

ORIC

Number **124**

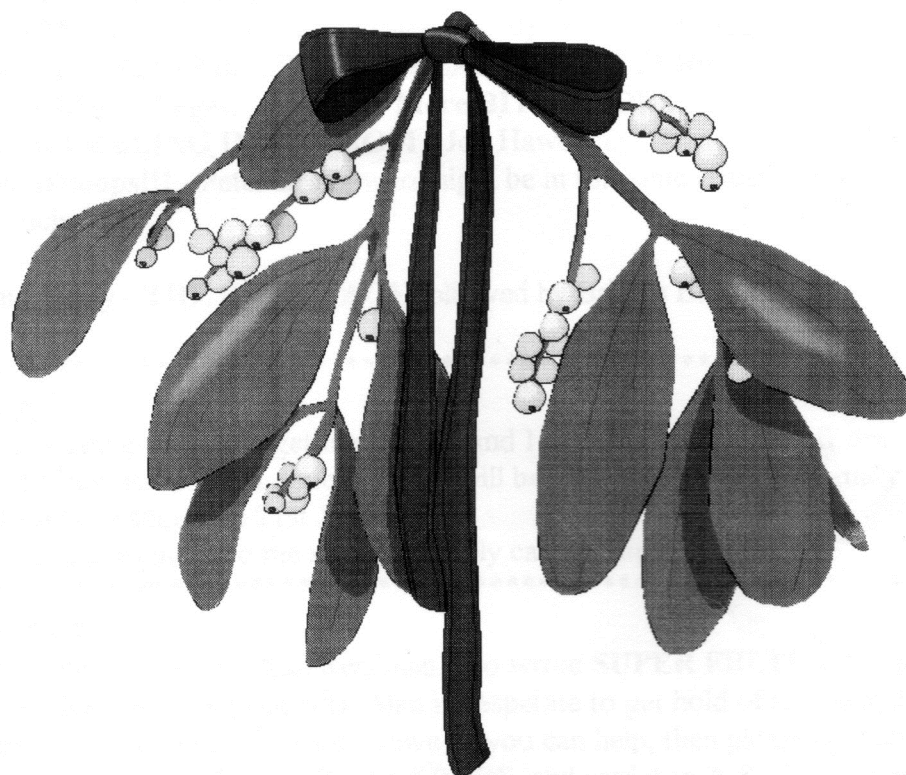
December 1997

USER MONTHLY

*Keeping the
Oric alive*

with Alternative Micros

MERRY CHRISTMAS



The Editorial

Hello one and all,

A very Merry Christmas and a healthy, prosperous New Year to everyone.

Thanks for the many Xmas cards, which adorn the house. Also a big thank you for supporting OUM during 1997 - a year which has seen many innovations for our trusty Oric, and bodes well for 1998. OUM readership figures have held up well with many new contacts being made via the Internet. Your support has been invaluable - some super articles from many of you, as well as the work put in by the likes of Brian & Nikkey Kidd, Jon Haworth, and Fabrice Frances. Without them I couldn't of coped.

Enjoy the festive season, and don't forget to take some time off from computing to spend with friends and family.

And now to the index of this huge last issue of 1997 - no frills - no clip art - just pure text this time around.

Let's hope that this issue reaches you before Xmas - I'm just finishing off on December 8th, with Jon's items in the post to me and Brian. Jon still supplies covers, article, labels, and chase letters.

All should be with Brian by the 11th, and then it's up to his photocopier, Nikkey the tireless collator, and Brian himself to whisk this tome off to you. Hopefully it should be popping through your letter box by the 15th.

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January OUM

As this issue is going to be late getting to you, and I only have two days off over Xmas, I've decided that the next issue will a double one. It will be called the January/February issue, and I plan to get it sent out about the 21st January.

Please therefore get as much to me as you possibly can by January 14th. 1998.

A double SUPER!

Have just had a phone call from Alan Readman who wrote **SUPER FRUIT (IJK)**, and **SUPER ADVANCED BREAKOUT (Tansoft)**. Alan is desperate to get hold of an original copy of his Breakout game. I am trying to track one down. If you can help, then please contact me. Alan also tells me he wrote **MUTANT INVADERS**, and sold it to A & H. He doesn't know if it was ever released - do you know?

NEWS....NEWS....NEWS

C.E.O. Annual General Meeting

La prochaine Assemblée Generale du Club Europe Oric aura lieu le samedi 24 janvier 1998
de 14h00 a 17h45

au 17 rue des petits hotels (premier etage) PARIS 10eme Metro Gare de l'Est/Gare du Nord

Au programme :

- election du conseil
- nomination d'un nouveau redacteur en chef pour le CEO-MAG
- activites et demos diverses

Venez nombreux !

Laurent Chiacchierini

CLUB EUROPE ORIC

E-mail: laurentch@compuserve.com

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

In other words: it's time for the Club Europe Oric A.G.M. in Paris - a nice little Eurostar trip in January.

Included on the agenda is the quest to find a new chief editor for their magazine - I sincerely hope they find a volunteer, as the publication would be sorely missed.

ATORIC

Christian Peppermueller is so modest I think Atoric has never been announced, though it's already in its fourth release ! Atoric is the Oric emulator all Atari people were waiting for : it's incredible, it even runs on small ST (and of course on TT, Falcon, etc) . The ST version implements oversecan in order to display the full Oric screen ! It is so good I don't know where is my oric and where is my ST !!

Download it from the Oric emulators page !

With thanks to Fabrice Frances for the news.

Coming from outer space, direct from planet Bristow

Here is a sound demo which pushes the Oric limits to unknown galaxies !

Every sound there is amazing, you won't believe your ears !

Find a good seat before listening to it, or it will kill you ! Jonathan is giving the final touch to his editor tools (based on Sonix and adding samples)...

Well, I'm running out of adjectives to describe these sounds, so just try the demo disk at <http://www.ensica.fr/oric/archive.html> and prepare for a shock !

Thanks again to Fabrice for the above. It was planned for Jonathan to visit me his latest **SOUNDTRACKER**, but unfortunately I do not have time to entertain until the New Year. I will, however, be checking out the demo when I get chance.

Adrian gets Flighty!

Orician Adrian Matthews is a fan of Microsoft's **Flight Simulator**, and has a web site for all Flight Sim freaks:

It is called **Magrethea** and can be found at:

<http://www.magratheta.clara.net> - for British Isles Scenery for Microsoft Flight Simulator

Adrian is also responsible for the his employer's website. Check out the Chichester Festival Theatre site at

<http://www.cft.org.uk/>

Oric Chat Room

There is now an **Oric Chat Room** on the Oric Web Ring

(<http://www.webring.org/cgi-bin/webring?ring=oric:random>)

Official inauguration took place on Friday 21st November (18:00 GMT)

Unfortunately I couldn't log on that time or the next recommended time I did try it later, but was the only one there.

BRISTOW FREEBIES!

Following agreement with Jonathan Bristow, his new **SOUNDTRACKER/SONIX II**, plus the likes of **MAGNETIX** will be available for FREE with documentation on the OUM web site. Atmos disk versions will be available at cheap rates. More news next issue.

The Origins of Oric Basic- Fabrice Frances

Some time ago, there was a question on the net about who owns Oric nowadays (well, the question is still open). This led to differentiate intellectual property of the firmware, and ownership of the brandname and the hardware. At this time, someone suggested that the Basic could be tied to Microsoft copyrights because it contains Microsoft code. And the rumour then raised that Tangerine could have derived its Basic from Microsoft's one without actually buying a license. So, I wanted to know more : I had never seen any Microsoft Basic (never disassembled, I mean) and was not sure Oric Basic could contain code written by Bill Gates. I was even remembering the Apple II had a Microsoft Basic which was very different: years ago, some people were glorifying themselves because the Oric had floating point values with an accuracy of 9 to 10 digits (one exponent byte and four mantissa bytes) while the Apple II only had an accuracy of 6 to 7 digits (one exponent byte and three mantissa bytes). Well, this is what I remember, don't take it for sure. Also, I hadn't a copy of Fabrice Broche's "Oric à nu" and hadn't discovered the hidden Microsoft signature (more on this later) when studying the rom myself years ago. Months later, I bought a photocopy of "Oric à nu" from CEO, and read Fabrice Broche's comments on the origin of Oric Basic, clearly a Microsoft one, like Applesoft Basic. This later point added to the confusion : as I said previously, I clearly remembered Microsoft Basic on Apple II being different. So, I had to start a quest...

With some discussions in the comp.sys.apple2 newsgroup, it became obvious there had been at least three different Basic's available for the Apple : the Integer Basic provided with the first Apple II (this one was written by Steve Wozniak and as its name suggests, there was no floating point in it), Applesoft's Basic with floating point identical to Oric Basic (found in later Apple II, II+, IIe, IIC), and Microsoft Basic running on the Z80 card with CP/M operating system. This Microsoft Basic was the one I had in mind : it had simple precision floating point values (6 to 7 digits accuracy) but also double precision values (more than 15 digits).

