



**USER  
MONTHLY**

with Oric Enthusiasts

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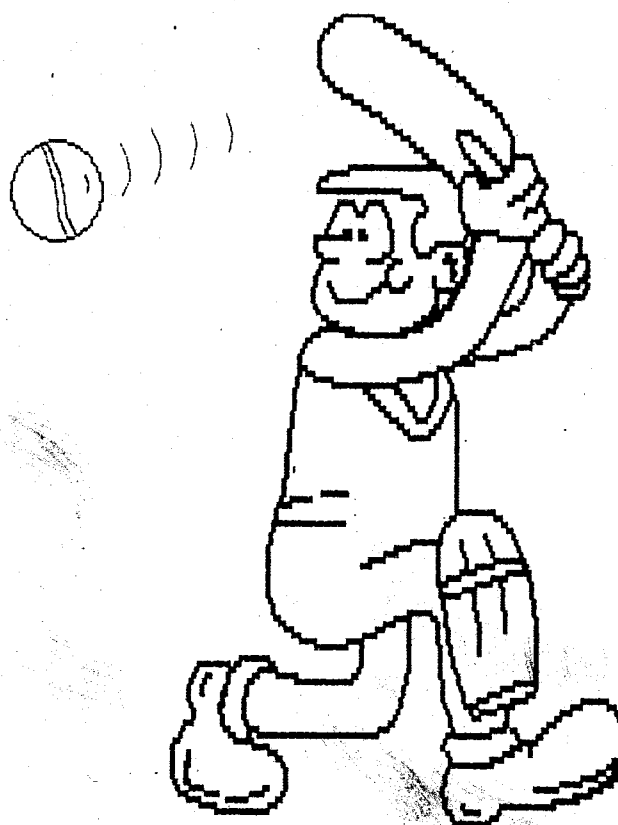
*Europe's longest running  
Oric Magazine*

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*Number 50  
October 1991*

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**50  
NOT  
OUT**



**ORIC** software by Oric User Monthly

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Edited and Distributed by Dave Dick, 65 Barnard Crescent, Aylesbury, Bucks HP21 9PW

# ...EDITORIAL...

HELLO AND WELCOME,

TO THIS OUR 50th ISSUE OF 'ORIC USER MONTHLY'. WHO WOULD OF ENVISAGED THAT WHEN ROBERT COOK FIRST PRODUCED THE MAGAZINE BACK IN 1987 THAT THE ORIC WOULD CONTINUE TO FLOURISH. AS A TREAT FOR MOST READERS WHOWERE NOT SUBSCRIBERS IN THOSE EARLY DAYS, WE REPRODUCE THE VERY FIRST O.U.M, WHICH CONSISTED OF A FRONT COVER AND 4 PAGES OF REVIEWS.

AS THE SUMMER FADES AND THE NIGHTS DRAW IN MANY OF YOU WILL BRING OUT YOUR ORICS AGAIN TO TAKE THE PLACE OF YOUR SUNBATHING AND DAYTRIPPING DAYS. FRANK BOLTON WILL BE BEAVERING AWAY PRODUCING HIS BOOKLET CONTAINING HINTS AND TIPS FOR OUR LITTLE MACHINE. IF YOU HAVE ANY LITTLE PROGRAMS TUCKED AWAY, THEN PLEASE PASS THEM ON TO FRANK SO THAT OTHERS MAY SHARE THEM.

FOR THE LESS SERIOUS MINDED, PAUL BAKER AND MYSELF ARE PUTTING TOGETHER A GAMES BOOKLET, WHICH WILL CONTAIN POKES, DOKES AND ADVENTURE GAME HELP. PLEASE SEND ME ANYTHING THAT YOU MAY FEEL WILL BE OF INTEREST.

AND SO TO THIS ISSUE.....

## ..THE MENU..

- PAGE 1 - THE COVER - Jon Haworth celebrates our 50th with Alistair's 'CRICKET'.
- PAGE 2 - THE EDITORIAL
- PAGE 3 - NEWS
- PAGES 4/5 - AND SO TO PRINT - Nigel Alefounder with a look at how to get started.
- PAGES 6/7/8/9/10 - RAMROM - Jon Haworth gives us the STRATOS story.
- PAGE 11 - BITS and BOBS
- PAGE 12 - THE GAMESTER and PROGRAMMER
- PAGES 13/14/15 - THE MACHINE CODE ARTICLE - Peter Bragg continues his critically acclaimed expose.
- PAGE 16 - ORIC HEX. CODING FORM - someone passed this to me at the July meet and I thought it might come in handy for budding programmers.
- PAGE 17 - PICK OF THE FLOPPIES - Peter Bragg explains why 3" could be on the wane.
- PAGE 18 - REFLECTIONS - your Editor delves into the past.
- PAGE 19 - READERS LETTERS
- PAGE 20 - THE BACK PAGE

PLUS ISSUE 1 of ORIC USER MONTHLY



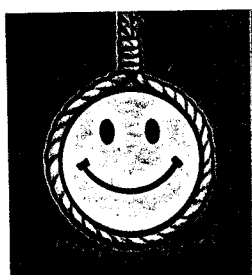
ARTICLES for inclusion in the November issue should reach me by October 23rd.

In the next issue: all the usual + some more disassembly of the ROM and hopefully an interview or perhaps some comments from 2 ORICIANS from the past who have been traced, namely: Dr. Paul Johnson and John Marshall.

## ..M I R A G E..

After taking into account the sales of Mirage software by Robert Cook and adding that figure to those that I have sold, we now print the sales figures to date.

- 1st - THE HAUNT (Text Adventure by Robert Cook) - 34 sold.
- 2nd - GALACTOSMASH (Arcade from Alistair Way) - 26 sold.
- 3rd - GRENDEL (More arcade from Ali) - 21 sold.
- eq. 4th - TETRIX (Andre Widhani's super game) and LEAGUE SOCCER (strategy from Robert) - 18 sold.
- 6th - INSECT INSANITY (John Marshall at his best) - 16 sold.
- 7th - CRICKET (Alistair brings the TEST MATCH to your screen) - 14 sold.
- 8th - GRAND PRIX - (Ali again) - 9 sold.
- 9th - KRYSTAL WORLDS (Ronberts underrated 5 part adventure) - 7 sold.
- 10th - ESCAPE (Ali brings up the rear) - 6 sold.



...NEW...



### WORDSPPEED

RAY McLAUGHLIN's super word processor is now ready for release on disc on SEDORIC and BYTE DRIVE. The program will be distributed via Allan Whitaker. Ray has now put into the program the ability to run and test a basic program. What this means is that with WORDSPPEED loaded, you can type in a basic program, run it to see if you have typed it in correctly and then return to the word processor. This will be of great help when I have to type in listings for the magazine.

Allan has written a utility to allow AUTHOR and WORDWORTH users to load their text files into WORDSPPEED.

Hopefully we will be able to let you know the price next month.

