

ORIC

USER MONTHLY

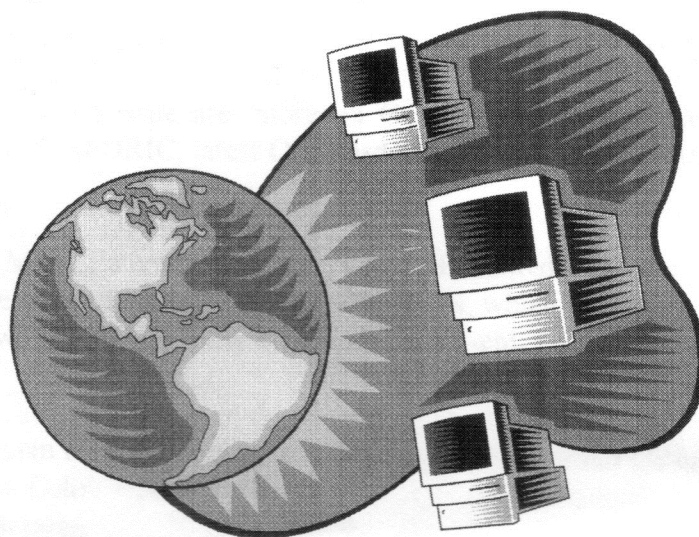
with Alternative Micros

Number **123**

November 1997

*Keeping the
Oric alive*

Oric on Usenet



comp.sys.oric

spans the world too...

The Editorial

Hello one and all,

And welcome to the November issue of OUM. Hopefully this issue will drop onto your doormat a little nearer the beginning of the month than last time. Basically it was my fault last time around, and was caused by my failure to cope with my increasing workload in many areas. IT WILL NOT improve over the next couple of months. I have written to those who are still awaiting things from me. Now let's see what we have in-store this month.

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DECEMBER O.U.M

All articles for inclusion in the December issue should reach me by November 23rd at latest please.

Already planned for that issue are: more on Correlation, Machine Code, Oric web sites, SOUNDTRACKER, PINFORIC, latest Oric hardware news, and lots, lots more.

Thanks Mr.F

A big thank you to Mr.W.Falconer from Fife, who has donated £5 to the club funds. He says it will help to cover the costs of posting him his raffle prizes, which were won at the OUM MEET.

It gets expensive when you win something from OUM -eh!

ON THE MOVE

One of our Norwegian readers (author of CHESS MADNESS) has changed jobs, and moved from Kongsvinger to Oslo. New address is:

Staale Eikebraaten
 Maria Dehlisvei 27 A
 1084 OSLO
 NORWAY

New e-mail-addresses : staalee@objectware.no and staale.eikebraaten@objectware.no.

A big thank you to all contributors, named and un-named.
 Plus the usual thanks to Brian & Nikkey Kidd for collating, enveloping, licking, and distributing this issue.

NEWS.....NEWS.....NEWS

AAH BRISTOW!

SOUNDTRACKER, the latest music program from Jonathan Bristow, is nearing completion. It is hoped that OUM receives the finished article before Christmas.

Meanwhile Jonathan was due to start a new job as a Bits Basic Trainee Programmer for CHECKOUT COMPUTERS at the end of October. The company is based in Luton - a bit too near to Aylesbury for my liking!!!!

Friends of Jonathan can write to him at: 30 Fensome Drive, Houghton Regis, Bedfordshire. LU5 5SH.

OXLEY - Mark II

Congratulations to Mark and Mrs. Oxley on the birth of their second son.

Mark is now beginning work on that software he promised us.

The first project, which is near beta release, is a Windows 95 launcher for Euphoric.

He is also working on a couple of games on the Oric. The first is a logic puzzle, in which the player competes against the clock to extinguish all the lights except the centre one.

The other game, a little more ambitious, is a dungeon role playing game in the same vein as Dungeon Master. However, Mark is fighting with a few machine code routines for that one.

Mark now has a new e-mail address: mco@earthling.net

The Paul Kaufman Interview

"I was born at a very early age - my mother was with me at the time.

There, see! I've started it now !"

- Paul

Well, thank you very much Mr.K. We hope to print another sentence from this amazing interview in the next issue of OUM - the magazine that gets back to the roots of the Oric!

PC HOME

A big thank you to David Wilkin for sending me a copy of the Go Retro article in the October issue of PC HOME. The article listed various emulators for old machines, with a write-up on each and a rating out of 5 stars.

Top of the crop was MAME (Multi Arcade Machine Emulator). It is rated as the definitive

arcade games emulator with over 150 classic games emulated. Those on the Net can get it for free from:

<http://lim.dsi.unimi.it/curr/mix/mame/>

Near the bottom of the ratings are emulators for :

Intellivision, and BBC.

Near the top with 4 Stars is **EUPHORIC** for the **ORIC**.

A nice write-up from the magazine, though the opening sentence poses a question:

"Most of the Oric related sites on the Web are French so it's not surprising that the only really decent emulator is written by a Frenchman."

Does the writer know something that I don't? Are there other Oric emulators out there?

I assume that most of the emulators covered can be found on the **8-Bit EMULATOR BBS**, but if you need the web site for any, then just write, phone or e-mail me.

PINFORIC

Infocom were a company who marketed popular Interactive Fiction Games in English. An interpreter is now finished that allows one to play the likes of **ZORK** with an Atmos with disk system or a Telestrat. The games can also be played on a PC via EUPHORIC.

The biggest ever memory footprint on the Oric, gets rid of Sedoric to fully use 64K ram on your Oric, and implements fast paged virtual memory to allow you run 128KB compressed games !

Available on the developers' archive at ENSICA, <http://www.ensica.fr/oric>

I have now a copy, and will ascertain how to run it and hopefully explain it next month in 'laymans' terms.

ZORK is freeware, and you can get cheap compilations of other titles cheaply.

I envisage supplying **PINFORIC** to **Oric** users on disk.

This should open up a whole new world to Oric users.

ORIC CD

The back cover this month is a black and white version of a colourful inlay for the **ORIC CD**.

The message from Fabrice read:

"The CD itself is here, well, it's quite a collectors item because it's unique ;-)

I made it one or two years ago, it should have demonstrated to a CEO meeting, but the guy to whom I sent it, left it at home...

So, if you want it for demonstrating at your next OUM meeting, tell me..."

Oh yes! - of course we would, and next month we will publish full details.

Classified Adverts.

Scanning Service

Brian Kidd is now able to offer a scanning service on PC or MAC format.
Cost is 50 pence per disk + postage.
For further information contact Brian on 01633 273359

8-Bit

The magazine for all 8 Bit owners with free classified ads.
£3 per issue from: Brian Watson, 'Harrowden', 39 High St., Sutton - in - the - Isle, Ely, Cambs.
And now a message from its editor:

"A copy (the first of a free subscription) of 8BIT has left en route to you today (Monday Nov.3rd). The last few weeks have been absolutely Hellish, what with extremely busy business commitments plus a week and a half's holiday.

You will be aware that this voluntary lark is all very well when times are easy but at times...

I found OUM very good and will try to give it a bit of in-depth coverage in the next issue. This is scheduled for Early Jan, but I am trying to plan my time so that it appears in time for Christmas.

All the best."

- Brian Watson

:: Protex Robot Software Pipeline Parados 8BIT IEBA WACCI Publicity ::

GROOVY BBS

THE GROOVY CHANNEL:27 is a new BBS with a PC and Amiga file base with free downloads.....Log on: 01793 822932 from 6p.m. to 9.p.m (Mon-Fri), and 10.a.m. to 9.p.m. at weekends.....phone once, hang up, then phone again.

Amiga Review

Commodore Amiga Magazine - £3.50 (incl. Disks) from: Amiga Review, Communications House, Isle of Wight. PO37 7LU.....Published by Mediasoft Magazines.

New C64 Fanzine

For a copy of 'Computer Scene' send £1 to : Richard Bowen, Computer Scene, 35 Nottingham Road, Nuthall, Nottingham. NG16 1DN

ORIC PUBLIC DOMAIN

It looks likely that Brian Kidd will take over the reins of the ORIC Public Domain library from Jon Haworth. As soon as it is set up, we will send out a copy of the titles available to all readers. Perhaps Brian will offer some titles on tape, as well as on disk.

HAPPY BIRTHDAY

CHIC COMPUTER CLUB is 15 years old. I have just received Newsletter 39 (Autumn/Winter).....more about them on the BACK PAGE

**** Get your ads in NOW - see last issue for rates****

E-mails to the Editor

> DEAR DAVE,

> Hope you Get this E-mail

> > As You Can See Its Internet All The Way..... My E-mail Address is WWW.Eladeus@aol.com

> This is my First week So Excuse the Mistakes

> Already visited the O.U.M Page - it's out of this world. Down loaded a couple of things. Hope I find you well , looking forward to the next issue

- DALE BLYTH

DEAR DALE,

OUM page is still far from finished, and I now find that using the new Internet Explorer V4, the background is lost, and the text greatly enlarged.

