

Number 94

June 1995

Keeping the
Oric alive

with Alternative Micros



For full details see page 7...

THE EDITORIAL

HELLO AND WELCOME TO THE EXCITING WORLD OF THE DRIC.

Exciting! - I hear you murmur.

CEOMAG readers will know what I mean others will be informed within these pages. Jon's cover is a big hint.

Your 21 page Oric User Monthly has taken a while to put together. I have hardly togged it up at all with Oric-irrelevant items!

Without further ado we press on to the index.

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P.18/19 PLURALS - Frank Bolton with more on English Grammar. (Frank - did I ever tell you that my highest G.C.E 'O' level pass was attained in English Language; much higher than my Maths pass!). ----- Also a MEET UPDATÉ

P.20.. A LETTER FROM FRANK BOLTON - I will stay clear of the fan!

P.21.. BRIAN's PAGE - The Welsh Wizzard with more posers.

LOTTERY -----

On page 20 of issue 91 we printed Brian Kidd's LOTTERY program. Unfortunately it didn't work correctly.

I now have a fully working version. As it is not just a case of amending an odd line (he decided to re-number much of the program), then I will give the corrected listing in the next issue of OUM.

I've checked it out and it works perfectly. I've used it to come up with 5 sets of numbers, and will use 5 pounds from OUM funds for the draw to take place on Saturday July 29th (the day of the MEET). The same rules on day-outs apply as previously printed in OUM.

The 5 sets of numbers are: 4,9,24,29,34,37 17,23,34,38,44,45 10,16,20,21,26,33 5,22,29,30,48,49 20,22,24,28,30,38

OUMDISK ~~~~~

Sincere thanks to Bob Terry who lent me some more 3" disks so that I could finally fulfill orders for the last OUMDISK. If you haven't got a disk and still want one, then please get in touch. If you still haven't paid - COUGH UP!

ORIC ON CD-ROM ---- -- -- ---

A new CD-ROM magazine will soon be published and will contain as it's cover disc - the ORIC EMULATOR + a selection of ORIC titles.

JULY OUM

Articles for inclusion in the July issue of OUM should reach me by June 24th at the latest.

It will include a list of all the cassette software still available from OUM + a list of disc software, including the newer titles such as: WORD-SPEED, COMPILER, SONIX, ASSEMBLER ETC..

GREENWELD

GREENWELD ELECTRONICS are at: 27 Park Road, Southampton, Hants. SO15 3UQ. Telephone number is: 01703 236363.

Thanks to all who wrote and rang with details, and also Hurley, who tells me that the TEAC, 5.25", 360K, uncased, brand new drive that he bought from them, works perfectly at an almost uncanny unwavering R.P.M of 307.1, which makes Sedoric disks easy to load. Frice of these drives is 5.95 - don't know if that includes postage.

Should you fancy a trip to Southampton, then you can send me an S.A.E for a map showing how to get to the shop.

EUPHORIC

A word that was often used in that classic French Oric magazine -THE ORIC. A word that will be used extensively in future issues of OUM. EUPHORIC is the name given to the emulator that will allow P.C owners to run Oric software. A full report on this amazing utility is in this issue. Young Matthew took EUPHORIC along to school to try it out as my FC XT is not powerful enough. Matthew got to play the likes of XENON and TROUBLE IN STORE with full sound.

Not to be outdone, I visited a couple of Draughtsmen who use PCs for design work. Within minutes CAD was set aside, and we were into 'INVADERS' etc.

At the end of the session one of the guys tried CTRL/ALT/DEL to get back to his PC. Fool - it's an ORIC now, not a PC - he had to turn off and back On.

I hope he saved that drawing that he was working on.

EUPHORIC is being updated all the time. As Jon Haworth finished his article on it, so more updates appeared - SEE BELOW

EUPHORIC UPDATES

I WOULD ADVISE THAT YOU READ JON HAWORTH'S ARTICLE PRIOR TO CHECKING OUT THE UPDATES BELOW.

Updates to Jon's article are as follows:

- Ability to alter the speed of the software how fast can you play INVADERS!
- ii) Ever got to the fiftieth level of a game and realised you should be somewhere else? Well, now you can be! There is now a facility to Dump the game at the stage you have reached and continue at a later stage. Up to now this facility was only available to Oricians on adventures and Managerial type games.
- iii) Fabrice now has Sedoric and is busily upgrading his Emulator so that files can be transferred from Oric disk rather than cassette. The speed with which he works will probably mean that the task is finished before you read this.

GRAND RAFFLE

Rob Kimberley will again be along at the MEET to twist arms generally threaten people into parting with their money for the GRAND RAFFLE at the Aylesbury MEET. If you have something that you wish to donate then please send it off if you are not attending.

Non-attendees can purchase tickets for the GRAND RAFFLE in advance for 1

nound each.

READERS LETTERS

I would like to take this opportunity to congratulate you on making 'Oric User Monthly', not only the heart of the Oric movement but an increasingly enjoyable read! A fantastic achievement in it's own right. I appreciate that your contributors have also helped to make this possible but I'm sure they would all agree taht without your enthusiasm and dedication 'OricUser' would have sunk without a trace long ago.

Many of the letters of late have indicated the move to other computers, different word processing software and a more general outlook to computing in general. As lately my involvement with my Oric has been unfortunately very perfunctory I personally find this makes the magazine, with it's balanced mixture of letters and articles of general interest and the Oric specific items, more interesting. A situation, in my opinion, which should ensure the survival of the magazine for some time to come providing that you. Dave, are able to continue to devote your time to it.

The articles on the use of the English language, so interestingly written by Frank Bolton, make me want to ask why I've had to wait until I'm nearly sixty for this information to be imparted to me! I was pleased to have read them and look forward to more although I am relieved taht they are written in such a way that does not deter me from writing to you in case I spell or punctuate incorrectly.

> -PETER WOOLLEY

(Portsmouth)

DEAR PETER,

I think that it is the enthusiasm of the Oric users that has led to the continued success of Oric User Monthly and the Oric movement. Just as the scene starts to become a little bit stale, then up pops someone with fresh ideas in software, hardware or just generally to keep the momentum going. This along with the influx of new readers has certainly made my job that much more interesting, and thus easier to perform.

I'm glad you like the current mix of OUM, and hopefully we will pull out a few more surprises in the future.

- DAVE

DEAR DAVE,

I don't know if them DUM readers are aware or not, but most of us know that the Oric runs at 1 MHz, but more significantly so does the C64, and some of the the graphics produced on that machine such as in the games 'Driller' and 'Elite' surely prove (speed wise) that the Oric is capable of achieving a lot more than was expected of it. This is of course putting hardware sprites to one side, as these were not employed to any great degree in the two mentioned games. Anyway.... back to coding MAGNETIX.

See you at the MEET.

JONATHAN BRISTOW

(Watton)

DEAR JONATHAN.

nice to get a letter - will be even nicer to get

MAGNETIX!

- DAVE

DEAR DAVE.

Just a quickie (yes I heard the runours), to let you know I enjoyed your latest double issue of OUM, and that I very much hope to be at the MEET on the 29th July.

If you need my services again on the raffle to twist a few arms, squeeze a few wallets, and generally make a nuisance of myself to all and sundry, then I'm your man! The help of my assistant, the Lovely Louise would also be welcome!