### 80 TRACK DOUBLE SIDED

"So what!", I hear you mutter. Alright you may be able to get a full double sided 80 track disc with ORICDOS, but just try it with SEDORIC. 55 track is about your limit. This is because the maximum permissible is or should I say was totalled 1920 sectors.

Well Ray McLaughlin has nudged his ego into gear (his words - not mine) and is happy to report that it is possible to have 80 x 17 sectors per side.

In fact, he has produced an updated SEDORIC. In place of your 1920 sectors, you will get 2720 per side. An increase of about 40%.

This update is compatible with the original SEDORIC in that it will run as the original with originally formatted discs, i.e. a user with no more than 1920 sectors on any disc drive will experience no change whatsoever. However, for those lucky users who have double sided 80 track drives, it is possible to format and cover the discs completely with files. All the (hidden) support files, e.g. FORMAT and DELETE, have been updated suitably also.

The small software prices to pay are:

(i) After the first 1920 sectors are full there is a little more disc activity on some searches for a vacant sector as there are now 2 sectors reserved for the sector bitmap and the first is searched before the second one is accessed. With commands such as SAVE and its derivatives, this extra activity is extremely minor and, with a quiet disc drive, it will probably go unnoticed. However, with a command such as PUT then the extra disc activity could take place every time but as the extra bitmap sector is on the same track as the first (original) bitmap sector and no disc head movement takes place and the extra time needed to read this extra sector is negligible.

(ii) When a file is deleted from near the end of a fairly full directory, then there is some extra disc activity as SEDORIC attempts to compact the directory. This directory compacting is not new but there is now more scope for the activity.

(iii) The JMP vectors at the top of SEDORIC RAM are no longer available as the space was needed to hold the new code (which is patched into the original SEDORIC). As far as has been ascertained, only NIBBLE uses one of these vectors and Ray has simply modified (very easy) his copy of NIBBLE to access SEDORIC directly instead of through a high RAM JMP vector.

This SEDORIC update uses, in addition, one zero-page register only which does not, as far as can be determined, interface with SEDORIC or the ROM basic.

This new version of SEDORIC will be distributed by Allan Whitaker and will come complete with a TYPE'able file of description/instructions.

Well, Ray has been busy and I just can't wait to get my hands on the new SEDORIC and WORDSPPEED.

By the way, my review copy of an earlier version of WORDSPPEED, which also had CLAVIDACT on it, plus the manual and another disc of mine with SNOWBALL on it appears to have gone walkies. I wonder if anyone may have mistakenly wandered off with it after the last ORIC MEET.

### PETER's CAMERA

PETER BRAGG REPORTS A CERTAIN AMOUNT OF INTEREST IN HIS CAMERA AND INTERFACE AS SEEN AT THE JULY MEETING. THE ORIGINAL SUPPLIERS HAVE STOPPED SUPPLYING IT. PETER IS CURRENTLY MAKING ENQUIRIES TO SEE IF ANYTHING IS AVAILABLE ELSEWHERE.

# AND SO TO PRINT

Information for people who would like to fit a printer *other* than an MCP40 to their ORIC, but have been too affraid to ask !

This is easy ! Don't panic. The ORIC is a friendly beast and uses a universally accepted output standard to 'talk' to a printer. The only stipulation on printer type is that it is one with a PARALLEL interface (sometimes called CENTRONICS although you should really make sure it is just Parallel), or for the technically minded - "Socket" ! This has a central bar running the full width with flat contacts on the top and bottom surfaces and two wire ear-like clips to secure the plug.

The ORIC too has a PARALLEL socket but of a different type. This is a much simpler version having two rows of ten pins, one above the other. Now it may seem like a nightmare of wires and soldering to connect the two but it really is surprisingly easy. We are going to use a method which requires no soldering at all and hardly any time.

First you need three items, a plug for the ORIC, a plug for the printer and a cable to join them. A Tandy shop or mail-order from Maplin's are the best places to go, Maplin's being the cheaper of the two.

The plug for the ORIC is a 2x10 way DIL IDC socket. (Maplin no: FG84F) I know that sounds daft, but the plug is actually a socket, if you examine your ORIC you'll see the parallel output is two rows of gold pins, even though they are enclosed in a small box.

The plug for the printer is an IDC Centronix 36-way plug (Maplin no: FJ62S)

The cable needed is Flat IDC cable 20-way (Maplin no: XR74R per 30cm length).

(My Maplin book is a couple of years old so **please** double-check my part numbers before ordering !)

To connect all three, insert the flat ribbon-cable into the 20-way socket making sure that the red edge goes in next to the triangular marker on the socket. These sockets often come with a strain-relief bar so remove this first to avoid damaging it. If you have a vice ( other than wine, women/men and song !) use this to gently squeeze the parts of the socket together ensuring that the cable remains lined-up with the teeth. It should assemble nice and easily. If you don't have a vice then it can *just* be done with a large pair of pliers, but make sure the sections go together in parallel. Clip on the strain-relief after bending the cable through 180 degrees.

At the other end of the cable slide on the 36-way plug aligning the red edge with pin number 1. This is marked on the plastic body so shouldn't be difficult to find. Don't worry that there are a lot of unconnected pins, these are not used on the ORIC. Once more remove any strain-relief gismo and again use the vice to close everything up, taking even more care than before because these plugs are more expensive ! Replace the strain-relief.

And that's all there is to it. You can now connect your ORIC to the printer, while both are switched-off, and think about all those letters you'd better start writing !

John McKay enquires in OUM 49 about a manual for an NEC printer he has bought. Well NEC have made more printers than you can shake a stick at ! However I've had a look at a few we use at work and they all, despite some being pretty old, use Epson control codes. These are the bits of information sent to the printer, down our new cable, before, after and during the transmission of the actual characters to be printed. They tell the printer what to do next because, despite their technical wizardry, given half a chance a printer will just sit there doing nothing all day !

Epson were the first company to score big sales with their standard of printer, and so their set of control codes has become one of the most popular. These codes tell the machine things like when to return the print-head to the left-hand margin and when to push the paper up a line. Over the years these basic codes were added-to until today they enable a printer to perform all kinds of magic tricks. For all this the early, standard codes are still used so if you contemplate buying a machine make sure it is Epson-compatible.

A good book to get you started, if you perhaps buy second-hand and don't get a manual is: GETTING THE MOST FROM YOUR PRINTER by J.W.Penfolds, published by Bernard Babani. If your local W.H.Smiths don't have it you can get that too from Maplin's (or could a year or two back !) It's quite old now so doesn't include all the modern additions which only tend to make things more confusing anyway, and has the benefit of being cheap !

(Incidentally *my* first printer was an 1982 OKI Microline which isn't fully compatible with Epson, however as the actual characters and line-feed/carriage-return codes are to ASCII standard, the ORIC has no problems talking to it.)