Then, I asked some questions in order to compare Oric Basic with Applesoft Basic. This one was indeed written by Microsoft and adapted to the Apple II. Some routines might have been added at Applesoft on the end. I asked how variables names are used and got the following answer from Nathan Mates (I got several answers of course, but some people have answers which lead you in bad directions): "the significant part of variable names are of the form [A-Z] or [A-Z][A-Z0-9], excluding 2-letters reserved words such as AT and TO. Suffixes denote variable type : % for integer (stored as 2 bytes), \$ for string, and nothing for reals". Doesn't it ring a bell ?

I also asked if the hidden Microsoft signature is present in Applesoft Basic (you know it, thanks to Jon's "rambling in the rom" series). Nobody in the comp.sys.apple2 newsgroup was aware of such a signature, so it seemed there was not such a thing in Applesoft Basic. I told the Apple users to mask every byte in the rom with \$3F, then add \$40 and search for MICROSOFT! spelled backwards, and they didn't find it. But, when I told them where the signature is in Oric Basic, after the TAN function and the floating point constants used in the polynomial for SIN (erroneously labelled as constants for ATN's polynomial in "Oric à nu"), Nathan came with a positive answer : first, the floating point routines around there are the same in Oric and Apple; and second, the !FTOSORCIM string is there too, but only with a different encoding (every byte is XOR'ed with \$87). That was a scoop for Apple II users, as they all had these bytes flagged as "unused" in their disassembly listings !

Further comparisons between Oric Basic 1.0 and Applesoft Basic showed that they share a 8 KB kernel nearly byte-to-byte identical. This common part contains the interpreter loop, the control structures (FOR, IF, etc), the hardware independent statements and the floating point expression evaluator (with all the floating point functions). Very few differences exist in this kernel : a noticeable one is the absence of ELSE in Applesoft Basic (Ho-ho... do you remember how ELSE is bugged in Oric Basic 1.0 ?...). The remaining code is of course different, it is hardware-dependent (input/output routines, all the graphics and sound, etc.). Applesoft Basic is 12 KB versus 16 KB for Oric Basic.

So, no doubt anymore, should the Microsoft signature have not stated it, Oric Basic 1.0 is built on a Microsoft Basic. Our beloved computer will be haunted by the fear of Bill Gates for ever...

By the way, that's not the only results of my quest (which might be no news for you), next month we will trace the origins even further in the past (back to the Microtan 65, and more...), thanks to Peter Halford's testimony and other sources.

Bits'n'Bobs

Dump

Robert Cook is looking for to dump a Hires screen to a Seikosha SP2000 printer.
I've a feeling this may have been dealt with before.
Robert is at: 12 Liford Lane, Stirchley, Birmingham. B30 3DY

COOKs Claims Consultants

Robert has a new business address, It is: Cook's Claim Consultants, The Executive Centre, 111 Hagley Road, Edgbaston, Birmingham. B16 8LB. Tel: 0121 4525038.....Fax: 0121 4525039

OUM INDEXES

Over the Summer months there appears to have been a bit of a faux pas concerning mailing of OUM Indexes. Don Brown should now have his, and everyone else. If you ordered one and didn't get it, then please contact OUM.

OUM New number

Don't forget the new telephone number for OUM: **01296 426050**

Message to John Foggin

If you didn't receive **KRYSTAL WORLDS II** then please contact me.

GOLDMINE

Having a sort out and found a message from Fabrice Frances with regarding to that classic Oric game **GOLDMINE**. If you create the puzzles, then he will enter them in the game.

8-Bit Directory

The IEBA gets a mention on page 7, but just to let you know that I have received their 8 bit directory. It is an excellent 55 page publication, which lists clubs, fanzines, helplines, suppliers, repairers etc. If you want to information on a particular machine then see page 7 for how to get a copy, or you can contact me in the usual method.

I have now written off , and hope to have **ORIC USER MONTHLY** included in the next re-print.

OUM Home Page

The OUM Home Page on the web has had a revamp, and is now part of the **ORIC WEB RING** Our site now has **GALACTOSMASH** as freeware, and it is hoped to add more software soon (**ENCHANTMENT**, **GRAND PRIX** etc). Thanks to some scanning by Brian Kidd you should also be able to scan the **ORIC CHEATS DIRECTORY** on-line, plus a few surprises.

Visit us at: <http://www.soft.net.uk/oum>

ZIP!!!!!!

On page 16, Peter Bragg enquires about the possibility of a Zip drive for the Oric. Recently received on the Net has been this e-mail from Matt Emson:

"Pondering on the IDE hard drive question, I came up with an interesting thought.. Has anyone ever thought of using an Iomega Zip Parallel drive to Oric connection?? Surely there must be some way of achieving this, even if you end up putting a PC parallel port emulation between the drive and the Oric. As far as I can see this would be a cool idea, as this would also give the 'possibility' of attaching other standard parallel devices to the Oric without a special lead.

The drives have 100mb (ish) on each disk, and the disks are about £10-15UKpounds, so fairly cheap. The drive has an inbuilt controller (I assume) - the need to build one for the Oric end may then be simpler than the IDE interface. The drives are fairly cheap, and have the added advantage of being able to be used on the PC. Maybe a common disk format could be used?? Or a 'Virtual' set of Sedoric disks?? (all 70+ of them :P) Who knows.

Anyway, something to consider"

Small Ads.

ZX81

Monsieur Euphoric (Fabrice Frances) is on the look out for a ZX81. Can you help?

You can e-mail Fabrice at: frances@ensica.fr

You can also snail mail him at: 63 bis, Chemin de Pahin, 31170 Tornefeuille, FRANCE.

LITTLE COMPUTER PEOPLE

Ex-Orician and ex-high ranking member of the Police Force Mr. John McKay was in touch recently (not the long arm of the law!). John has a friend with a Commodore 64, who needs the instructions for the adventure entitled 'Little Computer People'. The game was also released for the Speccy. If you can help, then please contact John on: 01522 754870 or write to him at:

21 Holme Drive, Sunbrooke, Lincoln. LN2 2QL

HELLO THERE, WANT A TOSHIBA!

A friend of mine, who has helped a few of you on occasions, has a computer to give away. I will be willing to fetch it from him and send it to the first person to either telephone, e-mail or write to me. Cost will be that of sending it plus a £5 contribution to OUM funds.

The computer is a **Toshiba MSX - HX10** and comes with Owners and Basic manuals.

8-BIT Magazine

Published by Brian Watson, this magazine is reviewed on page 7. One issue costs £3, but if you upgrade to a subscription it is only £2 per issue, and you'll get a free advert up to 50 words.

Brian Watson publishes **8-BIT** from: "Harrowden", 39 High St., Sutton-in-the-Isle, Ely. Cambs. CB6 2RA (Tel: 01353 777 006...Fax: 01353 77 77 66...e-mail: 8bit@spheroid.demon.co.uk

APPLE

Apple IIe with dual 5¼" drives and green screen 12" monitor, working condition, with Applesoft and Integer basics, manuals and cables. Serial printer interface (n/w), cables and parallel card (n/w). Brother HR15 daisywheel printer (n/w, no manual). No longer required by company. Free to collector. Contact Colin Cook on 01268-472336 after 6pm.

ORIC TAPES and BOOKS

From Robert Millar I have recieved a list of tapes (mainly boxed and with manuals where applicable). There are also some books. Robert has agreed to send them to me if I make a contribution to postage. I would then off load them to readers for the cost of postage. If you want any, then please contact me. The list:

Harrier Attack -Durrell Software...Chopper -FGC Distribution...Land of Illusion -Tansoft ,Xenon1, Zorgon's Revenge,...Dambuster, Trick Shot - all IJK Software, Classic Racing - Salamander, Zodiac -Tansoft, Contract Bridge-Alligata, Centipede -PSS, Mr Wimpy - Ocean, The Hobbit - Tansoft, Oric Trek - Salamander Software, Lone Raider- Arcade Action, Manic Miner -Software Projects,Scuba Dive - Durell Software,Elektro Storm- PSS,

The Hellion - Orpheus,Football Manager - Addictive,Defence Force - Tansoft,Hopper - PSS,Rescue - CRL, Two-Gun Turtle, Johnny Reb, Paras, Special Operations - All Lothlorien, Trouble In Store - Orpheus, Space Shuttle - Microdeal, Maze Rally - FGC,Airline - Copy, Author - Tansoft, Wordsworth - FGC, Spanish & French Language Linkword - Tansoft,Megabase- FGC,Oric Calc - Tansoft,Multi-Filer , Tyrann, Concours Hippique, Transat One, Categ/Oric- all No Man's Land,4 tapes - Various card/golf and other games from magazine articles on Basic

Books include:

* The Oric-I - Ian Sinclair. Publisher: Granada, * Oric Advanced User's Guide - Leycester Whewell. Publisher: Adder
* Guide to Playing The Hobbit - David Elkan. Publisher: Melbourne House,* Using Your Oric Atmos - Garry Marshall. Publisher: Newtech,* Sixty Games for the Oric Atmos - Robert Erskine et al. Publisher: Personal Computer,* The Oric Book of Games - Mike James et al Publisher:Granada,* Oric Atmos Manual

Alternative Computers

IEBA

The Independent Eight Bit Association (IEBA) was formerly mainly a Speccy and SAM user group, but has been relaunched to provide a contact and support group and clearing house for users of all 8-bit computers.