I have a confession to make!

After many many months of an Oric-less life, using a PC, I actually dusted down one of my many Orics.powered up.and marvelled at the 8 bit wonder of it all. The rush of nostaloia swept over me!! I thought back to those heady days of the early 80's, when men were men, and so were the women. When computing was as enjoyable (and frustrating), and so so over powering, that debugging programs until 4 in the morning had a hypnotism that can be seldom matched by today's powerful 386/486/586 machines.

That feels better! (must keep off the Sanatogen).

Actually, I had to modify some EPROMs, and using an ORIC-1 plus Byte Drive disk system, special I/O card and EPROM interface (designed by Uncle Ray), the job was done in reasonable time.

Back to the raffle. As you know, I have lots of Oric goodies up here, some working, and some a little tired (working but need some attention). I will bundle up a selection, and donate to the raffle. OK?

P.S. Apologies to Uncle Frank if my grammar is a bit erratic, but Sanatogen is powerful stuff.

> -KIMBO (Leamington

Spa)

WELL ROB,

what can I say!

Look forward to see you in arm twisting mood at the MEET. Hopefully the Lovely Louise (now known as LEGS LOUISE on the Disco circuit) will assist. That is as long as her boyfriend/minder - Tony the Tiger, does not object. If he does then I'm sure that Louise will render him unconscious for the duration of the MEET.

I'll have to try that Sanatogen wine when I get to that age. How does the advert go? - "Fortifies the over forties". Obviously it works well on the over fifties as well. Better pass some on to Wilkie.

Your bundle of Oric goodies will be most welcome, but please NO massive black/white valve monitors!

- DAVE

(aged 39 ++)

YOUR LETTER
COULD

BE HERE!!!

I have recently been playing a couple of games on the old Spectrum, namely, 'Booty' and 'Scrabble'. 'Booty' reminds me a lot of 'Damsel in Distress', whilst the version of 'Scrabble' has much more to offer than the Oric Public Domain one, as it has it's own dictionary. Could some programmer out there possibly work on a similar project for the Oric?

- PETER THORNBURN

(Canterbury)

DEAR PETER.

I'll leave that one up to our readers. Perhaps we could teach the Oric to swallow a dictionary.

- DAVE

DEAR DAVE.

I enclose my cheque for a years subscription to OUM. The two issues you sent me were very interesting, and $\, \, I \, \,$ enjoyed reading them. Do you have any back issues?

As a major interest of mine is collecting old machines and their accessories, I must admit to looking forward to the next instalment of "The 8-bit A to I".

You mention in the editorial in issue 91 that most users are now on disc. Is this 3",3.5" or 5.25" or a mixture?

What interfaces are available?

CHARLIE WALLIS

(Groby)

DEAR CHARLIE,

it's nice to welcome a new member on board. I have written to you directly concerning your queries, but for those other readers who may be interested; I will go through the points raised.

I have spare copies of virtually every issue from numbers 65 to 90. For these the asking price is just 25 pence plus postage at cost (order those you require and you will be invoiced). To help you decide which ones you want, it maybe wise to order the OUM INDEX at just 1.50. I do have all the master copies to each and every OUM published, and therefore can photocopy any issue whatsoever. Price will be that of photocopying plus postage.

The original Oric disc systems were supplied with 3" drives, as Oric thought that they would become the industry standard. The ORIC MICRODISC, CUMANA, OPELCO, and BYTE DRIVE were all of this nature, but with the option to add other drives of the same or differing size.

With the likes of Amsoft keeping the price of 3" discs artificially high at around 3 pound each, many of the Oric fraternity turned to 5.25" drives, which were cheap to buy. One could get 40 track single sided drives, double sided or even 80 track double sided ones. The price of these discs (about 30 pence) allied to the fact that they could store much more, meant that many switched rather than just use them for backups. The introduction of cheap 3.5" drives and their discs (about 50 pence each) saw the advent of a more reliable and sturdy product compared with the 5.25" floppies. With cessation of production of 3" discs the newer convert to an Oric disc system has tended to go straight for the 3.5" drives. These 720k units can be had for about 25 pounds.

Personally i have all combinations, so that I can cater for all. We even have a couple of users with 3.5" 80 track single sided drives.

Cumana disc interfaces are available for about 45 pounds each (plus post) from STEVE HOPPS, 56 Manor Park Drive, Finchampstead, Wokingham, Berkshire. RG11 4XE - TEL: 01734 328251 - evenings or weekends.

- DAVE

DEAR DAVE.

I enclose my cheque for two tickets for the MEET. shall be bringing a daughter with me. I would like to donate prize for the raffle - a box of printer paper.

I like the series on the A-Z of 8-bit computers. It's a pity that when APPLE was included in part 2, that the APPLE IIc wasn's mentioned. I've got a IIc, which I haven't used yet. From the written specifications the IIc seems to have a number of enhancements over other models in the APPLE II range. For example, the IIc has 128k memory, built in disk drive and mouse port. It doesn't have the expansion slots which the other APPLE IIs have, but some of the expansion cards (e.g. extra memory, 80-column card, serial ports, modem port & joystick port) are already built in to the IIc. It does have some limitations, its disk drives are 5.25", which only hold 143k. On a recent Bank Holiday, I saw an APPLE IIc in the James Bond film - "Live and Let Die".

In the last OUM, Paul Hutton asks about Oric Emulators on the PC. I have seen an advert for an Oric Emulator in a recent issue of 'Micro Mart'. If it will run on my PC, then I will buy a copy of it. I enclose a copy of the advert, which I have also sent on to Jon Haworth.

- ROBERT CRISP (Meanwood)

DEAR ROBERT,

I look forward to at last meeting up with you at the MEET.

Perhaps APPLE IIc owners amongst our readers would like to get in contact with you. For their information, Robert is at : 44 Bentley Grove, Meanwood, Leeds. LS6 4AT (TEL: 0113 2745294).

An ORIC EMULATOR - this is in fact fully documented by Jon Haworth in this issue. Readers of the CEO Magazine will of already been informed. Splattered throughout this issue of OUM will be little updates to the Emulator as I hear them from Jon. Regarding the advert in 'Micro Mart', I rang the contact, one Daniel Thomas and was informed that the Emulator that he was selling was in fact by Fabrice Frances (you guessed it - it's the one that Jon Haworth is selling). Daniel sells it for 3 pounds, whereas Jon does it for 1.50. Fabrice states in his literature that he holds the copyright, but it can be passed on without financial gain to others. I'll let you decide who you buy the Emulator from!

I have informed Daniel that many Oric titles are not to be freely distributed as copyright is still held by: a) the original software house, b) the author (often when a software house ceased trading, then the rights reverted back to the author, c) OUM - for titles released under the OUM and MIRAGE logos, and d) me personally, where I have purchased the rights, stocks of inlays, or have reached agreement with an author or software house to pay them royalties.

Rather than just send a copy of this letter to Daniel (not an Oric owner), I will send this full issue, as he has kindly agreed to pass on details of DUM to any Oric related contacts.

In return I will advertise his other Emulators in another section of this magazine.

I have also had discussions with Jon Haworth regarding the matter of distributing Oric software with the Emulator. The outcome of these discussions are to be found elsewhere in this issue.

