart from the jump tiles) at the beginning of each level and any left at the end of the level are converted into points. PMODE3 is used throughout and has five colours of tiles plus scenery colours so therefore the ball changes colour each time the background changes so that you can see the ball. It is one of those games in which you want to beat your high score and also progress just that little bit further. Jonathan Cartwright is one of the few games writers left on the Dragon and let us hope he is encouraged by sales of Impossiball to write more for the arcade lovers

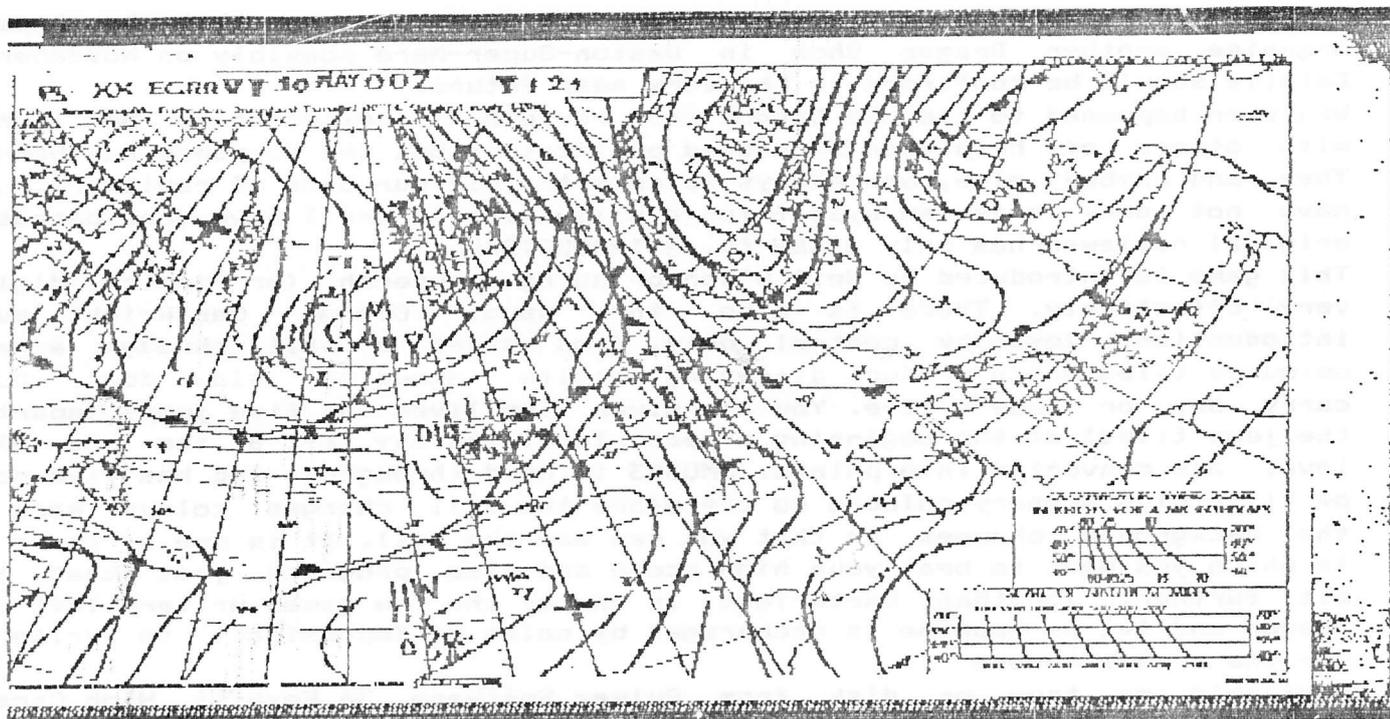
Available on tape or disk from Pulser Software, 36 Foxhill, High Crompton, Shaw, Oldham, OL2 7NQ for 5.49 incl. p&p.