NIGEL  
ALEFOUNDER

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*Midnight sun greets you as you slip through, into the twilight lands. As you wander towards the blackened dell, you feel panic seeping through the blood-stained grass beneath your feet. Sulphurous essence pervades the air you breathe, cowering figures shuffle past, their priestly heads bowed in shame. At last, a ragged man steps forward and hands you a parchment, before crumbling silently away. The parchment reads:*

**'GRENDAL HAS RETURNED'**

## RAMBLING IN THE ROM - 31

In chapter 4 of 'Oric - The Story so far', I made reference to the appearance of the Oric Stratos in early 1985 - to be precise, at the Frankfurt Computer Fair the very day before Oric UK went into receivership. The final issue of Oric Owner for December 1984 contained outline details of the new Oric (called the IQ164 in the UK), which was never to see the light of day - or was it?

Oric France, who bought Oric UK from the receiver on the 1st June, 1985, developed their own version, the Telestrat, which was a very different creature indeed, with a greatly enhanced 'Hyper-Basic' and of course all the Minitel communications software. That was eventually released in France in the Spring of 1986.

It has always been rumoured that the Stratos shown at Frankfurt was a working model rather than an empty box, but until now I'd never been able to discover whether a working Stratos truly ever existed. While researching for a second edition of 'The Story so far' I came across incontrovertible evidence that it had, and what's more it was tested by the French computer weekly, 'Hebdogiciel'. In early 1985 it carried a splendid article which gives a vivid picture of the state of play in matters Oric at that time, as well as a thorough test of a working Stratos. Rather than hold it back for the next edition of the book - still a good way off - there follows a translation of the article, written in Hebdo's own inimitable style (did Dave moonlight for them in his youth?!) :-

"

### World Exclusive!

This time, no "shoe-box" (proto-prototype), no pleasant photos, no doubtful documentation, we have had the authentic 'Stratos' in our hands. And we have tested it thoroughly. Not being the kind of people to hand out platitudes, we've done it all - the maniac's test, the bugs, the lot....

First though a short resume. The complexity of the affair, the multiplicity and contradictory nature of the information we've been given needs an explanation.

### The Story

On the 30th January 1985, (in fact it was the 2nd February - JH) Oric UK went into receivership owing several million pounds sterling. The receiver was appointed and the offers to purchase began to come in, among them two from France. One was from Denis Taieb, ex-president of Oric France, in association with Barry Muncaster and Peter Harding, ex-directors of Oric UK; the other was from Jean-Claude Talar, director of Eureka Informatique and involved with the Oric name from the start (he had sold 10,000 Orics in France). As for ASN, exclusive importer for Oric in France, they announced the Stratos for 2995 Fr. for April, as if nothing was happening! What a cock-up!

### I'm so different

When asked about all of this Andre Fisher, spokesperson for the group of 14 principal creditors of Oric, and representative of Hitachi, kept his own counsel on the issue of a possible sale. The receiver had asked for his help in evaluating the offers. He admitted the existence of a contract ready for signature, but refused to give us the name on it so as not to hinder 'a proper resolution of the affair'. Meanwhile he estimated that all would be resolved in a week.

We tried the 'Stratos' out at Eureka. According to Jean-Claude Talar and Andre Fisher, only two completed examples exist: the first had been entrusted to them by the receiver, the second was in Cambridge at the offices of Oric UK. According to Denis Taieb, some five or six existed, but he couldn't show us one - oh yes! And the one ASN showed (at a French show, Micro-Expo, in September 1984 - JH)? It's a fake, an empty box - here we go again!

The likely price? 2995 Francs from Denis Taieb, 2990 from Jean-Claude Talar (about £300 - JH). The latter said he was ready to make radical changes in the way the Oric was sold in France. He wants to put the emphasis on after-sales service, to lower the price of the Atmos to a sensible level, and above all not to call the new computer a 'Stratos' - hence the quotation marks we've used in this article. The new name hasn't yet been chosen, but regrettably it will not be 'Ionos'.

Denis Taieb would seek to maintain the market much as it is. He thinks that his offer is the most tempting of all. The presence of Barry Muncaster and Peter Harding by his side seems to reassure him, but the receiver is reluctant to return the company to its ex-directors, whom they hold responsible (in part?) for its collapse.

In case he doesn't get the company, Denis Taieb has a new machine in reserve, different to the 'Stratos', and software compatible with the Oric Atmos. It's known characteristics are a 6502 processor and an interesting range of peripherals. Unfortunately we weren't able to set eyes on it!

### Good, when?

The 40 column version, on the most optimistic view, will be here in May according to Eureka, and later according to Denis Taieb. As for the 80 column version, that might see the light of day in September, with the possibility of a prototype on view at SICOB in May. Who will import it? The one who has the machine? No, me, says the one who hasn't got one - oh gawd!

### Let me at it!

So to Eureka, to test the machine. Our first glimpse - but it's not what we saw at Micro-Expo! Instead of a flat case underneath, this one is inclined towards the user where one inserts the ROMs.

A quick look at the back: the connectors are all there, and fitted. That makes a change. And what connections are there?

Two video sockets - one UHF black and white, the other RGB SCART. A novelty - this one is auto-powered, which saves a power source and extra cable.

There is an extension bus for disc drives. Another novelty: the disc controller is integral to the machine, which means you only have to buy a slave drive (under 2000 Francs). You can also connect any Shugart-standard drive.

The cassette port is the same as on the Atmos, but the loading routines have been radically altered to improve reliability, and a new routine has been added - it saves a program at 2400 baud, but in blocks of 1½k. The RS232 socket is in standard form, and indeed addressable from BASIC. It can be used to exchange data with a peripheral. The parameters that can be modified are the transmission speed (from 50 to 19200 baud), the number of data bits, and the number of stop and parity bits.

The parallel printer port is identical to that of the Atmos, as is the extension bus which can be used with modems, voice synthesisers and all other peripherals. There are two redefinable joystick ports, one on each side of the machine, to Atari standards.

A modem interface exists as well, but unlike the English version, it will not be included in France as it has not been approved by the Post Office.

Finally, there is a reset button on the side of the machine giving access to 3 different resets (cold start, NMI, and warm start). As forecast, there is complete compatibility with Atmos software because there are two ROMs, the Stratos one and the Atmos one.

### The BASIC

Now for a trip round the BASIC - it comes as a cartridge which you can insert and leave in its slot. The Atmos and Oric-1 editor is still there, but with an addition. If you enter the command 'ED', you get a full-screen editor which can be scrolled up and down. The status line shows the status of the editor - insert mode, overwrite mode, erase, etc. The listing can be modified at will, without needing to validate each line using RETURN. CTRL-C allows you to exit this mode. There are three extra functions for the old editor: AUTO, giving automatic numbering of program lines,



RENUM for renumbering a program with start and step definable, and DELETE which can delete several lines at once.

SLIST, SPRINT, SINPUT, XSAVE, XLOAD, XSTORE and XRECALL allow communication with a peripheral or another computer from BASIC via the RS232 port. SETFUN at last enables you to use the FUNCT key as a function key.