Negotiations are under way to get a regular BBC radio spot for 8-bit users in the South and East. A free 8-bit directory is sent out to all subscribers. To enrol just get a form and then fill it in and send a cheque payable to IEBA for £5 to: Mr.D.Williams, 32/34 Carfin St., New Stevenston, Motherwell, Scotland. ML1 4JL. Once you've enrolled, membership is free. (You can telephone David Williams on: 01698 732403

Publicity Officer is that busy 8-bit man - Brian Watson.

See also page 5.

8BIT

It is not that I've been given a free subscription (I can't be bribed - well not that easily!), **8BIT** really is an excellent magazine for 8-Bit users. I have the October issue of this quarterly, which has a cover price of £3 for its 26 pages of A4. The subscribing readership is just over 750 - amazing!

As well as 8 bits such as Speccys, Amstrads and Commodores, there is also coverage of the NC series notepads, SAMs, Osbornes, & Einsteins. From issue 19 (due out about Xmas) the Oric will also be included.

Included in the October issue are articles on **Writing for Money, PCW16 files, Multi Computer Use, Starting e-mail on an 8-bit computer, CPC 464 limitations**, plus plenty of news and adverts.

Brian Watson has done an excellent job here, and I have an agreement with him to re-produce any news or adverts which may be beneficial to OUM readers. In return I will be using **8BIT** to advertise on your behalf. One sad bit of news is that because of

a business project that Brian is starting, the magazine will not continue after issue 25, but that is still some 18 months away.

For full details of **8BIT**, check out the advert on page 6.

Meanwhile, thanks to **8BIT** for the information which takes up the rest of this page.

RETROGAMER

The fanzine for classic computer games fans.

£1.50 an issue or £8 for 6.

Cheque payable to Keith Ainsworth at:
52 Kingfield Rd., Orrell Park, Liverpool. L9 3AW

CD for 8-bits

If you have a PC with CDROM and would like a 10Mb CD of 15,000 8-bit computer games to run under emulators for the PC or Mac, then send £22 to: N.McIntosh, 4 Brock Street, Bath. BA1 2LN (e-mail: rocketship@dial.pipex.com

MUMPITZ

That's the name of the Germany based 8 bit magazine, which has tips, tests, circuit diagrams etc.

For a complimentary copy, send a letter to: Hans- Christol Tuchen, Lotzestr.10, D-12205 Berlin.

Amstrad Notepad

If you are the owner of an Amstrad NC 100 or 200 notepad (like Chris Hearn and myself), then you might be interested in linking up with fellow users. Contact John Walker from Plymouth on: 01752 706266

YOUR VIEWS

Over the years, we here at OUM have put you on touch with other magazines - let us have your views on them, so that we can pass them on.

Going back to our old encounter with the dog, firstly a reminder of the problem. Suppose you pass a particular house four times, and on two occasions the dog sees you and barks. What is upsetting this dog, is it the weather or the fact that you occasionally wear a hat? Now, most people would not consider this a mathematical problem, but it can be expressed as one if you can assign numbers to the states of particular things. On 3 occasions you are wearing a hat, and you suspect that the dog is mis-identifying you as a postman (this is set in the '50s). The wearing of a hat can only have two values, 1 (wearing) or 0 (not wearing). Alternatively, on 3 occasions the weather is not warm (this is Britain!) and you suspect that the dog is expressing its desire to go inside. You give the temperature a rating of 3 for freezing, 2 for cold, 1 for average and 0 for warm. You collect your data:

No.1: Hat worn (1), weather average (1). Dog bark? (1=yes, 0=no).

Result: 0

No.2: Hat worn (0), weather cold (2). Dog bark = 1

No.2: Hat worn (1), weather freezing (3). Dog bark = 1

No.4: Hat worn (1), weather warm (0). Dog bark = 0

The matrix is

1	1			0
0	2	x	Hat	= 1
1	3		Weather	1
1	0			0

Enter this matrix now and calculate the coefficients. (2 decimal places are sufficient.) The program generates coefficients of -0.23 for the hat, and 0.42 for the cold weather. The initial analysis, then, indicates a negative correlation between the barking dog and the wearing of a hat, which might indicate that the hat actually calms the dog. (You now have some evidence that the dog's owner may wear a hat, but this is not the only interpretation!) But of course these results are only approximate, and a lot more observations have to be made before the correlation can be 'firmed up' for reliability. Also, there may be other factors not included in the analysis, such as the mere presence of a person, regardless of hat or weather. These factors will also have coefficients, and for proper analysis at least one more column needs to be added, to include that part of the dog's behaviour which does not depend on either. (The observation, though, would have to be done through a pair of binoculars!)

If we assign a value of 0 for the absence of a person near the dog, and 1 for a presence, we may get a matrix of observations like the following:

0	1	1		Person	0
1	0	2	x	Hat	1
1	1	3		Weather	1
0	1	0			0

On calculating coefficients for these, we obtain:

Coeff. for person = 1

Coeff. for hat = 0

Coeff. for weather = 0; in other words, the hat and weather now appear to be having no effect! But beware! We must never forget that our results are only approximate, and that if we passed the house every day for 50 days, we might have enough data to show that most of the dog's

tendency to bark is caused by someone passing, but that the barking is worse (the coefficient is positive) when the weather is cold. Effects here are all additive, so the tendency (=coefficient) to bark when a person passes on a cold day can be found by adding the coefficient for a person to the coefficient for cold weather.

The values assigned to an observation should be chosen carefully, so as not to skew the coefficients, or in other words, not to give them too much weight to the analysis. For example, if the wearing of a hat were given a value of 0.1 instead of 1, what we are saying is, that an extremely small hat is sufficient to start the barking. Our coefficient for the hat will calculate as 10 times larger than before, in this case indicating a more negative (calming) effect on the dog.

Coefficients calculated from additional data or a separate set of data are likely to be different from the first results, because there is often some random element, known as NOISE, which affects the observations. The trick is to obtain enough data so that the coefficients begin to approach a constant value, and to guess at the value whenever there are only a few it can have. For example, some coefficients may be derived from observations which have no correlation at all, but which have been added as an indicator of the noise content. In our barking dog case, we may have added a column for whether United were playing at home (1) or away (0), which should not affect the dog, provided we are not living in the same town as United or the other team! We then have to collect data on the dog until the coefficient for United gets near to zero.

Note: it is presently only possible to add extra columns or rows to the matrices in the program under a DOS. The arrays have to be re-dimensioned, and this means storing them in protected memory (in this case on disk), so that the CLEAR command can be used. There is no limit on the number of results columns, since these are added separately and overwrite the previous data.

There are much more interesting phenomena than barking dogs to study, and one of the most valuable potential uses for the program is in the area of daily health. Anyone who suffers from allergies must wonder, at first, what in particular sets off a reaction, when many foods may have been eaten for a period of time before the attack, and many environments encountered which could have contained allergens. A correlation between intensity of the attack (on a scale of 0-3, say) and presence (1) or absence (0) of a suspected allergen, or its source, could just pin down the culprit. To reduce the workload, the sufferer can group together foods which are similar, (such as wheat products). Although this will reduce the coefficient, for the group, from what it would be for the individual culprit, the group will still show up against non-irritant foods after enough data have been gathered. The sufferer can then divide the group up into its components (or smaller groups), collect data based on the components, and do another analysis. Groups with low coefficients can be left out of the new analysis. The allergen-containing food (or place) will finally stand out like a tramp at a garden party.

©Setting up an analysis

Data should be collected in an orderly fashion: a good way is to use a form like the one shown below. This presents the data already in matrix format, with as many Results Columns as required, one for each phenomenon being studied. In this example, the allergic reaction has been divided into two separate phenomena: upset stomach and headache. There are two columns for headache: the first is the daily record, and

the second is the same record shifted back one day. This allows a study of the "hangover" effect, something that many Oricians are quite familiar with, I am sure.

