Free character definition grid

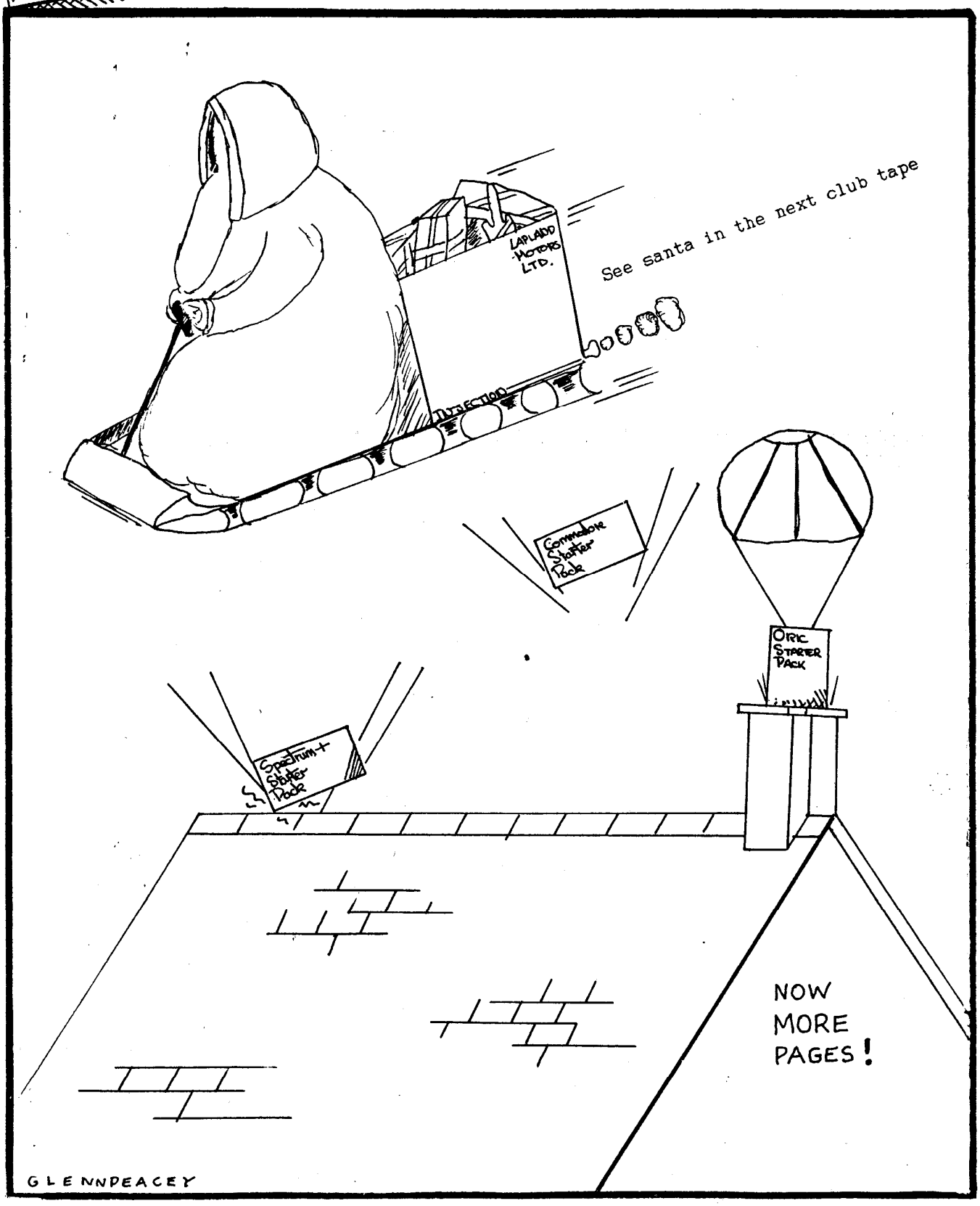
+

Help us help Ethiopia!
(see Puzzle page)

No. 2

ORIC NOTES

DEC 85



EDITORS COMMENTS

Welcome to the second edition of ORIC NOTES!

In this edition we have included two new pages:-

PLUG PAGE
MEMBERS PAGE

1) PLUG PAGE:

This should contain any important imformation about the club. i.e. The date of the next meeting and where it will be.

If you have any queries about the club, we have printed out all the names , addresses and telephone numbers of every one in the club this time.

Any important things will go in here, so it is important that you have a good look at that page!