And hires graphics? The Stratos has the same screen format as the Atmos, with the following extra commands:

ABSDRAW draws a line from the cursor position to an absolute point

MOVE3D moves the screen picture on 3 axes using X,Y and Z as relative co-ordinates

AMOVE3D gives the same effect, but with absolute co-ordinates as set by X, Y and Z

DRAW3D and ADRAW3D draw lines in different planes than just the horizontal and vertical. The first uses relative co-ordinates, the second absolute ones.

DSET3D zooms the screen picture in and out

PAINT fills a closed figure from the point set by CURSET. The fill is not that quick, but is very effective

ELLIPSE draws...ellipses. The parameters are height, length, angle of departure and angle of arrival

SPLIT draws a shape set up by a character string, using U(p), D(own), R(ight) and L(eft) followed by the number of pixels to draw, so that a whole drawing can be executed by this one command.

The 80-column version of the Stratos is intended to include a hires mode allowing you to define colours pixel by pixel. ENV defines the level and envelope of a sound. This is welcome given the enormous possibilities of the 8912 sound chip.

NOTE plays a note, but we can't help you further because we couldn't make it work!

Three commands redefine the keyboard: ENGLISH, FRENCH and GERMAN. The French version will be sold with a French keyboard including accented lower-case letters. The English version is as on the Atmos, and the German keyboard has several extra diaeresis (yes, read it carefully) characters.

So that's it for the keyboard; looking just like that of the Atmos, it's much better to the touch, the keys have a much cleaner feel on contact.

### The Test!!!

What's left? Our maniac's test! To recap:

```
10 A=2
20 FOR N=1 TO 20
30 A=SQR(A)
40 NEXT N
50 FOR N=1 TO 20
60 A=A!2
70 NEXT N
80 PRINT A
```

The result? - 2.0023917 in 2 seconds 20. It's not very precise, but it's quicker than the Atmos.

A little bug in passing? The TRON routine, bugged on the Atmos, still hasn't been corrected. But it must be, we demanded, and our request will receive consideration, since Andy Brown, author of the ROM, was put in the picture right in front of us.

#### What else?

A CP/M Z80 card exists, but we haven't seen it. So, with the usual reservations, this is what we've been told. The Z80 runs at 4 MHz and 52K is available to the user. A 2K printer buffer is included, and a great deal of software is available, since in principle all CP/M software is compatible with all CP/M machines. On the question of compatibility, the instruction ATMOS puts the Atmos ROM in memory to give complete compatibility with existing software.

#### Don't let's talk about the DOS

I can only give you its name - RANDOS! It's new, very complete, and we're preparing a comparison with XL DOS.

#### Conclusions

The DGC (Director-General of Conclusions) has produced the following communique:

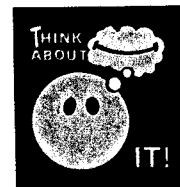
From all sides the Stratos, or whatever it's called, is well-suited to be French since the protagonists in the purchasing lists are both cock-a-doodle-Oric blokes. Sure, the approach of Eureka seems to favour the public more, but we must be careful about drawing Hasty Conclusions, the DGHC is in charge of those. In a few weeks, we will know who has cornered the market and the first examples should arrive here in May. So let's wait and see.

Thanks to the DGC.....

"

So there you have it - the Stratos did exist, even if only two were ever completed. Indeed the first 2,000 Telestrats manufactured in France used the Stratos cases already produced in England. My Telestrat has the Oric IQ164 label on it, and above the Telestrat midi output are the raised letters on the plastic case 'UHF' - an output the French abandoned as being of no use with French Secam TV's. So I have a Telestrat made in France, with a Stratos case made in England - in fact it's numbered T00002! I wonder what happened to the two working Stratos machines? And what about that CP/M Z80 card? Oh well, more research.....

Jon Haworth



## ...BITS & BOBS...

### OPELCO

STEVE HOPPS AT OPELCO HAS RECENTLY BEEN SELLING THE FOLLOWING SYSTEMS:

- OPTION 1: ATMOS + LEADS + PSU + MANUAL - 35 pound
- OPTION 2 : AS OPTION 1 + 10 PACK OF SOFTWARE - 49 POUND
- OPTION 3 : AS OPTION 1 + 20 PACK OF SOFTWARE - 59 pound

- SYSTEM A : CUMANA PCB DISC INTERFACE - 49 pound
- SYSTEM B : DISC DRIVE INTERFACE PCB + PSU TO DRIVE THE I/FACE + CASE TO HOUSE BOTH - 59 pound
- SYSTEM C : COMPLETE OPELCO SYSTEM IN CASE LESS DISC DRIVE - 99 pound
- SYSTEM D : COMPLETE OPELCO SYSTEM - 129 pound

SPECIAL OFFERS FOR XMAS - BY BUYING ITEMS SUCH AS CASES etc. IN BULK STEVE CAN REDUCE THE PRICES OF ALL THE ABOVE. TO ASCERTAIN THE PRICES STEVE NEEDS TO KNOW YOUR REQUIREMENTS SO THAT HE CAN PLACE ORDERS FOR PARTS. ANYONE WISHING TO PURCHASE IN TIME FOR XMAS SHOULD WRITE DIRECT TO STEVE AT : 56 MANOR PARK DRIVE, FINCHAMPSTEAD, WOKINGHAM, BERKSHIRE, RG11 4XE.

### ORIC ENTHUSIASTS

ALLAN WHITAKER HAS JUST RETURNED FROM HOLIDAY AND THEREFORE HAS NOT HAD TIME TO WRITE AN ARTICLE FOR THIS ISSUE. BACK TO NORMAL NEXT MONTH.

### JON HAWORTH

AFTER JON'S 3 WEEK VACATION, HE RETURNED TO FIND THAT 30 PROGRAMS HAD BEEN SENT IN FOR THE PUBLIC DOMAIN. ADD TO THIS THE FACT THAT OUR INTREPID JON BLEW UP HIS MONITOR AND YOU WILL UNDERSTAND IF YOU HAVE NOT HEARD FROM HIM REGARDING YOUR PROGRAM. APOLOGIES FROM JON, WHO IS NOW ON STREAM AND WORKING HIS WAY THROUGH EVERYONES PROGRAMS.

### BRUSSELS

FRANCISCO AREIAS DOESN'T KNOW OF ANY OTHER ORIC USERS IN BELGIUM. HE TELLS ME THAT THE 8 BIT SECOND - HAND COMPUTER MARKET IS ALMOST EXCLUSIVELY COMMODORE 64.

### ERRATA

JAMES GROOM POINTS OUT THAT THE TIP PRINTED FOR 'THE HOBBIT' IN THE LAST ISSUE WAS IN FACT FOR 'ZODIAC'.

### GULPP

THE NEW ARCADE GAME FROM JONATHAN BRISTOW ENTITLED 'GULPP' IS NOW FINISHED, AND I AWAIT THE PROGRAM FROM HIM. IT WILL BE A FIRST FOR THE ORIC, IN AS MUCH AS IT WILL ONLY WORK WITH 'PASE' JOYSTICK. MOST OF YOU NOW HAVE OUR 'ALTAI' JOYSTICK INTERFACES AND THERE SHOULD BE NO PROBLEMS.