DAY	NON-FOOD RELATED	DAIRY PROD.	WHEAT PROD.	NUTS	MEDICINE	TUM 0-3	HEAD same day 0-3	HEAD next day 0-3
1	1	0	0	0	1	0	3	0
2	1	1	0	1	0	1	0	3
3	1	0	0	0	1	3	3	1
4	1	0	1	1	1	1	1	1
5	1	1	1	0	0	2	1	2
6	1	0	0	1	1	1	2	0
7	1	1	0	1	1	2	0	2
8	1	0	1	0	0	0	2	0
9	1	1	0	0	0	1	0	1
10	1	1	1	1	1	2	1	3
11	1	0	1	1	1	3	3	1
12	1	0	0	0	0	0	1	0
13	-	-	-	-	-	-	0	-

The program gives three coefficients for each 'consumed' item, one relating to its effect on the stomach, a second for its tendency to cause (or cure) headaches on the same day, and a third for the Hangover Effect. The results may be plotted in a table:

	TUM same day	HEAD same day	HEAD next day
Non-food	0.1	1.55	-0.1
Dairy food	0.91	-1.21	1.75
Wheat products	0.48	0.41	0.35
Nuts	-0.21	-0.94	0.55
Medicine	1.3	1.15	0.2

Interpreting these (fictitious) results leads me to the conclusion that the stomach upsets are not non-food related, (i.e. they have a consumables-related cause). Neither are the headaches non-food related if only those on the following day are counted as significant. There will be a correlation with headaches and non-food on the same day, but that is because the headaches are so frequent, making the data sets physically very close, so that one set affects the other. In fact, we could have added an extra 'Causes' column, to hold data on whether a headache occurred on the previous day, or two days before, etc, and a high correlation would be expected. Another explanation is that the person has a propensity for headaches anyway, regardless of the type of product consumed. Overall, though, the highest correlation, 1.75, is between Dairy Products and a headache the following day, which speaks for itself. The results also show that the medicine taken, presumably for headache, is causing an upset stomach, a fact that may not have been apparent before the analysis.

Racegoers may be tempted to correlate their favourite horse's position in a race with factors such as the jockey's weight, the racecourse condition (soft, firm etc), the type of weather, and lots more. I'm sorry to have to disappoint you, but this will not work! Your only chance of success would be to correlate the actual time from start to finish, with as many factors as could possibly affect the horse's speed. The trouble is, you need to do this for every horse in the race, which means you would need data from every meeting that each horse had raced at.

— COLIN COOK.

FINALE — NEXT YEAR!!

E-mails to the Editor

DAVE,

... I have tried Krystal Worlds, but not a lot...(only took all the objects, opened the briefcase... Imho, Rob should enhance the literacy of the descriptions, it would help the player dive in the atmosphere of the game. Do you have "Hitchhiker's Guide to the Galaxy" for example ? It's an Infocom game, I find the text excellent and fun)

- Fabrice Frances

HI DAVE,

I have recently found an Oric-1 in my loft! I have extremely fond memories of Orics and would love to get it up and running.

However, all I have is the computer. No leads, manuals or anything. So what do I need to use my Oric? (ie to power it etc.) Any help gratefully received.

-Matthew

Dear Dave,

Just a line to inform you of my new e-mail address.

Virgin.net had become a little too expensive. I am now at :-

allanmoore@aol.com

I am unable to read 3.5" disks with Euphoric on my PC. Could it be that I only have sedoric2 on my 3.5" disks?

I get great enjoyment on reading the O.U.M. and feel that there is something for all tastes in all the issues. I wish that "Brian's Pages" had the replies that he richly deserves, but like me, maybe other readers never complete ALL of

-Allan Moore (Sheffield)

Dear Dave,

Fame at last issue 123 Nov 1997 -Dale's Email

Thanks for the plug your money's in the post. No seriously, thanks for the last twelve months; its been great to see the old Oric running on this new PC ; the other day I downloaded the latest version of Euphoric and now this !

The renewal will be sent as soon as I find a stamp .So count me in for another twelve and I still need some of the back issues , sedoric , etc, etc. One good thing was I did manage to get the monitor working for my three old Orics and the display is very good . It's been a very good year well its time for work, so keep up the good work, it's all appreciated.

All the best - Dale Blyth alias Eladeus@aol.com

Hello folks.

I start again my request for Oric Books !

I need scans of front covers of all french/english/german/martian oric-related publications.

Please, put a little comment, a rating, the name of authors, and so on...

If you want to see the actual collection, just go on my page at:

<http://www.perso.hol.fr/~mpointie>

Just click on the ORIC button :)

I'm looking for the entire collection of Théoric ! Anybody want to sell me these magazines ???

See ya, Mike.

Hi Dave,

Its nice to see that I'm not the only one who remembers the Oric! I still have an original Oric-1 and an Atmos, but I think both are now dead. I have just seen reference to an emulator, is it any good? Any advice would be gratefully received. Assuming that the emulator works, is it possible to get data from an old cassette into a form which could be used? (I still have loads!!)

Anyway, nice to hello - Mike.

The Story so far

----- Recent articles have been looking at how to install a computer mouse on the Oric. A DIY project is currently the only option for those who wish to do this.

The mouse operation produces four high speed streams of pulses to tell the computer which way it moved and how far it went. An interface converts the pulses into data for the computer so that it can keep the mouse operation and pointer display, constantly updated.

Suitable mouse interface hardware is described in the "Oric Advanced User Guide", written by Leycester Whewell, Pages 83 to 91. It is a simple general purpose interface that uses two IC chips, the VIA 6522 and the address decoder 74LS 138. It can also provide other useful facilities in addition to the mouse interface. A brief description of the interface construction follows to help those who don't have the book.

!Take Note!

----- Like the Oric, the interface operates on low voltage and there is no danger of shock from it, as described. However, if you are new to soldering and electronic projects, be aware of safety at all times. A soldering iron gets very hot and should never be left switched on, unsecured and unattended. Always read instructions and be very careful when using any equipment powered by high voltages or connected to the mains electricity supply.

Basic Components

RC6522P Versatile Interface Adaptor ("VIA")	:	Component stockists -
40 pin DIL socket for the above item	:	Maplin MPS,
74LS 138 Decoder	:	P.O. Box 777,
16 pin DIL socket for the above item	:	Rayleigh, Essex SS6 8LU.
100 nF Ceramic Capacitor	:	
Two 2.2K ohm Resistors (0.25 watt)	:	Phone 01702 554000.

In addition to these items, you will need a circuit board. Mine came from the local Tandy store. It has a matrix of pre-drilled holes, each hole with it's own isolated copper pad (see Part 69, Pic 2). There are other types available from Tandy, or you can use "Veroboard" as described in the Advanced User Guide. Thin coloured plastic insulated solid core wire was used to link up the component (socket) pins on the circuit board. The solid core wire can be shaped to fit before soldering and using a variety of insulation colours can help identify connections on the circuit board.

Finally there is the 34 way ribbon cable and it's IDC header plugs and sockets. They should be easy to obtain as they are commonly used on floppy disk drives. There is a choice, you can solder the cable direct to the board in which case you need about fifteen inches of ribbon cable plus the appropriate IDC header plug on one end, to go into the Oric's Expansion Port. Alternatively, you can solder a 34 way IDC socket on to the board and use about a foot of ribbon cable, with an IDC header plug at each end, to link it to the Oric. What ever you do, bear in mind that if you have a problem with your disk interface, you should use a "Y" lead, to bypass disk interface, as mentioned in the last article. Probably the easiest way to achieve that, would be to impress an IDC socket into the short ribbon cable that links Oric and disk interface and plug the Expansion Board into that.

Oric VIA 6522 Expansion/Interface construction.

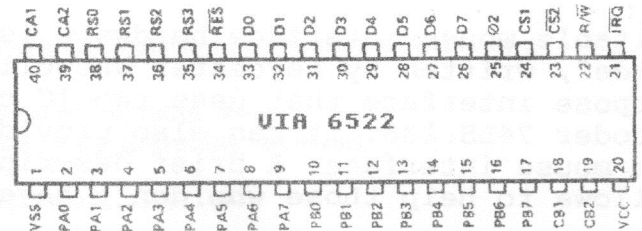
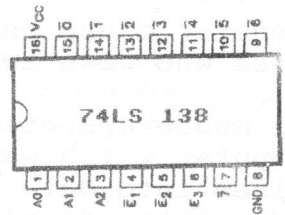
Oric Expansion Port

	solder
1) Pin 34	link to
2) Pin 33	link to
3) Pin 4	link to
4) Pin 8	link to
5) Pin 3	link to
6) Pin 7	link to
7) Pin 13	link to
8) Pin 15	link to
9) Pin 17	link to
10) Pin 11	link to
11) Pin 10	link to
12) Pin 12	link to
13) Pin 9	link to
14) Pin 16	link to
15) Pin 18	link to
16) Pin 19	link to
17) Pin 14	link to
18) Pin 22	link to
19) Pin 6	link to

VIA 6522

Pin 1
Pin 20
Pin 34
Pin 21
Pin 25
Pin 22
Pin 38
Pin 37
Pin 36
Pin 35
Pin 33
Pin 32
Pin 31
Pin 30
Pin 29
Pin 28
Pin 27
Pin 26
Pin 23

Components and Board Layout



74LS 138

	solder
20) Pin 8	link to
21) Pin 9	link to
22) Pin 16	link to
23) Pin 6	link to

VIA 6522

Pin 1
Pin 23
Pin 20
Pin 24

Oric Expansion Port

	solder
24) Pin 20	link to
25) Pin 21	link to
26) Pin 23	link to
27) Pin 25	link to
28) Pin 5	link to