2) MEMBERS PAGE:

This is going to be totally devoted to you, our members, and so you may put anything you wish (with in reason) in here. Especially we would like to print here hints and tips on programming, letters, bits of news, and we will try to answer any questions you may have.

If you want to put something in here, or ask a question, please write to:

Paul Meadows
4 Park St.
King's Cliffe
PETERBOROUGH
PE8 6XN

We hope that you will use this opportunity well, and fill up the page well, (Jokes, and 'small' pictures will also be accepted. Pictures must not be more that 9.5cm wide).

HARDWARE WHERE?

You may well have difficulty with trying to find hardware for the ORIC, and even if you manage to find it, it may be possible to get it cheaper.

One place to look, is in you're local newspaper, but as there are only people from a relatively small area, it is unlikely that you will be able to find the thing you're looking for.

However there are one or two national publications now totally devoted to second hand selling of computers, hardware, and software. One such magazine is called 'MICRO MART', and is full of good offers for all sorts of products.

Micro Mart is printed in black and white (plus one extra colour on cover) which means that it is not to hard to find from amoungst all the other hundreds of magazines. It costs 40p, and is sold in most newsagents.

It is possible to get software from Micro Mart, but you should be very careful when buying second hand software because the slightest thing wrong with the cassette and the whole program may be corrupted, and if the fault is in the magnetic tape itself, it is generally impossible to see such faults. Because software is reasonably cheap (in comparison to other computer add-ons), people think that they can get away with it more easily. Also there is so much software about that it is unlikely you will be able to find exactly what you want.

By Glenn Peacey and Paul Meadows

PLUG PAGE

We have printed here a list of names, addresses and telephone numbers of all our members, so that you will be able to contact anybody you may need to.

Glenn Peacey
104 Wood Road
King's Cliffe
PETERBOROUGH
PE8 6XR
(078 087) 665

Paul Meadows
4 Park St.
King's Cliffe
PETERBOROUGH
PE8 6XN
(078 087) 239

Huw Morgan-Jones
2A Stoke Road
Lyddington
UPPINGHAM
RUTLAND
(0572) 823330

Charles Porter
Tower Cottage
Ashwell Hall
Ashwell
Rutland
LE15 7LW
(992) 56610

Lloyd Preston
8 Caistor Road
Gretton
CORBY
NORTHANTS
(0536) 770188

Mr A. Peacey
104 Wood Road
King's Cliffe
PETERBOROUGH
PE8 6XR
(078 087) 665

Competition still on

Don't forget about the competition we started last time, to find as many words as you can in the 'RANDOM GRID'. Even if you don't find very many, bring it along, you may even have found them all, it is possible that there arn't very many, remember, it was produced totally randomly (if you can call the result from the 'RND' command totally random) by the Oric!

There is still a small prize awaiting the person who finds the most number of words!

The tape

We are now well on the way to finishing the cassette, and we hope that it will arrive with you sometime soon after Christmas.

As you may well know, it can be very difficult to load programs made by large software companies, and so with our primitive system (cassette recorder to cassette recorder) it is even more likely to cause problems.

All the tapes sent out will be checked, but whether somthing will load or not depends partially on the type of cassette recorder. If you do encounter any difficulties of any kind, contact one of us, and we will do something so that you can load it.

We know perfectly well what it's like to get a cassette, rush up to your room, try it, and it DOESN'T WORK!

We meet again

The next meeting will be at Lloyd's house (see left-hand column) on Sunday the 12th of January from 2:00pm.

Remember to bring along anything you have for the next magazine then.

ORIC move house!

I have just arrived back from a holiday in France, and as you may or may not know, ORIC have just been bought up by a French firm EUREKA INFORMATIQUE so I took the holiday as a good chance to do a bit of info. collecting for PLUG's magazine. I've got most of this imformation from a French magazine which I have got, so if you are interested you may see the magazine at the next PLUG meeting.

First, the ATMOS:-

Well, there seems to have been quite a lot of doubt as to whether the ATMOS was to come out, but the news is that IT WILL!

At the moment it is being sold in two forms:-

1) The ATMOS and 3 games. This is being sold for 990 Frs which is aproximately 99 pounds. This also includes all the leads and adapter to make it work with the French television systems.

2) The ATMOS package which comprises of the ATMOS, a colour monitor, and the ORIC cassette recorder. This is selling at 3490 Frs this is just under 349 pounds which is very good value in France considering that the colour version of the Amstrad is around 4500 Frs (about 450 pounds).

