

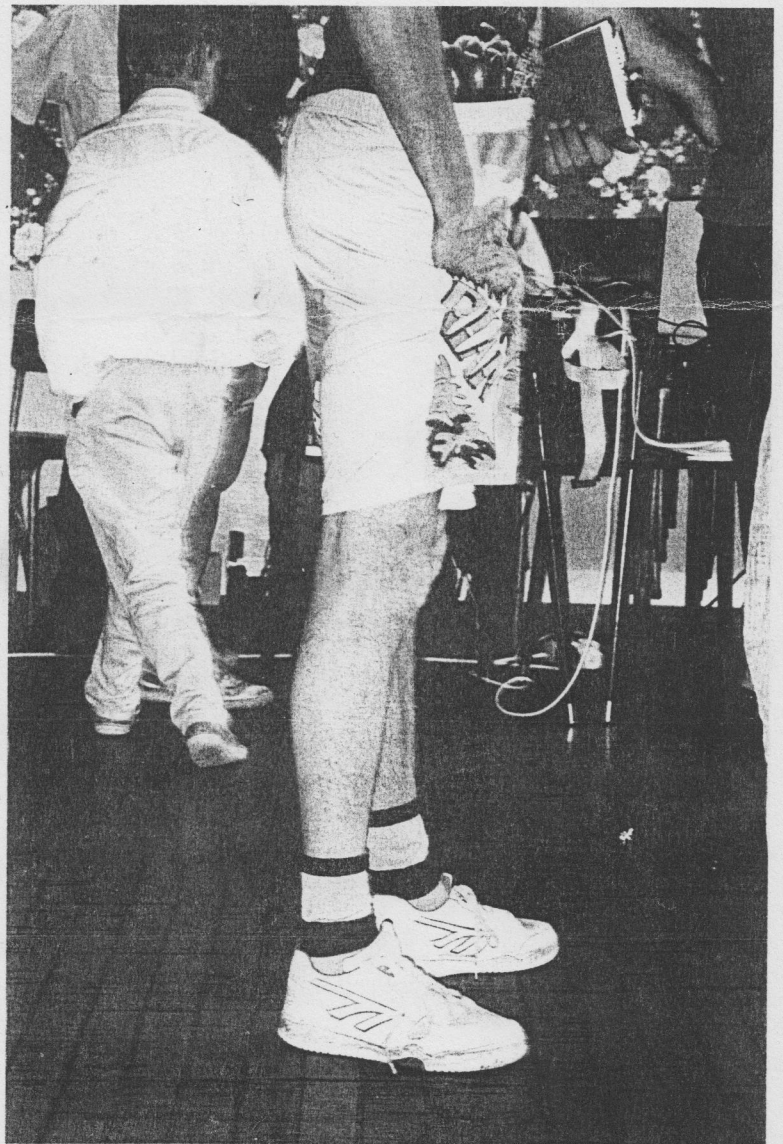
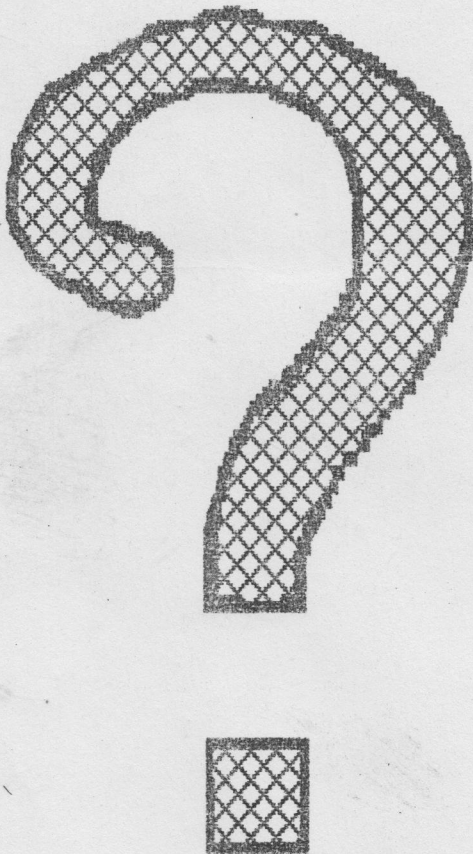