74LS 138

Pin 1
Pin 2
Pin 3
Pin 6
Pin 5

1st 2.2K ohm resistor soldered links -

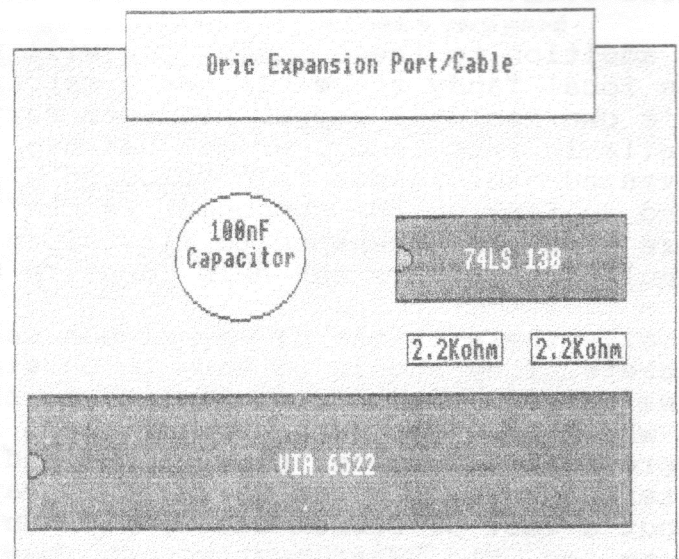
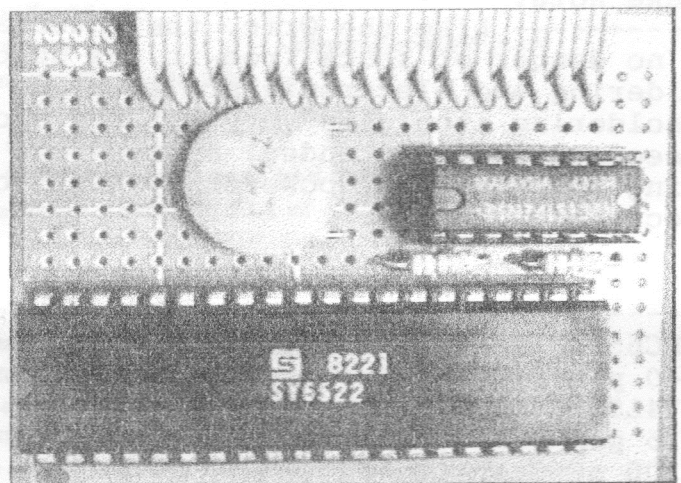
- 29) Link one end to 74LS 138 Pin 6.
- 30) Link other end to VIA 6522 Pin 20.

2nd 2.2K ohm resistor soldered links -

- 31) Link one end to 74LS 138 Pin 4.
- 32) Link other end to 74LS 138 Pin 8.

100 nF Capacitor soldered links -

- 33) Link one end to 74LS 138 Pin 16.
- 34) Link other end to VIA 6522 Pin 1.



NOTE - the Oric Expansion Port socket is next to the power plug on the Oric and the top row of pins are all even numbers, 2 to 34. The bottom row are all odd numbers, 1 to 33. The highest numbers are closest to the power plug.

If constructed as detailed above, the VIA 6522 Expansion Board will be accessed from a base address of #03E0, going up to #03EF inclusive. The software in this series of articles is based on those addresses.

The first two diagrams accompanying the construction details above, show the two IC chips and their pin numbering as seen from the component side of the board. Note the indentation mark on the chips, there should be a similar marking on the socket, to show which way the chip plugs into it. Use the indentation mark to identify pin numbers and to ensure that the chips are plugged in the correct way round, when the board is finished. Remember that you have a "mirror image" of the pin layout on the underside of the board. A few well placed markings made with a fine fibre tip pen, on the underside of the board, can be very useful to identify component pins.

The VIA 6522 chip is a CMOS device and can be damaged by very small amounts of static electricity, as produced by some clothing or some carpets, so keep it in its packaging, or foil until you have completed the construction.

The other two illustrations show the suggested board layout, plus a picture of the latest example that I built to that layout. Mine was as small as I could make it, in order to fit into a small case. The finished unit in the picture is only intended to illustrate the layout and doesn't have to be made that small. The type of circuit board suggested above, with it's matrix of pin holes and isolated copper pads is more flexible than a printed circuit and will allow you to space the components out a bit more, while using the same layout, if you wish. You could also buy a larger board, with enough space to install the input/output sockets on it as well, if you prefer that sort of layout. We will have a look at the I/O sockets next time.

I started, by soldering the three components and two DIL sockets into the board. The Expansion socket on the Oric is linked by an IDC header plug and 34 way ribbon cable to the interface. You could solder a 34 way IDC socket into the interface board, as illustrated in the last article and plug the ribbon cable from the Oric into that, using a second IDC header plug. The socket's pin numbers should then be the same as those at the Oric end of the ribbon cable.

Alternatively, you can wire the ribbon cable directly into the expansion board as illustrated in the picture above. It doesn't matter which you do, the wiring up instructions are the same for both options.

I used a sharp modelling knife and a steel rule to separate each of the 34 leads, for about a couple of inches, at the end of the cable. The leads were then threaded through the board in sequence, in two rows of 17 holes each, odd number leads in one row and even numbers in the other, as seen in the picture above. You might have to enlarge the holes slightly. Obviously, the ribbon cable should be a couple of inches longer, so that the individual leads can reach the furthest component pin on the underside of the board.

The input/output sockets will be looked at next time, but meantime, it is a good idea to arrange your wiring so that you have sufficient access in order that you can make connections to any of the the VIA 6522 input/output pins, you might require. Essentially those are pins 39 and 40, plus pins 1 to 20 inclusive, which includes access to the power supply. Most of those pins are on the far side of the VIA 6522, which makes them easy to avoid anyway.

More construction info next time, so hang on to this article if you want to make sense of it all.....A Happy Christmas and New Year to all of you.

The Gamester

A trio from the C.E.O

The thirtieth in the series of software disks from Club Europe Oric has duly arrived. I now get mine on Euphoric PC format, as it saves the hassle of using 'READDSK' to transfer it. Mind you, if you are new to Euphoric, and have simply downloaded the latest version from the NET, then you probably wouldn't know about 'READDSK', 'WRITEDSK' etc. - but that's another story.

*There are three titles on the disk (must I keep spelling the word 'disk' with a 'k'? - I feel so more comfortable spelling it: 'disc' - sorry Frank!). Yes three titles on it! **Princess Aurorre** was penned by Thomas Gempp (he wrote a few good Sedoric utilities), and was submitted in 1985 to **Oric International/ Eureka Informatique**. It was never marketed, and has now been translated into English by none other than Laurent Chiacchierini. In this role playing game, you are the knight trying to rescue the princess from inside the castle. In the first part you have to find your way into the castle - having succeeded (you need a key and torch) you must seek out her bedroom.. Features include good graphics, animated sprites, and spoken text (if you happen to have a voice synthesiser). The game is random - next time you play it will differ. You die if you run out of life points.*

The second and third titles on the disk are I believe both by Dominique Pessan. I concluded this from the Hi-Score tables, and by the fact that option 4 on both items - QUIT - did not function correctly!

***ENDU-RACE** is just an endurance race - basically a tarted-up version of the car race game as found on the Atmos Welcome Tape.*

***YAM** is more my cup of tea. I actually have two other versions of this dice game. One is actually called YAHTZEE, and the other called YAM is, I believe, a type-in from **THE'ORIC** magazine, and from what I remember it had a slight bug.*

*This **YAM** is a most enjoyable version. After a few games I had entered the Hi-Score table in sixth place with 255 points, but some considerable way behind the leader 'Dom' on 313 pts.*

Well Dominique - one of our readers from Caen in France - you have been famous for two minutes - wasn't it Andy Warhol who said that everybody would be famous for two minutes or words to that effect?

GOLF

*Back in 1995 one Kieron Smith from the Cheltenham area did not renew his subscription - I don't know why! At the time I was working with a couple of other readers to try and convert his goodish **GOLF** game from cassette to disc. We never did have any success. Out of the blue recently came a call from young Kieron, who is currently off work doing a 'sickie' with a broken leg (I think - Footie I believe). Kieron had got the old Atmos out, had done some more work on his **GOLF** game, wanted to re-subscribe to OUM, and is going to get a disk interface. Now perhaps we will see his game on disk. WATCH THIS SPACE!!!!!!!!!!*

Oh! - nearly forgot - welcome back Kieron.

Readers Letters

DEAR DAVE,

With regard to my latest machine code article (see pages 12 -14); I constructed the unit described in the article some years ago and I have to confess that as both the original units are still going strong, I haven't built one since then. The construction is based on the notes I made and used at the time. My **Maplin** catalogue lists the main components and was current up to February 1997, so they should be still available. All being well, I shall be at the next **Oric Meet** with the interface, so anyone interested can have a look.