Links to other sites should be helpful, as these lead to many more. Latest OUM went out today -rather late I'm afraid.

Dave Dick (Oric User Monthly).....dave@oum.softnet.co.uk OUM HOME PAGE: <http://www.soft.net.uk/oum>

DEAR DAVE,

Your name was passed on to be by a friend who has an Oric. Can I still get hold of one of these, and how do I get hold of info about your user group?

> Do you have a website? is it possible for me to download info from any other source?

Robin Ward > robin_ward@weblife.bangor.ac.uk

> HI ROBIN,

nice to hear from you.

We can still get an Atmos for you - new! Price is £45 incl. post with PSU. The vendor is Steve Hopps - he also makes disk interfaces at £60.

We publish a magazine - Oric User Monthly. For a complimentary issue, just e-mail me with your home address.

I have a web site - the address is at the bottom of this message. It has a little software, and I intend to add to it - when time permits. I also have links to a couple of other sites, which lead onto various others, including some with software. The main software archive at Tardis seems to be having problems at the moment. Instead of downing software you get a picture! It would take literally hours to read every site.

- Dave Dick (Oric User Monthly).....dave@oum.softnet.co.uk

> Hi,

> I've only been on the net for 2 days and stumbled accross the OUM page.

> > The first computer I ever owned was an Oric-1 48K (far superior to the Sinclair Spectrum I thought) in 1983. This was a birthday present from my parents (I was 12). It is sitting in my attic along with magazines, games on cassette and even an adapter which allowed it to talk !! (This was built from a kit by myself which was purchased from Maplin Electronics).

> I'm sure I could find listings which may be of interest.

- RICHARD CREES

Hi Richard,

good to hear from you.

Would be interested in any listings, so that we could print them in Oric User Monthly. If you want a complimentary issue of the mag., then please e-mail me with your home address.

I hope you have found the other sites, many of which lead to games archives etc.

- DAVE

Dave,

Amazed to find OUM still alive and kicking on the internet ! I was a subscriber a few years back and still have my old Oric-1 and Atmos with all the software and other bits & pieces - couldn't possibly throw 'em away, could I ? I spend most of my days now playing around with IBM AS400's - can't find a copy of Xenon-1 anywhere for it though... Hope all's well - I might well be back in touch before too long ! That is if my other half let's me retrieve my plastic pals from the loft! Women...

- Adrian Westley

Hi Adrian,

A reply on its way to you shortly. As for XENON-1 - why not play it on EUPHORIC?

- Dave

READERS LETTERS



the latest article is enclosed. In fact it really is the start of a short piece on constructing an interface. With luck, I hope to cover the main part of the construction next month and finish it the following month. After that comes the software. I hope that **OUM** readers find it useful and interesting.

As for Peter Hill's query about the **PLING** ("!") operation, I finally got around to testing the routines and they seem to work OK, but they are still just a pencil scribble at the moment. I will tidy them up and get them to you, sometime soon.

I received your e-mail. I managed 57 minutes on the Internet this month. There was a small problem with unwanted news groups (none Oric related), to which I had been "Subscribed". These automatically down loaded immediately on connection, tying up the **ARCHIMEDES** for ages. Being new to the Internet, I wasn't sure if I should drop them, but did so in the end, otherwise I would never have got on line at all, at the rate they were building up.

- Peter N. Bragg (Sutton)

DEAR PETER,

Thanks for yet another great article. I'm sure it will be of interest to many.

Regarding to subscribing to News groups - your software seems to be different to mine. From what I remember, I could get a list of groups (about 8,000) and then just subscribed to the one I wanted, namely, **comp.sys.oric**. I did at one point subscribe to the **Classic Computers** group, but there was too much irrelevance for me, and so I un-subscribed.

- Dave



here is my latest contribution to the **Oric** scene, which has taken a couple of months to obtain.

Sorry it takes so much paper, but I thought it makes more sense to keep each section to one page; then any further details/comments can be added later.

If I had known how involved this little exercise would become, I doubt if I would have ever started.

The disk of **MASTERPAINT** that I have came to me about five years ago.

Anyway, how is the search for the missing machine code to complete the last type-in published in **OUM** called **SCORBUTT**? I have all the text completed now, but of course it will not work.

The latest **OUM** is obviously very clever, but a little over my head. I hope the content doesn't drive people away that are very much still just home computer operators like myself.

I have a relation in Canada who is on the Internet, and the hassle he tells me is involved in trying to get to grips with it just isn't worth it for us old togs.

Going back to **MASTERPAINT** - I haven't tried to put it to **SEDORIC** format, but if it would move over, it might be a good program to put out on an **OUM DISK**, and charge accordingly to cover the cost of publishing the instruction pages.

- John Hurley (Yeovil)

DEAR JOHN,

An enormous thank you for the English translation of **MASTERPAINT**, that super drawing program (from ERE Informatique - I think!). It is 14 pages long, and therefore too long to re-publish in **OUM**. I will send a copy on to Ron Evans, as I know he has been after a copy. If anyone else wants a copy, then would they please send me 4x26p stamps to cover copying and postage. I agree that it would be a good program for an **OUM DISK**, but unfortunately I am still finding no time to work on its completion. I have a feeling that somewhere amongst my vast array of disk software, that I may just have a version that allows one to save and load to disk, rather than being a disk version whereby you must save and load to tape. I'll check out the programs I had from Harry Peters from the Netherlands.

Regarding **SCORBUTT** - I think I had better send you a disk copy of the program.

LETTERS (Contd.)

The content of OUM is basically dependent on 3 factors: A) What our contributors send in, B) What you the readers ask to be included, and C) What I am currently finding interesting.

I do on occasions telephone readers at random to find out if they are happy with the content, and the reaction is usually favourable. I do listen to peoples views, and try to act on them. I know we could do with more on the Games front for instance, but I also appreciate the fact that there is any ever increasing percentage of readers who are getting PCS, going onto the Internet, and using EUPHORIC to emulate their Orics. Perhaps I could ask for light hearted contributions from Oricians for the December issue of OUM. In the words of the Tories - "Let's get back to Basics".

- Dave



just a quick note to say what a change it was to read something different i.e. "For Sale" column in the last OUM.

Brian is now using me as his Secretary - hence the different writing!

- Nikkey Kidd (Newport)

Hi Nikkey,

Nice to hear from you. Glad you liked the "For Sale" column. If you like I'll do a Music page, a Sports page, a Current affairs page, and then see if there is any room for that boring old computer stuff!

I wonder if you are still Brian's Secretary - after all, he blames you for the fact that poor old Jon Haworth didn't get the last OUM - instead he got 15 Front Covers! Well, that has stirred it! One thing about getting a note from you - at least I don't have to get it translated from Welsh!

While I'm prating away - **A BIG, BIG THANK YOU FOR DOING THE COLLATING OF OUM EACH MONTH, AND FOR LICKING ALL THOSE ENVELOPES.**

- Dave



moving house was, as always, a strain, and I'm still not over it. Instead of a new article, I've repeated my feelings on the spelling of **DISC** when I insist that it should always be **DISK**. Peter Bragg took the name of the Lord High God in vain in his last article, so I've countered it with an article for this issue. I hope you don't mind me criticising him in

public. A good opportunity to correct a mistake that most contributors (INCLUDING YOU!) make, with the possible exception of Jon Haworth. I also wanted to do SOME good to people who don't understand the difference between a contracted IT IS (It's) and a possessive ITS (like HIS or HER) which cannot have an apostrophe.

I was in Spain just over a month ago, but my health hasn't been good since. I'm feeling better today - writing the article snapped me out of my lethargy. So you see, OUM REACHES THE PARTS THAT OTHER MAGS CAN'T REACH. By the way - ta for the E-mail. I'm sure that the three letters O, U & M could be woven into a similar type of cartoon. We might have a competition to see who could develop the most vulgar pattern created by O, U & M. But I suppose there would be complaints. Still, it could be done via E-mail - Luis, get designing. We fight like tigers, but I couldn't manage without him these days.

- Frank Bolton (Leicester)

DEAR FRANK,

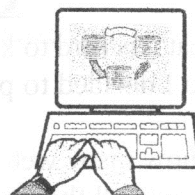
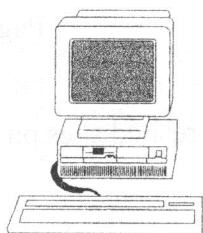
I'm pretty sure that Peter won't mind a bit of ribbing. As for me - I'm used to it.

Regarding the e-mail (the e-moon I received from a fellow Orician) - designing a pattern using O, U & M is a great idea. Contributions please from all readers, though I must insist that no vulgar ones will be re-produced in OUM.

It was nice to speak to Luis on the telephone. His English has certainly improved, and he has certainly mastered the art of computers.

Hope your health improves soon.

- Dave.