DEAR DAVE.

I enjoyed Frank Bolton's article on correct useage (or should that be usage?) of the English language, just as much as the earlier article about the sound of the Stradivarius violin, written by Steve Marshall. We Oricians are generally an intelligent and knowledgeable lot with a desire to communicate, and a computer magazine seems like a suitable vehicle for us to air our views or dazzle our colleagues on just about any subject, as long as too many people (and that includes the editor) do not mind. These communications act as a cohesive force in a self-help group such as ourselves, and there will always be copmuter activities to discuss alongside, while we keep our general interest in computers going.

We should, however, remain philosophical about our little ethnic minority, and not become alarmed at the diminishing numbers of subscribers to the British and French magazines. Being told by well-meaning editors that there is no reason to worry about the clubs closing down is rather like telling a small child that there is NOT a menacing monster lurking under the bed when the thought had not occurred to it before. The loss of support for small computers is a sign of the times, and represents the part of the population who started off because computers were seen as futuristic and providing access to another, created world of fantasy and adventure. There are much bigger 'playgrounds' in PCs now, and they are much easier to use. But as Steve wrote in the March issue, you are allowed to own more than one computer, and if you are into programming, you can get a great deal of satisfaction in pushing the Oric to its very limits, something I suspect not one of us could do with a PC. And there is still lots of room in my small machine for creativity and discovery, and more fun to be had by sharing than by working alone. So lets keep sending in our results and tolerate each others' loves, hates and idiosyncrasies, whilst flying off the handle occasionally just to entertain the other readers!

On the subject of participation and support, perhaps more encouragement could be given to our younger readers by introducing a student rate of subscription, supported by a small increase to other members. (You can edit that bit out, Dave, if it's considered too frightening.)

- COLIN COOK (Basildon)

DEAR COLIN,

I couldn't of put it better myself - well, not a lot better!

I'm glad that you like the idea of being able to 'fly off the handle' at times. A letter like yours is worth re-producing in full, even if it contains a lot of long words, and took me an age to type in! Some people have been known to send me articles and extremely long letters on disc so that my fingers don't cease up! Subtle - eh!

Regarding a cheap student rate to OUM - why not? I was seriously considering offering cheap rates to students, senior citizens, gays, lesbians, Guinness drinkers, Liberal Democrats, Take That fans, Spectrum owners. This would probably mean that you and I would be the only one's to pay the full rate - at least I hope so ducky!

Seriously though - there are a few amongst the student population, senior citizens, and unemployed that do subscibe at reduced rates. I do not advertise the fact, but if I feel that a reduced rate is warranted then I offer it. It is better to let someone have a few pounds off the subscription than to lose their input to the group. Rather than increase the cover price to others, I tend to top up funds with profits from the ORIC MEET RAFFLE. - DAVE

DEAR DAVE,

recieved the OUM Disk, but haven't been able to quickly try it out to see if it has survived it's postal journey.

The reason it isn't quick to try it out is that my Oric and monitor are still, after months since they went walkabout, sitting tied up in a large plastic bag labelled 'Essex Police'. Our garden caravan was stripped clean of computer stuff by children from the next door Comprehensive School some time ago. They must have thought they had found Aladdin's cave, but a lot of the computer stuff I store there was broken or useless in some way. Anyway, the first I heard of the burglary was when the Police arrived to see what I had missed, after a teacher spotted the boys in the playground selling my stuff to other children. The Police told me to keep the stolen things together till the court case as I might have to show it as a witness and identify it.so it is still all bagged up in our cellar including Oric. It was supposed to come to court by April, but it is now the end of May and I have heard nothing more. I don't suppose it would matter if I did get some of it out to use, as long as I keep it together and can identify it if necessary.

- NORMA WRANGHAM (Halstead)

DEAR NORMA,

sad to hear your sorry story. I suppose you keep your Oric in the caravan so that it is always to hand when you have a week-end to the coast with the caravan. I can just imagine it - it's pouring down with rain in Brighton, and so Norma powers up her trusty Oric to play 'INVADERS'!

Hope you get back on the trusty Oric soon.

- DAVE

NOTE FROM THE EDITOR

The postbag has been absolutely heaving over the past couple of months, and I thank you. I have tried to print a mix of letters as it is virtually impossible to print them all. I can honestly say that the input of letters and articles is at an all-time high. The input is possibly 50% higher now than when membership was 50% bigger. Give yourselves a pat on the back.

DEAR DAVE,

please find my cheque to re-subscribe to OUM for the next year. I'm more than happy to send 15 pound to keep me in touch with other Oric owners.

My stable of computers has enlarged to include a TELESTRAT, SPECTRUM 2, DRAGON 32 and an ENTERPRISE 64.

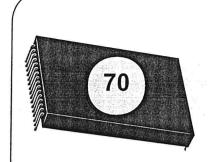
- JOHN FOGGIN

(Ashington)

DEAR JOHN,

you join the illustrious list of other TELESTRAT owners in England, namely - Jon Haworth, Brian Kidd and Derek Smith. Plus of course our German subscriber - Andre Widhani.

- DAVE



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RAMBLING IN THE ROMANCE



Huh? Not what you think, but all will be explained. It all started in the middle of May, when I received a letter from Laurent (wait, wait...) by e-mail over the Internet. What's the Internet? If you know already, skip a paragraph.

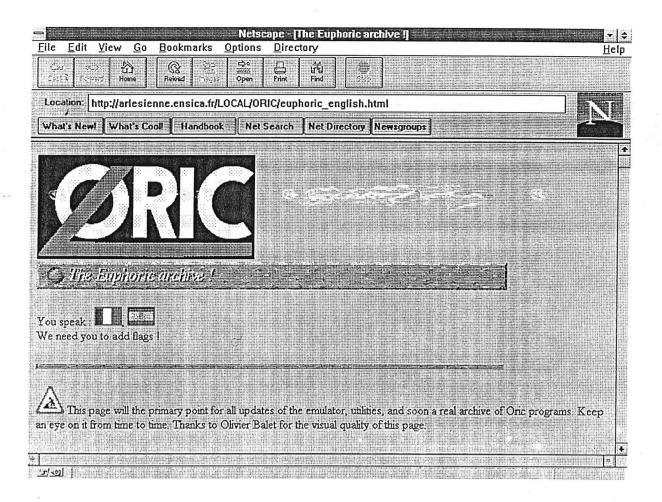
The Internet is the 'global information super-highway' beloved of computer magazine writers. You can now hook into it over a modem from your own PC (or Mac), paying a monthly subscription to your local 'service provider'. So we pay £10 per month for unlimited access; after that we pay only for the local phone call whilst on-line. What do you get? Well, an awful lot. Access to Usenet news groups, public conferences which you can read, and to which you can contribute. The ability to download almost any program you can imagine, from anywhere in the world. And your own e-mail address, so you can send and receive mail to and from others with an e-mail address. And finally (for our purposes) you can 'surf' the World Wide Web, a system of interlinked graphic pages which anyone can 'put on' the Internet, and anyone else can read - these cover every imaginable subject, from health to Formula 1, from the White House to Blur (who?).

So, Laurent sent me an e-mail - 'The main French computer magazine today gave a WWW address for an Oric page, can you access it?' Yes, I could, and there I found the server of ENSICA, the French National College of Aircraft engineering in Toulouse. And there it was - the Oric logo in glorious technicolour, and pages of information - in French, and in English.

