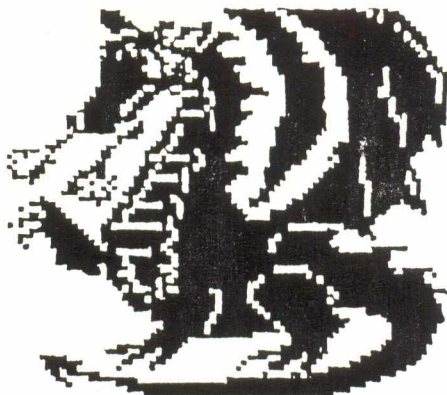


Dragon Logic



Issue 9

UK Only

INSIDE

£1

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Jonathan Cartwright is on Holiday

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Dragon Logic, 72 Diriebught Road, Inverness, IV2 3QT.

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Editorial

DON MORRISON

They say the Summer is traditionally the Silly Season, the time in which so many companies go to the wall. The reason perhaps? Well evidently most people would prefer basking in the unusually hot sun rather than programme their computers. Not such a strange phenomenon you might say, but it leaves the computer press with the unenviable task of producing their wares with rather less reader input than usual. There lies the reason for this slightly smaller than usual edition of Dragon Logic. Things should hopefully be back to normal by next issue, but don't quote me on that!

Very little news information has come our way over the last month or so, but the main news item, which we can now confirm, is that the NDUG has booked Hove Town Hall for a repeat performance of their recent summer show. The venue will next be used on Saturday 2nd June 1990 and anyone interested in purchasing a stand should contact Paul Grade at the usual address. The other major news item is that Dragonfire Services has confirmed the date for the next Colour Computer Convention in Weston Super Mare as being December 10th. Again, anyone requesting details, should contact Dragonfire as soon as possible. Both shows may seem some way off, but these events really do have to be arranged months in advance.

On the software side, very little has been released, the NDUG has added several other titles to its list of software and ARCSOFT has re-released its highly acclaimed The Thirteenth Task which features in this issue's Adventurers Anonymous and Knight Computer Services has announced details of a new DTP package which they hope to launch before the forthcoming Colour Computer Convention. Expect a preview of the program next Issue.

This Issue we introduce yet another semi-regular feature, the subject being Applications Software. The series kicks off with information on Spreadsheets and next Issue it features Word Processors, so if you have any information you'd like to add on either topic, or if you have any suggestions as to what we should cover in future issues, then get in touch.

LETTERS

If you would like to correspond with any section of the magazine write to Dragon Logic, 72 Diriebught Road, Inverness, IV2 3QT.

Alan Swift's article in Issue 4 on fitting a 3.5" Disk Drive for the Dragon sparked an interest in my brain and I began looking round for drive suppliers J&N Bull appeared to have stopped advertising in Micro Mart and I was keen to get the maximum benefit to the change by fitting a double sided drive to obtain 720k capacity.

I first saw some drives (already cased) in an Electronics Equipment and spares shop in Stockport. These turned out to be single sided at about £40. On enquiring about D/S drives I was told there were some expected soon and would be about £80.

So I visited a Computer auction at Bowler's Leisure Centre (Trafford Park, Manchester) and lo and behold there were three batches of brand new NEC 3.5" d/s drives, approx 30 in total. To cut a long story short I got one for £40 - some went for £35 and £45 - but I was happy. (At a further auction at the same venue similar drives went for as low as £28).

The installation has already been described by Alan Swift but I give below some of the problems I encountered.

A) Getting screws of the right sizes and threads necessary for fixing the drive into 5.25" footprint case I obtained from a private source.

B) The configuration of the 34 pin connections on the drive, turned out to be the opposite way round to the existing 5.25" drives and to enable the IDC 2*17 socket to fit, it had to be crimped onto the existing ribbon cable in a non standard manner (this may not apply to other makes of drives) and the ribbon twisted to insert the pins into the socket.

I have started using the 3.5" drive as No.2 - the jumper on the drive PCB being changed from D0 to D1 - and using the other 5.25" drive as No.3 (the jumper was changed to D2 on its PCB).

Having obtained the case and power supply jumper cheaply the total costs were approx £45. I hope the above may help others to follow Alan Swift's lead to keep upgrading the Dragon.

Geoff Smith, 51 Dalebrook Road, Sale, Cheshire, M33 3LB.

Most people appear to like our latest title, Revenge, and fortunately it is selling well, despite the lack of reviews. It seems that people are starting to trust us in what we define as a good game, many buy our titles without knowing anything about them.

I have seen copies of all Dragon magazines and quite honestly I think Dragon Logic is the best of the amateurs, especially in presentation. I hope it takes off more so than the other amateur magazines, as it is easily the best. Your review of Mandragore sold more copies than I could of hoped for and you are also responsible for Kouga entering the market, and what a good move it turned out to be.

At the moment we have no further plans for the Dragon A 50% royalty is still being offered, however, for any Dragon and Tandy titles. Unfortunately Stewart Orchard has had to abandon his plans to write a game similar to Magnetrone, due to lack of memory.

John Foster, Kouga Software, 94 The Oval, Firth Park, Sheffield, S5 6SP.

Editor Replies: However much I or Dragon Logic may have done to establish Kouga Software, the fact remains that if their titles were not of such a high standard, the company would never have achieved the measure of success they are now enjoying.

News

If you have any new products for the Dragon- Software or Hardware - write to Dragon Logic, 72 Diriebught Road, Inverness, IV2 3QT.

Following the apparent success of their previous summer show in Hove, the National Dragon Users Group has announced details of its plans to stage a similar event in the summer of 1990. The event will once again be held at Hove Town Hall, the location for their previous show, on Saturday June 2. Further details can be obtained from Paul Grade, 6 Navarino Road, Worthing, Sussex.

A unique weather picture decoder has been launched by Lee Cook's Public Domain Library. The program is said to decode weather pictures sent over short wave radio which can then be stored on disk or dumped on a Dot Matrix printer. The program requires a short wave radio capable of receiving Single Side band transmissions and at least 64k.

The program is available on Dragon DOS, Super DOS and Tandy DOS. Printer dumps are available for Tandy DMP105/6 and EPSON compatibles.

WEFAX is available in 2 versions, the only difference between them being that one contains a printer dump routine and a 17 page manual, while the other features only minimal documentation.

The latter version is available from Mr Cook's P.D Library at the normal rates while the full version is available, priced £5 from Chris Rouse, 18 Gregson Close, Bridgemary, Gosport, Hants.

NDUGSOFT, the Software Subsidiary of the National Dragon Users Group has recently added further titles to its growing list of material.

The three titles involved, Fun Disc, Best of Input and Anitunes, lean heavily towards the light hearted nature of Dragon computing, with a selection of programs best suited for young children.

FUN DISC contains over two dozen simple games, quizzes, tunes, utilities etc written and compiled by R.A.Davis. specially for the Group.

"Best of Input" contains a selection of program listings from the hugely successful Input magazine, produced by permission of Marshall Cavendish LTD.

ANITUNES contains a selection of tunes with animated graphics displays.

All three programs are available on DragonDOS only, priced £3.50. Orders should be sent to Paul Grade, 6 Navarino Road, Worthing, Sussex.

The Norweigan based Dragon Computerklubb has recently pulled out of the Dragon market.

The club which provided its members with access to UK titles and a regular Newsletter has been forced to close down owing to managerial problems. Over the past few years, the Computerklubb provided Dragon users throughout Scandinavia with a vital link to the UK Dragon market and its closure will pose serious problems for all remaining Dragon users in this area.

Pulser Software's recent takeover of Orange Software has resulted in the company taking stock of over 80 titles, making it the most comprehensive Dragon company.

Among their most recent titles are Sprite Designer, Larkspur Waldorf II, Visitext, North Sea Action, Hi Text Plus and French test, all of which will feature in Dragon Logic in the near future.

POSTSCRIPT



I thought that the best start to this month's POSTSCRIPT was a photograph scanned through and printed by a POSTSCRIPT printer. I hope that you find the results impressive.

Also last month I gave you some idea of the programming language, but I won't go into further details of the actual commands. What will be interesting though is the fact that one day I will try to connect my TurboLaser/PS to the Dragon. Having got only a Dragon 32 this presents a problem since there is no serial connection. However, as I mentioned in the very last Dragon User issue, that a POSTSCRIPT printer can also be connected on a parallel port. The DRAGON 32 has a printer port and therefore I will try to make a connection. I will let you know if my attempts are successful.