Please convey my thanks to those **OUM** readers who replied to my original query on Zip drives; their advice being very useful and more accurate than the information put out by certain magazine reviews. Eventually, I bought an **Acorn** version of the Zip drive at the beginning of this month, while visiting the **Acorn World Exhibition**.

The drive I bought appears to be a standard "PC" version of the 100 Mb Zip drive and includes one 100Mb Zip disk. Also included in the £139 package is the software to adapt it to the **Acorn** system. Additional 100Mb Zip disks cost about £13 each from our local "**PC World**" store.

Is it worth it? The answer has to be a definite YES to that, so far. Initial results have been very good. The drive was easy to set up and operate. It is very fast indeed and appears to be nearly as fast as the hard drive, although I haven't done a proper check on that. Zip disks are really "souped up" floppy disks. A single Zip disk will store the contents of at least 70 floppies. On the **Acorn** machine, the Zip drive only operates in the desktop ("Windows") environment and automatically ejects the Zip disk if you leave the desktop. I still wonder about the possibilities for the **Oric**.

- Peter N. Bragg (Sutton)

DEAR PETER,

Fancy thinking about the next **Oric Meet** already!

Glad to hear you are happy with the Zip drive - I'm sure virtually anything is possible for the **Oric**!

- DAVE

DEAR DAVE,

Enclosed cheque for subscription renewal.

It's a pity that **OUMDISC No.7** has still not seen the light of day after what seems like an eternity, and I hope it won't be too much longer before it is released.

My other gripe is that the magazine is now so PC orientated that most of it is of no interest to me, and I have to scour through it to find the bits relating to the **Atmos** and peripherals.

Anyway, having got that off my chest, may I wish you and yours best wishes for Christmas and the New Year.

- Chris Evans (Northampton)

DEAR CHRIS,

It is so good to hear criticism occasionally. After all; I am here to put into the magazine what you want to read. As I've always said, in the title of the Aaron Neville song:- "TELL IT LIKE IT IS". In my defence, I would point out that I can only print what I am given to print. Most of my mail nowadays stems from the **NET**, and though much of it is **EUPHORIC** related, I think you will agree that much of the **NET** news is relevant to the old **Atmos**. Quickly glancing through this issue (about 20 pages done so far), and I would think that you'd agree that we have a pretty good mix. It really does need more input from readers on **Atmos** related items to keep everyone happy. We can't have a gamester section if no one can come up with games news, or unless I do it myself.

With regard to **OUMDISC No.7** - I'm afraid I have still got no further. It is not that I don't want to finish it, but it is just the lack of time. In the past 6 months I have probably used the **Atmos** once only as a stand-alone machine. **EUPHORIC** residing on my PC has been used a few times, though not a lot - for the odd game, and a bit of word processing. Most of my computer time is used to type up this magazine on **WordPerfect**, and answering my mail.

Why do I not have the time to **Oric**? WORK- WORK-WORK.

I do intend to finish off the **OUMDISC** - as I've said before - please be patient!

- DAVE

BRIAN'S PAGES

ORIC USER MONTHLY

Issue # 124

P17

DEC 1997

WELCOME

I was greatly disappointed that with the exception of one reader, no one replied with answers to last month's posers.

The exception was Ron Key, who will receive the prizes as previously mentioned.

Perhaps he would like to comment on the prizes, via O.U.M., telling you what you're all missing?

No news on the side of things - of course I've been extremely busy, and unable to sort things out with Jon H.

I hope to remedy this in the very near future

MY ADDRESS IS :

32 KIER HARDIE CRES.
TREBERTH FARM
NEWPORT
S. WALES
NP9 9DQ



TO THE LEFT AND BELOW, ARE REDUCED IMAGES OF THE ALTERNATIVE FRONT COVER OF THIS ISSUE, WHICH FORM THE BASIS OF THIS MONTH'S COMPETITION.

TO ENTER ALL YOU HAVE TO DO IS COMPARE THE RELEVANT PICTURE WITH YOUR AFC, AND TELL ME WHAT IS MISSING!



THE PRIZES ON OFFER FOR THE LUCKY WINNERS (DRAWN FROM THE PROVERBIAL HAT IF MORE THAN ONE ENTRY RECEIVED!) ARE AS FOLLOWS:

- 1) ELF - A BOTTLE OF SPARKLING WINE
- 2) SANTA - 5 FREE ISSUES OF O.U.M.

SO ENTER TODAY - OR LOSE YOUR CHANCE OF WINNING!

Brian's Pages :

Issue # 124

DECEMBER 1997

Page #18

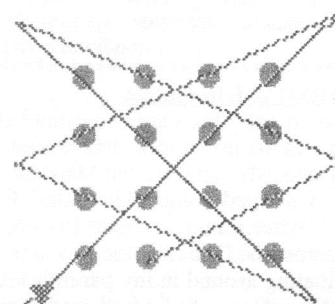
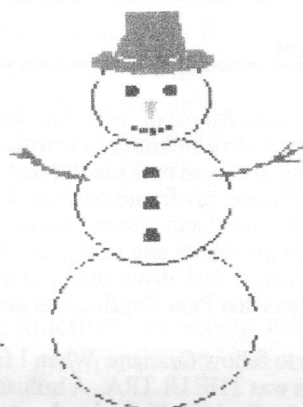
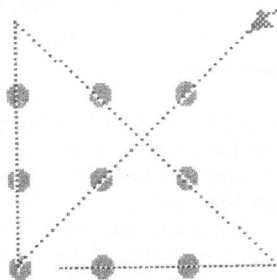
And now onto the answers to last issues set of posers :

1) Old MacDonald had a farm , and on that farm he had :

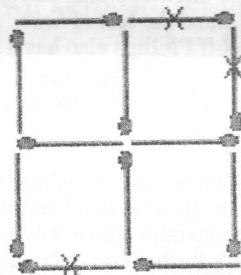
- a) Pig > Piglet : {1}
- b) Kid > Goat : {1}
- c) Sheep (or Deer) : {E , E }
- d) Ox > Oxen : {0} (Unusual but who cares !)

2)

a)



3)

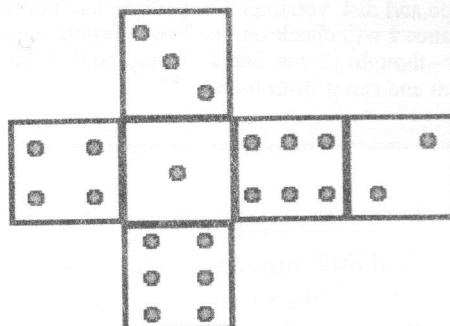
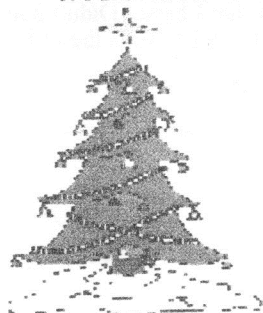


Move the rightmost three matches , and place them where marked . The fifth square is found on the outside .

4)

Most people would have got their dice out , looked opposit the 4 , and found the number 3 . However this is not the correct answer , for I am looking for the answer 6 . This is because my cube is not an ordinary die , it having two sixes and no fives .

To see why , look at the two six faces , shown in the last issue . One slopes to the left , while the other slopes to the right .. So there must be different faces involved . If it were the same six in both views , then the 3 & 4 end up on the same face - so two sixes have to be present . Here's what the unfolded cube would look like :



More Bits'n'Bobs

You know when you are an e-mail junkie when.com

1. You wake up at 3am to go to the bathroom and stop to check your email on the way back to bed.
2. You get a tattoo that reads "This body best viewed with Netscape Navigator 2.1 or higher."
3. You name your children Eudora, Mozilla and Dotcom.
4. You turn off your modem and get this awful empty feeling like you just pulled the plug on a loved one.
5. You spend half of the plane trip with your laptop on your lap...and your child in the overhead compartment.
6. You decide to stay in college for an additional year or two, just for the free Internet access.
7. You laugh at people with 9600-baud modems.....8. You start using smileys in your snail mail :-)
9. Your hard drive crashes. You haven't logged in for two hours. You start to twitch.
10. You find yourself typing ".com" after every period when using a word processor.com
11. You refer to going to the bathroom as downloading.
12. You start introducing yourself as "JohnDoe at AOL dot com" at parties..
13. All your friends have an @ in their names.....14. Your c@ has its own home page.
15. You can't call your mother...she doesn't have a modem...16. You check your mail. It says "no new messages." So you check it again :-)
-17. Your phone bill comes to your doorstep in a box :-)
18. You don't know what sex three of your closest friends are, because they have neutral nicknames and you've never bothered to ask....19. You move into a new house and decide to Netscape before you landscape.
20. You tell the cab driver you live at: "http://1000.edison.garden/house/brick.html"
21. You start tilting your head sideways to smile :-)

d.goodrum@virgin.net

JOHN MARSHALL in contact.

From out of the blue came an e-mail from John Marshall, who now lives in the U.S.A. I have turned the transcript of subsequent e-mails into a little article, and we hope to a full interview with John for a future issue of OUM.