So far, so good, but for most of us without Internet, not so spectacular. Turn to page 2 - and there it was! 'Euphoric', the Oric emulator for the PC!! It was too good to be true, just what we have asked for so often. So, download it, and try it out.

It's remarkable. Your PC thinks for a moment, then up come the three familiar white bars we all remember from our cassette days, followed by the power-on messages. Right, 'PING' - and it pings! A short endless loop Basic program - and it runs. Check the ink and paper colours - perfect. What else will it do, then? Back to the server, and there is a library of 40 plus programs to download and run on the emulator. Grab those, and run the emulator again.

This is the crunch - they all work - Xenon 1, Invaders, Trouble in Store, Super Jeep, Doggy. For a hectic hour I try them all out, and they all work - controls, colours, sound, even the speed is spot on. The author of this tour de force is one Fabrice Frances. He's constantly working on improving the emulator, we get a new version every two or three days at the moment. And he's just about to see Sedoric for the first time....



The 'Euphoric' Internet Page

Here are is the version history so far, as fascinatingly described by the author:

V 0.1 (29/01/95)

- a very approximative display with 80x25 PC standard mode, but it works ... the rom runs until the Ready prompt after having patched the wait for 3 interrupts to switch to text mode.
- a bug fixed at 4 o'clock: an ADC was executed instead of each indirect X indexed ROR, very annoying for the floating point computations (so you learn that the Oric has "<58225.792 BYTES FREE" ... BTW, incredible to use floating point instead of integer computations)
- no emulation of the VIA yet: no timer, no keyboard (the PC keyboard interrupt writes the ascii code in the Oric Basic's keyboard buffer. I remember also another night(mare) hunting for a bug in this routine affecting the Oric stack register, ouch...)

V 0.2 (12/02/95)

- Loads and runs an Atmos rom (in fact, my 1.3 modified one)
- patches the rom to allow CLOAD and CSAVE (I still have to test STORE and RECALL)
- displays Text mode with background and foreground attributes, simple and double height, normal and alternate charset, and reverse video (blinking is missing). Identical to the real Oric, at the pixel level, and allows the redefinition of character shapes (but it does not affect characters already on screen, so Invaders lacks some animation)
- displays Hires mode with 3 text lines (I have to figure out what exactly the ULA does to allow semi-hires modes like the one in Doggy), and handles the switch to/from Text mode.

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- basic emulation of the 6522 VIA: PC timer mimics the standard 100 Hz timer 1, basic emulation of port B and PSG in order to allow the keyboard simulation.
- lacks BCD computations, so some programs don't display the score correctly...

V 0.2.1 (25/02/95)

- Speed identical to the real Oric, whatever CPU you have (min 486SX/25?)
- BCD computations emulated
- a bug corrected with the correct handling of the IER register (VIA). Before that, a timer interrupt rising before the initialization of the IRQ sometimes happened.
- 2 patch to the handling of port A in order that every program succeed in reading the keyboard, since some (incorrectly) use the acknowledged port.

V 0.2.2 (05/03/95)

Port of the V 0.2.1 to the linux i386 target. Why? Previous versions have been developed with PharLap DOS Extender, a really good product, but I would have to pay to distribute the emulator since I don't have the runtime kit, and the development kit was expensive enough... So I decided to use DJ Delorie Dos Extender, and his port of the GNU environment. This has the advantage of allowing DOS/Unix versions that are quite similar, but the port has been very painful due to the lack of support for assembly programmers, and the AT&T assembly syntax different from the Intel one, not to mention the bugs of GASP, the assembly preprocessor, nor the very approximative checking of GAS. So bugs introduced by the port might still be hidden somewhere...

V 0.2.2a

• near completion of the VIA emulator. A reasonably correct handling of port A now allows programs to detect that no joystick is connected. Timers are now as precise as with the real Oric.

V 0 2 2b

• correction of a little bug: now stores the Oric name of the file read by CLOAD, in order that the top line displays it correctly. I still have to test if CLOAD and CSAVE work with the Oric-1 rom, since I have written the patch of that rom with just a listing of it.

V 0.2.2c

 Bug fixes. Oric-1 rom was not patched correctly to allow the CLOAD command. BRK instruction was not correctly emulated.

V 0.2.2d

• Correction of the clock's count of conditional branching instructions.

V 0.2.2e

- rewrite the 6502 emulator for cpp preprocessor. When I change the VGA code, I will throw GASP...
- Clock count of the NOP instruction (Oops, had forgotten it...)
- emulation of reset button and power on/off reset.
- for DOS version, disable keyboard interrupt during disk access in real mode (the ENTER key sometimes appeared pressed after such access)

V 0.2.2f

• change of the tape handling for two reasons: it's easier now to use multi-part programs, and the emulator can read JF. Fabre emulator's format.

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V 0.3 (14/05/95)

- complete rewrite of the display code (it's mode X now). Synchronization is far better, the speed should be the same on every machine. Powerful machines will just benefit by more screen refresh (up to 50 per second). It also allows me to get rid of GASP, so...this is a wonderful world!
- partial rewrite of 6522 emulation : cleaner now and (almost) exhaustive...

V 0.3a

- small detail corrected in PSG (but still no sound yet)
- * 'thinner' emulation of the tape, so that programs like Lone Raider or Trouble in Store can load.

V 0.3b

• Two gadgets added: a help line on top of the screen (de)activated by F1, and a simulation of the screen aspect when powering on the Oric...

V 0.3c

• a modification to the display code and the synchronization, so that smaller CPUs (486/25 and less) have a better screen refresh. Animation is not so jerky on these CPUs now.

V 0.3d

• Unofficial MOS 6502 opcodes added. This allows some programs to run. I don't have time to look if they use them or if they have bugs...

V 0.4

At last some sound! Many thanks to Gerton Lunter who sent me his emulation code of the AY-3-8912 (the Spectrum 128 has the same chip), by which I have been inspired a lot.

V 0.4a

- Oops, I must have been in a hurry with V0.4: a bug in the frequency of the sound, and in the noise too... I still need to find a way to make square waveforms with the Adlib, and noise could be better.
- have improved the screen mode changes by examining the real Oric.

V 0.4b

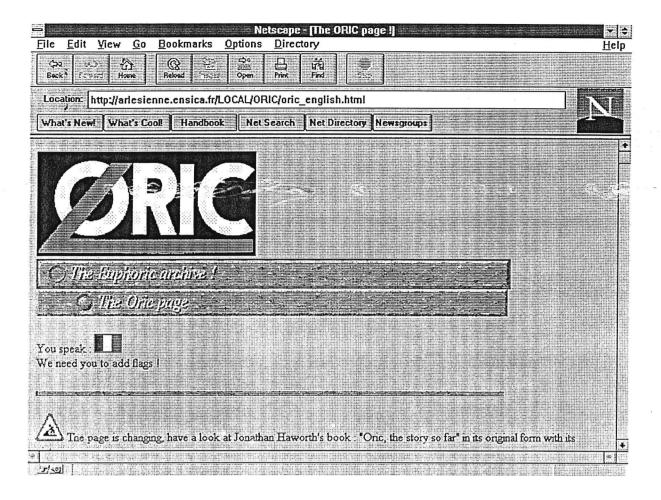
- All BIOSes don't use the same order for Red/Green/Blue...so, don't use the Bios any more.
- Printer support added by default. File "printer.out" is the result.