**USER
MONTHLY**

with Oric Enthusiasts

**Fourth Birthday
Issue**

**Number 48
August 1991**



HI,

AND WELCOME TO THIS OUR FOURTH BIRTHDAY ISSUE.
THE NEW PRINTER HAS ARRIVED; A 'SEIKOSHA SP-2000'. I BOUGHT IT FROM THE SILICA SHOP. IT ARRIVED WITHIN 48 HOURS OF ME POSTING THE CHEQUE OFF. EXCELLENT SERVICE. AS I DIDN'T TAKE DELIVERY UNTIL JULY 25th, IT HAS MEANT THAT THIS ISSUE WAS A BIT OF A RUSH TO PUT TOGETHER. ADD TO THAT THE FACT THAT I STILL HAVE TO GET TO GRIPS WITH ALL THE THINGS IT CAN DO. I HOPE YOU FIND THIS ISSUE OF INTEREST. THE MAIN THING MISSING ARE SOME LISTINGS. THERE WILL BE PLENTY IN THE NEXT ISSUE.
MY LOCAL PRINTER HAS RUN ME OFF A COUPLE OF 'ORIC' GOODIES; NAMELY AN 'ORIC' BASEBALL HAT AND T-SHIRT. INITIAL PRICES WERE 5.99 FOR THE HAT AND 7.95 FOR T-SHIRT. I WILL TRY AND GET SOME DISCOUNT FOR QUANTITIES AND REPORT BACK.

PAUL BAKER HAS SENT ME AN 'ORIC' STICKER. VERY NICE INDEED AND SHOULD SELL AT ABOUT 50 pence EACH.
AS WE GO TO PRESS, JONATHAN BRISTOW IS OFF TO PARIS. THE 'CEO' HAVE BEEN WARNED. VINCENT TALVAS INFORMS ME THAT HE WILL BE OVER FOR A HOLIDAY IN BRIGHTON SHORTLY. NO DOUBT HE WILL BE MAKING USE OF THE NUDIST BEACH.

MEMBERSHIP CONTINUES TO GROW AND NEXT MONTH WE WILL SEE HOW NEAR WE ARE TO THE 100 MARK.

NEXT MONTH WE WILL HAVE AN IN-DEPTH LOOK AT 'GRENDL'. THANKS TO ALL WHO HAVE WRITTEN WITH THEIR SOLUTIONS TO THE MORE DIFFICULT SECTIONS OF THIS GAME.

RECENTLY IT APPEARS TO HAVE FALLEN ON JON HAWORTH, ALAN WHITAKER, PETER BRAGG AND MYSELF TO SUPPLY ARTICLES FOR THE MAGAZINE. I AM SURE THERE ARE MANY MORE OF OUR READERS WHO HAVE SOMETHING WORTH SAYING IN PRINT. COME ON LADS AND LASSIES. GET TYPING AND GET THOSE ARTICLES IN. DEADLINE FOR THE NEXT ISSUE IS AUGUST 25th.

NOW TO SEE WHAT'S IN OUM 48 - THE EDITOR

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THE FOURTH ORIC MEET

It has been decided that stand prices are too high to warrant ORIC stands at the next AMS in Bingley. However, we would like to give more ORIC users a chance to meet up. With this in mind; we want you to organise the next ORIC meet. Perhaps in Birmingham or Cheshire!! LET US KNOW!!!

Back in March we looked at actual sales figures for cassette and disc (Mrage) titles that had been sold in the previous 3 months. This update is based on nearly 300 inits despatched. Some titles would of been higher if only we could get hold of them. The IJK range is one in question. Overall top seller is TETRIX from the pen of Andre Widhani and is closely followed by Alistair Way's GRENDL. It just goes to prove that new titles are wanted.

Now for the charts with the last position in brackets.

ARCADE

- 1 (1) TETRIX 2 (5) GRENDL 3 (2) INSECT INSANITY 4 (4) GALACTOSMASH
5 (-) PASTA BLASTA 6 (9) XENON I 7 (-) THE HELLION
8 (-) ESCAPE 9 (7) RATSPLAT 10 (-) GRAND PRIX 11 (6) INVADERS (IJK)
12 (-) CHOPPER 13 (10) ISLAND OF DEATH 14 (3) PANIC
15 (8) GHOSTMAN 16 (-) MANIC MINER 17 (-) GUBBIE 18 (-) MAZE RALLY
19 (-) TROUBLE IN STORE 20 (-) ZORGONS REVENGE

NOTES : Grendl makes a giant leap. If supplies had been available; then the following would of figured prominently:- XENON III, STYX, THE ULTRA, ATTACK OF THE CYBERMEN, and DON'T PRESS THE LETTER Q.