As we mentioned earlier the use of POSTSCRIPT language is to manipulate text and graphics on a printed page. The commands to do so are very similar to those for the screen as we saw last month. For a reminder consider the following example:

```
0 0 moveto
100 200 moveto
200 100 moveto
0 0 moveto

stroke

showpage
```

This simple example will draw a triangle with end points 0, 0, 100 and 200, 100. There is no separate DRAW command for POSTSCRIPT. The imaginary graphics cursor will move along leaving a line behind until the interpreter finds a **closepath** command, which in fact is the instruction for drawing a line back to where you started or **newpath** which means start at 0, 0 again.

So as we can see the move command is equivalent to the DRAGON BASIC DRAW command. A quite interesting idea is that POSTSCRIPT supports colour printing devices as well. However, if you think that an AppleWriter costs more than £2000, you can imagine that a colour printer will cost at least 4 times as much !

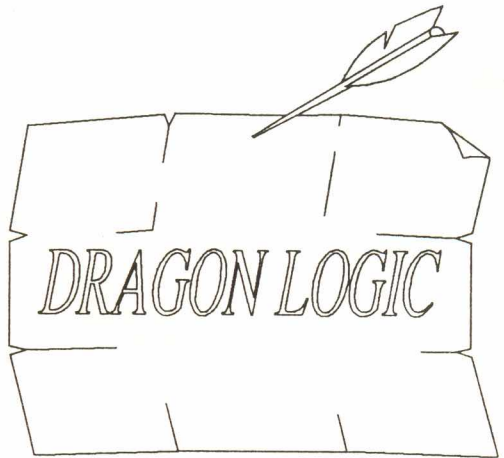
Another important issue of printing using the POSTSCRIPT language, is that of resolution. If you consider the above photograph a close look will reveal that there are a lot of little pixels gathered

together, at some points so close that they form a black background, or if they are a bit sparse a grey background is formed. Considering a A4 size page which is 8x11 inch paper at say 300 dots per inch has a resolution of 2400x3300 pixels. The amount of memory needed to hold this information is a bit less than 1 Mb ! Makes the DRAGON look small. But never mind, this is the printer's problem. And it is very common that today LASER printers will have as much as 16Mb of memory. Some of them in fact have a hard disk inside them rather than using electronic memory chips.

The text handling in POSTSCRIPT is very flexible. The fonts used by the printer reside inside the system itself in a ROM. To access these fonts POSTSCRIPT provides a variety of commands such as `findfont`. The words used to address the fonts are **TimesRoman**, **Helvetica**, **Courier**, **Gothic** and a great variety of others. Because there are so many printers available in the market today, there are so many companies which provide POSTSCRIPT fonts. The reason POSTSCRIPT is considered so important is that it is both device and resolution independent. Device independent means that the language is standard (think of Dragon Basic, CoCo Basic, and other versions of Basic - which are fairly standard). Resolution independent means that because POSTSCRIPT uses vectors rather than bitmaps, the higher quality of the output device, the better the image appears on the paper. Now if you consider that all the work is done on the monitor, the actual printing quality is far greater.

I have come to the end of this months article. If there are any questions that you need to ask please write to **DRAGON LOGIC**. I understand that POSTSCRIPT is something of a distant dream for the DRAGON. Although it is perfectly OK to produce ASCII files, using the faithful DRAGON, for printing on a LASER printer supporting the POSTSCRIPT language, there are no packages such as VENTURA or PAGE MAKER which are used in the more professional world of PCs. These packages will allow you to create images as well as text using a great variety of fonts.

I will leave you with the following image. This unlike the very first picture is a line art image.



Sotos Mandalos

*Dragon Logic congratulates Sotos and his Wife who are now the proud parents of a baby boy.

HARDWARE

DOS Plus

During the life of the Dragon there have been enough Disc Operating Systems and perhaps it is now about time a standard DOS was produced to make it easier for the user and cheaper for the Software producer.

Dos Plus came after Delta, Dragon, Superdos and Cumana Dos but there is its greatest advantage. All their problems have been picked out (and there were some) and what you are left with is the best around.

Available with the Dos Plus system is a manual which is worth a look at on its own - getting started, data storage, files - all are explained and examples are provided. Full details of the Directory track, M/code and file record formats are shown along with error codes (Dos Plus adds some more), hooks and Dos workspace.

Now to the system. I cannot report any problems with using the system at all and the extra features such as Disc naming and numbering and different printouts of the directories are a pleasure to use. Copying either using one drive or two never gives a problem but there does appear to be a compatibility problem on bought in software, confirmation of this are the short patches you sometimes see in magazines. To get a piece of existing software to work with Dos Plus, one that springs to mind is Sprite Magic, by Chris Jobson in Dragon Update Feb '89, also Macgowan's Printer Control does need some altering and errata sheets do accompany the manual. Now the reason for these conversions lies in the previous systems. Dos Plus is very picky, correctly so, in all its file handling processes, so if an error exists in old software then it isn't picked up until run on Dos Plus. Now we come to the reason to adopt Dos Plus, here is a product that functions correctly, has excellent documentation and in Phil Scott has someone who can back it up. Ask him a question, or tell him a problem and the answer will arrive, the correct answer, only this system can offer this.

For Delta users, Dos Plus Delta can be added to run "Dragon Dos compatible" software, both systems can be put in one controller, as I have done on my sons' Dragon, obviously the transfer of software between my systems - Cumana controller + Dos Plus to Delta Controller - takes place with no problems at all.

The sooner suppliers begin to use Dos Plus then the better all round. BUY IT, you know it makes sense. Perhaps Phil Scott should issue the software houses that produce basic programs with Dos Plus thereby initiating the process that will lead to one DOS.

Dos Plus is available from Pro-Tech Systems, priced £10.00 + £3.50 for manual at 25 Pelican Road, Pamber Heath, Basingstoke, Hants, RG26 6EN.

*Updates for registered users are available, the latest is 4.8. Protech also supply controllers, including a twin dos system similar to the one mentioned above.

I require a Race RS232 I/O Cartridge which I am willing to buy or swap for. Also I have acquired a Farnfax 16k Rom/Ram memory pack with which I have had little success. I'd be very grateful if anyone could help me with either of my problems. Contact me at 12 Hereford Close, Prospect, Worksop, Notts, S81 0PP.

Alan Swift



Name: Music Maker
Author: David Makin
Supplier: John Penn
Price: £5

By Stuart Beardwood

Music Maker is an all machine code programme which allows you to write your own four channel music or copy the notation from sheet music. As with Music Maestro and Composer Companion the music is written onto a graphic representation of a musical stave (PMODE4, white on black).

The tape comes in one of those moulded plastic wallets, designed to hold two cassettes. They look nice on a book shelf, but don't fit in any sort of cassette storage device! The good thing is that the manual (a small booklet in this case) tends NOT to get lost among piles of listings, other manuals, Dragon Logic back issues etc.

The programme is very comprehensive and covers most of the symbols and notation found in sheet music. One up on its rivals is its ability to deal with 'tied' notes and rests. Also the facility to change the 'Play Shift' of any one of the four channels allows the playing of notes which would be out of range on the working screen. The tempo of the music remains constant throughout a tune, but the tempo of the whole piece, and the play shift of each channel may be altered whenever a tune is loaded into Music Maker. Music may be saved as stand-alone machine code or as a file containing note data to load back in for future development.

The presentation and graphics are excellent, although the screen does tend to look a bit cluttered when writing complicated pieces. When viewing a tune, I would have preferred a 'scrolling' display rather than have to wait for sections to be wiped before the next section appears, it just seems a more natural way of displaying anything which needs to be read, either music or text.

Music Maker makes it easy to create music for your Dragon, the manual even has a section giving what amounts to a musical notation tutorial so even the most non-musical Dragon tapper should find this program quite easy to use. The sound of music is a bit too 'light' for my taste, but it is clear and pleasant to listen to.

*See also Page 12
for a review of
Anitunes and Page
15 for the chance
to win a Unique
Stereo recording
of Dragon genera-
ted music.



softscene

With Donald Morrison,
Geoff Smith & Stuart
Beardwood.

Name: North Sea Action
Author: Geir Hovland
Supplier: Pulser Software
Price: £2.75

North Sea Action is the first release from one of Norway's many enthusiastic programmers, Geir Hovland.

Following the Norweigan theme, the game is set in a North Sea Oil field where you control a drilling platform. Under the water you direct the pipeline and your mission is to collect as much oil as possible.