V 0.4c

• Change in file handling: it is now possible to save a file without a name (CSAVE"") This is not recommended but some programs use this feature. The file gets the name "_____" on the host.

V 0.5 (17/5/95)

- International keyboards supported (look at the manual).
- Speed index argument for 386 owners who don't have the processing power to run the emulator at nominal speed (or bigger cpu owners who want to try a speedy Oric!).
- ORIC environment variable to ease execution from several directories •
- better error messages for first time Linux users
- new documentation
- a small bug corrected in PSG emulation, triggered by DPTLQ



The top of the ENSICA Oric Page

V 0.5a

Add an on/off switch for sound (F2)

V 0.5b

• Add the behaviour of the Oric when it hangs up. The only solution then is to unplug and plug the power in again...

V 0.5c

• Let's say that 0.5b was so similar to the Oric that even the tape routines were as slow...

V 0.5d

• Dump/Restore added. F9 gives the opportunity to save the state of the Oric, and the -r parameter on the command line allows you to restore this state. See manual for applications.

Talk about the Story So Far! Remarkably, he's never had an Oric disc system. So the emulator literally stores the tape version of the program on the PC disk (sort those two out, Frank!), and you load it with the good old CLOAD "PROG" command. You can also CSAVE to disk, and use the usual MS-DOS file hierarchy within the name - limited to 16 characters as usual with the Oric cassette commands, e.g. CSAVE"A:\FILES\MYPROG". There are utilities to enable you to write a Basic program in a PC word processor and then read them into the Oric emulator, and an excellent 'readme' file. And last but not least, there is a full 32-bit C editor and compiler (the emulator is written in C).

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So, all you PC owners who were thinking you had moved on from the Oric, fear not - you haven't escaped so easily! The emulator and attendant programs are all freeware, i.e. freely distributable at no charge. Minimum requirements are VGA graphics and a 386 processor, although a 486 is recommended. For sound you need an Adlib or Soundblaster compatible card. There are two versions, one for DOS, and one for LINUX, the UNIX shareware clone.

If you'd like a copy of the emulator, there are two possibilities:

- send me £1.50 to cover emulator disk and p&p; this is a 1.4Mb disk containing the emulator and a full set of classic programs (plus the C compiler) in two *.zip files; it also includes the DOS program 'Pkunzip' to extract the files to your hard disk.
- Alternatively, if you have Internet access you can download them from Ensica, via the WWW on URL http://arlesienne.ensica.fr/LOCAL/ORIC/euphoric_english.html, or via FTP on ftp.ensica.fr/pub/oric if you prefer. The Web server tends to have the latest version.

I hope to be able to demo the Web server at the Meet in July, and of course to display and distribute the emulator. For now, the next page illustrates the start of the Web server (which is in glorious technicolour).

Oh yes, the prologue... French is a Romance language, as Frank will confirm...

Oric Mailing List

Following the discovery of the Ensica server, I've set up an Internet Mailing List for Oric aficionados. Basically, it operates by distributing contributions to the List to all those subscribed to it. It's a bit like the chatter on Meet day spread across the Net. The initial response has been very encouraging - we have as of mid-May about 15 subscribers, including people in Greece, Austria, Holland and of course France - none of whom are members of CEO or OUM! The possibilities are obvious, and it will be fascinating to see how the List develops. It certainly seems likely to be a much better forum than Oricall was. I'll keep you posted; if you want to subscribe (it's free) send e-mail to:

oric-request@cam.dungeon.com and if you want to write to me my e-mail address is at the bottom of the page.

Incidentally, e-mail access can be much cheaper than a full Internet connection. Many local BBS's provide e-mail facilities for £10 a year or so. If anyone wants advice on connecting either to Internet or a local BBS, drop me or Nick a line (or phone), and we can provide information best suited to each individual.

That's all for this month, but what an exciting one. Next month I hope to provide a report on the June Paris Meet and my first excursion on Eurostar. Funny how just as one or two began to think the Oric scene was fossilising, off we go again. I wonder what Dr. Ray will do with the emulator...

Jon Haworth 01223 68761 (office) e-mail jon@cam.dungeon.com

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14 May 95

Machine Code for the Oric Atmos (Part 46) Peter N. Bragg

The Story so far

Oric

Although the Indirect Jump is not a Zero Page instruction, it does provide a straightforward example of indirect addressing on it's own and is the only standard 6502 instruction to do so, which is why it was used as an example to illustrate the operation. The point is that Zero Page has a number of very useful instructions, that combine indirect addressing with indexing. Hopefully, illustrating the two operations separately this way, will make the combination of them both, a bit easier to understand.

It might help to explain Indirect addressing if we have a look at a working example. The rather silly routine below does just that. Once again, we call up Oric's useful collection of noises for the demonstration.

Demo Routines

[CAIL#1030]	[Ratchet Racket !!][1/2]
1000: FF :	Parameter Block 1000: Page Marker.
1001: 00 : "nil"	: Copy of Keyboard input.
1002:0C : "start	: Address LSB / Indirect Jump Address for : Address MSB / instruction 1024.
1003:10 : addr"end	: Address MSB / instruction 1024.
[[The Four Sound Calls]]
	[Shoot !]
1010:20 B5 FA : JSR FAB5	: Call "Shoot" routine.
1013:60 : RTS	: and return.
404/1-00 05 54 - 155 5405	[Ping !]
1014:20 9F FA : JSR FA9F 1017:60 : RTS	: and return.
	[Zap !]
1018:20 E1 FA : JSR FAE1	
101B:60 : RTS	: and return.
	[Explode !] : Call "Explode" routine.
101F:60 : RTS	and return.
end	
[JSR 1024]	[Indirect Instruction Demo]]
	2 : Jump to the address as set in Params 1002/03
1027:60 : RTS end	: and then return to main routine.

```
14 May 95
                                                                          _____
[ JSR 1030 ]-----[ Sound Call Switcher ]-----[2/2]
---start--- ---Fetch a Key---
1030:20 78 EB : JSR EB78 : Read Keyboard (OS "GTORKB")
1033:10 FB : BPL"1030" : until key pressed.
                           ---Continue or Finish ?---
1035:8D 01 10 : STA 1001 : Save a copy of the Key press input and then 1038:C9 1B : CMP"ESC" : Test - Was "ESC" key pressed ?
              : BEQ"105A" : Yes - so skip to finish now.
103A:F0 1E
                                  No - so.....
                             --- Change Address for Indirect Instruction ---
103C:AD 02 10 : LDA 1002
                             : Fetch Indirect address LSB from Param 1002
103F:C9 1C : CMP "1C"
                             : Test - Is it last address ? (ie. addr 101C)
              : BNE"1048" :
1041:D0 05
                                 No - so skip next two instructions
                                 Yes - so.....
1043:A9 OC : LDA #OC : Load Accumulator with OC and initially
1045:8D 02 10 : STA 1002
                              : reset Indirect address back to addr 100C
1048:EE 02 10 : INC 1002 : Increment the LSB of the Indirect
104B:EE 02 10 : INC 1002 :
                                  instruction address four times
104E: EE 02 10 : INC 1002 : in order to add 04 to it, so that
1051:EE 02 10 : INC 1002 :
                                   it is set for the next "Call".
                             ---Make a Noise---
1054:20 24 10 : JSR 1024 : Go and use the "Indirect Instruction Demo" 1057:18 90 D6 : BCC"1030" : and then go back for another key press.
                             ---Finish---
105A:60
               : RTS
                             : Exit back to Basic.
             ---end---
```

Demo Routines

Oric

Enter the complete routine using your favourite assembler or hexloader. I usually enter the hex code in the second column only, it's quicker, but whatever suits you, is best in the long run.

