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New series - edition 3

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#########RADIO DRAGON##########

##*#*#*#*#*#*#*#*#*#*#*#*#*#*
SUPER-MEGA-HIRES
By Tim Hayton
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As you all know, the resolution in PMODE4 is quite good at 256x192 pixels, but while POKEing around, I discovered that this resolution is available four times over on the same screen, giving an effective resolution of 1024x 768!

"Unbelievable," you may say, but as far as I can tell, it works.

The new mode is enabled by selecting a normal PMODE and SCREEN, and then POKEing &HB6,0. The new screen is split into four areas, each area having a resolution of 256x192. One drawback is that you can only draw in one of the areas at a time, but this should be OK if you plan the drawing carefully.

After looking at my Hilton Memory Map - a must for machine code users - I found that these four areas are selected with addresses &HBA and &HBB as follows:

```
For top left quarter....POKE &HBA,6:POKE&HBB,0
For top right...........POKE &HBA,6:POKE&HBB,16
For bottom left.........POKE &HBA,18:POKE&HBB,0
For bottom right........POKE &HBA,18:POKE&HBB,16
```

That should provide the basis for you to make up a program of your own, but I've included a short demonstration program.

```
10 PMODE4,1:SCREEN1,1:PCLS
20 POKE&HB6,0:FORA=1 TO4
30 IFA<3 THENPOKE&HBA,6 ELSE   POKE&HBA,16
40 IFA=1 ORA=3 THENPOKE&HBB,0   ELSEPOKE&HBB,16
50 LINE(127,5)-(127,185),PSET
60 LINE(7,95)-(247,95),PSET
70 FORX=7 TO247STEP20
80 PRESET(X,95):NEXTX
90 FORY=5 TO185STEP10
100 PRESET(127,Y):NEXTY
110 FORX=-180TO180STEP1.5
120 AX=X/57.29578:XP=X/1.5+127
130 F1=-(SIN(AX)*90)+95
```

```
140 F2=-(COS(AX)*90)+95
150 PSET(XP,F1,1):PSET(XP,F2,1)
160 NEXTX:NEXTA
```

The program draws identical graphs in each of the quadrants in turn.
A problem which appeared on my monitor is that occasional dots get
missed out because the resolution is too high! (I think that's the
reason anyway.)

Better go now (I want to leave room for something else on Radio
Dragon!) Any queries, please MBX 51374641.

>>>>>>>>TERM'S ON TAPE<<<<<<<<<

Martin Cleghorn's Terminal program (sounds almost as sinister as the
Final Departure Lounge at Luton Airport!) will soon be available on
tape.

In case you've wondered why the RD reception software has peculiar
line numbers, it's because it forms part of Martin's master-work.

The program, for use with a D32 and Modem House cartridge, is
suitable for receiving RD (of course), and 1200/75 and 300/300 boards,
when used with a 300 modem.

It will also allow you to use 1200/1200 user-to-user, although a
simple modification to the cartridge, involving soldering, is
necessary for this and 300/300 use. Details of the mod are included
with the tape.

The Tim Hayton pokes (see the current directory or Prestel page
323000153) should make the program suitable for D64s.

Martin also provides full instructions, as well as details of the
workings of the cartridge and the Terminal program.

The program will receive Prestel, but as it formats over 32, rather
than 40 columns, you'll probably prefer to stick to the cartridge
software for this use.

The complete package will be available from Martin for 3.00 from 7th
July, but he would appreciate early orders, or an MBX (919992757)
indicating that you are planning to order. Order from him c/o Sara
Wood, Bassenthwaite, Keswick, Cumbria.

In a rather higher price bracket is a new Prestel program from Gordon
Twist, which is on offer at prices between 15.00 (tape) and 25.00
(ROM). It offers double height letters, conceal reveal, flash, and
continuous and separated graphics. All controls for these can be sent
from the keyboard.

For inclusion in MBXs, you can save and load frames in Prestel format
to tape or disc, or in the form of a PMODE4 screen, again to tape or
disc. You have two MBX stores in RAM to prepare MBXs off-line, and 26
10-byte buffers for MBX numbers or page numbers.

A time frame allows you to time your call, and your identity can be
programmed into the package by the Prestel computer. You can also add

your password, if you wish.

Inquiries to Gordon at MBX 919998286.

#########EVEN MORE NEWS##########

Hot on the heels of Wayne Smithson's Dragon Monthly comes news of plans for another Dragon newsletter, from our very own Julian Cogdell.

Details aren't finalised yet, but Julian's promising the latest news, details of new releases, an article on machine code programming, and in the first issue, an interview with Quickbeam Software.

Inquiries to Julian at MBX 992893036.

Best of luck, J!

STOP PRESS!!! Just to show off the virtues of instant electronic magazinery (good word eh?) Radio Dragon can exclusively reveal that 15 minutes before RD went on the air, Julian decided to name the newsletter Dragon's Tail.

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*******SHORT AND SMART*********
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```

Two very useful quickies this week from Gary Coxhead, allowing the partial save of a program, and providing a true merge (no more POKEing and PEEKing about in 25 and 26).