Using the Right hand joystick you must guide the pipeline to several oil spots and numerous oil barrels, always wary of the many oil monsters which lie beneath the sea. Should an oil monster hit any part of your pipeline you automatically lose one of your four lives.

If you notice an approaching oil monster you must prevent death by withdrawing your pipeline to the surface, using the fire button.

However, if a monster has started crossing the screen, you can guarantee that

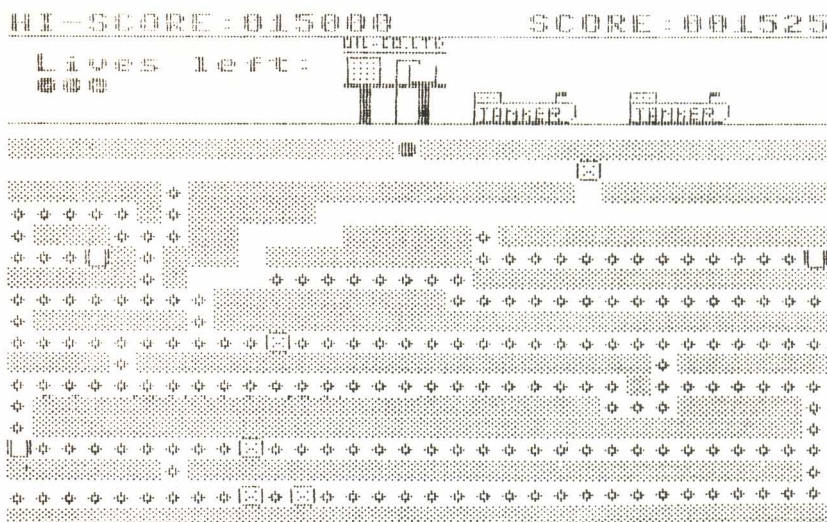
there are no further monsters behind it and you may use this information to help you collect as much oil as possible.

For each oil spot you receive 25 points while 200 points are awarded for each oil barrel collected. You also get a bonus life for every 10000 points scored.

As with most games, North Sea Action starts of relatively easy, though the number and the seemingly continual parade of oil monsters does tend thwart ones efforts. There are in my opinion too many oil spots to collect but fortunately there is no time limit.

The PMODE4 Graphics are well designed if a little simple but this does not detract from ones enjoyment of the game. The short burst of music at the start of the game and the various spot fx are reasonable, certainly for a budget game such as this.

For a first effort North Sea Action is an interesting game, fairly difficult at times, but enjoyable nonetheless. Great fun for the kids especially.



Name: PC FONTS

Author: Steve Knight

Supplier: Knight Computer Services

Price: £4.99

Anyone possessing McGowan's Printer Control Word Processor (all versions) or Desktop+ should strongly consider purchasing PCFONTS from Knight Computer Services.

This software package includes 20 ready-made fonts for use with McGowan's programs. Also provided is an improved font designer to allow further designs to be prepared more easily than with the CHANGE GRAPHS mode in the word processor. There is a further facility to enable font designs prepared using Knight's Dragon Graphics Studio to be made suitable for McGowan's programs (so far I have not had a lot of success with this facet but it could be my fault).

The fonts provided on the disk are - Default, Bold, italic, Script, Hitech, Commando, Stencil, LCD, Alphabet, Spyder, D-Height, Halfhite, Graphics, shadow,>NNLQ, Halfsize, Medium, 6*6, Outlined and Pmode3, and it depends on the mood and type of composition as to which font is chosen. The size of printing chosen also has a bearing on how the final result appears ie. a favourite font of mine - SHADOW - looks better to my mind in the larger sizes, in normal size printing it looks to be too crowded.

The names given to the fonts are generally quite aptly named:-

BOLD - is very solid looking.

SCRIPT - uses joined-up lettering.

D-HEIGHT - is a double height font formed by using the upper case characters as the top half of the letters and lower case characters as the lower half. The line spacing must be altered to 8/72" for the two halves to join up and it is necessary to arrange your lines so that the two halves "marry up" exactly. (It can be a very interesting exercise!)

HALFHITE - utilises reduced height upper case characters for the lower case (a font sometime known as Orator).

GRAPHICS - each letter (upper and lower case) is in the form of a graphics character and these can be used singly or joined together to produced the desired graphics image. (Not strictly a font but it can be used to manufacture giant print characters if desired).

OUTLINED - as its name suggests, this consists of white letters outlined by black. Can be used with a black background on a graphics screen to make legible text.

SHADOW - similar to OUTLINED but with additional black to the bottom and right of the character giving a shadow effect.

LCD - the upper case letters are in the form of characters used in digital readouts, the lower case characters being only of a similar outline. Use upper case only for the true effect.

HALFSIZE & MEDIUM - these are reduced width characters and so the individual letters are spaced further apart.

The remaining fonts each have their own distinctive style and by practising their use in different situations you can provide distinctive printing for your correspondence, or professional looking posters with some of the more exotic fonts.

*Due to reasons beyond our control, we were unable to bring you the reviews of DGS+ and TEXTPRINTER. Both programs will feature next Issue.

Name:Sprite Designer
Author:James Plester
Supplier:Pulser Software
Price:f4.50

During the past few years, Sprite Designers have been a rather rare commodity, the only one to have achieved some measure of success being Sprite Magic, and that, like so many Dragon utilities, has disappeared into obscurity.

Now Pulser Software have released what can only be described as one of the best Sprite Designers ever to feature a Dragon label.

The program comes in several parts. Featured on side one is the main program along with a collection of screens drawn using the program while side two features a demonstration program which contains some excellent examples of the standard of animation the program can achieve.

Having loaded the main program, the Main Grid is displayed. Using the right hand joystick you can move the small cursor around the grid, filling in each little grid as you go along, slowly building up your sprite.

The screen itself consists of the main grid and two smaller boxes which display your sprite in normal and inverted colours. These smaller boxes are the actual size of your sprite. Each is 40 by 40 so there is a total of 1600 pixels available to you, or more if you join them together.

There are a large variety of commands a brief description of which follows:-

Clear Key - This clears the main grid and the two smaller boxes.

Cursor Keys - These can be used to position the sprite correctly within the grid.

'I' - This inverts the sprite.

'C' - This changes between the two colour sets (buff and green or green and black).

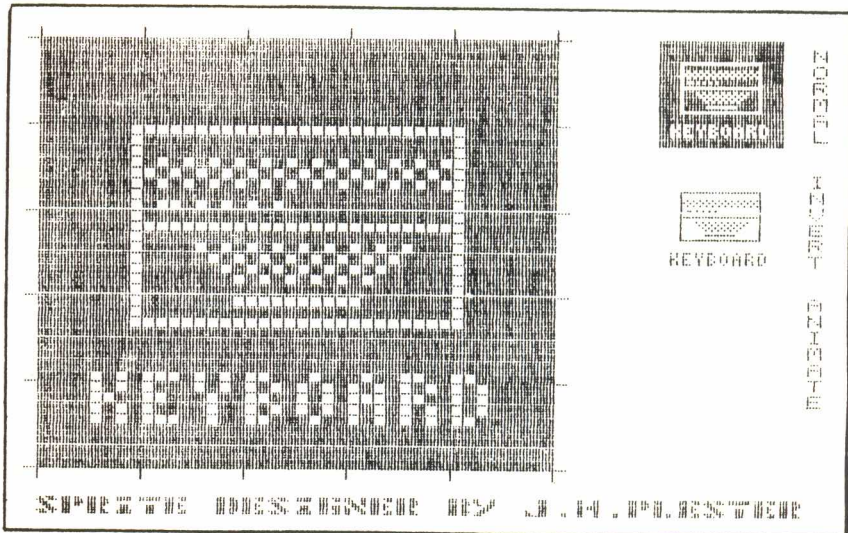
'L' - This can be used to load previously saved sprites.

'S' - This saves your sprite to tape.

'T' - This option mirrors the sprite from top to bottom.

'R' - This mirrors the sprite from left to right.

All these commands are used to manipulate the sprite but once you have achieved the desired shape you may store the sprite, this is where the work pad comes into being. To



store a sprite one needs only to press '@'. The letter 'G' can be used to GET a previously stored sprite.

One of the most fascinating features of Sprite Designer is its ability to animate a series of sprites and this is neatly shown in the demonstration program. You can animate from 2 to 24 sprites and the results can prove quite amazing. The instruction leaflet covers this area very well, indeed the program is very simple to operate owing to the simplicity of the instructions.