BBC ROM UTILITIES PROGRAM - **Colin Cook**

The Rom utilities program that I've been writing for the BBC is now working. It is not complete, but the main two parts are working. These two parts display a section of memory on the screen and dump a section of memory onto printer. I also intend to include parts which will save copies of ROMS onto tape or disk and send copies across the serial interface, but these features have not been written yet, as I need to set up more hardware, such as Disk interface and having a second BBC system working so that I can test the serial link. My program has only been tested with 16k ROMs so far and I would like to see how it works with smaller ROMs. My program started off as being very simple and more features were added. Features that I never originally considered, were added. For example, you may recall **EVE**, the disassembler and memory dump program that I wrote for the Oric, several years ago. The memory dump in that would only scroll down through a section of memory. My present program will scroll UP and DOWN, line by line OR page by page.

The dump to printer part also has a number of features which I have not seen on other dump programs. All the other dump programs that I have seen, just switch on the printer and dumps the memory until it gets to the end and then switches the printer off. My program breaks the output up into pages where each page has a page title and a page number. The title is selected by the user and centred in the centre of the 40-column page and can be up to 38 characters long.

A late featured to be added was the offset feature. In the BBC, sideways ROMs occupy the space between 8000 and BFFF. The offset feature appears to let the rom start at any memory location that the user requires. For example, if an ORIC rom was put in a BBC rom it would occupy locations 8000 to BFFF, but the offset feature could appear to make it occupy locations C000 to FFFF as in the ORIC.

You may be wondering what this program has to do with ORIC users. It can offer another way to examine the contents of an ORIC rom. To test this program, I installed an Oric Atmos rom into my BBC and then dumped the entire contents of the rom onto the printer. I enclose the print-out as an example of the programs output. Please note that the print-out was done before I included the offset feature. The program was written entirely in machine code.

ORIC WEB SITES

I have found that it is hard to keep up with the ever growing number of Oric related sites on the Internet, and so I decided to post the following message to the news group:

"Hi,

there are now many web sites for the Oric. Many are linked to each other, but it is easy to miss some. Would all those with Oric sites please e-mail me with the addresses of their home pages, so that I can print them all in the next issue of Oric User Monthly. Also I will post a copy of the list to all subscribers.

Thank you." - Dave Dick (Oric User Monthly).....dave@oum.softnet.co.uk

OUM HOME PAGE: <http://www.soft.net.uk/oum>

Back came the replies, starting with this: -----

Your following message has been delivered to the 164 members of the list oric@lyghtforce.com at 14:03:28 on 17 Oct 1997.

Hi Dave,

The link to my hompages is

The Swedish Oric Homepage:

http://www.algonet.se/~hakan_k/

The Swedish Archive:

http://www.algonet.se/~hakan_k/swed_arch.html

Regards - Hakan Karlsson

Hi Dave,

My Oric URL is

<HTTP://CICERO.SHU.AC.UK/~CMSRM2/ORIC/>
ORIC.HTM

There is other stuff on my web site as you know and it starts at URL

<HTTP://CICERO.SHU.AC.UK/~CMSRM2>

- Ray McLaughlin.

http://ourworld.compuserve.com/homepages/Marc_Goldstein/Oric.htm

Regards, Marc Goldstein.

E-mail : Marc_Goldstein@compuserve.com

U R L :

http://ourworld.compuserve.com/homepages/Marc_Goldstein/

My Oric site is at

<http://www.geocities.com/paris/7150/orice.htm>

in English

(Yes I finally translated the main part into English :)

Thanks for all that you're doing for Oric!

- Simon Guyart.

Hi all!

(pour les francophones, voir plus loin)

Club Europe Oric Home Page has just been updated with brand-new links, including to:

- the Bulgarian Oric ROMs

- the Oric CD page

- pictures of the Oric-1 and Atmos motherboards

Have a look at:

<http://ourworld.compuserve.com/homepages/laurentch/>

and click on What's New

- Laurent Chiacchierini

<http://sung3.ifsi.rm.cnr.it/~dargaud/Oric1.html>

Guillaume Dargaud

Software/field engineer.....CNR/IFA

<http://sung3.ifsi.rm.cnr.it/~dargaud/index.html>

"INSERT DISK THREE" ? But I can only get two in the drive !"

NOTE: Those are the ones that replied to me directly. At other times, messages have come in that lead us to sites. These are:

If you have WWW access, look e.g. at:

http://www.ensica.fr/~frances/oric/oric_english.html

The English section of Fabrice Frances's site.

I don't remember if I have already announced them here, sorry if this is the case...

euphoric 0.99j2 has been uploaded to

<http://www.ensica.fr/oric/EMULATORS/euphoric.zip>

and

pinforic 1.01 (Infocom Interpreter allowing to play all Infocom Standard Series games) is available on

<http://www.ensica.fr/oric/DISKS/pinforic.zip>

release 1.01 only has a better status line display.

> A little more on the Back page, more next month, and finally the OUM site:

> OUM HOME PAGE: <http://www.soft.net.uk/oum>

e-mail: Dave Dick (Oric User Monthly).....dave@oum.softnet.co.uk

CORRELATION - THE LISTING

```

100 FOR C=0 TO 7:READ D:POKE #B400+8*126+C,D:NEXT
110 CLS:PRINT "Keyboard entry of matrix [K]"
120 PRINT "Load matrix from disk [L]":GET A$
130 IF A$="L" THEN GOSUB 1460:N=U:T=W:GOSUB 1520:GOTO 240
140 IF A$<>"K" THEN 110
150 :
160 : 'INPUT MATRIX
170 :
180 PRINT:INPUT "NO.OF COLUMNS";N:INPUT "NO.OF ROWS";T:GOSUB 1980
190 PRINT:FOR I=1 TO N:PRINT TAB(I+2)"Column";I
200 FOR J=1 TO T:PRINT "Row";J;:INPUT C(J,I):NEXT:PRINT:NEXT
210 :
220 : 'CALCULATE MATRIX OR CHANGE MATRIX ELEMENT
230 :
240 PRINT:PRINT CHR$(27)"Q[1] Calculate matrix"
250 PRINT CHR$(27)"Q[2] New matrix"
260 PRINT CHR$(27)"Q[3] Save matrix to disk"
270 PRINT CHR$(27)"Q[ESC] to end ";:GET A$:PRINT
280 IF A$="2" THEN GOSUB 2000:IF C$="Y" THEN RUN
290 IF A$="3" THEN GOSUB 1590
300 IF A$=CHR$(27) THEN END
310 IF A$<>"1" THEN 240
320 GOSUB 1170 'input results
330 :
340 : 'NEW VALUES OR COMPUTE COEFFICIENTS
350 :
360 PRINT:PRINT CHR$(27)"Q[1] New Results Column"
370 PRINT CHR$(27)"Q[2] Save results to disk"
380 PRINT CHR$(27)"Q[3] Change single result"
390 PRINT CHR$(27)"Q[4] Change matrix Element"
400 PRINT CHR$(27)"Q[5] Compute coefficients"
410 PRINT CHR$(27)"Q[6] Add new column"
420 PRINT CHR$(27)"Q[7] Add new row"
430 PRINT CHR$(27)"Q[8] Delete matrix column"
440 PRINT CHR$(27)"Q[9] Delete matrix row and result"
450 PRINT "[ESC] for previous Menu";:GET A$:PRINT
460 IF A$="1" THEN GOSUB 1170:GOTO 360
470 IF A$="3" THEN GOSUB 1260:GOTO 360
480 IF A$="6" THEN GOSUB 1810:CLR F$="TEMPM":A$="6":GOSUB 1470
490 IF A$="6" THEN N=U+1:T=W:GOSUB 1870:GOSUB 1540:F$="TEMPR":GOSUB 1670
500 IF A$="7" THEN GOSUB 1810:CLR F$="TEMPM":A$="7":GOSUB 1470
510 IF A$="7" THEN T=W+1:N=U:GOSUB 1940:GOSUB 1540:F$="TEMPR":GOSUB 1670
520 IF A$="7" THEN GOSUB 2060
530 IF A$=CHR$(27) THEN 240
540 IF A$="4" THEN GOSUB 1370:GOTO 360
550 IF A$="2" THEN GOSUB 1740
560 IF A$="8" THEN GOSUB 2120
570 IF A$="9" THEN GOSUB 2170
580 IF A$<>"5" THEN 360
590 SE=0:L=1:R=0:FOR I=1 TO N:X(I)=0:S(I)=0:NEXT:FOR J=1 TO T:Q(J)=0:NEXT
600 FOR I=1 TO N:FOR J=1 TO T:S(I)=S(I)+C(J,I)^2:NEXT J,I
610 CLS:PRINT "Typical no.of iterations = 25-250":PRINT
620 INPUT "No.of iterations: ";DM
630 INPUT "No.of decimal places accuracy: ";DP
640 PW=10^DP:RP=1/PW/10:DEF FNA(X)=SGN(X)*(INT(ABS(X)*PW+.5))/PW
650 PRINT:PRINT "Print results to Screen [S]"
660 PRINT "Print results to Printer [P]"

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670 GET P$:PRINT:PRINT CHR$(17);CHR$(126);
680 :
690 :      'COMPUTE COEFFICIENTS
700 :
710 IF SE<=DM THEN 780
720 PRINT CHR$(13)CHR$(14):PRINT "POOR DATA.":L=2
730 PRINT "CONTINUE SOLVING (Y/N)";:GET A$:PRINT
740 IF A$="N" THEN END
750 IF A$<>"Y" THEN PRINT:GOTO 730
760 PRINT:PRINT "Press [V] to View result"
770 PRINT "Press [S] to stop calculation":PRINT:PRINT "Coefficients so far:"
780 FOR I=1 TO N:X(0)=X(I):A$=KEY$
790 IF A$="V" THEN TR=X(I):GOSUB 1310
800 IF A$="S" THEN I=N:FL=0:GOTO 850
810 FOR J=1 TO T:R=R+C(J,I)*(D(J)+Q(J)+C(J,I)*X(I)):NEXT 'J
820 X(I)=R/S(I):R=0
830 FOR J=1 TO T:Q(J)=Q(J)-C(J,I)*(X(I)-X(0)):NEXT 'J
840 X(0)=ABS(X(0)-X(I)):FLAG=FL+(X(0)>RP)
850 NEXT 'I
860 IF FL=0 THEN 920
870 IF A$<>" " THEN PRINT
880 FL=0:SE=SE+1:ON L GOTO 710,780
890 :
900 :      'DISPLAY COEFFICIENTS AND RESULTS
910 :
920 PRINT CHR$(13)CHR$(14)CHR$(17)
930 IF P$="P" THEN GOSUB 1410 ELSE GOSUB 1420
940 FOR I=1 TO N:PRINT "Coefficient";I;": ";:PRINT FNA(X(I)):NEXT:PRINT
950 PRINT TAB(11)"Exp.Result";TAB(26)"Calc.Result"
960 FOR J=1 TO T:PRINT "Row";J;TAB(11);D(J);
970 FOR I=1 TO N:SUM=SU+C(J,I)*FNA(X(I)):NEXT:AS=FNA(SUM)
980 PRINT TAB(26);AS:SUM=0:NEXT:PROFF:P$=""
990 :
1000 :      'RE-CALCULATE OR PREDICT
1010 :
1020 PRINT:PRINT CHR$(27)"Q[1] New Results Column"
1030 PRINT CHR$(27)"Q[2] Prediction"
1040 PRINT CHR$(27)"Q[3] Re-calculate Matrix"
1050 PRINT "[ESC] to end";:GET A$:PRINT
1060 IF A$="3" THEN 240
1070 IF A$="1" THEN GOSUB 1170:GOTO 360
1080 IF A$=CHR$(27) THEN END
1090 IF A$<>"2" THEN PRINT:GOTO 1020
1100 PRINT:PRINT "Input elements of row:":PRINT
1110 FOR I=1 TO N:PRINT "Element";I;
1120 INPUT X(0):SUM=SUM+X(0)*FNA(X(I)):NEXT:X(0)=0:PRINT
1130 PRINT "Result=";FNA(SUM):PRINT:SUM=0:GOTO 1020
1140 :
1150 :      'INPUT RESULT COLUMN
1160 :
1170 PRINT:PRINT "Keyboard entry of results [K]"
1180 PRINT "Load results from disk [L]"
1190 GET A$:IF A$="L" THEN GOSUB 1660:GOSUB 2060:RETURN
1200 IF A$<>"K" THEN 1170
1210 PRINT:FOR J=1 TO T:PRINT "RESULT COLUMN, ROW";J;
1220 INPUT D(J):NEXT:RETURN
1230 :
1240 :      'CHANGE SINGLE RESULT
1250 :
1260 PRINT:PRINT CHR$(27)"CHANGE RESULT":INPUT "Row";J:IF J<1 OR J>T THEN 126