Second, external peripherals (add-ons)

All the add-ons that you could buy in England (Disc Drive, Printer etc.) are on sale in France except the modem, but this may be because the modem was designed for the English market and phones, and they may have to redesigned for the French market and to comply with the French telephone system's rules, so one may come out.

Also on top of all these, there are some new ones:-

1) Colour monitor
2) Monochrome monitor (Green)
3) ORIC cassette recorder
4) MCP80 Printer
5) Programmable joy. interface
6) Joy (Joystick) QUICKSHOT 1
7) Adapters for Fr. Tele etc.

Although the MCP80 printer is now on sale in France they are still selling the MCP40. I don't know the difference between the MCP40 and MCP80 printers, but I guess the the MCP80 uses paper twice the width of the MCP40 (the one I have).

Third, the STRATOS.

Having decided to make the ORIC ATMOS in France EUREKA wondered whether to bring out the STRATOS or whether they should design another computer instead, specially for the French market, but as with the ATMOS they decided that as they had a working prototype they might as well make it, and although it isn't out at the moment, it soon will be.

For those of you who don't know anything about the STRATOS, it looks rather like the ATMOS with extra plastic stuck round the outside, but this time the speaker really is where it looks as if it is on the ATMOS.

It has two cartridge slots, one for languages (BASIC,FORTH,PASCAL,LOGO etc).The computer is sold with a BASIC cartridge and a LOGO one. The other cartridge slot is for games and other software.

As well as the cartridge slots there is a joystick interface, and a serial output port meaning the the computer may be used with a much larger range of printers and modems with out

Cont...

Cont...

external interfaces. Also the STRATOS has a built in DOS (Disc Operating System) which means that a wide variety of Disc Drives may be used as well as ORIC's own one.

The other differences are in the BASIC vocabulary. Here there are 31 extra commands including one called ATMOS. This makes the STRATOS totally compatable with the ORIC ATMOS, so it will run all the ATMOS's software meaning that even when it comes out it will have a nice stock of software which should help it a lot.

All in all it looks as if it will be a very powerful computer because on top of all that, it will have 64K of RAM.

Forth, Any new software?

The answer is yes. There are and have been for some time software houses in France producing software for the ORIC, though little seems to leak into this country.

Now that ORIC is in France this is a clear call for more to start.

Though already in a French advert for the ATMOS in the magazine I have, there is a list of some of the software available for the ORIC-1 and ATMOS, alltogether there are over 60 titles about half of which are French ones I have never heard of.

So all I say is 'Good luck to ORIC in France!'.Au revoir!

Paul Meadows
Programmer for PLUG

In the 'EDITOR'S COMMENTS' section of the magazine, we mentioned 'MICRO MART', a magazine full of offers and advertisements. Well, if you keep your eyes skinned over the next few months, you may see in there an advertisement for PLUG. We have started to put one together now, and will be sending it off shortly.

Just a reminder that the next meeting in January will be the first in the new year, so we would be very grateful if you could bring along your membership money to the next meeting. If however for some reason you can not come to the meeting or find it awkward to pay just then, please could you send it to:

Glenn Peacey
104 Wood Rd.
King's Cliffe
PETERBOROUGH
PE8 6XR

to arrive before February (before the next magazine). The membership has been reduced to £3:00 a year (£1:50p per half year), but the individual amounts that must be paid may vary because some people have paid more than others, so there is a slip of paper in your envelope saying how much you owe, also this half years cost has been cut to £1 because there have been only two magazines, not three.

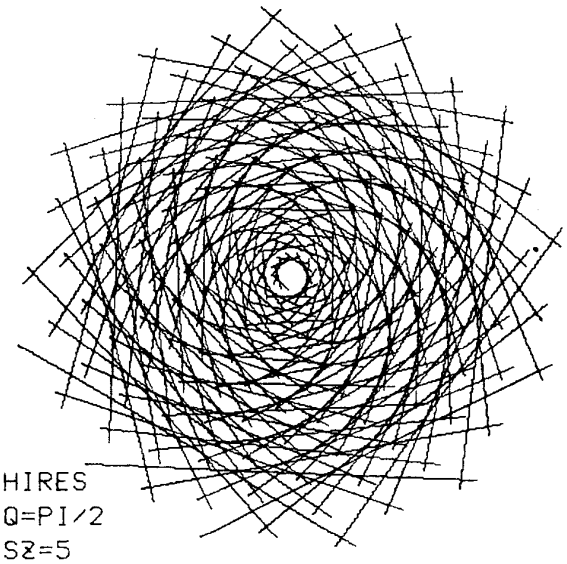
We hope you have enjoyed this half year, and hope you will all stay members now that the club has got up off it's feet.