The final command allows you to print the bit pattern of the current sprite to the screen or the printer. This is a most useful addition to the program.

There is very little one can say against Sprite Designer, it achieves what it sets out to admirably and it would appear that the author has thought of every feature necessary to create sprites for use in one's own programs.

The demonstration program contains some quite excellent examples of what can be achieved using Sprite Designer, particularly the scene in a park where a man relaxes with his newspaper in the park unaware of the intentions of the bird which flies above him, or the Lunar Space Race in which a sole space man races across an impressive lunar landscape.

For those interested in programming, and in particular Graphics creation, Sprite Designer offers excellent value for money, and there seems little doubt, that used to its full potential, this program seems capable of improving any program.

Name: Anitunes

Authors: Dave Cadman & Tony Davis

Supplier: NDUG

Price: £3.50

A point much mooted by Dragon users is the single channel sound which effectively prevents the computer from doing anything else while sending signals to the speaker.

Through some extremely nifty programming techniques, we have software which can provide up to four 'psuedo' channels, producing a variety of sounds, depending on the particular software. Great you might say, but what about the simultaneous sound/graphics bit then?

Nifty machine code programming once again silences the critics and this offering from two well-respected members of the Dragon community deserves a place in everyone's collection.

The disc contains six different animated displays set to music. They are:-

SWAN - A swan glides slowly across the lake in front of an impressively drawn castle. The tune is a gentle classical piece, very soothing.

BONES - Three skeletons dance to the tune of "Dem Dry Bones" - What else!

GARDEN - Pmode3 for this one, featuring a butterfly fluttering by in an English Country Garden.

DANCER - An Arabian beauty performs her seductive art to music. This one comes in a plain wrapper!

BARREL - A barrel organ being energetically operated, with three different authentic sounding tunes.

ORGANIST - A hand-pumped pipe organ with enthusiastic player but no so enthusiastic bellows operator! A touch of nostalgia in this one.

QUARTETTE - My favourite, brings back fond memories of my days as a 'Mecca Band' musician. One for the jazz fans, with four classic tunes.

A unique and enjoyable suite of programs. You'll love 'em.

Name:Hi-Text Plus
Author:Mathew Lodge
Supplier:Pulser Software
Price:£2.75

Hi-text Plus is an updated and much improved version of a program originally released by Microvision Software.

At first glance Hi-Text Plus appears to the Basic user as an almost exact replica of the original, but there are several notable differences not less the type of commands available. However, at machine language level, Hi Text Plus is very different. For a start all the variables are grouped together at the end of the program to form a consistent interface which does not vary between cassette and disk versions (as Hi Text did).

For the Basic user, three new commands have been added. OPENW defines windons, GOW switches between the six windows, and PRINT! is used to position the cursor within a window. Text can be placed anywhere within a window using PRINT! so for example, PRINT! 2,3,"Dragon Logic" prints "Dragon Logic" two charaters from the side of the window and three lines from the top of the window. PRINT@ no longer has any use.

OPENW is a fairly complex command and requires the user to enter to number of window, the X & Y co-ordinates, the width and depth and the bit pattern. So the statement OPENW 1,8,48,16,95,XHAA would result in a window 32 characters wide (16 bytes) and 10 characters deep (95 lines) starting at 16 characters from the left of the screen and 48 lines down from the top of the scrren.

A further command, CLS is similar to the BASIC command, but it clears only the current window not the entire screen.

The Machine code changes are far more complex, but those with knowledge of such matters should find that the instruction sheets covers all the changes adequately. On the subject of Machine Code, the instructions covers the PRINT! command, selecting, defining and clearing Windows, re-defining characters and testing for reverse video. There is also a full High Text Plus memory map. A High Text supplement is also included with the booklet for Tandy users.

As with the original version, High Text Plus offers a 64*21 display which gives a crystal clear display. PRINT CHR\$(1) may be used to activate inverse characters and with the ability to alter the colour set to green on black or white on black, the presentation is very impressive.

Included with the main program is a demonstration adventure game which acts as an excellent example of what can be achieved using the programs 64*21 display and Window facility.

Full autorepeat of keys has been implemented and as a result the keyboard responds more quickly and allows more competent typists to programme at their own speed without the loss of any words.

The Hi Text series, though not the most sophisticated of its kind, as it is obviously outclassed by the likes of BASIC 42 and its series of suites, is nevertheless excellent value for money, particularly as it has been reduced from its original price.

It would be most welcoming if some enterprising programmer were to take advantage of this programs features and particularly its display and produce a series of programs such as a word processor, data base or indeed an adventure game which would best harness its impressive capabilities.

clubs / FANZINES

The 68 Micro Group has been in existence for many years now, and has built up a loyal Dragon following. The Group has a particular interest in technical matters and subsequently many hardware devices have emerged from the group, including Hard Discs. Indeed many individual members, through their own expertise, have built their own hardware to suit their own individual requirements.

The Group, despite its many Dragon members, is not wholly a Dragon Group, its members range from 6809 users to 68000 users. In the past the Group contained many Dragon users in the days when the computer flourished, and though numbers are significantly down, there are still many enthusiastic Dragon users who participate in the Group, including many Flex and OS9 users.

The Group has over the years built up a varied software library containing around 50 disks of Flex Software, 15 disks of OS9 and a little less OS9 64K material. The Software Library is incidentally kept up to date with the US OS9 Group, so there is doubtlessly a wealth of programming talent involved. The Group publishes a bi-monthly newsletter, 68 Microcosm, and though it caters for other besides Dragon users, there is no doubt some valuable information to be had.

In addition to their Software Library and Newsletter, the Group hold regular monthly meetings in London at the Prince George of Cumberland in Albany Street, NW1 as well as the Birmingham/Coventry area. It is also rumoured that another group may start meeting in Sussex in the near future.

If you would like to know more about the 68 Micro Group contact Keith Barnes (Membership Secretary), 174 Glen Albyn Road, Wimbledon, London, SW19 6HG. The Group also has a bulletin board number on Tom Goodfellow's 24-hour board at 01-316-7402, 1 start, 1 stop, 8 data, 300/300 or 1200/75 baud.

The NDUG last month celebrated its 5th year in existence, 5 years in which it has grown into one of the UK's biggest User Groups and still enjoys a membership in excess of 1000.

Word Search

Welcome to the second Dragon Logic Word Search. All you have to do to claim your prize is to find the names of 10 Dragon hits, from the past and the present, listed in the opposite word puzzle.

When you've found all 10 names send the completed entry form (photocopied entries are permitted) to Dragon Logic at 72 Diriebught Road, Inverness, IV2 3QT. The first entry drawn will receive a copy of a UNIQUE STEREO recording of Dragon generated music. Ninety minutes of sheer musical bliss as supplied by Dragon music expert, Stuart Beardwood!

Dragon Logic Word Search

J	P	C	J	Q	P	I	D	H	C	P	R	J	A	I	N
V	G	M	P	S	A	N	R	D	S	E	U	X	C	P	W
Q	O	R	Y	D	A	Q	X	D	T	X	S	M	Y	N	A
O	Y	D	D	L	J	W	I	I	T	H	C	D	L	V	R
X	E	R	N	Z	S	K	R	A	O	V	D	U	E	I	R
G	M	W	Q	H	R	W	P	C	M	B	E	V	M	I	O
P	O	Z	X	E	E	O	K	O	R	R	N	P	Z	X	M
D	U	L	P	L	S	T	A	H	O	N	O	M	K	J	N
K	W	U	E	I	R	I	N	G	E	S	U	R	L	P	N
U	S	T	T	O	P	D	A	X	S	K	A	L	B	D	L
G	R	I	O	O	A	R	P	I	A	L	A	G	V	V	B
Y	O	P	T	X	D	W	B	M	L	B	I	B	L	L	J
N	E	U	I	N	Z	A	D	Y	R	N	D	U	A	C	X
R	T	E	A	V	L	C	K	I	S	P	T	W	V	T	Y
U	I	M	Y	L	T	T	A	Q	Q	N	Z	X	Y	U	P

* Dragon Logic Word Puzzle - Entry Form *

* The hidden words are *

* 1 6 *

* 2 7 *

* 3 8 *

* 4 9 *

* 5 10 *

* Name *

* Address *

* Post Code *

*Last month's Word Search winner was John-Rhys-Vivian of Liversedge in West Yorkshire who correctly identified the 10 hidden names as 1) Compusense / 2) Computape / 3) Dragonfire / 4) Microdeal / 5) Oasis / 6) Orange / 7) Pamcomms / 8) Pulser / 9) Quickbeam / 10) Starship.