For those people having difficulty loading Rolaball 2 from cassette :-
PCLEAR5:PMODE4,2:CLOADM:EXEC before loading should give you the whole of the screen. I am told by Jonathan Cartwright that there was a slight duplication problem and he has asked me to pass on his apologies. I have received two reviews of Impossiball from readers and if anybody would like copies of these I will be glad to send them on receipt of a SAE as they are rather lengthy to print in Update. The only software received this month has been Visitext De Luxe, an enhancement of the word processor, from Orange Software and a preview cum tester version of Letter Writer for Basic42 from Sutcliffe Electronics whose title explains its use.

##Don't be such an innocent, Mike!. Most of the Dragon User writers were in it for two reasons, [1] so that they could boast about "writing for a national computer publication", and [2] for money!. You don't REALLY think they could suffer the loss of image involved in having to admit that they wrote articles for a User Group Newsletter, do you?!

CoCo Matters (2) . . . Chris Rouse.

One of my favourite programs was published in the American magazine, Rainbow. It enables weather FAX pictures broadcast from the London Weather Centre, on short wave radio, to be displayed on screen and printed on a dot matrix printer. Yet the program is only 2K long and contains disk handling routines and a printer dump, as well as the FAX decoder. FAX pictures are sent in a serial format, rather like a cassette program, with a tone of 2300 Hz for white and 1500 Hz for black. They take about twelve minutes to build up, line by line, to the final picture. In order to store the whole picture the CoCo is switched to the 'all RAM' mode to allow for over 50K of data to be stored. The picture is equivalent to nine graphic screens in a three by three matrix. Many stations around the world transmit FAX pictures, normally on Upper Sideband and a speed of 120 line per minute, but I find that those from Bracknell on 4.782 MHz and 3.29 MHz give the cleanest pictures. From about 10pm to midnight good pictures can be received from Moscow, but the slightly fading signal gives rise to some noise on the picture that shows up as bands of dots. No special equipment is required other than a shortwave radio capable of receiving sideband signals. Simply plug the cassette lead from the computer into the extension speaker socket on the radio. I have included an example below. It is not the best I have received, but it is the only one which will fit the space as the normal size is about A4. One last point, the program WEFAX will work on a Dragon and would make an ideal school project.



TRSDOS (2) .

Last month we looked at the FDC registers. This month, I would like to briefly mention the various tables and the use of DSKCON. The existence of the tables and messages can cause problems when trying to disassemble the ROM, as they appear sometimes as genuine code, although often the disassembler prints a series of ????. Few of these tables are of use unless you want to customise some of the messages. The DOS startup message is at \$C139, the instructions for single drive backup are at \$D35F, and despatch tables for commands and functions are at \$C1F1 to \$C237 and \$C22C to \$C237 respectively. These last tables are made up of two bytes per address as usual. The major table of use starts at \$C004 and gives the address of DSKCON's entry point. This routine is used to read and write 256 byte blocks of data to and from the disk. Simply set up the command (2 for read, 3 for write) in \$EA, the drive number in \$EB, track in \$EC and sector in \$ED. The buffer address is loaded into \$EE, \$EF then JSR [\$C004]. Any errors will be reported in \$F0. This easy to use routine is the most powerful available and will form the basis of almost all machine code disk routines.