Thankyou very much.

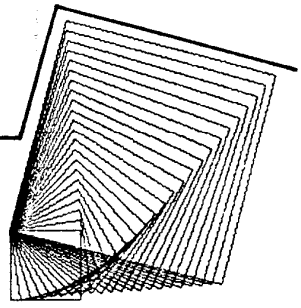
hires page

```
1 REM *** P 51 D MUSTANG ***
10 HIRES
20 CURSET 60,70,1
30 DRAW 20,0,1
40 DRAW 5,30,1
50 DRAW 70,-10,1
60 DRAW 20,0,1
70 DRAW 10,10,1
80 DRAW 30,0,1
90 DRAW 0,10,1
100 DRAW 5,0,1
110 DRAW 0,-30,1
120 DRAW 0,70,1
130 DRAW 0,-30,1
140 DRAW -5,0,1
150 DRAW 0,-10,1
160 DRAW 0,20,1
170 DRAW -100,0,1
180 DRAW -50,0,1
190 DRAW -5,0,1
200 DRAW 0,-60,1
210 CURMOV 130,80,1
220 CIRCLE 10,1
230 CURMOV 0,-10,1
240 DRAW -5,-10,1
250 CURMOV 10,0,1
260 DRAW -5,10,1
270 CURMOV5,-10,1
280 CURMOV -110,0,1
290 CURMOV -20,0,1
300 DRAW 0,10,1
310 CURMOV 0,5,1
320 CIRCLE 5,1
330 CURMOV 85,-20,1
340 DRAW 40,0,1
350 DRAW -5,-5,1
360 DRAW -36,5,1
370 CURMOV 0,-32,1
380 DRAW 35,10,1
390 CURMOV -100,10,1
400 DRAW -2,-2,1
410 DRAW -15,2,1
420 DRAW 17,0,1
430 CURMOV -23,-10,1
440 DRAW 10,0,1
450 DRAW 0,-30,1
460 DRAW -10,0,1
470 CURMOV 70,40,1
480 CIRCLE 14,1
490 CIRCLE 9,1
500 CIRCLE 5,1
510 PAPER 6 :INK 0
```

By Lloyd



```
10 HIRES
50 Q=PI/2
90 SZ=5
100 FORN=0TOPI*30STEP.5
110 X1=SIN(N)*SZ+120
120 Y1=COS(N)*SZ+100
130 X2=SIN(N+Q)*SZ+120
140 Y2=COS(N+Q)*SZ+100
190 CURSET X1,Y1,1
200 DRAW X2-X1,Y2-Y1,1
290 SZ=SZ+.5
300 NEXT
```



```
3 X=50:Y=-7:HIRES
10 X=X-.5:Y=Y+7
20 SOUND1,X,5
30 IFX<39THENPLAY0,0,0,0:END
40 CURSET10,149,3
50 DRAWX,-Y,1:DRAWY,X,1:DRAW-X,Y,1:DRAW
-Y,-X,1
100 GOTO10
```

by Huw

CIRCLES?!

```
10 HIRES
100 CURSET120,100,1
102 C=50
105 REPEAT
110 FORN=1TOCSTEP1
120 CIRCLEN,2
130 NEXT
140 FORN=CTO1STEP-2
150 CIRCLEN,2
160 NEXT
170 C=C-2
180 UNTILC<=2
190 GOTO100
```

By Lloyd

```
10 HIRES
20 CURSET100,100,1
30 CIRCLE20,1
40 DRAW20,0,1
50 DRAW-40,0,1
60 DRAW20,0,1
70 DRAW0,20,1
80 DRAW0,-40,1
90 DRAW0,20,1
100 DRAW12,-12,1
1000 GETA$
1100 TEXT
1200 LIST
```

By Glenn

SOUND TRACK

(1)

```
1 SOUND 1,0,0
5 PLAY 1,1,0,0
10 FOR N=0 TO 160
20 SOUND 4,N,7
30 NEXT
40 SOUND 4,0,0
```

In the last magazine we printed a program in 'SOUND TRACK' that did the same thing as the one above. The reason for us printing another program to do the same thing is to demonstrate the fact that 'white' noise on the ORIC has a pitch range from 0-31. Once the ORIC is told to play pitch 32, it will in fact play pitch 0, and 33 will play 1, 34 will play 2, and so on. This happens over and over again, so 64 will play 0 as well. This program just shows this fact, and is another way of structuring the program.