SPREADSHEETS

Most computer users will no doubt have heard the term SPREADSHEET. If you are a home computer user the chances are you may not have used a Spreadsheet or even have a working knowledge of what they can do. This article will tell you a little about spreadsheets and what they are capable of achieving in a modern office.

Accountants and people who work in finance offices have been using spreadsheets for years long before micro computers appeared on the business scene. In days past accountants had to compile spreadsheets manually on analysis paper. Analysis paper is paper lined vertically as well as horizontally. The vertical blocks created are called columns and the horizontal lines are known as rows. A computer spreadsheet is much the same, it too consists of rows and columns.

On a typical spreadsheet vertical blocks (hereinafter called COLUMNS) are identified by a letter and the horizontal blocks (hereinafter referred to as ROWS) by a number. By using a grid system it is possible to refer to each small block. Thus if you want to refer to the topmost left block on the spreadsheet, this is identified as A1. These smaller blocks are referred to as CELLS.

Cells are able to hold either TEXT or NUMBERS. If the cell content is in NUMBERS mode this can be held as either the number or a formula. If the cell content is a formula, then the display on the screen will normally show the result of the calculated formula. However the formula can be displayed if you so desire. Formulae can be extremely complex e.g. $\text{@SUM}(\text{AB6}.\text{AB73})*\text{PI}+\text{SUM}(\text{A7-AA6}+(\text{AA14}*5)/2)$. Obviously if you have many formulae like this there is a considerable saving in time in doing the calculations. Also of course another advantage is that 100% accuracy is assured provided that the formulae have been set up correctly in the first place. Formulae can be set up using add, subtract, multiply, divide, percentages, sines, cosines.

tangents, and many more mathematical formulae. Obviously what a Spreadsheet program can do is dependant on (a) how the program is written and (b) the available memory. Therefore what you can do on your home computer does not compare to the standard achieved on commercial spreadsheet programs such as LOTUS 1-2-3 and SUPERCALC (now version 5). However the programs available for the Dragon should prove sufficient for most home users' needs and one can live with their shortcomings. There are a number of spreadsheets available for the Dragon, of which I have the following:-

- (1) MST-CALC
- (2) ELITE-CALC
- (3) DYNACALC
- (4) SPREADSHEET

MST-CALC is one of a series of business programs written by Andrew Crane and marketed by MST in 1982/83. It is written in basic and is therefore relatively slow in operation.

ELITE-CALC which originated in the USA and was marketed in this country by Microcare, was written in Machine code and is therefore much faster in operation.

Both the above programs will run on a Dragon 32 and if they can be found, are available on disc.

DYNACALC is in my opinion by far the best spreadsheet program available for the Dragon and is very similar to SUPERCALC. The only drawback is that you need OS9 and a 64 to use it.

SPREADSHEET is a very simple program originally published in a magazine and is written in BASIC. It is available as PD from Dragonfire Services, Unit 3, Rising Sun Enterprise Centre, Blaina, Gwent, NP3 3JW.

What can you use a spreadsheet for at home, you may ask. I will give you a few examples for which I have used DYNACALC recently.

1) I recently refitted my kitchen and used it to keep track of the cost of doing the job. OK it was only a list but I could keep adding to it as and when I

bought materials or tools etc. and it had automatic totalling.

2) My wife is employed in a small residential home for the elderly. As the wage slips are not all they should be, I keep a spreadsheet of her earnings and deductions week by week, which allows me to have available her cumulative earnings and deductions.

3) I am asked to audit the "Old Folks Welfare Association" books. I then type up the accounts using DYNACALC. In entering the amounts I do not have to worry about layout as using the columns the figures will be automatically aligned.

4) A friend whose wife has a small business was able to do a cash flow forecast for the bank on his machine.

I am sure that you will now be able to think of how you can use spreadsheets. I hope this article will arouse some interest and show you that spreadsheets can be of some use to you.

If you have any queries or comments or need any help then I can be contacted via the usual editorial address.

*John Penn Discount Software were believed to have stocked ELITE-CALC & MST-CALC in the past, but it is not known whether these programs are still available from the same source. Contact John Penn at Dean Farm Cottage, Kingsley, Bordon, Hants, GU35 9NG for further details.

*DYNACALC is still available from its original stockists, Compusense priced £49.50 + £2 post and packing. The program requires OS9 and a Dragon 64 and is available from Compusense at Sinclair House, 68A Willoughby Lane, London, N17 0SP.

*A full review of all the above programs can be found on Page 25 of the May 1984 edition of Dragon User, which may be among Pulser Software's stock of back issues.

(If you know of any other commercially available Spreadsheet programs, or if you have any additional information you might like to add, contact Dragon Logic at 72 Diriebught Road, Inverness, IV2 3QT.) 18

NEWS...NEWS...NEWS

IN BRIEF

Scotland's booming Electronics industry suffered a major setback recently, due to the much publicised departure of US computer manufacturer WANG from its personal computer manufacturing plant in Stirling.

The move is said to have resulted in the loss of two hundred and fourty jobs due to a world wide restructuring which will result in an overall loss of 2000 jobs.

The Company, having received substantial grant assistance from the Government, is to move production to its Limerick plant in the Republic of Ireland but it is hoped a buyer will be found for Wang's Stirling plant.

Meanwhile the Scottish Office are said to be involved in talks with WANG regarding the repayment of the initial grant assistance it received, rumoured to have been over £4 million.

German hardware manufacturers, Siegfrieds Schraubenzieher, have announced details of their latest project

The Company now offer an RS232 Interface card fully compatible with the 232 interface used in the Dragon 64. The device is said to be of use to Amatuer Radio enthusiasts and modem users, particularly Dragon 32 owners. Instructions on how to install the device are supplied with the Interface.

The Interface is priced £13.00 + £2.50 post & packing. Orders should be made in the form of a EUROCHQUE and sent to Siegfrieds Schraubenzieher, Bernd Neuner, Dina-Ernstberger Str. 23, D-8524 Neunkirchen-am-Brand 1, West Germany.

Newly created Dragsoft has announced details of its two most recent releases, FONEBILL and SETTER.

FONEBILL allows you to check your 'phone bills by inputting the length of call, and time of day. The program also has a facility to change the cost per unit should British Telecom see the need to increase prices.

SETTER is a useful program for those who wish to attempt to improve the Dragon's sound and vision.

Price details are not known as yet, but further details can be obtained from Dragsoft, 41 Hereford Street, Prasteigne, Powys, LDB 2AT.

Knight Computer Services are shortly to release a Desk Top Publishing package known as Publisher. The program is said to give a page area of 512*768 pixels, in otherwords a full 80 column A4 page. The company have also released details of two further releases, ARTRIP & SIDEWAYS PRINT.

*Glasgow based ARCSOFT has re-released its vastly underrated adventure game, The Thirteenth Task. Written by Alan Cook, the game is now available on Cassette priced £3, though a 50p discount is offered to NDUG members. Contact ARCSOFT at 272 Mearns Road, Newton Mearns, Glasgow, G77 5LY.

*Andrew Hill of Dragonfire Services has now confirmed the date for his forthcoming show in Weston-Super-Mare as being Sunday December 10th. Contact Dragonfire at Unit 3, Rising Sun Enterprise Centre, Blaina, Gwent or 'phone 0495 292159.

*The Stafford Show Centre is to be the venue for the forthcoming Alternative Micro Show on 11th November.

*The NDUG has released a revised version of Adventure Writer for DragonDOS Disc. The program is expected to retail at the same price as the original tape version. Contact Paul Grade, 6 Navarino Road, Worthing, Sussex for further details.

LETTERS

After reading the review of my Data & Loader Printer program, in Dragon Logic No.8 I was shocked to say the least. A "BUG" in the program I had spent weeks DE-BUGGING!! Well I checked my stock and though some are OK others are not. It seems that I may have got an early attempt mixed up with the final program. It's practically guaranteed that I've sold some of the faulty copies somewhere. If you wish to correct the bugs yourself, they are in Line 49.

Replace START with ST, END with ED, EXEC with EX and SA with ST (they are in that order). Alternatively, send the original tape or disc back to me and I will correct them and refund your postage.