Split Baud Rate on a 64. Chris Jolly

Many bulletin boards support 1200/75 split baud rate, as do many cheap modems. Unfortunately, computer manufacturers seem to have assumed that the modem manufacturers would look after the split rate and made their machines with single rate interfaces, but modem manufacturers have assumed that the computer manufacturers would sort it out and give their machines split rate interfaces. The Dragon 64 of course only has a single rate serial interface, which means operating at 300 baud when accessing most bulletin boards. With 1200/75 split rate operation, you can receive at 1200 baud while transmitting at 75 - the advantage is tremendous (unless you happen to be uploading a file to a bulletin board) because you can receive four times as much data in the same time, cutting down on boredom and 'phone bills. I have a Voyager 7 modem connected to my 64, which supports both 300 single and 1200/75 split rate. I have recently found a way of operating at 1200/75 using software only. The trick is to switch between 1200 and 75, the problem is knowing when to do it. The solution is not perfect, but it works for me. I use Telecom Gold regularly. Basically, the ACIA needs to be set to 1200 until a keystroke is detected on the keyboard. Then the program switches to 75, transmits the character, and returns to 1200. The way to ACIA works makes this rather tricky. Assuming that no characters have been sent previously, the IRQ flag is 0 and the TDRE Transmit Data Register Empty is 1. When a character is loaded into this register, the chip transfers it to the Transmitter Shift Register, begins transmitting and immediately sets the IRQ and TDRE to 1. This means that you could load another character ready for transmission whilst the previous one is being transmitted, but it does NOT mean that you can change back to 1200 - you must wait until the whole character has been transmitted, then quickly switch back to 1200 ready to receive the echo character. The program must read the status register until the first IRQ is found (reading the register automatically clears it), then wait until the next IRQ is found, which the ACIA sets as soon as the character has been transmitted. Because the Transmit register is empty during this whole process, only the IRQ flag conveys any information about the transmitter's state. Therefore the transmitter interrupt must be enabled, but the CPU interrupts must be disabled so that the program can monitor IRQ until it flags end of transmission. The following routine is an assembler function which transmits the character in register A at 75 baud, waits until it has been fully transmitted, then switches back to 1200.

```

XMIT   ORCC    #10    disables interrupts
       LDX    #FF04  ACIA address
       LDB    #27    enable transmitter interrupt
       STB    2,X    write command register
       LDB    #32    75 baud
       STB    3,X    write control register
       STA    ,X    write transmit data register
LOOP1  LDA    1,X    read status register
       BITA   #80    check for IRQ
       BEQ   LOOP1  loop while clear
LOOP2  LDA    1,X    read status register
       BITA   #80    check for IRQ
       BEQ   LOOP2
       LDB    #2B    disable transmitter interrupt
       STB    2,X    write command register
       LDB    #38    1200 baud
       STB    3,X    write control register
       ANDCC  #EF    enable interrupts
       RTS                    return to caller

```

You may have to slow your typing down a little to wait for the host to stop sending before you try to send a character back, but it works well.

Notice to CoCo Addicts.

Just to stop you complaining (well, that's my excuse and you're stuck with it!), I have now, at enormous expense, got myself a much modified CoCo 64K running DOS 1.1, so those of you who were complaining that you couldn't send me discs because I wouldn't be able to read them on the Dragon can now relax, safe in the knowledge that I now have the capability to ~~corrupt~~ read both Dragon AND Tandy discs. Paul.

North East Dragon User's Club

ANNUAL REVIEW:

Just to let the Dragon world know that the club is still going strong. Our membership stands at 16 with average attendances of 8 or 9 at our weekly meetings.

The topics covered during the year included adventure reviews, Flex, machine code, hardware conversions eg D32 to D64, demonstration of Olivetti PC, Harris42, 80 column boards, OS9 RMS, communications including Psion to Dragon, Desktop Publishing, WIMPS, Picture Maker, and DynaCalc.

We have had an outing to a British Telecom telephone exchange and a visit by a guest to show his Dragon graphic capabilities.

Members have aquired disc drives, printers, 80 column boards, and modems.

Our future programme includes an Amiga demonstration (who says Dragon owners aren't a tolerant lot). There is also a visit to the local BBC TV and radio station lined up. In addition at least half of our members are also in the NDUG and a few of them are chancing their arm at writing articles.

Just as a hint to other clubs, as well as the inevitable losses we have added 5 new members to our ranks this year, some through adverts in libraries, others by going to the Ossett show and talking to people. A good trick is to 'phone people advertising Dragon equipment for sale in your area and ask them to pass your name on to the buyer.