### A TRIP TO PARIS

IN THE PAST WHEN OUR FRENCH FRIENDS HAVE COME OVER FOR OUR 'ORIC MEETINGS'; CLUB EUROPE ORIC' HAS FUNDED THE VISIT. WE THINK IT IS NOW TIME FOR OUM TO DO THE SAME SORT OF THING AND SEND 1 OR POSSIBLY 2 OF OUR MEMBERS TO A FRENCH ORIC MEET IN JUNE 1992. IT DOES NOT MATTER IF YOU ARE BRITISH OR ARE FROM GERMANY OR FROM ANOTHER PART OF EUROPE. ALL YOU HAVE TO DO IS TO BE ABLE TO TRAVEL EARLY ON A FRIDAY AND RETURN ON THE SATURDAY. TO EARN THE RIGHT TO HAVE YOUR FARE PAID FOR, YOU MUST DO THE FOLLOWING:

- a) ASCERTAIN THE COST OF TRAVEL TO PARIS AND BACK FROM WHERE YOU LIVE.
- b) TELL US WHY YOU THINK YOU SHOULD BE CHOSEN.
- c) LET US KNOW BY NOVEMBER 28th AT THE LATEST.

IN JANUARY WE WILL ANNOUNCE WHO HAS BEEN LUCKY. GET THOSE LETTERS OFF TO US NOW. IT IS A GREAT OPPORTUNITY TO MEET UP WITH OUR FRENCH FRIENDS OF WHOM MANY SPEAK VERY GOOD ENGLISH.

# THE GAMESTER AND PROGRAMMER



XENON I

Type: POKE 24617,173  
CLOAD""",J

## A VIEW TO A KILL (Part 1)

Get the codes and the fire hose. Go to the top floor and then to the lift entrance. Use the hose & then go to the room at the bottom right. Use the codes and walk out of the door which opens after the codes are used.

## GRENDL

Matthew Coates looks at one of the harder screens. The one with the 'KING' on the left and the 6 'FACES' on the right.

Solution 1: Get the big gun, which resides in the second gun bay. The other gun isn't fast enough for this screen. With gun no. 2 at the ready, enter the screen by dropping into it from the centre of the one above. As you drop, keep as far right as possible, facing right, in the squat position and firing all the time. It's important to kill that first 'Face' before he shoots. There are 6 of these 'Faces', so keep hammering the fire button. Now for the hard part. Whilst your'e blasting away, the 'King' is getting ready to shoot you in the back. So, after you have taken care of the first 2 'Faces', stand up and start walking right (still firing) so that you drop onto the lower platform. When the 'King' moves up far enough, turn to the left, fire a couple of shots, say a prayer, and then turn right again for the remaining 'Faces'. You are now safe to pick up the key segment. To do this, drop down onto the little step to the left of the key, then creep towards the key until you can pick it up. Then you retrace your steps and go out the way you came in.

Solutin 2: Ignore the above and jump up from the passage-way at the bottom of the screen, which achieves the objective but involves sacrificing a life. However, as it may take a few attempts by the other method, this can turn out to be the safest course of action.

If all else fails, don't forget that pressing SHIFT + at the end of a game will make you bullet proof.

## BRIAN KIDD

Our Publicity Officer has come up with 3 snippets for us.

1) ERRATA - In the September issue of OUM there are 2 corrected lines for Listing 1.

```
290 GOSUB 315
322 IFK=1 THEN P=N:RETURN
```

2) C.A.D on Public Domain - users should break into the program and after the line selecting HIRES, add:

```
PRINTCHR$(27)"!":CLS
```

Note for "!" use the character on the same key as \ The amendment gives the impression of a larger working screen.

3) H.S.C on Public Domain - On message scroll, pressing '\*' will result in clearing the HI-SCORE.

RESTORE to any DATA line number

Type XX = (line number of DATA):GOSUB60000

```
60000 L=1281
60010 NXT = DEEK(L):IFNXT=0THENRETURN
60020 IFDEEK(L+2)=XXTHEN60050
60030 IFDEEK(L+2)>XXTHENRETURN
60040 L=NXT:GOTO60010
60050 IFPEEK(L+4)=145THENDOKE176,L-1
60060 RETURN
```



## WARNING BELL

For cassette users who want to know when a program has loaded; the following if loaded prior to your main program will ring a bell when your program has loaded. The SPACE BAR stops the bell. You can change line 40 so that pressing any key will stop it. You may cahange CHR\$(7) to alter the sound emitted.

```
10 ST=0      20 REPEAT      30 PRINTCHR$(7)
40 IFKEY$=" " THENST=1
50 WAIT 100   60 UNTILST=1  70 RETURN
```

### The Story so far

----- Last month saw an updated version of the Hexloader program. Prior to that we had looked at three of the Oric's 6502 Registers, A small subset of just fourteen instructions was then described and tried out with a display routine (in Part 6) which produced a fly's eye view of a fly swat.

### Design Critic

----- If you look back to that Screen Fill routine in Part 6, you will find that although it satisfies the essential requirement in that it works as intended, it is rather limited by the way data is loaded into it.

Curiously enough, most machine code programs I have seen, fall down badly in this respect. My personal feeling is that it is essential to make machine code programs easy to follow, even if it costs a few extra bytes to do so.

### Data Access

----- Most programs need data to set up and control program operation. For Basic programs, the data can be provided by using strings and variables.

Immediate instructions are just one of several ways to provide the required data for machine code programs. They consist of two bytes each. These are, the operation code (opcode), immediately followed by a data byte (operand). The data byte is normally used for the same purpose as a Basic "Variable".

The data controlling the above mentioned Screen Fill program was essentially the two addresses and one display character. These were loaded by Immediate instructions. This works well enough in small compact routines, where the operation is fairly easy to follow.

However, when it comes to large routines and programs, involving a lot of data, it is obviously going to make life much easier, if it can all be gathered up into a few specific data blocks. Using lots of scattered Immediate instructions each one, with its own data byte, can make large programs difficult to follow, particularly if you want to make modifications to the program at a later date.

This is where the "Absolute" instruction becomes useful. The Absolute instruction consists of an opcode again, but this time it is followed by a two byte address. The address is set in reverse order, low byte then high byte. The instruction will then operate on the contents of that address. For example, the Absolute LDA instruction will fetch one byte from the address and the Absolute CMP will compare the contents of the address, with those of the Accumulator. Absolute instructions can be set to operate anywhere in memory.

### Parameter Blocks

----- The data items that control the program operation, can be grouped together in specific data blocks, when we use Absolute instructions for access. These data blocks can then be put anywhere we wish, for easy control.

We need identifying labels for these blocks of data. The most popular labels used for this purpose appear to be parameters, registers or tables etc. Early publications, prompted me to use the second of those labels, but that could be confusing in a series like this, so it would be better to use the term "parameters", which often appears in Oric literature and which can also be abbreviated to "params" if required.