The Indirect Jump instruction has a routine all to itself (JSR 1024), with an RTS added, to ensure return to the main routine. You will notice the jump instruction address is 1002, however being an Indirect Jump, it will not jump to 1002. What it will do instead, is read the address located in 1002 and 1003. The jump requires a full two byte (16 bit) address, so the instruction needs to use the contents of two adjacent locations, that is the location indicated in the instruction and the next one up, which in this case is location 1003.

Locating the jump address in a parameter block, like this makes it easy to modify and we can use this to change the operation. Just like one of those rotary ratchet switches, the routine switches through each of the four Oric sound effects, by modifying the contents of the bottom half of the jump address, thereby selecting a different sound call each time. The main routine does that job, by switching the jump address in Params 1002/03. from 1010 to 1014, 1018, 101C and finally back to 1010 again, so that each time you press a key, you get a different sound. The listing hopefully explains the operation. You could use JMP 1030 (4C 30 10) in instruction 1057, also if you prefer (Q)uit to "Escape", change instruction 1038 to code C9 51. Call#1030 to run it and annoy the neighbours !! See you next month......

Carrying on with a look at the Atari computers I thought I would fish out the old ST and see if I could sort out that dodgy word processor that I was struggling with a while ago. The ST is almost as old as the Oric and, some would say, nearly as dead. There are many user groups to support the ST though, and one of the newer groups is called "STench". This group also supports Atari XE & XL 8-bit machines - which is why I mentioned it! Why the ST has dropped in popularity when the Amiga hasn't is beyond me as they are very similar machines. Anyway, on with the show....

* ATARI 400/800 spec. 6502 CPU. 16K-400 RAM.48K-800. 40×24 text 320×160 graphics screens. 16 colours each with 8 intensities. INTERFACES 4 joysticks; printer; cassette; light pens. 4 sound synthesizers. KEYBOARD 400 has a horrible keyboard like a ZX 81, 800 has a nice WP type keyboard. Both have 57 keys with 4 function keys.

These old Atari's are nice machines and there was a lot of software available for them. Software can be hard to find now, but you may buy the machine with a pile. Try STench or one of the other user groups if you're after some more. Both machines have cartridge ports on the top and you need to plug one in to be able to use BASIC which could be a bit of a pain. The lack of memory means that you can't really use the machines for any serious work. All the usual add-ons were available, but they had to use Atari's own devices so you can not use hardware from other machines (- except a printer).

* ATARI 600/800 XL These computers were redesigned versions of the 400/800 and they could use the old software. The redesigned black and white cases have decent keyboards with 69 keys and five silver function keys down the side: reset, start, select, option and help.

The new machines now have 11 graphics modes and the 16 colours have 16 intensities. BASIC is now built-in. The 600 has 16K, the 800 64K RAM. Other than that the spec. is as for the older machines. Excellent machines for games because of their graphics and sound capabilities!

* ATARI 130 XE This is another model based on the 800. It looks like a baby ST, having the same sort of grey case. It is slightly bigger than an Atmos and has 57 plus the 5 function keys like the XL. I am not sure of the spec. on this one, but it has about the same free memory as an Atmos, and has built in BASIC. Like other Atari's it needs their own peripherals and there is only one peripheral socket. This can be used for either cassette, disk drive, modem or printer. What you're supposed to do if you want to use both disk drive and printer I'm not sure. There are also sockets for cartridge, (round the back this time), monitor, TV and an expansion port.

ATARI also made another machine in a grey case that was bigger than the 130 XE and the function keys were big, round rubber things that looked a bit like Smarties. I can not find any other info about it though - sorry!

* AQUARIUS The 16K Oric-1 was the first colour computer under £100, the Aquarius was the first colour computer under £50 - and it shows! One nice thing about this machine was that it had all the peripherals sorted out and available at the time of the computers release. If only Oric had done that!

The machine was made by toy manufacturers 'Mattel' and looks and feels like the cheap, tacky plastic thing that it is. The keys are the same sort of horrible rubber things that were on the Spectrum, and similar to the Speccy, it has no space bar. The machine could be expanded up to 64K and had other add-ons included to make it quite a powerful machine. The awful thing would then be an expensive pile of junk rather than a cheap pile of junk!!

spec . Z80 CPU. 8K RAM, 4K ROM ! 40 x 24/320 x 192 screen with 16 colours. 256 pre-defined characters but NO user-definable characters !!! 49 foul rubery keys. It has sound, but no-one seems to say much about it in the reviews I've got. Printer and expansion ports.

I am not aware of any major software companies producing any software for this machine and I've never met anyone even vaguely ibnterested in the thing.

BITS 'N' BOBS

A PLEA FROM FRANK BOLTON TO DR.RAY

I have a plea for Ray. You know how he has programmed in WORDSPEED (probably through KEYUSE and KEYDEF and KEYSAVE) the FUNCT key to work with numbers 0 to 9. Well there are six remaining keys that can be defined with KEYUSE, if I knew how to get them into the programme then these would be ideal for programming internationnal characters that could be used on individual printers. The Citizen printers only let you redefine characters from CHR\$ (32) to (63) but the Amstrad DMP 2000 will only redefine from (0) to (32). However, all printers have a whole hosts of letters already redefined if only we could get at them without having to use ESCAPE and half a dozen keys.

For instance, Spanish international keys on any printer will not give the vowels, a,e,i,o,e, with an accent 'over them. The only way we can get them with an accent is to type, say, the letter A and then use FUNCT + 1 to escape, then CHR\$(8) to backspace, then FUNCT + 2 to come back from ESCAPE and then 'to put the accent over the backspaced letter. And that can get tiresome when you have to do it a couple of times on each line. Spanish uses a lot of accented vowels.

My Atmos printer has all the accents I need from CHR\$(128) upwards, but even then, to get an accented 'a' in a word like Malaga, I have to write 'M' and then FUNCT +1 and then OC128 and then FUNCT + 2 and then 'laga'. Which isn't on. If I could only programme KEYUSE 10 to KEYUSE 16 to bring up the accented vowels of CHR\$(128) to (132) (or wherever they are) and KEYDEF them so that by touching FUNCT + a I get an accented 'a', and FUNCT + e an accented 'e' it would solve the whole problem. Do you think if I wrote to him he would mind? Or if you have to speak to him, could you put the problem to him and see what he thinks? I could let it wait until the meet, but usually he is so busy down there and surrounded by people he knows well that I feel too much of an outsider to approach him. It is times like that when I realise just how shy I am, though no-one ever believes me as I cover it up with brashness and a hard face!!! I'm also terrified of being made to look a fool if the answer is, "Well, everyone knows it just can't be done" or "Well, it's so simple I wonder you haven't seen what's under your nose."