If there is anyone in our area who would like to join us contact me, Chris Jobson, on (091) 416 5415

The Editor's Late Again Late Bit...

Last month's Late Bit was quite early if you recall, but this one is late again. There are many reasons but they are not of interest to anyone so I won't bore you with them.

As I said on the front page, you know the show details, so PLEASE make every effort to be there. I have had some feedback on the subject of stand minders (thank you), so hopefully I will get time for a look around. There are a lot of stands booked up, so this so really is worth a look. There may not be many more in the future, so please support them while you can.

There were no takers to my film poser last month (Name the film: "I will offend again...I get my orders from a higher source"). The answer was, of course, ROBOCOP. All I can say is that you lot either (a) don't watch films or (b) aren't watching the good ones! As a special show competition, name the film which this line comes from:

"Human teleportation - molecular breakdown, decimation, and reformation, is inherently purging". The prize is the same as last month, a copy of Formula One. There is only one winner, so if you are going to claim at the show, BE EARLY!

For anyone looking for HenceForth this month, I do have an article (Bob is still having major problems), but as I only have one and I don't know when he will be back into full swing, I will keep it until the next issue to space things out.

On the NDUGSoftware side, Inside The Dragon has now SOLD OUT completely. I have no more stocks, and it is unlikely that I will get any more, so if you missed out, then sorry, but you should've been quicker. In the next month or so I hope to have Colossal Cave and Adventure Writer up for grabs, but they are NOT AVAILABLE YET, so no orders please.

Finally, the show is of paramount importance. With any luck, you should be reading this before the show, and so will have one final reminder. And when you do turn up to the NDUG stand, PLEASE bring an article with you to keep me "happy" - well, sort of...

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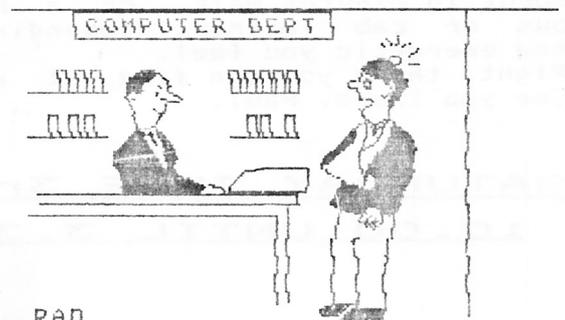
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RAD

The Late, Late Bit

Now who can I insult this month?. There's a distinct shortage of suitable victims at the moment, but I can't get away with a nice, "compliment everyone" sort of page ... every time I try I get floods of letters complaining about it!. The main trouble with running a computer group is that whatever you write HAS to be in some way connected with computers, which cuts out all the more "interesting" stuff. I was thinking of running a "Page 3" pic of Simon Jones tastefully posed in his latest range of "6809 User" underwear, complete with baseball cap, (well, Simon IS a computer related subject!), but I'd only get complaints from the Sun that I was trying to pinch their readers, so I can't even do that!. I just can't seem to win at this game. Of course, I could always try "speculative reporting" and tell you all about the new machine being secretly developed by Eurohard S.A. It is alleged to be a multi user, multi tasking, multi processor computer, with 60M RAM, quadruple 50M hard drives and eight languages permanently in ROM, fully compatible with ALL other computers, and will have Kray 2 and Spectrum emulators. In order to undercut competition price will be under 50.00 for the basic machine, which comprises of a plastic case and dummy keyboard only. Oh what's the use?!, if I make it sound even half way credible someone will be writing to ask where they can buy it!. What else can I try?, a selection from letters?. "Dear Paul, I read in a magazine that you can use the printer port to control central heating systems, but when I connected mine to the mains it blew all the fuses and melted the Dragon completely. Do you think there was a mistake in the article and please can you tell me where I can get the Dragon repaired?". "Dear Paul, I haven't received any copies of Update since November 1986, can you please send the issues that I've missed?. By the way, I changed my address about the time the newsletters stopped arriving, perhaps I should have mentioned this to you at the time.". No, that's no good either, even more boring.