ADVENTURES

- 1 (-) HELLS TEMPLE 2 (-) LAND OF ILLUSION 3 (2) THE LAST WARRIOR
4 (-) BUCCANEER 5 (-) HOUSE OF DEATH 6 (-) KRYSTAL WORLDS

NOTES: The power of advertising shoots Kenema's old classic straight to the top.

UTILITIES

- 1 (-) ORION 2 (1) C.A.D 3 (-) THE QUILL

NOTES : Thanks to Peter Bragg's machine code articles and the cheapo price arranged between Alan and myself, ORION from LOTHLORIEN not only becomes the best selling utility, but also the joint third overall software seller of the past 8 months.

STRATEGY/SIMULATION/BOARD GAMES

- 1 CHESS II 2 WARLORD 3 DRAUGHTS 4 PARAS 5 GOLDMINE 6 SYNTHESISER
7 DALLAS 8 CATEGORIC 9 SPECIAL OPS 10 JOHNNY REB

NOTES: War games abound.

WORD PROCESSORS

- 1 AUTHOR 2 WORDSWORTH

NOTES: Perhaps next time we can include shareware and PD to see how WORDSPEED and SCRIVENER would fare.

EDUCATIONAL

- 1 FRENCH LINKWORD 2 GERMAN LINKWORD 3 TABLES TEST

As mentioned in the ORIC ENTHUSIASTS section of this issue; all disc software (except Public Domain and Shareware) will be handled from this office. It will be interesting to see what effect this has on the next charts which will be printed in about 3 month's time.

I would like to thank one and all for ordering our new software titles. It is only through sales that we will get the authors to keep the titles flowing - DAVE DICK

CAT's HEADS

JUDY SIMMS (AUTHOR OF 'PATEIENCE' etc.) ASKED ME TO GIVE A MENTION TO THE FACT THAT SHE DESIGNS AND KNITS "CAT HEAD" JUMPERS. COLOUR PHOTOS OF THE DESIGNS ARE AVAILABLE.
JUDY IS AT: FLAT ONE, 20 HOLLY ROAD,EDGBASTON,B'HAM B16 9NH or GIVE HER A RING ON 021 454 0326

MUSED

"MUSED" - THE MUSICAL EDITOR FROM JONATHAN BRISTOW IS NOW NEARING COMPLETION. I SPENT AN HOUR WITH HIM GOING THROUGH THE PROGRAM AND WAS VERY IMPRESSED.

GULPP

"GULPP" FROM THE SAME AUTHOR IS ALSO HAVING THE FINISHING TOUCHES PUT TO IT. IT WILL HAVE 9 DIFFERENT SCREENS. IT IS A NICE 'BOULDERDASH' GAME WITH A DIFFERENC. THE IDEA IS TO COLLECT KEYS WHICH OPEN DOORS,BUT BEWARE THE ROCKS WHICH CAN TRAP YOU IN OR KILL YOU. YOU HAVE TO BE QUICK WITTED AS THERE IS A TIME LIMIT. AND OF COURSE IT WILL BE COMPATIBLE WITH OUR 'ALTAI' JOYSTICK INTERFACES.

SOFTWARE INDEX

THE NEW IMPROVED VERSION (V4.1+) IS NOW ON PUBLIC DOMAIN. I KNOW A COUPLE OF YOU HAD VERSIONS AT THE SHOW. IT WAS NOT UNTIL THE NEXT DAY THAT DAVID GOODRUM AND I FOUND A BUG IN IT.
TO PUT MATTERS RIGHT YOU SHOULD CHANGE LINE 8580 TO READ:

IF NE\$ +"@" THEN 8880

WD 40

NO IT'S NOT A JOKE!!
A RECENT ISSUE OF 'NEW COMPUTER EXPRESS' STATES THAT THE MANUFACTURERS OF WD40 ARE NOW PUBLICISING THE FACT THAT THEIR PRODUCT WILL LENGTHEN THE LIFE OF PRINTER RIBBONS.