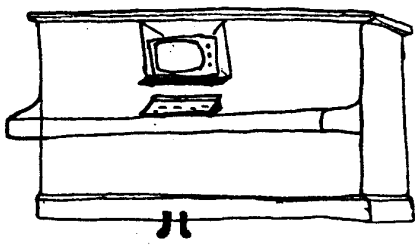
(2)

```
10 REM  Sound & M.C.
20 A=#400
30 REPEAT
40 READ X
45 POKE A,X
50 A=A+1
55 UNTIL X=96
60 INPUT "Enter any number (0-65535)";D
70 DOKE #41E,D
80 CALL #400
90 END
100 :
200 DATA #AE,#1E,#04
210 DATA #AC,#1F,#04
220 DATA #20,#86,#FA
230 DATA #60
```

NOTE :- When using the ORIC-1 line 220 should be changed to:-

```
220 DATA #20,#6C,#FA
```

```
0 REM ************************
1 REM * COMPOSITION & PROGRAM *
2 REM *        BY PAUL        *
3 REM *        P.L.U.G        *
4 REM ************************
5 PLAY 3,0,0,0
10 REPEAT
20 READ A,B
30 IF B=0 THEN MUSIC 1,1,1,0:GOTO 50
40 MUSIC 1,2,B,10
50 O=4
55 IF A>12 THEN O=5:A=A-12
60 MUSIC 2,O,A,11
70 WAIT 20
80 FINISH=(A=1 AND B=1 AND O=4)
90 UNTIL FINISH
92 WAIT 20:PLAY 0,0,0,0:END
95 :
100 DATA 1,8,1,8,5,8,5,8,8,1,8,1
110 DATA 8,1,8,1
120 DATA 6,3,6,3,5,1,5,1,3,3,3,5
130 DATA 3,6,3,8
140 DATA 1,6,1,6,1,0,1,0,1,6,1,6
150 DATA 1,0,1,0
160 DATA 3,6,3,6,3,0,3,0,3,6,3,6
170 DATA 3,0,3,0
180 DATA 1,5,1,0,1,5,1,0,1,5,1,5
190 DATA 1,5,1,5
200 DATA 13,0,13,0,13,0,13,0
210 DATA 13,0,13,0,13,0,13,0
220 DATA 13,5,13,5,13,8,13,8
230 DATA 13,10,13,10,13,1,13,1
240 DATA 1,8,1,8,5,8,5,8,8,1,8,1
250 DATA 8,1,8,1
260 DATA 6,3,6,3,5,1,5,1,3,3,3,5
270 DATA 3,6,3,8
280 DATA 5,5,5,1,5,5,5,1,3,3,3,3
290 DATA 3,10,3,8
300 DATA 5,1,5,1,6,3,6,3,3,8,3,8
310 DATA 3,8,3,8
320 DATA 5,1,5,1,3,6,3,6,1,5,1,8
330 DATA 1,1
```