First, a useful demonstration of the above points. After that, how it all works

Oric

## Demonstration Copy Routine

15 Sept 1991

```

Addr...Code.....Data.....Description....
PARAMETER BLOCK 1002
1002:  AB      BBAB  :Lo: Start Address  : "Fetch Addresses"
1003:  BB      :Hi:                      : The start and end of the
                                           : area from which items
1004:  E0      BFE0  :Lo: End Address    : are fetched.
1005:  BF      :Hi:                      :
                                           : "Copy Address"
1006:  00      3000  :Lo: Start Address  : The start of the storage
1007:  30      :Hi:                      : area for copied items.

```

```

Addr...Code.....Assembly.....Description..... COPY ROUTINE
SET UP FETCH & COPY INSTRUCTIONS
1010:AD 02 10  LDA 1002: Lo : Addr for
1013:8D 29 10  STA 1029:  : "Fetch"           : Set the address of
1016:AD 03 10  LDA 1003: Hi : instruct      : instruction 1028 from
1019:8D 2A 10  STA 102A:  : .....          : Params 1002 and 1003
                                           : and
101C:AD 06 10  LDA 1006: Lo : Addr for      : set the address of
101F:8D 2C 10  STA 102C:  : "Copy"         : instruction 102B from
1022:AD 07 10  LDA 1007: Hi : instruct      : Params 1006 and 1007.
1025:8D 2D 10  STA 102D:  : .....

FETCH & COPY ITEMS TO STORAGE AREA
1028:AD 00 00  LDA 0000: Fetch an item into Accumulator : Instruct addrs are
102B:8D 00 00  STA 0000: Copy it into new area.         : preset by routine.

UPDATE COPY INSTRUCT ADDRESS
102E:18        CLC      : Clear Carry Flag to "0"       : Sets next address
102F:AD 2C 10  LDA 102C: Fetch 102C contents and        : in new area, for
1032:69 01      ADC# 01  : add 01 to them, then         : next item to be
1034:8D 2C 10  STA 102C: put them back.                 : copied.
1037:AD 2D 10  LDA 102D: Fetch 102D contents and        : This is done by
103A:69 00      ADC# 00  : add Carry (if any) then      : adding 01 to the
103C:8D 2D 10  STA 102D: put them back.                 : instruct 102B addr.

UPDATE FETCH INSTRUCT ADDRESS
103F:18        CLC      : Clear Carry Flag to "0"       : Sets next address
1040:AD 29 10  LDA 1029: Fetch 1029 contents and        : in old area, for
1043:69 01      ADC# 01  : add 01 to them, then         : next item to be
1045:8D 29 10  STA 1029: put them back.                 : fetched.
1048:AD 2A 10  LDA 102A: Fetch 102A contents and        : Again, done by
104B:69 00      ADC# 00  : add Carry (if any) then      : adding 01 to the
104D:8D 2A 10  STA 102A: put them back.                 : instruct 1028 addr.

LAST ITEM COPIED YET ?
1050:CD 05 10  CMP 1005: Are 102A contents same as 1005, : Test the address
1053:D0 D3      BNE 1028: back to Fetch & Copy if not.   : of instruct 1028
1055:AD 29 10  LDA 1029: Fetch 1029 contents and test,   : If it is Fetch
1058:CD 04 10  CMP 1004: are 1029 contents same as 1004,: End Addr (Params)
105B:D0 CB      BNE 1028: back to Fetch & Copy if not.   : then finish/exit

FINISH
105D:60        RTS      : Exit, back to Basic.

```

## Copy Routine Demo

----- The routine is an all purpose copy routine. For testing, it has been set up so that it will copy (dump) the text screen contents into the memory at 3000 to 3437 address. It is also easy to set up for copying anywhere in memory. Very useful, but avoid copying over program area, or you will crash.

Enter the routine into the computer using your favourite method (eg. Assembler) If you are using Hexloader (O.U.M. Sept 91 for update), you only need to put in the codes at the locations shown. Locations 1000, 1001 and 1008 to 100F can be set to 00 and ignored. All codes and addresses are in hex as usual.

To test it, have a nice cluttered up screen display then CALL#1010. To retrieve the copy, just change the addresses around in the Parameter Block, clear the screen and CALL#1010 again. The addresses in the Parameter Block should be changed so that the addresses of the copy area (3000 - 3437) are now used as "Fetch Addresses" and the Screen Start (BBAB) is used as the "Copy Address".

Notice that we are still using that same small subset of fourteen instructions from Part 5 of the series. The operations here are similar to those used in the Screen Fill routine in Part 6. This routine is just an extended version. To avoid too much repetition, I will keep this description fairly brief and will concentrate on the main changes made.

## What makes it tick ?

----- Once again the actual routine starts at location 1010, but this time it has been preceded by a small Parameter Block, starting at location 1002, which holds the controlling items (addresses).

## SET UP FETCH & COPY INSTRUCTIONS

----- Absolute LDA instruction at 1010 copies the low part of the "Fetch Address" from Param 1002 into the Accumulator. The STA instruction at 1013 then puts a copy of that into location 1029. This operation is repeated by instructions 1016 and 1019, to put the high part of the address into location 102A, all of which sets the "Fetch" instruction at 1028.

A repeat of that operation in 101C to 1025 sets the "Copy" instruction at 102B.

## FETCH & COPY ITEMS

----- This is the main operation. Once the operands (addresses) of instructions 1028 and 102B have been set up, the LDA and STA operation will copy one byte from one address to the other, via the Accumulator.

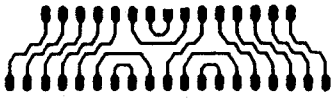
## UPDATE COPY (& FETCH) INSTRUCTION ADDRESS

----- The operands of instructions 1028 and 102B, must be updated after each "Fetch & Copy" operation, for next pair of addresses. The two operations 102E - 103C and 103F - 104D are identical. They are also the same as that used in the earlier Screen Fill routine. They set the next pair of addresses in "Fetch & Copy" by simply adding 01 to each of the operands. The operations are unlikely to benefit much from a change to Absolute operation so they are still using Immediate (#) instructions as in Screen Fill.

## LAST ITEM COPIED YET ?

----- This uses Absolute CMP instructions and the Accumulator. It compares the address in "Fetch" instruction 1028, one byte at a time, with the "End Address" in Params 1004 and 1005. A match results in Exit from routine otherwise the routine returns to "Fetch & Copy" for the next item.

More on this next time...Meanwhile, copy ROM to Screen RAM, to see DD's shorts!

[illegible]



## Pick of the Floppies

---

Peter N. Bragg.

A couple of weeks ago I was in our local free library (W.H.Smiths), reading my own obituary in the new "Silent Flight" mag (honest !!) when I came across a shock horror report on the new Amstrad wordprocessor.

It appears that Amstrad are relaunching their wordprocessor machine, this time with a 3.5" disk system. The old Amstrad wordprocessor used 3" disk drives. Apparently the reporter had found it very difficult to push the new size disks into his old machine, because they kept scratching the sides of the disk drive.