```

```

1270 PRINT "Present value =";D(J):INPUT "New value";D(J):RETURN
1280 :
1290 :      'TEMPORARY RESULTS
1300 :
1310 PROFF:PRINT:PRINT I;"=";FNA(TR);
1320 IF P$="P" THEN GOSUB 1410 ELSE GOSUB 1420
1330 RETURN
1340 :
1350 :      'INPUT SINGLE ELEMENT
1360 :
1370 PRINT:PRINT CHR$(27)"CCHANGE ELEMENT"
1380 INPUT "Column";I:IF I<1 OR I>N THEN 1370
1390 INPUT "Row";J:IF J<1 OR J>T THEN 1390
1400 PRINT "Present value =";C(J,I):INPUT "New value";C(J,I):RETURN
1410 PRSET:RETURN
1420 PROFF:RETURN
1430 :
1440 :      'LOAD SIZE
1450 :
1460 PRINT:INPUT "Name of file ";F$
1470 OPEN S,F$,1:TAKE 1,U,W:CLOSE 1
1480 PRINT:PRINT "Matrix on disk has";U;"Columns and";W;"Rows":RETURN
1490 :
1500 :      'LOAD MATRIX
1510 :
1520 GOSUB 1980 'DIM routine
1530 PRINT:PRINT "Loading";U;"by";W;"matrix"
1540 OPEN S,F$,1:TAKE 1,U,W:FOR I=1 TO U:FOR J=1 TO W:TAKE 1,D
1550 C(J,I)=D:NEXT:CLOSE 1:RETURN
1560 :
1570 :      'SAVE MATRIX
1580 :
1590 PRINT:INPUT "Name of file";F$
1600 PRINT:PRINT "Saving";N;"by";T;"matrix"
1610 OPEN S,F$,1:PUT 1,N,T:FOR I=1 TO N:FOR J=1 TO T
1620 D=C(J,I):PUT 1,D:NEXT:CLOSE 1:RETURN
1630 :
1640 :      'LOAD RESULTS FROM DISK
1650 :
1660 PRINT:PRINT CHR$(27)"CLOAD RESULTS":INPUT "Name of file";F$
1670 OPEN S,F$,1
1680 TAKE 1,W:IF W>T THEN W=T
1690 PRINT:PRINT "Loading";W;"Results"
1700 FOR J=1 TO W:TAKE 1,D:D(J)=D:NEXT:CLOSE 1:RETURN
1710 :
1720 :      'SAVE RESULTS TO DISK
1730 :
1740 PRINT:PRINT CHR$(27)"CSAVE RESULTS":INPUT "Name of file";F$
1750 PRINT:PRINT "Saving";T;"Results"
1760 OPEN S,F$,1
1770 PUT 1,T:FOR J=1 TO T:D=D(J):PUT 1,D:NEXT:CLOSE 1:RETURN
1780 :
1790 :      'Temporary save to disk
1800 :
1810 F$="TEMPM":GOSUB 1600 'save matrix
1820 F$="TEMPR":GOSUB 1750 'save results
1830 RETURN
1840 :
1850 :      'ADD COLUMN
1860 :

```

```

1870 GOSUB 1980 'DIM routine
1880 PRINT:PRINT "NEW MATRIX COLUMN";N
1890 I=N:FOR J=1 TO T:PRINT "Row";J;
1900 INPUT C(J,I):NEXT:PRINT:RETURN
1910 :
1920 : 'ADD ROW
1930 :
1940 GOSUB 1980 'DIM routine
1950 PRINT:PRINT "NEW MATRIX ROW";T
1960 J=T:FOR I=1 TO N:PRINT TAB(I+2)"Column";I;
1970 INPUT C(J,I):NEXT:PRINT:RETURN
1980 DIM S(N),X(N),C(T,N),D(T),Q(T):RETURN
1990 :
2000 PRINT:PRINT CHR$(27)"LARE YOU SURE (Y/N)";
2010 GET C$:PRINT CHR$(13)CHR$(14):RETURN
2020 DATA 12,18,37,41,37,35,18,12
2030 :
2040 : 'ADD RESULTS FOR NEW ROWS
2050 :
2060 IF T>W THEN 2070 ELSE RETURN
2070 PRINT:FOR J=W+1 TO T
2080 PRINT "Result for New Row";J;:INPUT D(J):NEXT:RETURN
2090 :
2100 : 'DELETE COLUMNS AND ROWS
2110 :
2120 GOSUB 2000:IF C$="N" THEN RETURN
2130 PRINT:INPUT "Delete column number";D:IF D<1 OR D>N THEN 2130
2140 IF D=N THEN N=N-1:GOTO 2160
2150 FOR I=D TO N-1:FOR J=1 TO T:C(J,I)=C(J,I+1):NEXT:N=N-1
2160 PRINT:PRINT "MATRIX COLUMN";D;"DELETED":RETURN
2170 GOSUB 2000:IF C$="N" THEN RETURN
2180 PRINT:INPUT "Delete row number";D:IF D<1 OR D>T THEN 2180
2190 IF D=T THEN T=T-1:GOTO 2210
2200 FOR J=D TO T-1:D(J)=D(J+1):FOR I=1 TO N:C(J,I)=C(J+1,I):NEXT:NEXT:T=T-1
2210 PRINT:PRINT "MATRIX ROW AND RESULT";D;"DELETED":RETURN

```

You can enter and run this program now if you like, and try a few combinations of rows and columns. They are entered one column at a time in the matrix format so you are always inputting the data for just one variable or one result. It works well for solving simple simultaneous equations where the determinant is big enough, but is slow for large data sets or data containing repetition, i.e. where the determinant is smaller. Basically, the more rows and fewer columns there are, and the more variations in the sets, the better the result, which is what I expected. However, there is a minor flaw in the algorithms I have used to detect when an answer is ready to be printed, and this could affect some types of correlation analysis. But more on that later. As it stands, the program can still be used in some interesting studies of systems with few variables but plenty of results, or bigger sets depending on how long you are prepared to wait.