A BIT OF FUN

```
10 REM  Docker!
20 REM  by Paul
30 REM    (C)
40 REM  26/7/85
50 CLS
55 POKE #26A,10
60 X%=2:Y=0
70 GOSUB 400 'Def chars
80 GOSUB 1500'Start
90 :
100 REM  Set up screen
105 CLS
110 PLOT 18,25,128
120 PLOT 21,25,128
130 IF L%=0 THEN 190
140 FOR N=0 TO L%*10
150 Z%=RND(1)*36+2
160 T%=RND(1)*23+2
170 PLOT Z%,T%,"_"
180 NEXT
190 PLOT 2,0,"\"
195 :
200 REM  Main loop
210 PLOT X%,Y,"  "
220 Y=Y+W
230 W=W+.03
240 K$=KEY$
250 X%=X%-(K$="X")+(K$="Z")
260 PLOT X%,Y,"\|"
270 IF SCRN(X%,Y+1)<>32 THEN 600
280 IF SCRN(X%+1,Y+1)<>32 THEN 600
290 IF Y>=25 AND X%<>19 THEN 600
300 IF Y>=25 THEN 1000
310 WAIT 20
320 GOTO 200
395 :
400 REM  Def chars
410 FOR N=46840 TO 46847
420 READ A:POKE N,A
430 NEXT
440 FOR N=46816 TO 46823
450 READ A:POKE N,A
460 NEXT
470 FOR N=47072 TO 47079
480 READ A:POKE N,A
490 NEXT
500 RETURN
510 DATA 30,33,33,18,12,0,0,0
520 DATA 8,7,31,53,63,31,11,17
530 DATA 4,56,62,43,63,62,52,34
600 REM  Crashed
610 EXPLODE
620 FOR N=1 TO 6
630 PAPER N
640 WAIT 10
650 NEXT
660 PAPER 0
670 WAIT 50
680 PAPER 7
685 PRINT:PRINT:PRINT
690 PRINT"  Sorry, but you did not mana
ge"
700 PRINT" to dock, better luck next ti
me!"
710 PRINT:PRINT:PRINT:WAIT 50
720 PRINT"   Would you like to try agai
n? (Y/N)"
730 GET A$:IF A$="Y" THEN RUN ELSE END
1000 SOUND 1,0,0:PLAY 1,1,0,0
1005 FOR N=32 TO 0 STEP -1
1010 SOUND 4,N,15
1015 WAIT 5
1020 NEXT
1030 SOUND 4,0,0
1040 WAIT 50
1050 CLS
1060 PRINT:PRINT:PRINT
1070 PRINT"  My word your good at this!
"
1080 PRINT" I shall have to make it har
der!"
1090 PRINT:PRINT:PRINT
1100 PRINT"  Press any key"
1110 L%=L%+1
1115 WAIT 5
1120 GET A$
1130 CLS:X%=2:Y=0:W=0
1140 GOTO 100
1500 REM  Start
1510 PRINT:PRINT:PRINT:PRINT
1520 INPUT "What level.  (0-20)  0=easy
";L%
1530 IF L%<0 OR L%>20 THEN 1520
1540 RETURN
```

In this game, you must steer your craft through the 2 black squares at the bottom of the screen, without falling into any black holes. The level you choose will determine the number of black holes on the screen. Levle 0 is a practise level with no holes. You steer your craft with:-

Z = left
X = right

UTILITY TIME

```
 5 REM ** CHAR GENERATOR **
 7 REM *** PAUL/P.L.U.G ***
 10 CLS
 20 INPUT"CHAR TO CHANGE (A,B,C etc.)";C
$
 30 C=ASC(C$):SA=#B400+C*8
 40 FORA=SATOSA+7
 50 INPUT"ENTER BINARY PATTERN (100101)"
;B$:IFLEN(B$)<>6THEN50
 60 FORN=1TO6:P=2^(N-1)
 70 IFMID$(B$,7-N,1)="1"THENU=U+P
 80 NEXT
 90 POKEA,U:U=0
 100 NEXT
 110 PRINT:PRINT:PRINT:INPUT"ANOTHER CHA
R (Y/N)";A$
 120 IFA$="Y"THENRUN
 130 END
```

You may well have looked at games on sale and thought 'How on earth do they get such good graphics on the text screen'. The answer is: it is possible to change any character ORIC has into something different. e.g. an 'A' could be made to look like an alien and 'B' to look like a bullet, or 'A' and 'B' could each be half a space-ship, and then be printed next to each other to make a large space-ship.

The program above will help you to do this. I will show you how to do this, taking a little alien as an example. The first step is to draw out the alien on paper. On the ORIC, each character is defined on a grid of squares 6x8.

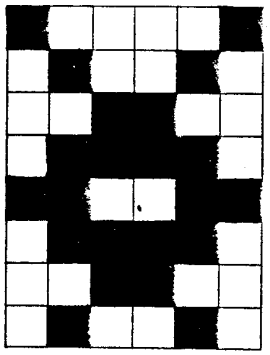
I have drawn out a possi ible alien below. Now imagine every white square as a '0' and every black one as a '1'. Now all you have to do is enter in this pattern (line by line) into the computer using the above program. The first line therefore is '100001', so enter that and press return. The next '010010', enter it and hit return, and so on. When you have done 8 lines, you will be asked if you want to define another character, to exit the program enter 'N' here.

Try some characters out for yourself. I have given you a sheet of 36 little grids to help you.