To cut a long story sideways, Amstrad have kept the 3" disk market going for us but now the supplies of drives and disks look like drying up. Sure enough, on the following day at the "All Formats Fair" there were 3" drives and disks being unloaded (eg. 10 disks for £8). If you still love the 3" disks as of yore you had better get out sharpish and mop up the remains.

The next All Formats Fair is on 3rd November 1991 and might be worth a visit if you are nearby.

It was obvious that this would happen sooner or later. However, there is an alternative, which is to go over to 3.5" disks anyway. Several of us have done this already. A year ago, I bought a Cumana BBC 3.5" drive with PSU. It was expensive, but I have never regretted it. I have three different computers, each with a different disk size. Now they can all be made to talk to each others disks, by simply plugging in the 3.5" drive, where appropriate.

Another possibility, is a 5" drive. My 1983 vintage 5 $\frac{1}{4}$ " TEAC drives work well with the Oric. I often used them, when backing up. The 3.5" and 5 $\frac{1}{4}$ " sizes are well established in the market and unlikely to disappear in a hurry. One thing to watch for is that the drive is compatible with the Oric. If they will not allow you to test it, ask them to make a note on the receipt to that effect.

Next month is Acorn User Show time and I shall be looking around to see if there is anything cheaper than the Cumana 3.5" for the Oric. If I do find anything, I will let DUM know. There do in fact appear to be a fair number of cheap Amiga 3.5" drives around, particularly at the All Formats Fair. The main difference seems to be the in the type of data/control cable used. Does anyone know if any of these are suitable for Oric.

Finally, prices vary, but 3.5" disks can be cheap. £13 to £17 will buy you 50 disks at the All Formats Fair. Of course, you may prefer coloured disks, a fiver can get you ten of your choice, how about pink to match the wallpaper !!



## .. R E F L E C T I O N S ..

IN OCTOBER 1979, 'TANGERINE' WAS FORMED BY DR. PAUL JOHNSON & BARRY MUNCASTER.  
 WITH INFORMATION CULLED FROM 'ORIC OWNER', 'YOUR ORIC', 'TANSOFT GAZETTE' & 'O.U.M', WE LOOK AT WHAT WAS HAPPENING IN THE OCTOBER'S OF 1981 AND ONWARDS.

## OCTOBER 1981

Issue 1 of 'Tansoft Gazette' appears with Paul Kaufman as editor. A High Resolution Graphics Board is marketed at 79 pound. MICROTANTEL released with the offer to upgrade your TANTEL for 20 pound. The MICROTAN 65 available in kit form for 79 pound or assembled for 91 pound. A 6522 VIA will cost you 9.20. 'GAMES 1' containing MOONLAND, HANGMAN & OTHELLO, is available for the MICROTAN for 8.95.

## OCTOBER 1982

The last issue of 'Tansoft Gazette' prior to its name change to 'Oric Owner & Tansoft Gazette'. It is reported that 33,000 ORIC 1's have been ordered. One Andrew Zuntz shows readers of 'Tansoft Gazette' how to make a joystick for 50 pence, using a bolt, rubber washers and aluminium plates. 'TAN-FLIGHT' from Stephen Laws is released.

## OCTOBER 1983

ORIC's assembly plant at Feltham burns down. MCP release a joystick interface that includes its own speech synthesiser. 'P.S.S.' release 'THE ULTRA', whilst TANSOFT release 'HOUSE OF DEATH' & 'AUTHOR'. The MCP 40 printer/plotter is marketed at 149.95.

## OCTOBER 1984

ORIC announce the imminent release of an 80 column printer for around 250 pound - made in Japan and in Oric colours. DOWNSWAY ELECTRONICS release a programmable joystick interface. The ORIC V23 MODEM is released. On the software side we see the release of KROKATILE WALTZ, GEOGRAPHY and VELNORS LAIR, whilst TANSOFT promises HARRIDGES (later released by ORPHEUS as TROUBLE IN STORE, KILBURN ENCOUNTER, INSECT INSANITY and RIG RUNNER (an arcade that has you rescuing oilmen from a rig by helicopter and never released. MICROHIRE in Solihull will rent you a MICRODISC for 19.95 a month.

## OCTOBER 1985

IS IT THE END OF THE ORIC???

## OCTOBER 1986

W.E.SOFTWARE are developing an ORIC mouse. ZORGONS REVENGE tops the charts. Graeme Burton claims to have scored 90,860 on GUBBIE and 1,060,758 on TROUBLE IN STORE (with 26 lives!). When asked if they had considered distributing French software, IJK replied: "We shipped a load in, sent out 2000 handouts to dealers and mailorder customers, did not get one single reply, and so sent all the software back." W.E. offer the EUREKA/ORIC 3" disc drive for 270 pound and the ORIC COSMOS printer for 310 pound.

## OCTOBER 1987

XENON III tops the charts. John McKING (I think they meant our very own John McKay) completes THE HOBBIT. The 'ORIC SHOP' in Paris is selling software.

## OCTOBER 1988

XENON III still tops the charts. Allan Whitaker obtains the rights to THE LAST WARRIOR. OPELCO are selling ATMOS's for 40 pound.

## OCTOBER 1989

CRICKET from Alistair Way is released. HGC are selling ATMOS's for 45 pound and MCP 40's for the same.

## OCTOBER 1990

Alexandre Delobel takes over as editor of the 'JEO-MAG' and lasts for one issue. O.U.M reaches issue 38 and sets a record. Jon Haworth reaches the 250 mark on Public Domain titles despatched. SCRABBLE being the most popular amongst the 46 titles. Allan Whitaker decides to change the name of HGC. INSECT INSANITY tops the charts.

## OCTOBER 1991

AND SO TO THE PRESENT..... O.U.M reaches issue 50....readership expected to top 100.....Public Domain has 78 titles in the library with 30 more due to be added...OPELCO will sell you an ATMOS for 35 pound..

..R E A D E R S   L E T T E R S



DAVE,  
3 points for the postbag, namely:

A) As well as the ORIC, I have purchased a SPECCY 128 + 2A. I use it for adventures. At present I am playing 'INTO AFRICA' on the Speccy which has 7600 locations. I think someone should write a similar sized game for Jon's Public Domain. Perhaps Robert Cook, who I haven't heard from for over a year.

B) If anyone needs help on an ORIC adventure; I would be glad to help.

C) The reason I bought my SPECCY was to play 'ELITE', but I can't get it anywhere. If anyone could help, I would be extremely grateful and might send some adventure tips in return.

- James Groom, 129 Narrow Lane, Halesowen, West Midlands.  
B62 9NX

JAMES,

A) Perhaps someone will 'QUILL' a massive adventure. As for our editor Robert, I have recently had a letter and a phone call from him. He tells me he is extremely busy with a new business venture. The only use he has had for computers recently is music software on the ATARI ST.

B) Thanks for the offer and I am sure that you will get a good post bag.

Perhaps you could send a list of your tips to OUM for our GAMES GUIDE.