NEXT MONTH - Back To The Dog

- Colin Cook

Brian's Pages :

Issue # 123

November 1997

Page # 14

WELCOME . It seems that no one was interested in the prize I offered last month . Well it has to go , along with a pack of superb Playing Cards . So send your answer to poser #1 , for a chance to win .

For this month only , I didn't get the chance to do an Alternative Front Cover - our beloved editor , and general Oric do-gooder and Demi-God , refused permission , saying he had something lined up . Can't wait to see it !

At this time I would like to write something sarcastic about our Dave - by now you have probably read about a little boo-boo I made , in sending out one particular persons last issue of OUM . Now I know Dave's written something , but until I get the pages for photocopying , I don't know his comments , however , I can't think of anything to say , so I'll let him off the hook .

In the near future , I am to take over the Oric PD thingy - details have yet to be arranged with Jon , so watch these pages , and please support this venture .

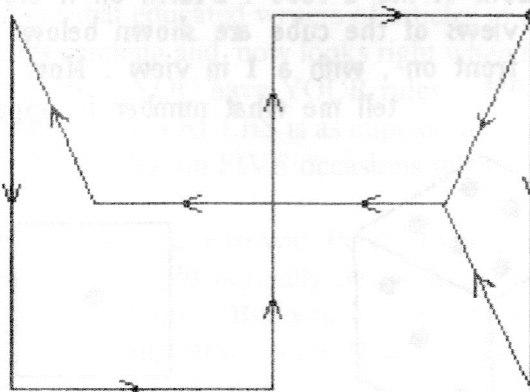
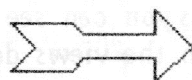
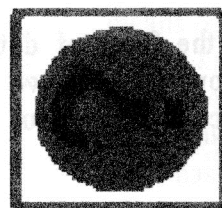
Now onto last issues poser answers

2) SIX GLASSES : simplicity in itself , and so obvious - simply raise glass B , and pour its contents into glass E , then replace glass B in its original position . Now that wasn't too hard was it !

3) STEEL BALL IN HAWAII : a bit of a trick question was this one . Hawaii , was really of no consequence - it could quite easily have been Aylesbury , for wherever you are , water at 20 degrees f , is frozen ! now you can work out the answer for yourself .

1) PAPER , PENCIL AND DRAWING : now don't tell me you never tried drawing the house with an X in it . If you never , well

There are various answers to this poser , and below is one such solution , chosen because it is one of the shortest routes possible - try it out !



Brian Kidd

32 Kier Hardie Crescent
Newport , S. Wales . NP9 9DQ

Tel : 01633 273359

Brian's Pages :

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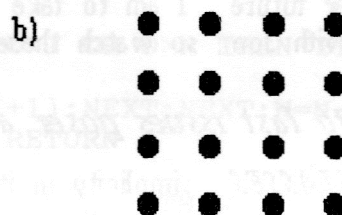
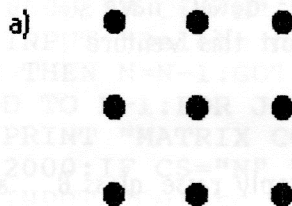
Now onto this months selection of posers , a bumper collection for you , starting with an old favourite of mine Old MacDonald Had ...

// Old MacDonald had a farm , and on that farm he had :

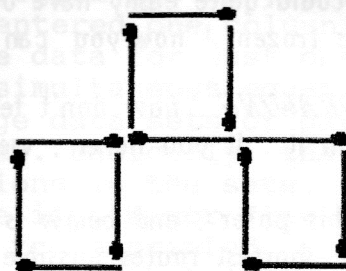
- a) 1 animal with half as many letters as it had when younger .
- b) 1 animal with fewer letters now than it will have when fully grown .
- c) 1 animal with the same number of letters as it's plural .
- d) 1 animal with half as many letters as its plural .

All together they have E I E I O (but not in that order !) . Now what are his animals ?

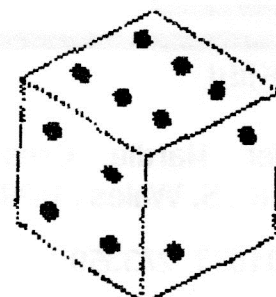
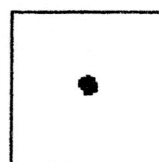
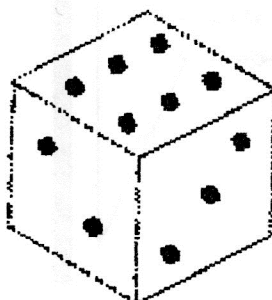
// Two groups of dots are shown below . Can you draw straight lines through every dot , once only , starting from ANY point , and without your pencil leaving the paper ?
In group a) you must use 4 lines , while in group b) , use 6 lines .



// Below are three squares made from 12 matches . Can you make 5 squares by moving three of the matches ?



// I have in front of me a cube . Drawn on it are some numbers , in the form of dot patterns . Three views of the cube are shown below . As you can see , one view shows only one face , front on , with a 1 in view . Now from the views depicted , can you tell me what number is opposit the 4 ?



A Murmur of Protest. (from Frank Bolton)

Although I do not profess to understand all that Peter N. Bragg writes in OUM, I always do him the courtesy of reading his articles and have learned many useful facts from his work. On page 16 of OUM 122 my name screamed at me from the page as Peter apologised to me because he had spelled DISK with a 'K' and not with a 'C'.

BUT THAT IS HOW I HAVE TAUGHT AND INSIST THAT IT SHOULD BE SPELLED!!!!!! DISK is English. DISC isn't!!! If Peter can't follow it, then it is time to set out the rule again.

In English no word should end in vowel + S+C. It is as simple as that. Any innovation that breaks this rule causes confusion and problems in spelling for future generations.

You have all heard of DAMASCUS (with a C). Well, that's where DAMASK (with a 'K') comes from. Why do you think we prefer DAMASK to DAMASC? Because our language is based on words like: ASK, BASK, CASK, MASK, TASK, DESK, RISK, WHISK, BUSK, DUSK, HUSK, MUSK, RUSK, TUSK, etc. Before a word from a foreign language comes to be accepted into our language it should undergo a change to bring it into line with our way of writing. Even the word MOLLUSC (which seems to have got away with it) is rejected by the USA in favour of MOLLUSK, and MOLLUSK is accepted by Chamber's English Dictionary as an alternative spelling. I've used MOLLUSK all my life because it gives us a clear rule rather than disorder.

I do not object to DISCUS, as in the Olympics, because it does not end in SC. But the moment we remove the end of DISCUS we break rule if we write DISC. If we permit this then when future generations have to write RISK they will ask, "Is it with a 'C' or a 'K'?" because if DISC looks right then RISC will begin to look right.

I don't give a damn if you find DISC in dictionaries. They are frequently contradictory in any lexical arguments, and I have found three different dictionaries giving three different rulings. It isn't a case of DISC for bones and records, but DISK for computers. It's a case of DISK for English and DISC for foreign languages just as we get BANK for English and BANC or BANQUE for foreign languages.

Peter thinks that I believe, as he evidently does, that referring to computers we should write DISK and DISKETTE and DISK DRIVE, but that all else should be DISC as in SLIPPED DISC and COMPACT DISC. He is wrong. The word DISC/K has the same meaning in all these cases, - a thin circular plate. There is no reason for two alternative spellings. We wouldn't spell BANK for a river bank and BANQUE for a place to keep money. We adopt one spelling and stick to it. So let it be with DISK.

But since you've dragged me out of slumber, Peter, if you really DO want to comfort an old gentleman before he shuffles off this mortal coil, then please, please, PLEASE stop writing IT'S when you mean ITS. If you mean the contraction of IT IS, then by all means put an apostrophe for the missing letter (I) in IT'S.

I don't know how it has come about that educated writers of articles in computer mags make the same mistake. Maybe it's catching and now looks right when it's wrong.

But think of this:- I have MY rules YOU have YOUR rules HE has HIS rules SHE has HER rules IT has ITS rules. (IT'S RULES is as impossible as HI'S RULES.) If you check your last article you'll find that on FIVE occasions when you wrote IT'S, it was correct on only ONE.