JOHN: Hello. My name is John Marshall. I was employed by Tansoft (and subsequently Orpheus) in '84. I had previously developed " Centipede" and "The Ultra" for PSS, and my friend Anthony Clark had written " OricMon and LightCycle". After joining Tansoft I wrote " Rat Splat" and " Insect Insanity". Not really sure what I'm leading up to here. I stumbled across the Oric ring due to a serendipitous search engine hit, and became enthralled. I think I still have some Oric hardware floating around in my parent's loft (Atmos, disk drive and printer, I seem to recall). Oh well. Drop me a line, if you can be bothered. Any idea what Paul Kauffman is doing these days ? Geoff Phillips ?

DAVE: >> Hi John, A name well known to fellow Oricians. When I first got my Atmos there was only one game that kept me and my wife zapping into the small hours was THE ULTRA. A brilliant game that has stood the test of time. Anthony Clarke is now in Australia, and has been in touch. Paul Kauffman has his own company. Geoff Phillips also has a software company and is based in the old Tansoft base. Dr.Paul Johnson is another with a company.

Steve Hopps can still supply Atmos's and disk interfaces. We are all still in contact. Can I have your permission to put Insect on my games section of my web site?-How about doing an interview for us?

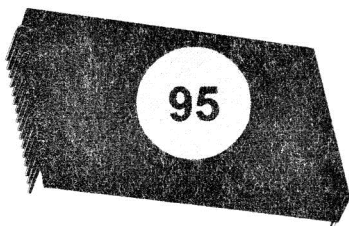
JOHN: Since sending my email to you yesterday, I stumbled across the software site run by Alexios and downloaded the old fruit of my fingers. Good grief. Also found Anthony Clarke's e-mail address and contacted him. He's replied briefly, and I'm sure we have some catching up to do (he and I were friends before Oric came along, and for some time afterwards). I rushed home last night after discovering the Oric web ring and bumbled away to my wife about it. She's further convinced I'm loopy. I must dash off and e-mail and ask my parents to avoid throwing away any old computer gear until I can sort through it all. I've spent most of the day taking advantage of my high speed link at work, and have hardly got any work done at all.

DAVE: Aren't we all loopy?

JOHN: Perhaps you can remind me of some history. What exactly happened to Insect Insanity? It seems to me it was never released properly. I've downloaded the excellent Euphoric emulator and played it, and I notice the animation of the boot is rather crude. When I wrote it, I'm sure the boot animated (ie the sole flexed as it jumped) and it faced the direction it was jumping. It looks like the version on the net is not the final release, but I'm not sure there ever was a final release. You can do what you like with Insect Insanity. Yeah, I'd be happy and flattered to do an interview.

Also - I'm using Euphoric 0.99k and I notice that Centipede will not work - gets stuck as the initial game screen is drawn, before any fungi appear.

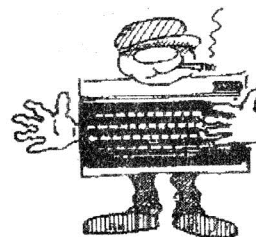
DAVE: From what I remember, Insect Insanity didn't get released in the U.K. It came to me via France. Robert Cook inserted a Mirage Software intro, and we ran off tape and disk versions. I believe he had permission from you, with royalties going to the World Wildlife Fund. When I get chance I will check out the boot animation on the versions that I have. Didn't know version 0.99k of Euphoric was now out - thought j2 was latest! Could be that the version of CENTIPEDE is the Oric- 1 version, in which case load the Oric-1 rom and run it from there.



RAMBLING

IN THE

ROM



Back in the 10th anniversary issue, Steve Marshall raised the question of what was new in Sedoric V3. Apart from ensuring compatibility with both V1 and V2 (which were not compatible), and adding a couple of new commands, the principal change related to the use of the KEYDEF and KEYUSE commands. These are greatly enhanced in their reliability. There follows the description of Function key setup in the new version of the Manual (still £4.50 from me, with a contribution to OUM funds and free copy of Sedoric if you don't have it).

FUNCTION KEY SET-UP

SEDORIC ships with a comprehensive function key set-up installed. You can, however, design your own keyboard set-up by assigning specific effects to each key or key combination.

A function can be assigned to any key in two ways. The first is by the allocation of a pre-determined command using *KEYDEF*, the second the allocation of a command defined by the user utilising *KEYDEF* and *KEYUSE*. To use these commands effectively it is necessary to understand how they interrelate. When a key, *FUNCT* + key, or *FUNCT* + *SHIFT* + key are pressed, a unique keyboard code is generated, as indicated in the following table. Note that there are gaps in the table, indicated by a lower case 'm'. Incidentally, the left hand column shows the codes used by the KEYIF instruction.

Keyboard codes

Codes for key alone		Index to KEYDEF table for	
		key + FUNCT	key + FUNCT + SHIFT
#80 to #8F	0 1 2 3 4 5 6 7 8 9 A B C D E F	#C800 to #C80F	#C840 to #C84F
#90 to #9F	7 J M K ■ U Y 8 N T 6 9 , I H L	#C810 to #C81F	#C850 to #C85F
#A0 to #AF	5 R B ; . O G 0 V F 4 - ' P E /	#C820 to #C82F	#C860 to #C86F
#B0 to #BF	m m c m g f m s 1 e Z m - d A r	#C830 to #C83F	#C870 to #C87F
	X Q 2 \ .] S m 3 D C ' ~ [W =		
<p>Legend: c CTRL, d DEL, e ESC, f FUNCT, g left SHIFT, m code missing, r RETURN, s right SHIFT, and ■ SPACE. Example: #80 corresponds to the "7" key and #BF to the "=" key. Certain codes (example #A0) do not represent any key.</p>			

By default SEDORIC assigns function codes (spanning #00 to #FF in the body of the KEYDEF table below) to each of the key presses in the two right hand columns in the table above (and hence to the key combinations themselves). The KEYDEF table spans values from #00 to #3F for *FUNCT* + key combinations and from #40 to #7F for *FUNCT* + *SHIFT* + key combinations.

To work out the effect of a combination, firstly find the key combination on the right of the tables below, then read off the corresponding function code on the left of the tables (the first column is the address of the table in SEDORIC ROM, #C800 to #C87F). The many '00' entries in the KEYDEF table correspond to a space character.

KEYDEF Table

Function codes	FUNCT + key:
C800- 07 45 57 4B 00 18 07 08	7 J M K ■ U Y 8
C808- 59 7B 06 09 00 42 41 52	N T 6 9 , I H L
C810- 05 66 25 00 00 5B 27 00	5 R B ; . O G 0
C818- 1B 3F 04 0A 00 5E 3D 0D	V F 4 - ! P E /
C820- 00 00 00 00 00 00 00 00	m m c m g f m s
C828- 01 00 08 00 00 00 22 FF	1 e Z m - d A r
C830- 6D 62 02 0C 00 0F 72 00	X Q 2 \ !] S m
C838- 03 31 29 00 00 0E 1E 0B	3 D C ' - [W =

FUNCT +] = DOKE#

Function codes	FUNCT + SHIFT + key:
C840- 17 B2 A8 F1 00 8C A6 18	7 J M K ■ U Y 8
C848- 90 C9 16 19 00 92 A2 B5	N T 6 9 , I H L
C850- 15 9C CA 00 00 D2 9B 10	5 R B ; . O G 0
C858- EB 8D 14 1A 00 87 C8 1D	V F 4 - ! P E /
C860- 00 00 00 00 00 00 00 00	m m c m g f m s
C868- 11 00 A5 00 00 00 D1 FF	1 e Z m - d A r
C870- A4 9A 12 1C 00 1F CB 00	X Q 2 \ !] S m
C878- 13 91 ED 00 00 1E B5 1B	3 D C ' - [W =

FUNCT+SHIFT+\ = VUSER

Legend: c CTRL, d DEL, e ESC, f FUNCT, g left SHIFT, m code missing, r RETURN, s right SHIFT, and ■ SPACE.

Then, remembering the function code, move on to the next set of tables, the function code translations, where you can read off the effect of the function code (and therefore of the original key combination). The default set is also contained in the disc file SEDORIC3N.KEY, and a developer's set in the SEDORIC3D.KEY disc file. Also on the Master Disc is SEDORIC1.KEY for those who wish to relive the vagaries of the V1.0 KEYDEF tables (see the 2nd Edition of this Manual, page 20).

Examples: From the table above we can read that FUNCT and the] key produces function code #0F, a predefined function which we can read in the table below directly gives the instruction DOKE#. Similarly, FUNCT+SHIFT+\ calls the function code #1F corresponding to the new command VUSER.

Here then is the full V3.0 function code translation table.