THIS SPACE RESERVED FOR RAY'S ANSWER

MAPLIN

Just recieved a mini-catalogue from MAPLIN. Included are a range of books for 'Dummies'. Titles in the series are: 'Upgrading & Fixing PCs...', 'Windows 3.1...', 'DOS...', 'The INTERNET....'. All books end in the words 'For Dummies'.

The MAPLIN 1996 main catalogue will be published in September at 2.95 (add 50 pence if you wish them to mail it direct).

ON THE MOVE

Our resident Comms man - Trevor Shaw will be soon on the move, as he has landed a new job in Bootle. The Shaw family have recently invested in a PC, but fortunately young Dominic is keen to pursue the ORIC. Trevor is hoping to make it to the MEET this year.

OUT VOTED

Allan Moore was hoping to make it to the MEET this year, but the MEET day is the same as when the MOORE family go on holiday to Suffolk. Allan did put it to his family to make a slight detour via Aylesbury, but was out \mathbf{Voreo} .

He hopes we all have a good day.

Now come on Allan - surely you could make a few wrong turns!

LINKER

In the June issue of the CEOMAG, there was printed the listing of a utility named LINKER, which should run as a notepad/address book/appointment book/list manager etc.

I say "should", because it doesn't quite work. Unfortunately in the adaption from Apple II to Telestrat to Atmos, a few errors crept in.

In line 60515 of Atmos-specific routines the command SPUT was used. This is a Telestrat command and should be amended to read PUT.

The commands ENTER and QUIT were inadvertently used as variables, and should be replaced by EY and QT. These appear in lines: 2020,3040,4030,5020 (on the GOSUB - not the print portion),6020 and 7005. Hopefully,according to Jon, all will now work - I'm sure you'll let us know if it doesn't.

I cannot comment on the correctness of the Telestrat version.

A PLEA FROM GREECE

Vaggelis Blathras from Greece has been in touch with the CEO via the INTERNET and is looking for help on "THE HOBBIT". He wants to know if there is any walkthrough for 'THE HOBBIT', as often on his tape version at certain points (not always the same one) the game crashed. Has anyone a solution that may help him avoid 'buggy' places? His appeal is to end a quest started ten years ago.

If you have an answer then please contact me or the CEO (via Jon).

I do have a disc version on ORICDOS, and can supply it to the CEO if they want it. I don't think that all tape versions were bugged as I know for a fact that an ex-OUM reader in Norfolk (a high-ranking police officer, whose name escapes me) has completed 'THE HOBBIT'. I will contact him when I dig out his details.

We form plurals in English by adding 'S' to the noun. If the noun has a sibilant sound then the 'S' wouldn't be clearly heard so we add 'ES'. In other words:BOOK makes BOOKS and KISS makes KISSES.

At one time only the semi-literate put apostrophe + S in a plural. The owner of some country cottage might advertise TEA'S but on the whole it was not a common error. Not so today. Within a hundred yards of my house there is an advert that says: LOG'S SOLD HERE. Many Asians have had to earn their living in England before they could speak English correctly and the result nowadays is shop windows with adverts like SECOND HAND BOOK'S.

"Criminal!" we exclaim. "You don't form plurals with apostrophe S."

Oh, no?? Then what about CD's and FC's and IBM's and reminiscences about the 60's?

You cannot blame a child who has learned to write "In the 60's" if he writes "In the sixty's" instead of "In the sixties."

The rot began centuries ago. We were told "Mind your P's and Q's" and it is hard to get rid of the technique. Nor is there agreement among the literary pundits on how to eliminate the fault.

Most teachers agree that we should write the plural of all acronyms with capitals followed by a small "s". Acronyms are NOUNS made up of initial letters, like NATO and UNO and IBM and PC. We should do the same with numbers and letters. "We didn't have PCs in the 50s". "Mind your Ps and Gs" (using capitals followed by a small "s").

But you can't change "Dotting the i's and crossing the t's" by putting capitals. We don't dot a capital I so "Dotting the Is" won't work, and "dotting the is" would be even more ambiguous. For good or bad we are stuck with it and only by writing, "dotting each 'i' and crossing each 't'" could we escape.

But we ought to do what we can to discourage apostrophe plurals where possible, and so I beg of you to write CDs and PCs and the 90s from now on and to encourage others to do the same. I can hear some—one murmur "On what authority does he ask us to do this?" If you had made a comparative study of the literary giants of this century, of FOWLER and PARTRIDGE and BURGESS to name but three, you would find disagreement among them which, in the absence of a Royal Academy to settle disputes, gives us sufficient grounds for adopting any stance we can logically justify.

I go back to my original statement. It isn't that CD's is incorrect. What enters into common usage becomes acceptable and therefore correct. But when a pattern can be shown to lead us into ambiguity, then we must back-pedal and avoid using that pattern so that future generations will reap the benefits. Using apostrophe + s in CD's leads to writing the plural of computer as computer's.

Next month we'll deal with "To DOS or not to DOS?". How far can we use acronyms and BASIC code words as if they were real verbs and nouns? What little horrors have they spawned?

Meanwhile here's my tip for the month:-

They tell us "PUT I before E except after C".

So what about THEIR, DEITY, FEIGN, HEIR, BEIGE, DEIGN, FEINT, GEIST, GEIGER-COUNTER, HEIGHT, WEIGHT, LEISURE, MEIGSIS, NEIGH, NEITHER, METCHEOUE PETROTEE PETROTEE PETROTE

MORE FROM FRANK

It wasn't until I was forty. (many decades ago) that I realised what was wrong.

"Use I before E except after C but only if the sound is EEEEEE." you look at the above words, not one of them has an EE sound. They have AY as in NEIGH or or IGH as in HEIGHT, but none of them has a pure EE. The amended rule works with very few exceptions. But you MUST add "BUT ONLY IF THE SOUND IS EEEE"

The odd exception, like SEIZE and WEIR puts the E before the I although the sound is EEE. But at least the rule I give above is well worth using. When I used the old rule as a child I was more often wrong than right.

We say that the exception MAKES the rule. But if it breaks it too often then there's no point in having a rule in the first place. Nobody in their right mind would attempt to give a rule that justifies the different ways of pronouncing the letters "OUGH" in words like ROUGH, COUGH, THOUGH, BOUGH, THROUGH, THOUGHT etc.

Not even me.

See you next month,

- FRANK BOLTON

ORIC MEET UPDATE

It is your last chance to get your tickets for the Aylesbury ORIC MEET on Saturday July 29th.
The price of a ticket is 2 pounds.

Tickets for the GRAND RAFFLE will be available on the day at a pound each. Those not attending can buy raffle tickets from OUM.

Tickets for THE MEET, along with a map, and raffle tickets (where purchased) will be despatched with the July issue of OUM.

Food will be on sale at lunch-time in the form of either a barbeque or fish'n'chips. I still have to finalise the details. Bar refreshments will, of course, be on hand.

What's planned for the evening - it's a little early yet to confirm details, but should either be a Disco in a local pub or a Barbecue at my home.