And now I must humbly and sincerely apologise to you, Peter. Even after a lifetime of correcting bad spelling as a teacher, I would normally never dream of criticising in public the grammar of any OUM contributor. But you brought my name into your article and wrongly accused me of preferring DISC to DISK so I'll accept your apology if you'll take mine and try to check your IT'S in future articles.

The Story so far

----- The last few articles have been looking at the subject of using a mouse on the Oric. At this point in time, a DIY project is really the only option for Oric users who wish to make use of a computer mouse.

Initially we looked at the mouse operation and found that when the mouse is moved, it produces four high speed streams of pulses to tell the computer which way it went and how far it went in that direction. That enables the computer to keep the mouse pointer (cursor) position on the screen display constantly updated, which is essential for a computer mouse system.

After that, we went on to look at the interface hardware required which can be found in the "Oric Advanced User Guide", written by Leycester Whewell, Pages 83 to 91. At this stage, we need interface hardware before we can make any use of the mouse or the software to operate it, so this is what we are going to look at first.

The Interface

----- We have already had a brief overview of this in the last issue. Essentially it consists of two chips, the main one being the VIA 6522, plus the second chip, which handles the address decoding. You can't just plug a piece of hardware into a computer and expect it to work just like that, it needs to be fitted in, so that the computers operating system, can use it.

Usually this is achieved by including some "RAM" in the hardware. This applies to the VIA 6522 which has sixteen bytes of data memory. The sixteen locations act in effect as the VIA's "control panel". You can write data into the appropriate locations, to tell the VIA 6522 what you want it to do and likewise, get the results of any operations by reading the appropriate locations. The data locations in the VIA 6522 are numbered in sequence from "0" to "F" and location "0" is the base address of those memory locations. Those sixteen locations have to be fitted into the Oric's memory map, which is handled by the address decoder (74LS 138 chip).

So which address do we use ?

----- The whole of Page03 (#0300 to #03FF inclusive) memory area is reserved for hardware input and output devices. While this does include the internal VIA 6522, which occupies locations #0300 to #030F, it still leaves plenty of space from #0310 up to #03FF available for other hardware, including our expansion board (mouse interface). Another advantage of the Page03 memory area is that it also has an I/O control line associated with it, on the Oric Expansion socket, which automatically decodes the top half of the address, making life a lot easier as the address decoder chip now only has to select single number, which is then automatically used as a base address for the VIA 6522's sixteen locations.

The interface hardware or Expansion Board detailed in the "Oric Advanced User Guide", as noted above, uses a 74LS 138 decoder chip to set the VIA 6522 base address to #0310. The top half #03xx is selected by Oric's I/O control line. The next address digit "1" is selected on the 74LS 138 chip to produce #031x with the sixteen "VIA" locations following automatically in sequence, providing the last digit "0" to "F". That allows the Oric user to control the Expansion Board operations through locations #0310 to #031F inclusive.

I built the first Expansion Board back in the mid 1980s more or less as per the "Advanced Guide" layout. The 34 way lead from the Oric was plugged into the IDC socket, on the left (Pic 1) and a couple of 14 pin DIL sockets were added to the layout, on the right, to handle the electrical input and output, to and from the VIA 6522. The components/sockets were soldered to the board's copper pads and then the pins were linked up using thin coloured plastic insulated solid core wire, as shown in Pic 2.

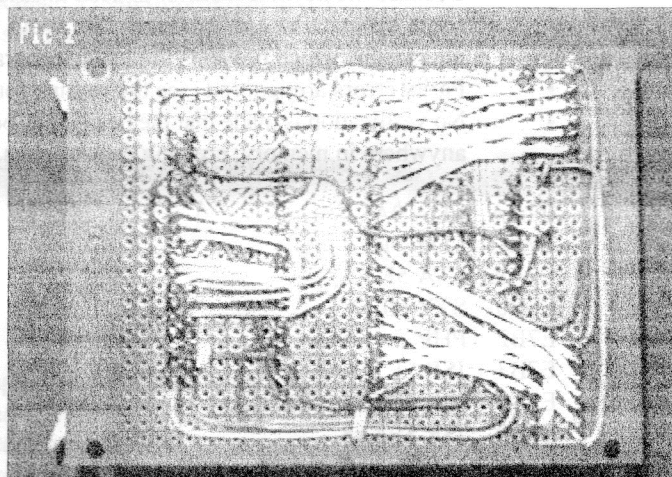
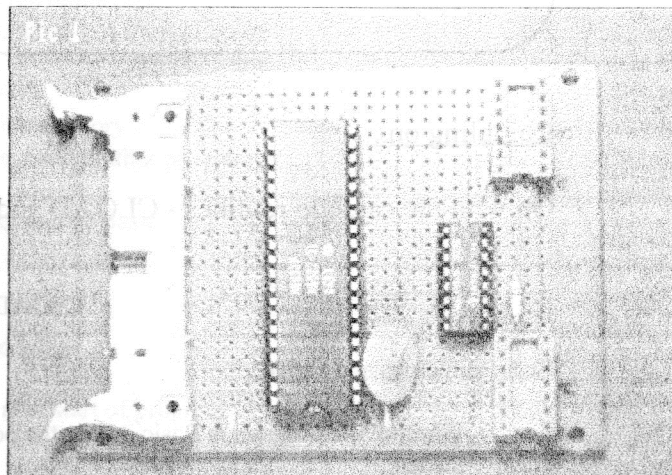
That Expansion Board worked very well for some time, until I bought a disk drive. I soon discovered that the disk interface also makes use of the same area of memory (#310 to #31F) resulting in a clash with the Expansion Board. At that time, in the mid 1980s, few Oric users had disk drives, but now at the end of 1997, there are far more using disks and many of those drives are likely to use the same #0310/1F memory locations and will also clash.

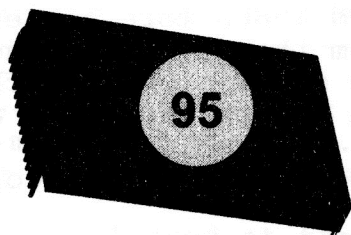
It was not a serious problem. The 74LS 138 address decoder chip used is quite flexible and can be easily reset to any other base address in the Page03 (#0300 to #03FF) area. The only question was, what address? There was at the time, a small possibility of further hardware developments, so I reset the base address on the Expansion Board to #03E0, which I felt was the least likely address to be used by any future developer. A small change to the 74LS 138 circuit and a second 2.2k ohm resistor, did the trick.

Of course, this means that the Expansion Board is now accessed in the locations #03E0 to #03EF, but that is only likely to be a problem, if you come across software for the Expansion Board. The only software I know of, is the "Real Time Clock" in the Advanced User Guide and that should be easy enough to change and make it operational.

One other problem cropped up, as a result of using a disk drive. The disk interface has to be plugged straight into the Oric's Expansion Port and other hardware, such as the Expansion Board had to be plugged into the extension socket at the back of the disk interface. I did this and found that it was impossible to access the Expansion Board. The problem was internal to the disk interface and was solved by using a simple "Y" lead.

A "Y" lead, in this case is a disk lead with three plugs, one in the middle and one at each end of the lead. The middle plug is plugged into the Oric. Of the other two plugs on the lead, one is plugged straight into the disk interface and the other goes straight into the Expansion Board, which in effect, bypasses the problem in the interface circuit. Next time, we will look at the Expansion Board construction.....See you next month.





RAMBLING IN THE ROM



Rambling on....

On with the cassette routines - CLOAD and CSAVE in their two different versions ...

'CLOAD' (COMMAND)

Bugs: numerous and varied...

- Whether the program is Basic or not, the pointer to the end of Basic is placed at the end of the program loaded.
- Because the keyboard buffer is used to save system variables, returns to command level would generate some spectacular syntax errors. To avoid this, the radical solution was chosen: a return direct to the interpreter, which prevents the use in program mode of any program not saved as an AUTO file...
- Parity errors are ignored (see the routine for loading a byte), so no verification is in fact made
- No verification is made that the header has been properly loaded (parity). If it is not, the program will load anywhere in memory, creating catastrophes...

E7AA	LDA 9A	.....	.....
E7AC	LDY 9B	.....	.....	take start of Basic
E7AE	STA 5F	.....	.....	as default start
E7B0	STY 60	.....	.....	(completely useless)
E7B2	PHP	.....	.....	save P (interrupt flag)
E7B3	JSR \$E725	.....	.....	analyse the syntax
E786	JSR \$E6CA	.....	.....	configure the VIA for EIS
E7B9	JSR \$E4A8	.....	.....	load the program
E7BC	JSR \$E804	.....	.....	reconfigure the VIA
E7BF	PLP	.....	.....	recover IRQ
E7C0	LDX 61	.....	.....
E7C2	LDA 62	.....	.....	take end of program
E7C4	STA 9D	.....	.....
E7C6	STX 9C	.....	.....	as end of Basic program
E7C8	LDA 63	.....	.....	AUTO mode?
E7CA	BEQ E7D6	.....	.....	no, return to Basic
E7CC	LDA 64	.....	.....	yes, Basic ?
E7CE	BEQ E7D3	.....	.....	yes, jump
E7D0	JMP (5F)	.....	.....	no, execute from start
E7D3	JMP \$C98B	.....	.....	do a 'RUN'
E7D6	PLA	.....	.....
E7D7	PLA	.....	.....	recover return address
E7D8	JMP \$C96B	.....	.....	and jump directly to the interpreter

Remark: this time, not only is the routine no longer bugged, it is much better!