So I'll tell you all the interesting news that's turned up this month except that there hasn't been any to tell you!. Is the point starting to sink in yet?. If you don't send us news, articles, reviews, etc, then we don't have anything to print, so I get bored trying to fill pages with a load of nothing, and you get bored reading it. Simple, no?.

I could tell you all about the Hove show, of course, but if you hear much more about it you'll probably be too bored to attend. Still, I can but try. The reason the Show is being held at Hove instead of London is that we couldn't get a good enough location there at a price we could afford it was a choice between getting a grotty hall in London at an extortionate price or a really top class one elsewhere at a more reasonable cost, so we decided on the latter. Fringe benefits were that it gives you the chance to have a good day at a seaside resort as well as the best Dragon show for years, and that we could lower the price of stands so that more people and firms could afford to take them. Why June?, because everyone told me that you couldn't hold a computer show in summer, and I NEVER do as I'm told, and because I thought you'd rather travel in fine weather than freeze your assets off on a draughty station in the middle of winter!. So now you know the reasons, and there's no reason for any of you to write and ask me "why".

Just in case you're wondering why Stephen and I haven't been indulging in our usual snide remarks recently, the main reason is that we seem to have used up all the good ones, and anyway Your Editor has been following other pursuits this month (no, NOT those,). It seems that he has gone all Dramatic and been playing at Assistant Stage Managers as well as Newsletter Editors, which hasn't left him much time for composing insults about Your Beloved Chairman!. Don't worry, he'll probably be back to something approximating normal by the time he types up the next issue.

Well, that's about all for the moment. See you at the Show, and don't forget that the bar opens at 1 o'clock, and that Stand Staff greatly appreciate a drink!.

Paul G.

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DRAGONFIRE NEWS COLUMN

LEADING DRAGON supplier, Dragonfire Services, have just announced the release of a great new adventure, available for the first time at the Hove Dragon & Tandy Summer Show. Available on both tape and disk, Don't Squall is based on the work of a Private Investigator. Priced at \$4-00 is bound to be a big hit, and demand high.

Also on the list of new titles from Dragonfire is Gothic, a new font in its excellently reviewed range, which add new type-styles to the best Dragon word processor, MacGowan's Printer Control. The new font, they say, is an "Old English" typeface, and priced at just \$2-00 - tape/disk.

Dragonfire suprised all late last year by releasing their version of the famous Mac. Gem on the Dragon! It is a real first-class utility, which gives the standard Dragon many new features, including Icons, Windows, Pointers, and Drop-Down Menus. It's receiving the highest praise from reviews everywhere, for its fantastic range of features, and its low price of just \$12-00. It runs on any 64k Dragon, with Dragon or Super Dos disk-drive. A mouse it planned for use with the system for later on in the year.

Intelligent Database, a remarkable new-style database system for the Dragon and Tandy, has, said a Dragonfire spokesperson "Just completed its final development stage" and that just the final touches were being added before release in early Autumn - along with other titles, including an arcade game.

The Dragons' best selling mag, Dragon Magazine, is still on the up and up, said publishers Dragonfire. With the total readership "Now approaching 300", it has confirmed its position at the top. It's published on a bi-monthly basis, and has now introduced a sister news-sheet, "Stop Press", to offer the latest news coverage between issues. It is available free of charge to Dragon Magazine readers! Dragon Magazine costs just \$6-00 (UK) per year, and has just entered its fifth year of publication!!!

LATEST! Dragonfire are, it was revealed late last night, to organise yet another Colour Computer Convention, following the success of last years in Weston-super-Mare, and this years Summer Show at Hove which they are jointly organising with the NDUG. Further information will be published in a future Dragonfire News Special!

EDITED BY - ANDREW HILL

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