Standard Function Codes Translation Table

1st series: 16 commands redefinable with KEYUSE (USER FUNCTIONS, codes #00 to #0F)

Function Code	
C880- 00	20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 A0
C890- 01	20 20 20 20 20 20 44 4F 4B 45 23 32 46 35 2C A3
C8A0- 02	20 20 44 4F 4B 45 23 32 46 35 2C 23 34 36 37 8D
C8B0- 03	20 20 20 20 20 20 44 4F 4B 45 23 32 46 39 2C A3
C8C0- 04	20 44 4F 4B 45 23 32 46 39 2C 23 44 30 37 30 8D
C8D0- 05	20 20 20 20 20 20 44 4F 4B 45 23 32 46 43 2C A3
C8E0- 06	20 20 44 4F 4B 45 23 32 46 43 2C 23 34 36 31 8D
C8F0- 07	20 20 20 20 50 41 50 45 52 30 3A 49 4E 4B 37 8D
C900- 08	20 20 20 20 20 20 43 41 4C 4C 23 46 38 44 30 8D
C910- 09	20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 FE
C920- 0A	20 20 20 20 3F 48 45 58 24 28 50 45 45 4B 28 A3
C930- 0B	20 20 20 20 3F 48 45 58 24 28 44 45 45 4B 28 A3

 *****DOKE#2F5, #
 *****DOKE#2F5, #467CR
 *****DOKE#2F9, #
 *****DOKE#2F9, #D070CR
 *****DOKE#2FC, #
 *****DOKE#2FC, #461CR
 *****PAPER0: INK7CR
 *****CALL#F8D0CR

 *****?HEX\$(PEEK(#
 *****?HEX\$(DEEK(#

97	GOTO	B5	WAIT	D3	>	F1	KEY\$
98	RUN	B6	CLOAD	D4	=	F2	SCRN
99	IF	B7	CSAVE	D5	<	F3	POINT
9A	RESTORE	B8	DEF	D6	SGN	F4	LEFT\$
9B	GOSUB	B9	POKE	D7	INT	F5	RIGHT\$
9C	RETURN	BA	PRINT	D8	ABS	F6	MID\$
9D	REM	BB	CONT	D9	USR		

5th series: Miscellaneous (codes 254 and 255)

FE	DEL
FF	Automatic line numbering

The developer's keyboard (obtained by loading the file SEDORIC3D.KEY) differs from the above, and is detailed in the Manual.

Now a guide to the effect of the standard keyboard used with FUNCT or FUNCT + SHIFT:

Standard Function Key Usage

<u>Code</u>	<u>Definition</u>	<u>Code</u>	<u>Definiton</u>
000-015	User definable		
000	(space character)	016	HEX\$(
001	DOKE#2F5,#	017	CALL#
002	DOKE#2F5,#467 + RETURN	018	TEXT + RETURN
003	DOKE#2F9,#	019	FORI=1TO
004	DOKE#2F9,#D070 + RETURN	020	LEFT\$(
005	DOKE#2FC,#	021	MID\$
006	DOKE#2FC,#461 + RETURN	022	RIGHT\$
007	PAPER0:INK7 + RETURN	023	STR\$(
008	CALL#F8D0 + RETURN	024	UNPROT + RETURN
009	ê	025	©
010	?HEX\$(PEEK(#	026	USING
011	?HEX\$(DEEK(#	027	VIEWHIRES
012	PEEK(#	028	VUSER + RETURN
013	DEEK(#	029	WIDTH
014	POKE#	030	WINDOW
015	DOKE#	031	!RESTORE
032 to 127	DOS keywords (see above)		
128 to 253	BASIC keywords (see above)		
254	DEL		
255	Generate line numbers.		

Now, Steve - what could be clearer?!!

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

Jon Haworth
 3 Petersfield Road
 Duxford
 Cambridge
 CB2 4SF

Oh Whoops !!!!!

Peter N. Bragg

With regards to Frank Bolton's "Murmur of Protest" on the subject of the English Language and my part in its downfall. Traditionally, such criticisms are met with a nit picking and stinging reply. While I am quite capable of that, I am far too much of a gentleman to do so. Anyway, criticisms like computer crashes are all part of the learning process.

I was well aware when I started writing for OUM, that anyone with my negligible qualifications would be a prime target for literary criticism and that eventually someone would take the pin out and lob one in my direction. I am only surprised that I have got away with it for so long ! I have frequently pointed out that I am no expert on machine code and the same applies to writing about it. One of the more dubious assets of that mass producer of sheet garbage, the wordprocessor, is that it is no longer possible to hide spelling errors in a squiggle and blame the editor !!

I have read all of Frank's articles. They were very interesting. My reaction at the time was, I wish that my English lessons had been more along those lines and as a result the articles were "earmarked" for further study at a later date.

I have little spare time and a lot of reading to get through and therefore read most articles very quickly first time around, in order to keep up to date. In spite of good intentions, it is not always possible to retain everything of interest on that first pass and it can take a long time to get back to it again. The spirit is willing but the memory (short term at least) is weak.

The errors in words such as disk, disc, its and it's, are easy enough to deal with, although they are more likely to diminish, rather than disappear straight away. For example I know perfectly well, how to spell the word separate, but it frequently comes out as sepearate in the first draft and can be missed. Old habits are hard to break, but it can be done, given time.

But is that really the problem. Most of my own reading material is selected for its technical rather than literary content and it shows. Words such as "tranny", "risc" and "carbie" are frequent occupants of that reading material. A recent objector to the last of those, got his feathers singed and no sympathy for his trouble, which doesn't help improve the situation.

There is a lot to be said for Frank's view, that we should protect the English language from bad practice. However, that is not enough. Criticism and complaints alone, are not going solve the problem, there is a need for constructive solutions to go with it.

My last English lessons were more than forty years ago, plenty of time to forget them and develop bad habits, in grammar, punctuation and spelling. In times of doubt, most of us reach for the dictionary, but if that cannot be relied on, where do we go from there ? It is a case of having one foot on a banana skin and the other on bar of soap !

This problem affects everyone. What we need is a good pocket sized reference book which lays down clear rules on the use of the English language. There may well already be such a book, in which case let us hear about it. Frank has already made a good contribution with his articles and I am sorry for the memory glitch, but we really do need more than that, from the other keepers of the light, if he is to sleep soundly at night.

And Finally ! - The Back Page

ORIC WEB RING

Some time ago, readers Adrian Matthews suggested to the idea of an Oric Web Ring, where all the Oric Web Sites were linked together. You would go to the Ring, choose a site (random if necessary). You could then go NEXT, Back or see a LIST of all the sites. I started to supply Adrian with a list of sites. Then up popped Fabrice to announce that he had implemented one!!

Along with many others, OUM is now part of the Ring - check out:

<http://www.ensica.fr/oric/ring.html>

Ian's Goodies

From Ian Hutchins I have received a list of goodies for Sale - Oric tape software and some hardware. Unfortunately I have misplaced it. I'll sort it out for the next issue. If you can't wait, then please send an S.A.E for a copy.

Science Museum

If you are in the London area in the coming months, then The Science Museum is worth a visit. I have recently recieved the following e-mail:

"Dave,

I have been reading your pages on the web. I have recently acquired an Oric-1 for the Science Museum collection and intend to put it on show in a recent acquisition case in the foyer. I have mentioned the OUM in the text that will accompany the display and wondered if there may be a recent copy of the journal I could use with the computer. If possible I will need it pretty urgently and it would be displayed for about three months. Look forward to hearing from you - any advice that may make the display more interesting from a users point of view would be welcomed. I've read " ORIC - The Story so far" from the internet site; that sort of information will be invaluable to future researchers.

Regards"

Rod Smith, Assistant Curator, Computing & Data Processing / Electronic Components
The Science Museum, London

COMPILER

I contacted Dr.Ray McLaughlin on behalf of Kieron Smith who is re-vamping his GOLF game. Kieron wanted to know if the COMPILER will compile programs longer than 15K ?

Here for Kieron and any prospective customers (can be bought via OUM) is Ray's reply:

The available memory, ie from #500 to #B500, is available for

(i) BASIC statements/programme....(ii) Symbol table.

As far as I can remember, the Compiler writes the corresponding Assembly language statements directly to disk. The Compiler can compile a BASIC programme loaded, as usual, into RAM and (I would have to check this) could also Compile FROM disk also. The Compiler can certainly handle BASIC programmes of well over 15k and is also able to produce (with the help of the Assembler) machine code results of more than 15k.

You might want to read the text file which is included with the Compiler to get more information - you could send this text file to the prospective customer. I won't have time to use my Oric-until about February due to heavy work & other commitments at present.

I hope that this is of help.

- Ray.

ORIC

USER MONTHLY

HAVE A GREAT CHRISTMAS
AND A PROSPEROUS & HAPPY
NEW YEAR

THE
**ALTERNATIVE
FRONT
COVER**

Issue # 124
DEC. 1997

BROUGHT
TO YOU
COURTESY
OF
BRIAN KIDD



Edited by D. Dick , 65 Barnard Cres. , Aylesbury , Bucks . HP21 9PW
Distributed by B.Kidd , 32 Kier Hardie Cres. Newport , S. Wales . NP9 9DQ

Proudly produced using Claris Works 4.0 , on an Apple Mac