.....	.....	E85B	PHP	save P (above all I)
.....	.....	E85C	JSR \$E7B2	analyse the syntax
.....	.....	E85F	LDA 02AD	if AUTO
.....	.....	E862	ORA 02AE	or A or E
.....	.....	E865	BNE E871	then SYNTAX ERROR
.....	.....	E867	LDA 025A	J ?

.....	.....	E86A	BEQ E874	no, jump
.....	.....	E86C	LDA 025B	J and V together ?
.....	.....	E86F	BEQ E874	no, it's OK
.....	.....	E871	J8P \$D070	yes, 'SYNTAX ERROR'
.....	.....	E874	JSR \$E76A	configure VIA
.....	.....	E877	JSR \$E57D	display 'Searching'
.....	.....	E87A	JSR \$E4AC	look for the required program
.....	.....	E87D	BIT 02AE	Array ?
.....	.....	E880	BVS E87A	yes, seek another program
.....	.....	E882	LDA 025A	merge required ?
.....	.....	E885	BEQ E8B3	no, jump!

Treat J(oin)

.....	.....	E887	LDA 02AE	is it a memory block ?
.....	.....	E88A	BNE E87A	yes, seek another program
.....	.....	E88C	LDA 9C	
.....	.....	E88E	L8Y 9D	take end of Basic
.....	.....	E890	SEC	
.....	.....	E891	SBC #02	
.....	.....	E893	BCS E896	
.....	.....	E895	DEY	and adjust
.....	.....	E896	STA 02A9	
.....	.....	E899	STY 02AA	as new start of program
.....	.....	E89C	SEC	
.....	.....	E89D	SBC 9A	
.....	.....	E89F	TAX	calculate length of program in XY
.....	.....	E8A0	TYA	Basic in memory
.....	.....	E8A1	SBC 9B	
.....	.....	E8A3	TAY	
.....	.....	E8A4	CLC	
.....	.....	E8A5	TXA	and adjust to end of program found
.....	.....	E8A6	ADC 02AB	
.....	.....	E8A9	STA 02AB	which gives the new end
.....	.....	E8AC	TYA	
.....	.....	E8AD	ADC 02AC	
.....	.....	E8B0	STA 02AC	
.....	.....	E883	JSR \$E59B	display 'Loading/Verifying'
.....	.....	E8B6	JSR \$E4E0	load and verify the program
.....	.....	E8B9	JSR \$E93D	reconfigure the VIA
.....	.....	E8BC	PLP	recover I
.....	.....	E8BD	LDA 025B	is it a verify ?
.....	.....	E8C0	BEQ E8D3	no, jump
.....	.....	E8C2	LDX 025C	yes, display the number of errors found
.....	.....	E8C5	LDA 025D	
.....	.....	E8C8	JSR \$E0C5	
.....	.....	E8CB	LDA #52	
.....	.....	E8CD	LDY #E5	index 'Verify errors detected'
.....	.....	E8CF	JSR \$CCB0	and display
.....	.....	E8D2	RTS	
.....	.....	E8D3	JSR \$E651	verify no parity error
.....	.....	E8D6	LDA 02AE	was it BASIC ?
.....	.....	E8D9	BEQ E8E9	yes, jump
.....	.....	E8DB	LDA 02AD	AUTO ?
.....	.....	E8DE	BEQ E8E8	no, exit
.....	.....	E8E0	LDA 02B1	test if error detected
.....	.....	E8E3	NOP	(the earlier version included
.....	.....	E8E4	NOP	a BNE E8E8 which hindered execution)
.....	.....	E8E5	JMP (02A9)	and execute the program
.....	.....	E8E8	RTS	

.....	.....	E8E9	LDX 02AB	
.....	.....	E8EC	LDA 02AC	end of program
.....	.....	E8EF	STX 9C	
.....	.....	E8F1	STA 9D	as end of Basic text
.....	.....	E8F3	JSR \$C55F	ajuster les liens
.....	.....	E8F6	LDA 02AD	AUTO ?
.....	.....	E8F9	BEQ E903	no, just exit
.....	.....	E8FB	LDA 02B1	take parity error flag
.....	.....	E8FE	NOP	
.....	.....	E8FF	NOP	originally BNE E903
.....	.....	E900	JMP \$C708	CLEAR, TXTPTR=start of program
.....	.....	E903	JSR \$C708	do a CLEAR
.....	.....	E906	JMP \$C4A8	and directly to the interpreter

'CSAVE' (COMMAND)

E7DB	LDA 9A	E909	LDA 9A	
E7DD	LDY 9B	E90B	L9Y 9B	take start of Basic
E7DF	STA 5F	E90D	STA 02A9	
E7E1	STY 60	E910	STY 02AA	as default start of program
E7E3	LDA 9C	E913	LDA 9C	
E7E5	LDY 9D	E915	LDY 9D	and end of Basic
E7E7	STA 61	E917	STA 02AB	
E7E9	STY 62	E91A	STY 02AC	as default end of program
E7EB	PHP	E91D	PHP	save I
E7EC	JSR \$E725	E91E	JSR \$E7B2	analyse the syntax
.....	.....	E921	LDA 025A	if J
.....	.....	E924	ORA 025B	or V required,
.....	.....	E927	BEQ E92C	
.....	.....	E929	JMP \$D070	then 'SYNTAX ERROR'
E7EF	JSR \$E6CA	E92C	JSR \$E76A	configure the VIA
.....	.....	E92F	JSR \$E585	display 'Saving ..' and the program name
.....	.....	E932	JSR \$E607	save the header
E7F2	JSR \$E57B	E935	JSR \$E62E	save the program
E7F5	JSR \$E804	E938	JSR \$E93D	reconfigure the VIA
E7F8	PLP	E93B	PLP	recover I
E7F9	LDX A9	.....	.....	direct mode ?
E7FB	INX	.....	.....
E7FC	BEQ E7FF	.....	.....	yes, return to interpreter
E7FE	RTS	E93C	RTS	return
E7FF	PLA	.....	.....
E800	PLA	.....	.....	adjust the stack
E801	JMP \$C96B	.....	.....	and jump to the interpreter

RECONFIGURE THE VIA

E804	JSR \$E563	E93D	JSR \$E5F5	clear line 0
E807	JSR \$F439	E940	JSR \$F9AA	initialise the VIA
E80A	JMP \$EBD0	E943	JMP \$EDE0	and authorise the IRQs with T1

Email: jon@cam.dungeon.com
 Oric Mailing List: oric@lyghtforce.com

Jon Haworth
 3 Petersfield Road
 Duxford
 Cambridge
 CB2 4SF

The Back Pages

J.B. Tel.No

Jonathan Bristow is now on the telephone:
01582 868147

Correlation

A late message from Colin Cook:
"Some care is needed when deleting columns or rows. When either is deleted, the program moves those above it down to fill the empty column or row. So when deleting more than one of either, the second deletion will have a different number to that originally allocated in the matrix. The column or row number of the 2nd deletion will be one less than the original location if the position of the 2nd deletion is higher than that of the first.

This will inevitably make the use of this function difficult. In fact the program is not as user-friendly as I would like, which I will correct when time is available. Another example is that it is not always obvious when things are happening in the Oric, and a few 'Wait' messages would make waiting more comfortable.

I have also found it necessary to turn the printer on before running the program! Although whether this was coincidental with a wait time, I don't know.

It is a pity that amateurs have to release incomplete programs, but this may be better than nothing at all in my case, for which I apologise."

TARDIS

Some of you Net users will have encountered the same problem as I did, when trying to download an Oric game from Alexios Choucs.... Archives at TARDIS.

You probably got just a nice screen-shot.
Over to Alexios:

" Thanks to everyone who identified the core dump bug (interesting trivia: it's NOT visible when *I* test it. Law of demonstrations, I guess), I've fixed things.

I've also added a caching mechanism so that most scripts run a lot faster.

Let's see... Maybe this will become more useful now.

-Alexios Chouchoulas

<http://www.vennea.demon.co.uk>

The Unpronounceable One

alexios@vennea.demon.co.uk

Greetings to all!

I've scrounged enough time to finish my update of the Jeremie's Oric Games page. This has been going on for around a year, but I did 98% of the work these past weeks (as it generally happens).