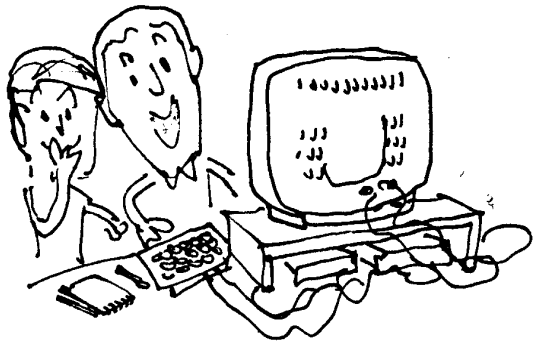
When you have finished entering the characters, if you want to save them on tape, enter:-

```
CSAVE "filename",A#B400,E#B7FF
```

You may then load them back at a later stage to use them in a game or something. When you want to reload them, you do not have to have the definer program loaded, as you load the data, the characters will change. It's quite fun to enter the alphabet somewhere on the screen before you load the in, and so as they are loaded you can see them change.



= 100001
= 010010
= 001100
= 011110
= 110011
= 011110
= 001100
= 010010



IT'S MY LATEST UTILITY PROG'
'SPECTRUM CRUNCHER'

HELP!

MAKING A NOISE

Last time we talked about making a noise but this time we will be doing something with it.

There is another we use, this is 'MUSIC' which makes it easier to play mosical notes.

Try:-

```
MUSIC 1,3,1,15
```

Turn it off with:-

```
MUSIC 1,3,1,0
```

As with the 'SOUND' command the first number is the sound channel (don't bother with this for the moment. The second number is the octave, 0 is the lowest, and 7 is the highest. The third number is the note in the octave starting at 1 and going up in semitones to 12. The last number is the volume, as in the sound command (0-15).

Try:-

```
MUSIC 1,3,2,15
```

Then switch the sound off (you should know how to do do this by now! MUSIC 1,3,2,0). The note should be one semitone higher than the last.
Try other notes for yourself until you fully understand it.

After all that boring stuff we shall move onto the more exciting stuff!

You can try making up programs from what you know already.

Try this:-

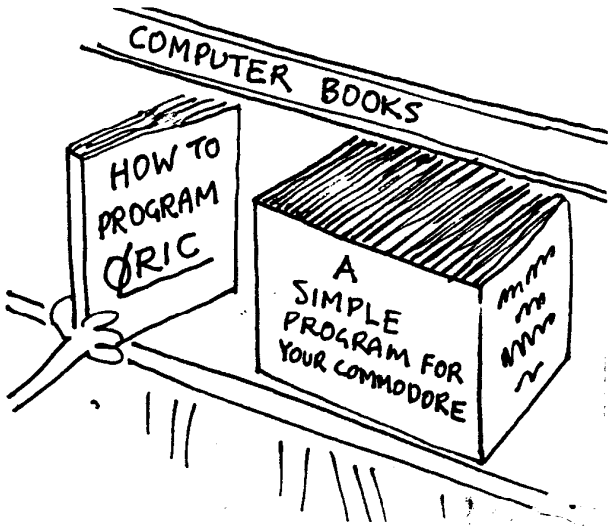
```
10 MUSIC 1,3,1,10
20 WAIT 50
30 MUSIC 1,3,5,10
40 WAIT 50
50 MUSIC 1,3,8,10
60 WAIT 50
70 MUSIC 1,4,1,10
80 WAIT 100
90 MUSIC 1,4,1,0
100 END
```

You should hear the chord of 'C major' when you run it. You should be familiar with lines 10,30,50,70 & 90, and the 'WAIT' command is simple. You just type 'WAIT' and then the number after is how long it should wait in hundredths of seconds e.g. WAIT 50 waits for about half a second.

Only 'END' in line line 100 I have not talked about, and that is even simpler. It just tells ORIC to finish the programand return to command mode, (in this case it is not even necessary to use it, but it is good programming to use it). Try altering the program and lengthening it so that you get the hang of it.

By R.H.M.J.

MORE NEXT TIME



MEMBER'S PAGE

Flow Charts

If you write many programs or not it is still important to know the three points of how to set out your program.

1 The STATEMENT i.e. what is it you intend the computer to do.

2 The ALGORITHM i.e. how you are going to get the computer to work for you.

3 The FLOW CHART i.e. how the program is to be structured.

Let me give you an example of this technique. This is a simplified version of the Halleys comet program.