PARTIAL SAVE

To save lines N to M inclusive of a Basic program, type:

```
OPEN"O",#-1,"FILENAME"
POKE111,255:LISTN-M
```

POKE and LIST must be on the same input line. Any form of LIST is acceptable. If N and M are omitted, the effect is identical to CSAVE"FILENAME",A.

MERGE

True merge may be obtained by:

```
OPEN"I",#-1,"FILENAME"
POKE111,255:POKE120,1:EXEC33658
```

This performs a CLOAD of an ASCII file without clearing the program pointers. Control is returned to the keyboard when EOF is encountered.

POKE and EXEC must be on the same input line. The stack grows by two bytes each time a file is loaded. To clear the stack, type CLEAR.

```
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DRAGON USER LATEST
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I am going to be VERY restrained. I am becoming paranoid about Dragon User. I've spent over three years subsidising it, and after reading the news items in the current issue I am seething.... again! I shall offer no further comment on this point, for the sake of my blood pressure.

If you haven't seen the July issue, it's not a badly-presented product for a subscription-only newsletter.

As we predicted, they've dropped full colour (and why not, as it no longer has to be an attractive news-stand product?) and that has allowed them to use cheaper paper.

All the old features are still there though.

Just for the record...as Dragon User well know, there is NO shortage of Dragon power supplies, as we spent a small fortune having a new, heavy duty unit specially designed and built. As a service to the Dragon community, we sell them at a loss to keep the price down, and to keep your Dragons in action. And as long as Peaksoft are on the road, we'll guarantee a continuing supply.

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       MAKING MAIL ORDER WORK
++++++++++++++++++++++++++++++++++
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Our Legal Eagle has spent a little too much time feathering his nest this week, so the promised feature on the legal aspects of hacking won't be appearing until next week.

However, I've been asked by several readers to expand on the notes on mail order protection which appeared on the Prestel Dragon pages some time ago.

As you will know, you have specific legal rights as a purchaser, but it's not so widely appreciated that you are very well protected when you send an order for goods by mail order, under the Code Of Practice of the Advertising Standards Authority. Unlike going to law, getting action costs you nothing, except for a stamp, and the ASA has a lot of punch, as it can ban an offending firm's advertising — that sort of threat tends to produce fast action!

Advertisers must comply with a variety of conditions when they place an advertisement, but the point which most often concerns the typical customer when he posts his order is: "How long will it take?"

The position is that unless the advertisement states otherwise (some firms, including one I'm too modest to mention, deal by return of post whenever possible) the goods must be despatched within 28 days. If this cannot be achieved, the firm must write to you, advising you as to when they expect to despatch the goods, and offering to refund your money. And it doesn't end there...they must continue to write to you every two weeks until the goods are despatched, keeping you fully in the picture, and repeating their offer to refund your money.

```
*=*=*=*=*=*=*=*=*=*=*=*=*=*=*=*=*
              HOT NEWS
*=*=*=*=*=*=*=*=*=*=*=*=*=*=*=*=*
```

Last week, I mentioned a gent who was having problems with his screen

display when Doris had chuntered up to full working temperature.

Julian Field once had a similar problem — in his case, a white strip moved up and down the screen.

He discovered that the bridge rectifier on the +5v line was collapsing. The problem was solved by replacing the four large diodes on the power supply board.

```
+++++++++++++++++++++++++++++++++
 WANNA MAKA BOBBA TWO?
+++++++++++++++++++++++++++++++++
```

You may have noticed in the directory that Peaksoft are "always interested in producing or sponsoring new Dragon accessories".

It's a pity that with so many knowledgeable types out there, very few people ever try to take advantage of their know-how.

For example, we are asked from time to time if we can supply a cheap printer, for people who just want something to churn out the occasional listing. The answer is that we can't.

A couple of years ago, however, one firm produced an interface which would allow the Dragon to work with the ZX printer. They priced it too high, and I think it was their only product, so they soon disappeared from the scene.

I can buy the Alphacom (which has replaced the ZX printer) from one of our suppliers, and if anyone can come up with a guaranteed design for a suitable box of tricks to interface it with Doris, I'd have a few built for starters, then we'd try marketing it, and with any luck, you'd earn some long-term pocket money in royalties.

That's just one example off the top of my head. If you have any other bright ideas, just leave me an MBX or give me a ring.

PS If you have a friend who is an EXPERT and fast Spectrum machine code programmer, I urgently need someone to convert Tim Love's Cricket to the Spectrum, following a let- down. I can supply a Z80 disassembly from the Amstrad version, so a great deal of the spade-work's done.

Come to that, I wouldn't mind a BBC version, either, so.....

```
=================================
          OUT OF TOUCH
=================================
```

Despite my optimism a couple of weeks ago, it now seems unlikely that the Touchmaster graphics tablet will make an early return to the market.

On the same general theme, Microdeal have lost the exclusive distribution rights to the Trojan De Luxe Light Pen (don't laugh — I didn't choose the name!), which means that it's again available at a 3.00 discount from a certain firm whose enterprises I don't like to plug TOO much.

? The directory now contains the details of 103 Dragon owners - new copies cost 1.50. What a rip-off!