When V2.0 is completed, it will print to tape as well as a printer, so giving a ready to run program. If anyone has any other problems with Dragsoft programs, please don't hesitate to contact me, bugs are embarrassing, but can only be corrected when spotted.

Mike Townsend, Dragsoft, 41 Hereford Street, Presteigne, Powys, LD8 2AT. (Tel 0544 260178 - late evenings).

*See COMMENT opposite.

COMMENT

For many years the Dragon software industry has been dogged by a series of 'hiccups', not less the problem of bug riddled or faulty programs.

As early as 1985 Birmingham based Eclipse Fenmar experienced serious problems with their smash hit, Total Eclipse which resulted in the eventual downfall of the company. Despite their well intentioned efforts, many people, even today, find their copies riddled with bugs.

A more recent example, Preston Games have been experiencing serious duplicating problems with the result that many of their titles fail to load correctly. The faults have been blamed on the duplicating companies and while they must accept much of the blame, it is surely up to software manufacturers to ensure that their software operates correctly.

It is unfortunate that Dragsoft's maiden release, Data & Loader Printer should encounter such problems as those referred to by Mike Townsend, particularly as it is such a useful program. Fortunately Dragsoft has kindly agreed to replace any faulty programs and in such a case we must accept the inevitability of 'teething' problems. Future similar incidents will surely alienate Dragon users from the software companies as this letter from one of Dragon Logic's readers reveals:

"I found out that some of the Dragon companies are only in the market for the money when I recently bought a cassette based program which when loaded failed to work, infact part of the program was not even present on the tape". This may indeed be an isolated incident, very few Dragon companies are infact in the market for the money, but it shows the level of frustration at having half-finished products sold as complete.

HARDWARE

Suttcliffe Electronic's Dos Adaptor Board is one of the items I purchased at the recent Hove Show. I had read about it in Dragon User but had decided against buying it until I had a chance to look at one.

The Dos Adaptor is designed to mount the bare DOS pcb inside the Dragon, leaving the cartridge port for other cartridges, if there's likely to be a memory conflict the DOS pcb can have its 5v supply turned off leaving the port memory available for the other cartridge.

So the idea is a good one, the instructions are clear on the sheet supplied, it took me just under 2 hours to get installation to my liking. The actual pcb and switch wired to it, plus self tapers supplied are all needed but so is a little imagination, finding something to span the Dragons inards to support the DOS pcb.

Anyway, this having been achieved, it all functioned OK and a large space has appeared on the right hand side of my Dragon.

Not much more can be added, really you are paying for the idea, how good a job you achieve is up to you. If you decide to acquire a DOS adaptor board, be prepared for a little bracket making. The board is, I understand, priced at £13.92 (inc. VAT) and is available from Suttcliffe Electronics, Hothfield, Ashford, Kent, TN26 1ET.

Next Issue

Next Issue sees the continuation of our new semi-regular feature on Applications Software, which on this occasion takes a look at Dragon Word processors, including amongst others Electronic Author & VisiText and an Exclusive preview of Knight Computer Services' Publisher package. Jonathan Cartwright, Stuart Beardwood, Ray Smith and Sotos Mandalos continue their regular series' while Alan Swift reveals an exclusive Twin-Rom modification. Softscene features Knight's latest releases, TEXTPRINTER & DRAGON GRAPHICS STUDIO + as well as Pulser Software's French Test. Mike Townsend of Dragsoft offers some invaluable advice on how to care for Tape Systems in an exclusive report and we also feature an article on Interrupts. Also included Next Issue is the usual Letters, News Reports, Competitions, program listings, Clubs information, Interviews and much more.

Help-Line

Problem: Can anyone help me obtain a replacement Power Pack for my Dragon 32, I have tried everywhere but have had no luck.
Name: Robin Clark.

Address: 58 Barfs Road, Distington, Workington, Cumbria, CA14 5TG.

Problem: Does anyone feel competent to review Pulser's French Test. If so contact me at the usual address - ED.

DRAGON · GRAPHICS

Published by the NDUG's Dragonart Graphics Library, 'TX' is a powerful low resolution screen designer with a host of unique features.

The program, which is available on tape or disc is essentially a BASIC program, but uses various Machine Code routines to speed up operation. The program itself comes in three parts, the main BASIC program, the Machine Code routines and a selection of screens created using 'TX'.

After a lengthy loading process, the program displays a colourful title screen which informs you that the Computer is in the main editing mode, Write mode. There are several other modes, but besides Write, the most important are CLS and ENTER.

WRITE mode allows you to write/design your screens. As stated this is the main mode, to which the computer always returns whenever it leaves the CLS or ENTER modes.

CLS mode is mainly concerned with clearing the screen in various ways, either fully or partially. ENTER mode covers all the program options such as keyboard speed, auto-repeat on/off, break disable, and all the load / save / print options etc.

The ENTER mode gives access to the countless options available to the user. These include keyboard response speed, auto repeat keys, joysticks, BREAK on/off, user characters, storing and recovering pages to and from memory, wipe, view, moving pages in memory, copying lines from a page stored in memory to the text screen, defining the 'box', a typewriter function & a customary Input/Output to tape or disc facility.

The program is fully error trapped and so in the event of an error, the program will not crash. The only possible errors are DOS related errors which the program will trap itself and report to you via a flashing screen. At the start of the program you are asked if you wish to input your own parameters. This is a very complex area and one should relate back to the manual as much as possible.

The 'box' referred to above can be controlled separately from the screen, and TX makes full use of text and block graphics which can be inverted, moved and scrolled left or right, and which can also be

altered in colour. Text and graphics can also be inverted separately if you wish.

The meddle mode allows you to 'meddle' with the current text screen in various ways, it's possible to invert all text, invert all characters, invert all graphics or fill an area with a user character.

There are very few such screen designers on the market at present, the most recent being Autorun which does allow the user to combine their designs with an Autorun facility. Though such a facility is not present on 'TX', the program is leagues above Autorun and anything else which may exist in the market.

However one must point out that 'TX' is an extremely complex program and it will take some time to master it fully. The 12 page A4 manual which accompanies the program, does its utmost to explain fully the capabilities of 'TX' but nevertheless the program is rather daunting.

Ian Rockett is to be congratulated on producing such a first class low-res screen designer, which will no doubt find favour with many Dragon programmers eager to improve their all-important presentation. The program is priced £2.75 (inc. Post and Packing) and is available from the address featured below.

Anyone interested should write to Ray Smith, Dragonart Graphics Library, Poole, Dorset, BH14 0HF.

By DON MORRISON

WHAT'S ON SALE

* Name	* Supplier	* Price *
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* CAD-6809	* Pulser	* £5.00 *
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----------*-----*

* Easel Plus	* Pulser	* £4.50 *
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* Sprite Designer	* Pulser	* £4.50 *
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* Drawzee	* NDUG	* £2.50 *
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* 'TX'	* NDUG	* £2.75 *
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----------*-----*

* Desktop	* NDUG	* £8.50 *
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----------*-----*

* WIMP	* Dragonfire	* £12 *
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* Graphics Studio	* K.C.S	* £4.99 *
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* P.C Fonts	* K.C.S	* £4.99 *
-------------	---------	-----------

----------*-----*

* Picture Maker	* John Penn	* £5.00 *
-----------------	-------------	-----------

----------*-----*

* Desktop +	* Mac. Cons.	* £30/35 *
-------------	--------------	------------

----------*-----*

* Starlite	* Mac. Cons.	* £7/9 *
------------	--------------	----------

If you know of any other Dragon Graphics
Utilities, then write, giving details,
to Dragon Logic, 72 Diriebught Road,
Inverness, IV2 3QT.

Adventurers Anonymous

I'm taking over Adventurers Anonymous from the Ed this month. Don't worry though, because your beloved editor will be back here next issue, when he's got over his recent fact-finding mission to Skegness, Loch Ness or wherever it was. For the time being though, you're stuck with little old me.

The Ed has asked me to review two adventures, "Larkspur Waldorf II" and "The Thirteenth Task". Concerning the latter I feel an apology is in order. I have already reviewed this game in another Dragon publication but I would like to say that this will NOT be the same review. I have look at the game after a couple of months, and will report how it appears to me, a couple of months after first seeing it. First, though, Larkspur Waldorf II.

Larkspur Waldorf II - The Journey Home is the full title, the game being the second part of a trilogy of adventures. The task is simply to get the hero home, since he escaped in part I - Larkspur Waldorf is Trapped.