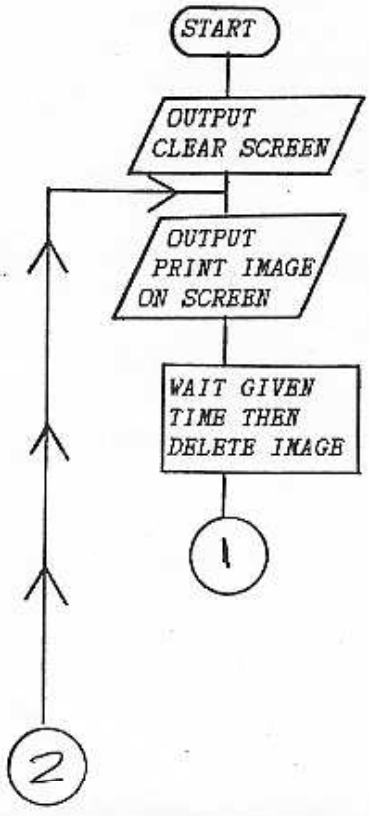
The STATEMENT:-

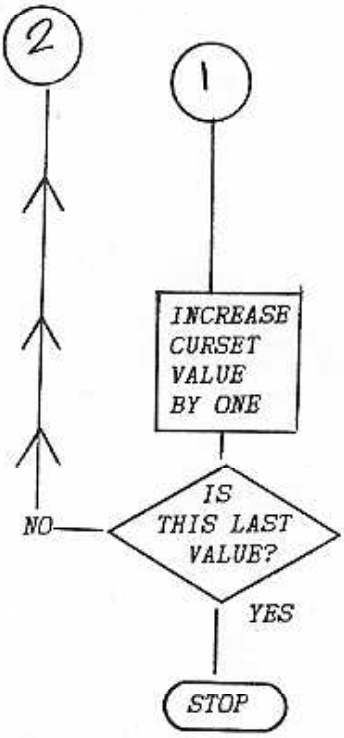
To produce a moving image on the screen.

The ALGORITHM:-

1. *To clear the screen.*
2. *To print the image on on the screen.*
3. *Wait given time then delete image.*
4. *Increase the curset value by one.*
5. *Repeat loop given number of times.*

The FLOW CHART:-





The PROGRAM:-

```
10 C=2
20 CLS
30 PLOT C,12,">*"
40 WAIT 10
50 PLOT C,12," "
60 C=C+1
70 IF C<38 THEN 30
80 END
```

This system of drawing flow charts is not worth doing for a whole game or program, but is very useful for working out awkward routines, and is almost vital when starting programming.
If however you are writing a very complicated program, a more vague version is very useful.

By Glenn Peacey.

We would like to see some of your ideas letters etc. in here next time! (see page 1).

PUZZLE PAGE

CHARITY COMPETITION

Can you write programs, yes! Then you could stand yourself to win some money for charity. For every line we will pay 1p to Band-Aid. The rules are simple thre are no REM statements allowed and no unnecessary repetion of lines.
There will be one winner and only one winner and the judges decision is final.

Can you see it?

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

Can you find these words which ORIC uses? They can be Down, Left, Up, Right, Backwards, or Diagonally.

DOKE, PRINT, GOSUB, CLOAD, LET, SOUND.

PROGRAM SKILLS

Re-write the program below in a different way, but producing the same effect when run.

```
10 FOR N=33 TO 125
20 PRINT TAB(N);N
30 PLAY 0,0,1,3000
40 NEXT N
50 PRINT
CHR$(32);CHR$(32);CHR$(65)
60 END
70 PRINT "FINISHED!"
```

Save Santa!

Santa's got himself into a spot of trouble. The evil wizard, Wumble, is plotting to take the presents which Santa has left over from Christmas, and plans to give out next year. Can you stop Wumble from getting the presents, and reducing the number of presents you'll be getting next year!

In Santa's house are 12 rooms for keeping presents in. 11 of the rooms use the same key, and 1 uses a different key (the lock had to be changed because of Wumbles last unsuccessful attempt!), Wumble has the key to the room with the presents in it.

Under the waste paper bin you see a message, obviously left by Wumble for one of his contacts. It reads:-

82/79/79/77/32/66.

Suddenly Santa walks in repeating to himself some weird sentence at first you think he's a total looney, but then realize it's some algebraic formula, you try and remember what he said, "x squared over sixty point five open brackets five close brackets"

Could this mean anything?

1) Where are the presents?
2) Where would they be safe?

If you find the answers, bring them along to the next meeting.

WHAT ABOUT YOU?!

Have you got any good ideas for puzzles we could do. Sketch out your ideas, and bring them along to the next meeting, and they are good we will put them in the mag!

Also if you've got any ideas for competitions we could run, we will have a look at those as well.

CHARACTER GRID