The new URL of the page is:

<http://www.tardis.ed.ac.uk/~alexios/Oric-Soft/>

Caveat: The old URL will forward you to the new one, but at some time it WILL be removed.

New features of the site:

- * Completely redesigned database.
- * 214 entries.
- * Now includes all types of software, not just games.
- * Classifies software by type(s) (application, arcade game, etc), compatibility (Oric-1/Atmos/Telestrat) and program medium (tape, disc, cartridge, ROM).
- * Users may create new entries.
- * Users may upload new screenshots.
- * Users may upload the programs themselves (this is obviously subject to copyright laws).
- * A voting facility exists to gather statistics about the best and worst Oric Games.
- * There's also a search facility so that people can look for strange things in the database.
- * The site is multilingual. Currently it supports the six languages supported by the Oric Project (alphabetically, French, English, German, Greek, Spanish and Swedish).
- * The site allows personalisation so that

users make the most of it. Frames and non-frames versions are available.

* All pages are generated dynamically from the database.



That's all I can think of now. Since this is a new effort, it's bound to be full of bugs and spelling mistakes. If you spot something strange or downright wrong, please mail me and give me the details!

By the way, in the course of preparing the graphics for the site, I needed a good, antialiased Oric logo. I traced over Fabrice's scanned one with the Gimp and now I have a high resolution (574x244) TIFF file with the logo. It's up for grabs, so help yourself if you need a logo that scales down smoothly. I know *I'll be using it a lot. Its URL is

<http://www.tardis.ed.ac.uk/~alexios/Oric-Soft/IMAGES/oric-logo-big.tif>

Bye for now!

Alexios

PS: One problem I've found (actually two, but they're related):

(a) Some of the scripts are a bit slow and the Tardis CGI server is a really old machine.

(b) The admins have set the maximum CPU time for any given process to 9seconds.

Because of this, sometimes, when the server is loaded, a script may not show all of its output. If you get empty pages (or half-completed ones), just reload the page. It should fix it (reload the frame if you're using [yuk] frames).

KINKY ALLAN

Ex- 'Oric Enthusiast' Allan Whitaker is busy setting up his own web site. It will concentrate on ACORN and ORIC computers, DTP, Multimedia, and a music section dedicated to sixties pop group THE KINKS. Check out:

www.visu-al.demon.co.uk

I found news of his site whilst doing a search on the web for Oric.

SMARTBOARD

From Oakley Data Services comes SMARTBOARD, which is an application for WINDOWS, which I gleaned from a magazine CD-Rom. Unfortunately I only get a 30-day trial. Or do I?

One of the best tools of Windows is being able to copy to the clipboard and then paste to another document. Unfortunately the clipboard can only store one item at a time. SMARTBOARD alleviates this problem, and more. A real boon to a magazine editor with precious little time.

Getting to grips with WORDSPEED

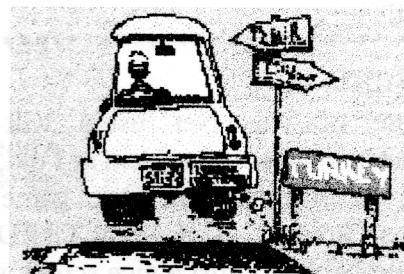
It had been a while since I had used Dr. Rays Oric Word Processor - WORDSPEED. With Colin Cook sending me his CORRELATION article on that format, it gave me a chance to get to use it again. It took me a while to figure out that I needed to press the 'Alt' key to re-produce the 'Funct' key - Yes, I was running WORDSPEED under EUPHORIC on the PC - well it saves time setting up the old Atmos, and I can even print direct.

TURKISH DELIGHT

Late news is of a contact from Turkey. Oguzhan Yilmaz was really surprised when he first visited our OUM web site. He is an "ORIC maniac of 80's.", and worked on it for years with friends there.

Oguzhan can write programs in Basic and Machine Code.

We hope to have more for you next month.



OUM REACHES THE PARTS THAT OTHER MAGAZINES CAN ONLY DREAM ABOUT!!!!!!!!!!!!!!!!!!!!!!

MORE BACK COVER

The Oric Project : we want you !

Here you will find some developments in progress : if you are interested in contributing to one (or several) of them, and are not on the NET, then drop a line to OUM. The list is not exhaustive and you may enter with your own project, let us know your intentions .

IEEE floating-point routines for the lcc65 ANSI C compiler ! - Ok, done already is a first release with single precision floats only...

Standard input/output routines interfaced to Sedoric for the C library !

A linker for lcc65 !

Now you may develop separated objects with the lcc65 compiler, and link them with libraries with Vaggelis' linker. Your executable will only include the needed libraries, and it's easy to mix C and assembly routines.

You may also engage in a new port of lcc65 with 8 bits integers, leading to the fastest language on Oric platforms (except machine code) !

A new back end has been developed for the 6502 (with 16 bits integers), following the lcc's code generation interface (not finished to implement floating point, though). It is much better than the previous one (emulating a 32 bits VAX with a 6502 is not the fastest thing...).

If you want to produce the fastest code, really designed for the 8-bit 6502 processor (it needs modifications in lcc's front end this time),

When the above standard input/output routines will be available, it will be time for the first NATIVE C compiler on Oric platforms !

You can start it now, it's a problem of clever splitting the code to have each part fit in oric's 48k ram. As above, contact me for the source.

For the FUN, you may then be interested by a port of a Mini-Unix !

Andy Tannenbaum made Minix' kernel fit in less than 64k. Xinu from Douglas Comer was about 4K in its first release. And there's also a 6502 multitasking OS documented in Peter's hardware page.

What about a real-time micro-kernel ?

It's not a joke, there are commercial micro-kernels running in 4 K ! The oric may be used as an embedded system : it has IO ports, timers, interrupts, and even keyboard and display ! So, what are you waiting for ?

OricLisp released !

Not really a new project, written in 1986... but the manual came in 1995 ! Try it in the archive page, enjoy recursivity, and build problem solvers easy !

Oric terminal on the Internet !

Connect to a Unix, VMS, OS/2,... workstation with your Oric and communicate ! Thanks to Vaggelis Blathras' incredible color VT100 emulator featuring 80 columns, you can use your Oric to read and send mail or news, or talk to someone else, or whatever you enjoy !!

Oric really ON the Internet !

Take it today or tomorrow will be too late ! Porting a SLIP (Serial Line Internet Protocol) or PPP package along with a TCP/IP stack will launch the Oric in the 3rd millenium !

You need an RS232 interface ? It's available, ask for it on the oric list ! You think it's impossible ? You're wrong, just do it and you will have the proof !

An 8-bit computer without new games is a dead computer !

Let other people enjoy your creations ! Oric is not an obsolete machine for games ! Have you seen the games running on a 120 MHz Windows machine ? Board games, very few animations... you can do at least the same things, surely better !

What about adventure games ? Very few people still use tapes, it seems quite masochist now. So what about a multi-file adventure game running with Sedoric, do you think 680 K will be sufficient, or do you want to make a multi-disks program ? We are waiting for your own King Quest series...

Or you lack THE idea making your game a Hit ? Not a problem, what about porting one of the best Apple II or C64 program ?

Start a new generation of flicker-free arcade games!

Have you seen Jonathan Bristow's new game ? "Magnetix" specifications (parallax scrolling on 75% of the screen, sound samples...) prove that you can push the limits ! (Magnetix is available through OUM).

Have you tried the small routine below ? It changes the background color from red to green and green to red, BUT, it is synchronized with your TV, and you can see this materialized ! Enter the program on a real Oric1 or Atmos (it should work on the TeleStrat too), but not on an emulator. Save it on tape or disk, then RUN. Use F key to raise the frequency of the timer, S key to slow it down, and Q to quit. It brings the detail Oric missed : an interrupt signaling the vertical screen retrace. So, think about what you can do with a 50 frames/s animation, or a double-buffered technique... Just add a small routine like this one in your program asking the user to graphically calibrate the timer at the top or bottom of the screen, and you will never seen again those flickering sprites !

Hardware

Design the second Oric generation !

Wouldn't it be nice to design a new Oric computer, upward compatible ? Of course, there's no hope to compete with the PC standard, so what about a single ISA card (or PCI) featuring a 65816 processor (not so updated, it is used in some consoles, like Atari's portable one), you would have an Oric card in your PC, sharing the display and the keyboard ! We could first write a software simulator of this, and then, why not, build a real one !

If you have some skills in this domain, you're welcome !

SUMMING UP

As you can see, there is plenty going on, and lots for YOU to get involved with. If you want more details on a certain topic, or have embarked on a project yourself, then please let us know.

Next month we will look at the software that is available on the Net, and via OUM and Club Europe Oric.

If you want more details on the CEO (Club Europe Oric), then write to Jon Haworth).

The ORIC CD page

ORIC
DISC

COMPACT
DIGITAL AUDIO
disc

Image de la nouvelle version (bleu plus clair, HITS modifié...)

Le fichier `ps` associe est disponible en version Gzip (`ps.gz`)