The game is played on the PMODE4 screen in black and white. The text is clear but the routine does have one or two drawbacks. Firstly there's no cursor, still no lower case (which I feel defeats the object somewhat) and there's no backspace. You have to press CLEAR to abort the entry and start again. This is more than a little annoying! Also, although the text scrolls nice and smoothly pixel by pixel, it's too darned slow! The text is drawn slowly too which suggests to me that the main program is BASIC. The screen is divided into various areas: A picture of our hero, his inventory, the locations exits, the main input and response area and a picture of the location. The picture, though simple, is drawn nice and quickly and doesn't get in the way. Not all locations have pictures and some pictures are repeated. So far in fact, I've only seen four different pictures and three of these were trees. You can shorten commands to the first 4 letters which is a blessing since the typing speed has to be slowed somewhat.

I think speed is the bane of the game. From the first location, if you type N(orth), from the moment you

press ENTER to when you are next given the chance to enter another command, some 16 seconds have elapsed. And that's not excessive by this game's standards. The first problem I came across was a maze. This effectively destroyed my interest in the game completely, since I had to wait at least 12 seconds each time I moved. In a maze this was particularly frustrating. The first problem I encountered was solved simply by carrying the correct object (an axe) when I was attacked by a wild boar. I didn't have to KILL BOAR, it was performed automatically. I don't like this approach to adventures, it tends to bring them down to the "Fighting Fantasy" gamebook approach.

Out of a sense of duty I did persevere a little further but eventually gave up in disgust. It's a shame because the adventure seemed to be "put together" quite well, but as I have said, the speed put me off completely.

The Thirteenth Task from Arc Software (priced at £3.00 or £2.50 to NDUG members:272 Mearns Road, Newton Mearns, Glasgow), is a completely different kettle of kippers. The plot here is that you are hercules, a greek Demi-God, who is initially given twelve tasks to perform for gory reasons ... and now you have a thirteenth task, to steal the crown of hades for your master. Most of the original twelve labours crop up to dog you again, like the lion in the first location. There's a subtle clue as to how to deal with this on the cassette inlay (although the method is somewhat less subtle).

The problems are indeed very violent, and the solutions are not exactly for the faint-hearted either! However that are typical adventure problems with perfectly logical answers, and they're not all bloody. The problems fit together VERY well and are neither too difficult nor too easy. They are also sufficiently varied to keep you interested some time. As far as the playability goes, although the program is in BASIC the response time is almost instantaneous. The game is played on the text screen, which is split into two: the location description and visible objects; and the input and response area. Resposes are printed letter-by-letter at a high speed, faster than reading speed (it's quite enchanting to watch but difficult to describe). There's a HELP command and a SCORE percentage total.

as well as an EXPLAIN command. For example EXPLAIN GRAEAE would tell you that they were three old hags sharing one tooth. The occasional joke makes this game more light-hearted and with gory scenes as well there is certainly a difference in atmosphere! Over 80 rooms makes this adventure quite a biggie too, and I must say that I think it's one of the best text-only games EVER devised for the Dragon. Anyone who plays adventures should get this! With most new releases being predominantly games oriented, adventures seem



to be taking a back-seat, which is a pity. There's still plenty of good material about though, so if you haven't played a new adventure for a while you should remind yourself what its like. After all most are now under a fiver and if you pick a good one then you're getting a good few evenings entertainment. Why not make it a family affair? Or invite a friend round? ("Fancy coming over to my place for an adventure in another world?" could become a standard line in the future!) Even if you're on your own, why not sacrifice a few pints!

Robin Hemmings

TIP!

Regarding the program 'Stripey' in Issue 7, I think I should point out a little idea I worked out for use with DOS+. The method relies on a formula which I cancelled down from a table of POKE 178,n to bit pattern that I produced.

No doubt someone will say that they have done it before but I haven't seen it anywhere before. The pattern can be entered using 1's and 0's forming the binary number of the pattern to be used.

PROGRAM

By Steve Knight

```

10 CLS:PRINT"POKE178,N NUMBER FINDER."
15 PRINT"YOU CAN LEAVE OUT LEADING ZEROS.":
20 PRINTSTRING$(32,128);:LINEINPUT"USE 1'S AND 0'S TO
   FORM 8 BIT  PATTERN:":BN$
30 BN$=RIGHT$("00000000"+BN$,8)
40 ANS=0
50 FORA=1TO8
60 ANS=ANS+VAL(MID$(BN$,A,1))*INT(2^(A-1))
70 NEXT A
80 ANS=(-3*ANS)AND 255
90 PRINT"POKE 178,N NUMBER IS :":ANS
100 GOTO 20

```


PROGRAMMING

By Stuart Beardwood

PMODE4 FANCY BORDER

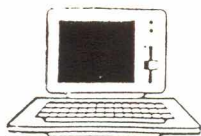
```
10 DRAW"BM7,15;":A$="C1E10F10G10H10;":PMODE4,1:PCLS2:
SCREEN1,0
20 A=A+1:IF A<13 THEN DRAWA$:DRAW"BM+20,0;":GOTO20
30 DRAW"BM-20,0"
40 A=A+1:IF A<23 THEN DRAWA$:DRAW"BM+0,+20;":GOTO40
50 DRAW"BM-20,-17"
60 A=A+1:IF A<35 THEN DRAWA$:DRAW"BM-20,0":GOTO60
70 DRAW"BM+6,-20"
80 A=A+1:IF A<43 THEN DRAWA$:DRAW"BM+0,-20":GOTO80
90 POKE 178,205:PAINT(2,2),,1
100 PMODE4,1:SCREEN1,0
101 COLOR1:LINE(27,25)-(227,163),PSET,BF
110 GOTO 110
```

ATTENTION GRABBING SCREEN

```
10 CLSO:BL$=CHR$(128):PRINT@325,"press";BL$;"any";BL$
;"key";BL$;"to";BL$;"start";
20 A=A+7:IF A>63 THEN A=0:X=X+1:IFX>=8 THEN X=0
30 IF INKEY$<>" " THEN 70
40 SET(A,0,X):SET(63,A-A/2,X):PRINT@203,"*MYGAME*";:S
CREEN0,1
50 SET(0,32-A/2-1,X):SET(63-A,31,X):PRINT@203,"*myga
me*";
60 GOTO 20
70 'START OF GAME
```

DIAGONAL MOVEMENT

```
10 'USE LEFT & RIGHT ARROW KEYS.
20 'USE 'Q' FOR UP, 'A' FOR DOWN & <CLEAR>.
30 PMODE0,1:PCLS:SCREEN1,1:X=127:Y=96
40 PSET(X,Y,5):FORP=0TO20:NEXT:PRESET(X,Y,5)
50 IF PEEK(343)=223 THEN X=X-4
60 IF PEEK(344)=223 THEN X=X+4
70 IF PEEK(339)=239 THEN Y=Y-4
80 IF PEEK(339)=251 THEN Y=Y+4
90 IF PEEK(339)=191 THEN PCLS
100 IF X>255 THEN X=255:IF X<0 THEN X=0:IF Y>191 THEN
Y=191:IF Y<0 THEN Y=0
110 GOTO40
```



DRAGON LOGIC

72 DIRIEBUGHT ROAD
INVERNESS, IV2 3QT.

Dragon Logic has in its first few months of trading, become one of the most popular amateur 6809 publications in recent years.

Published bi-monthly, *Dragon Logic* offers intelligent and thought provoking articles to cater for all ages and all capabilities, all aimed at sustaining further, the life of the Dragon, undoubtedly one of the finest 8-bit machines ever produced.

Dragon Logic's team of writers consist entirely of volunteer Dragon enthusiasts who are wholly committed to the survival of both the Dragon and Tandy machines.

The magazine is Edited and Published by Donald Morrison with regular contributions from leading Dragon writers including Jonathan Cartwright, one of the finest programmers in the Dragon market, Ray Smith of NDUG's Graphics Library and Stuart Beardwood, well known for his excellent work at the Westgarth Childrens Home.

Dragon Logic carries a wide range of information features including Machine Code programming, Graphics and Music Software, Entertainment Software, Adventure playing, Hardware projects, program listings, Show reports, Book Reviews, Charts, Clubs information, hints and tips, up-to-date news and EXCLUSIVE interviews with the big names in the Dragon world.

With *Dragon Logic* you not only get what is without doubt the finest Dragon publication, but also the kind of service which puts us ahead of our competitors - Programming advice, adventure help, special offers, competitions and much much more.