C) What a pratt! Well readers, I know that we have SPECCY owners out there so perhaps you could help. Alternately James could put a free advert in MICROMART, NEW COMPUTER EXPRESS or a SPECCY magazine (I think there is one called 'DIXCEL' - note for French readers: DIXCEL is a derriere paper).

=====

DAVE,  
I decided to build a D.I.Y printer for my ATMOS.....bought kit from CHIPLINK.....printer did not work.....printer head moved from side without printing (TRY a RIBBON - THE ED!).....lots of resoldering....no defective workmanship on my part...problem traced to EPROM...supplier seemed to imply I had fitted it wrong way round....they won't replace it free or at my cost and similar with solenoids to allow me to repair printer head. What I want is a replacement EPROM programmed to suit the printer....have you some agreeable contacts who might supply me with a copy EPROM if they have got one of these AMBER 4000 printers, or perhaps for an agreeable sum allow you or an associate to make a copy (a 3 minute job), so that you could supply it to me, or any other proposition that you consider reasonable.

- Mr. G K D LESTER, 41 St Helens Drive, Leicester. LE4 0GS

Dear Mr. Lester,

I thank you for your letter or perhaps I mean 'article'. The CHIPLINK company seem a bit 'fishy' to me!! I have never heard of the AMBER 4000 and neither had Rob Kimberley of "Hang on I'll stick it on my printer list" fame. I had a word with my boss at work, but he wouldn't allow me a company 'EPROM' blower so that I could do blow jobs whilst selling my milk, eggs, potatoes and yoghurts etc. Even if I could do a copy EPROM; my SEIKOSHA would probably not be compatible with your AMBER. I will leave it to the readers of our magazine (of which you are not a subscriber), to contact you direct if they can be of assistance. In closing, I hope you are having better luck with your D.I.Y. version of "an inexpensive disk type programmes recording unit".

- DAVE



=====

DAVE,  
a ripple of mirth went round our house at the beginning of the month with the last issue of OUM. My address was followed by 'EEK!' as it was explained that I use the ATARI ST as my main computer. If ORIC INT. had survived, who knows; I might have been using a 16 bit STRATOS or something similar!

- Neville Clark

NEVILLE,  
just to see what you missed in the STRATOS, have a read of JON's article in this issue. Of course we could always ask the French to part exchange a TELESTRAT for your ATARI ST.

- Dave



T - UP

AS WE GO TO PRINT, I HAD A LETTER FROM A TREVOR SHAW UP IN CLEVELAND ASKING FOR THE LATEST ISSUE OF O.U.M. I SENT HIM THE SEPTEMBER ISSUE. THIS MEANS THAT THE SEPTEMBER ISSUE WENT OUT TO 100 READERS. TREVOR HAS RECENTLY BEEN IN CONTACT WITH DAVID GOODRUM REGARDING ONE OF THE PROBLEMS WITH THE ORIC MODEM. WE HOPE TO HAVE AN ARTICLE FOR THE NEXT ISSUE.

BACC

THE BRITISH ASSOCIATION OF COMPUTER CLUBS, TO WHICH WE ARE AFFILIATED, WILL HOLD IT'S ANNUAL GENERAL MEETING ON SUNDAY NOVEMBER 10th. THE VENUE IS WELLINGBOROUGH. ON THE AGENDA IS A MOTION TO DISSOLVE THE BACC. THE MAIN REASONS GIVEN ARE THE DROP IN AFFILIATED GROUPS FROM 200 IN 1985 TO THE CURRENT LEVEL OF 60, AND THE FACT THAT ONLY A FEW OF THE COMMITTEE MEMBERS ARE PULLING THEIR WEIGHT. ADD TO THIS THE FACT THAT THE AFFILIATES ARE GIVING VIRTUALLY NO SUPPORT, AND YOU CAN SEE WHY THE MOTION HAS BEEN FORWARDED. IF ANYONE WOULD LIKE TO ATTEND THE MEETING OR TO BE NOMINATED FOR A POST ON THE COMMITTEE; WOULD THEY PLEASE CONTACT ME AS SOON AS POSSIBLE.

ALL FORMATS COMPUTERS FAIRS

ONE WAS RECENTLY HELD IN GLASGOW AND ANOTHER IS PLANNED FOR SUNDAY OCT. 6th IN BRISTOL.

TO FIND OUT WHEN THE NEXT FAIR IN YOUR AREA IS, PHONE THEIR NEWSLINE ON 0898 299 389 (34p min cheap rate & 45p at other times).

CEO-MAG

ISSUE 15/16 (a double issue) DULY ARRIVED A COUPLE OF WEEKS BACK. ARTICLES INCLUDED: 'THE THIRD ORIC MEET IN AYLESBURY', 'MAKING A STEPPER MOTOR', 'ABOUT THE ORIC TELESTRAT', and 'CUSTOMOSING THE SPEAKER'. STILL NO SIGNS OF A SECOND DISC/CASSETTE FOR THE YEAR. FOR DETAILS OF MEMBERSHIP TO THE CEO, PLEASE WRITE DIRECT TO JON HAWORTH.

MICRODISC

JUST RECENTLY THOSE 2 AGE OLD PROBLEMS WITH THE ORIC MICRODISC HAVE REARED THEIR UGLY HEADS AGAIN. NAMELY THE PROBLEMS OF: a) OVERHEATING and b) LOADING CASSETES WHILST THE DRIVE IS IN PORT. FOR CIRCUIT DIAGRAMS ON HOW TO SOLVE THE PROBLEMS PLEASE SEND 2 FIRST CLASS STAMPS TO ME AT O.U.M

=====

WELL THAT'S ALL FOR NOW FOLKS. I LEAVE YOU WITH A LITTLE DITTY: MARY HAD A LITTLE LAMB, SHE TOOK IT DOWN TO READING. SHE THREW IT OVER A 6 FOOT WALL AND KICKED IT'S RUDDY HEAD IN.

## . . L A T E N E W S . .

FOLLOWING OUR ANNOUNCEMENT OF IMMINENT SUPPLIES OF IJK TITLES, WE NOW HAVE SOME IN STOCK. FULL PRICES NEXT ISSUE OR DROP ME A LINE. ALSO AVAILABLE NOW ARE 3 IJK COMPILATION DISCS. ON THE DISCS ARE TITLES SUCH AS PLAYGROUND 21 AND ATTACK OF THE CYBERMEN WHICH ARE NO LONGER AVAILABLE ON CASSETTE. ZOOLYPMICS FROM 'NO MANS LAND' IS NOW AVAILABLE ON DISC ONLY. ONLY A FEW AVAILABLE AND I URGE YOU TO GET IN FAST FOR THIS SUPER SPORTS SIMULATION WHICH HAS ANIMALS AS THE COMPETITORS.

## . . V E R Y L A T E N E W S . .

PETER THORNBURN HAS FINISHED ALL 5 PARTS OF KRYSTAL WORLDS, THE ADVENTURE FROM ROBERT COOK. MAPS OF ALL THE LEVELS WILL BE WITH ME SHORTLY AND WE WILL START PRINTING HELP FOR THIS ADVENTURE IN THE NEXT ISSUE.