Jon Haworth will be bringing his PC to THE MEET. He will be showing us how to use the INTERNET, how the ORIC emulator works, and will show us all your favourite ORIC arcade games and adventures running on the PC.

An event NOT to be missed!

GET YOUR TICKETS NOW!!!!

The wisest man I know (my father), once said. "If you want to generate light, it doesn't do any harm to generate a little heat with it now and then." He died 35 years ago, but his precepts live on. So tell Steve: no offence meant by MY comments, and none taken by HIS. I was just so gob-smacked that he could have thought that I 'wasn't sure of the usage' that I launched myself into an explanatory article. At least we've given readers something to waken them up. We even got a mention (albeit a negative one, with the usual sideswipe at OUM) in CEO. Not bad for a little "unassuming" mag like ours.

I would like to thank the people who have written in to say thanks for the grammar articles. So it seems that the series will continue, though I must discipline myself to brevity. Thanks also to Steve for starting the ball rolling. And as you say, Dave, if we can't dedicate a few pages to articles about music and Stradivarius and "alternative micros" and our own native language in an Oric Magazine, then the mag wouldn't deserve to live.

CEO should take note: - we wouldn't dare risk lese-majesty by writing to France as we write to you, Dave, month after month or chat merrily away to you on the phone. Perhaps that's why OUM is in no danger of folding from lack of material which its readers consider interesting albeit on "such Oric irrelevant topics as Stradivarius violins and English linguistics". I will explain to OUM readers this private joke, which otherwise might generate heat amongst OUM readers not in on it.

CEO is a French ORIC magazine with 31 French members and 24 from the UK. In February they wrote (to me) on page 3. "Hello Frank....Your English courses would certainly come in useful, especially to those French youngsters who got a Telestrat for Christmas". The same magazine, in April, commenting on Steve's excellent Stradivarius article and my Linguistic articles in OUM wrote, "but these articles have nothing to do here, no matter how interesting they can be." Meaning, in colloquial English rather than FRENGLISH, that they are so 'Oric irrelevant' as to be unsuitable for CEO, but that Dave will use anything 'to top up the mag.' (Their words).

So my English lessons for French Oric owners are most welcome to CEO readers, but for OUM, ... "Oh, no my dears, CEO would prefer to close the mag rather than let down our standards with stuff like (Not their words, but a fair precis of their editorial.) What sticks in my gullet is that CEO didn't direct their criticism openly at OUM as I am doing here to CEO. They simply sideswiped us with innuendo, as if to name it directly would be beneath their dignity. I have written to them, with my usual charm, applauding the agility of their 'volte face' (French for 'two-faced' behaviour) and cancelling my subscription. I hope the remaining 23 English CEO members will use their influence to protect OUM from French derision. HOW SMUC must feel to know that, as their pages shrink and their numbers sink, they can take solace, on their downward spiral, in bitching against OUM as it grows stronger. (Am I generating light, heat, or merely gleefully stirring? No raffle tickets for guessing answer) Do I hear the murmur of 'perfidious Albion'? the correct

So — God bless your ungrammatical little soul, Dave, — God protect us from your devilish sense of humour, and God give you and OUM many years more to delight and surprise us.

Who loves you, baby?

Yours, etc.

(Frank)

BRIAN'S PAGE - JUNE 1994 -

CORRESPOND PEOPLE PLEASE

WELCOME ONE AND ALL - LAST MONTHS POSER ANSWER IS AS FOLLOWS - THE NEXT THREE PERFECT NUMBERS ARE : 28 , 496 & 8128 - DID YOU MANAGE TO WORK IT OUT ?

THIS MONTH WILL BE SLIGHTLY DIFFERENT - LITTLE CHIT CHAT AND MORE POSERS - SIX IN ALL - SO SEND ME YOUR ANSWERS AND RECEIVE ONE FREE RAFFLE TICKET WHETHER YOU ARE CORRECT OR NOT (CAN'T BE BAD) !

SO LETS GET THE BALL ROLLING WITH

- 1) IF ORIC = 45 AND ATMOS = 67 . WHAT DOES TELESTRAT EQUAL ?
- 2) IF SHELL = 77345 AND SOIL = 7105 , WHAT IS .07734 ?
- 3) I CAN BUY 2 FOR FIFTY PENCE , 50 FOR ONE POUND AND 100 FOR ONE POUND FIFTY PENCE WHAT AM I ?
- 4) HOW MANY DAYS IN A WEEK ? YES THE ANSWER IS SEVEN THEREFORE WE CAN SAY : DAYS * 7 = WEEK
- FOR THIS POSER SUBSTITUTE THE LETTERS FOR DIGITS THE SAME LETTER REPRESENTING THE SAME DIGIT AND TELL ME WHAT THE MULTIPLICATION IS "
- 5) EVERY EVEN NUMBER CAN BE FORMED BY ADDING TOGETHER TWO ODD PRIME NUMBERS COUNTING 1 AS A PRIME. FOR EXAMPLE FOUR IS THE SUM OF THREE AND ONE (4=3+1). SOME NUMBERS MAY BE FORMED IN MORE THAN ONE WAY (EG 8=7+1 AND 8=5+3).

CAN YOU WORK OUT WHICH NUMBER - IN THE EVEN RANGE OF 2-100 , CAN BE FORMED IN THE MOST POSSIBLE WAYS ?

AND FINALLY POSER NUMBER 6)....

ORICLAND IS IN A STATE OF CONFUSION.THE GOOD BUT ECCENTRIC KING DAVE HAS DECLARED THAT THE LAND MUST GO HEXIDECIMAL. WAS THIS DUE TO HIM WEARING OUT HIS SIXTEENTH ORIC COMPUTER, OR THE BIRTH OF HIS SIXTEENTH CHILD (IN HIS DREAMS EH ANN!) OR EVEN (AND MOST LIKELY) HIS CONTINUED USE OF A SIXTEEN BIT PC, TO STORE ALL HIS RECORDS.

ON 'H' DAY, THE DATE ARRANGED FOR THE CHANGEOVER, ALL ADDRESSES MUST BE CONVERTED FROM DECIMAL TO HEXIDECIMAL.

THE ONLY PRAISE FOR KING DAVE'S DECISION COMES FROM THE LANDS ONLY NUMBER PRODUCER - THE LOCAL BRASS WORKS , WHO ARE SAID TO BE DOING A ROARING TRADE (WOULD THEY BE PRETENDING IF THEY SAID THEY HAD 'BRASS IN POCKET' ? OH WHAT A PUN!)

NOW OLD 'MUSO', THE LANDS FOREMOST MUSICAL EXPERT, WHO LIVES AT NUMBER 53, AND IS AGAINST CHANGE (AS ARE ALL SCOTS - AS IT NORMALLY MEANS EXTRA COST!), IS REMAINING SILENT OVER THE ISSUE - HE KNOWS ALL HE HAS TO DO IS REARRANGE HIS NUMBERS (53 DECIMAL = 35 HEX).

NOW THE POSER...IF NO ADDRESS HAS MORE THAN THREE DIGITS , WHAT OTHER HOUSE NUMBERS SHARE 'MUSO'S' GOOD FORTUNE ?

THAT'S ALL FOR THIS MONTH - NORMAL SERVICE WILL RESUME NEXT MONTH

PS. NO OFFENCE MEANT-BUT DISCUSSION WELCOME