Dragon Logic is available in 40 plus pages, making it without doubt, the largest Dragon magazine, for a mere £1 per Issue or alternatively, £6 p.a. (Prices include Post and Packing).

WHAT THE PUBLIC HAVE SAID ABOUT DRAGON LOGIC

"The first issue of *Dragon Logic* was very good and a joy to read. The interview with Harry Whitehouse was good, perhaps the best I've ever read!" - Matthew de Monti.

"I thought *Dragon Logic* looked well produced." - Helen Armstrong, Dragon User.

"I must congratulate you on your efforts in producing *Dragon Logic*.

It is interesting and has a varied subject matter." - Jonathan Cartwright, Starship Software.

"The best Fanzine yet for the Dragon." - Ray Smith.

"Donald Morrison must be congratulated for his work." - Dragon Magazine.

"It is very well designed and offers an interesting selection of articles." - 6809 User.

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Why did you make a personal choice to buy a Dragon?

With Steve Knight

We in fact decided to buy a Dragon 32 after having four, or five Spectrums that went wrong (or never worked) shortly after we had them. The Dragon was the only other possible alternative at the time.

Why did you launch KCS and what did you hope to achieve by doing so?

Initially solely to market Dragon Graphics Studio. I had written DGS for myself in the Summer of '88 and it was suggested I marketed it. After trying several existing companies who offered to take it on, I decided to take a stab at it myself. The name KCS came around so we could run it as a 'sideline' of my parents company.

What experience had you had with the Dragon prior to launching KCS?

I had had a Dragon since 1984 and had been 'programming' (ie typing in magazine listings!) since then. However I had not really done anything seriously until I came to write DGS.

What in your opinion has kept the Dragon going for so long?

The devoted ownership - it seems there will always be the few who steadfastly refuse to let the machine go despite dwindling numbers - and I don't blame them!

With Dragon Support falling, how long can you see the need for KCS?

I'll keep producing software for the near future though I may hand the marketing over to one of the other companies some time in the future. If people still need, and buy my software, I'll keep writing!

What do you think of the standard of currently available Dragon software?

Considering the fact that for most parts it has to be written in spare-time by those who program as a hobby it is good. Though obviously some poorer titles are published.

How do you rate the Dragon as a games machine?

It is OK for people likeme who play only the occasional game, but for 'game-maniacs' there are few modern titles to choose between. The games that are available though, are very good within the Dragons limitations.

What do you like best about the Dragon?

The ease of programming when you can get down to it. It's just a pity DRAGON and 6809 didn't become more popular.

Do you find it difficult to devise original utilities for the Dragon?

I find it difficult to code them, but the main concepts and ideas I can borrow from other computers, so I suppose it's quite easy.

To what extent do your products span from your own requirements as a user?
DGS was written solely for that purpose, originally, I wrote it for producing screens, and graphics for various things. It was only afterwards that I thought about marketing it. The same thing occurred with the other titles - If I need a piece of software that isn't available, I'll write it then if it's good enough I'll market it.

In your opinion, how big a role have KCS played in keeping interest alive?
Very little. I don't think one company can keep the Dragon alive. It is probably a joint concern between all companies - If no software was available other than that already written I would guess the membership lists would shrink very quickly.

How have the Dragon Community responded to KCS since it's launch?
Fairly Well. A few more sales would have been nice though!

Do you think that Dragon users are doing enough to keep interest alive?
Yes they are. The people that support it are those that can offer something, and are showing this. Many of the others could no-doubt produce just as good articles, programs or whatever, but, buying a magazine doesn't mean you have a contract built in that you will write 'x' articles a year - at least I hope there isn't! Don't forget buying software is just as good as writing it. If we all wrote software, there would be nobody left to buy it!

Have you any new titles nearing completion?
Yes, one. It is a **proper** DTP for the Dragon at last. You can scroll around a page taking up 8 normal PMODE4 screens, and the dump to the printer without fiddly, an slow, rewinding of paper etc. (PLUG..PLUG..PLUG!). It should be released in time for the C.C.C. on December 10th.

In the past, KCS have tended to concentrate on Graphics utilities of some sorts so therefore do you intend to expand into the games market in the near future?
I may produce a simple game in the future but I don't know whether I'll have sufficient time to complete it.

Has your work with the Dragon been an enjoyable experience, and what has made your work worthwhile?

It's been very enjoyable, it's nice when you get letters from somebody ordering something using, say, the fonts, or seeing screens that somebody has created with DGS which are better than we thought possible. It just shows people actually do use these programs.

What have been you best, and worst, moments?

The best moment is probably when I saw the first review of DGS for putting in Dragon Update, the worst is probably when we realised a box had somehow got left behind, including a Dragon and drives, at the Hove town hall, and had to travel down there by train (4 hours each way) to collect it!

As a programmer what do you feel about the threat of software piracy?

Unfortunately on the Dragon, piracy seems to be the norm but it's too late to do anything now. If you protect discs from being copied, those who really want to will break the protection anyway, and for the rest of us it means having to send the disc back if it gets corrupted. The software company must therefore use some profits to renew discs. What do we do when the companies have closed down, or we get a different size drive then?

To date, what has been your most successful program?

Dragon Graphics Studio, probably because it's our longest released. It is the only one to have been reviewed in Dragon Update so far too, and obviously they have a larger readership than all the mags put together.

On average, how many units of any one program can you hope to sell?

Well, DGS sold just over thirty, DGS+ about twenty so far, and PCFONTS, fifteen. These should increase when people have had a chance to read the reviews, and when I get some in 'Update'. Hopefully 'Publisher' will out-sell all of these.

How large a role do you feel the amateur fanzines play in keeping interest up?

A very active one. 'Update' is OKAY as what it is mean't to be but as a magazine it cannot compete with the fanzines. For instance whilst it can take upto six months, or more, to get a review into Update, the fanzines are much quicker. I personally subscribe to 6809 User/Dragon Gazette, and Dragon Logic and normally find them both an interesting read. As they have such small readerships I am suprised at the high quality of the articles, and presentation of both of these.

What in your opinion makes a "good" game?

One where you are continually screaming 'Just one more go...' with plenty of good gameplay elements in the game. ie Lucifer's Kingdom, Impossiball, Ball-Dozer etc..

How do you rate the Dragon as an alternative to the machines of today?

Obviously it can't compete with the 16/32-bits and even some 8-bits, in terms of speed, but if it does what you need why buy another? Whilst I realise that it is often necessary for someone to use a IBM compat. or similar, if you can do exactly the same on the Dragon then you don't really need to change.

Have you ever been tempted to move onto more profitable machines in order to make a living?

I don't, and can't imagine anyone doing so, make a living out of the Dragon. I am currently at college and supported by my parents, so the Dragon work can just get me a (very) little extra spending money. We actually have some other computers (an Amstrad CPC 6128, and a PC compatible) but whilst I have programmed these I havn't produced anything suitable for marketing.

PULSER SOFTWARE PRICE LIST

Due to our recent acquisition of "Orange Software", we have vastly increased our range of software titles, the complete list detailed below.

Key to Format and Software Type Codes

FORMAT	EXPLANATION	S/W TYPE	EXPLANATION
DC	Dragon Cassette	UT	Utility
TC	Tandy Cassette	TA	Text Adventure
DD	Dragon DOS Disk	GA	Graphic Adventure
DE	Delta DOS Disk	AG	Arcade Game
TD	Tandy DOS Disk	SG	Strategy Game
D64	Dragon 64 only	ED	Educational
D32	Dragon 32 only	OT	Other
CC	Tandy CoCo only		
FL	Flex OS		
OS9	OS9 OS		

("Tandy" = Tandy COCO 32k)

Software Title	Type	Format	Price (£)	Software Title	Type	Format	Price (£)
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BEANPATCH	AG	DC	£1.00	LUCIFER'S KINGDOM	AG	DC TC DD TD	£5.50
BEANPATCH	AG	DD DE TD	£3.50	MAGEASE (+ DU file)	UT	DC DD DE	£3.00
BEANSTALKER	AG	DC	£1.00	MANDRAGORE 2	AG	DD TD	£3.50
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COMPOSER I (1)	UT	DD	£1.75	MISER'S DREAM	AG	DC TC DD DE TD	£2.75
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1 = Tape version available from COMPUTAPE

2 = Tape version available from KOUGA

(*) = Requires Microdeal's "COMPOSER"

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