POSTMAN SAM

ONE OF THE HIGHLIGHTS OF THE ORIC MEET WEKEND FOR MY YOUNG SON MATTHEW, WAS WHEN JEAN (ATMOS COLOURS) BOILEAU LOADED IN A GAME FROM 'MELLOWSOFT' ENTITLED 'POSTMAN SAM'.
ALL IN ENGLISH;IT IS A SUPER PROGRAM WHICH'EVEN HAD THE GROWN-UPS HOOKED. YOU HAVE TO DELIVER PARCELS IN YOUR MAIL VAN TO SHOPS etc. IT IS VERY WELL WRITTEN AND HAS MANY NOVEL FEATURES. DOES ANYONE OUT THERE KNOW IF IT WAS EVER RELEASED IN BRITAIN?

STANLEY

FOLLOWING DISCUSSIONS WITH OUR FRIENDS IN FRANCE AND MY ACQUISITION OF THE 'ORIC int' MASTER DISC OF 'STANLEY' - A SUPER ARCADE/STRATEGY WE HAVE DECIDED TO RELEASE IT ON A FREEWARE BASIS. COST IS ONE POUND TO INCLUDE CASSETTE VERSION,POSTAGE,PACKAGE AND ENGLISH INSTRUCTION SHEET.
DISC USERS SHOULD SEND 3 POUND FOR IT ON 3" OR WRITE FOR PRICE ON 3.5 OR 5.25

THE THIRD ORIC MEET

JULY 13th was the date of the latest get together for ORIC users from near and far to congregate at the usual venue in Aylesbury. Over 30 attended to make it a resounding success. Laurent Chiaccherini and Jean Cesar Andre Boileau (to give him his full handle) made the trip from Paris, whilst others came from Blackpool, Liverpool, Preston, Cardiff, Sheffield, Lincoln and all points in between.

We even had a star! Steve Wright 'in the afternnon'. Though to be honest he looked a little younger than the D.J from Radio 1. Young Steve won a huge B/W monitor in the raffle, but was barred from taking it as his companion/driver (David Utting) was the person who had donated it and bribed Steve not to take it back up the motorway.

David Wilkin nestled in a corner to start on the day's repairs whilst Ray McLoughlin gave a thorough demonstration of his updated WORDSPEED.

Young Nicholas Haworth roamed the hall photographing everything in sight. The worst sight being my bared legs, which hung from my infamous Bermuda shorts like two pieces of string. Nicholas also had a tendency to focus the camera on my young daughter Louise. Oh no ! Not big Jon as an in-law. Young Matthew was in his element showing arcade games to all and sundry, whilst Alistair Way explained the correct way to kill GRENDEL. It was nice to meet up with Brian Kidd (a new Publicity Officer) once more and to learn that his latest addition to the Kidd family is now on the mend.

Rob Kimberley donned his salesman's hat to persuade people to part with their cash for his excellent raffle. Total proceeds, including those who sent for tickets, amounted to £75. An excellent job Rob and thanks to all for swelling the OUM funds. We will even be able to afford new ribbons for this printer.

Technical highlight of the day was presented by Peter Bragg. His set-up consisted of a monitor, an Atmos, Disc drive, interface and a camera/scanner. A document was held up in front of the camera which was scanned and using a small software program, a digitized image of excellent quality appeared on the screen. It was then saved to disc for later reproduction.

The highlight of this demo was using a human instead of a document, but we had to make do with Jonathan Bristow. At least it kept him still for a time.

Jean, the Frenchman in the ATMOS colours insisted in loading every title by Daniel Duffau that he could find and gave us his favourite quote with - " See, Daniel Duffau - 1985 and he was supposed to be working!" Our congratulations go out to Jean who has recently won the title of Minitel Maniac of the Month. The award goes to the ORIC user who logs on to Minitel the most times in a month. AS soon as Jean arrives at work in his Government statistic office, he is on-line. Jean takes over the title from Laurent who has found other pleasures since he was wed recently. However, Laurent is by no means inactive as he told me that as soon as he got back to Paris on the Sunday night that he had to log on to give a report on the Aylesbury meeting.

Jon Haworth's new toy - A TELESTRAT had pride of place on his table along with his pint of JOHN SMITH'S.

The evening session turned into a BAR-B-Q and DPTLQ competition between Alistair, David Goodrum and Jonathan Bristow. For someone who spends his most of his spare time on the machine, young JB was absolutely cr.p On Sunday evening Bob Terry and I had a thorough tuition on Jon's editors. IT was a hectic, but memorable week-end and a big thank you to all who attended and I hope to see you all again soon - DAVE DICK

RAMBLING IN THE ROM - 29The Meet

What an excellent day out! Star of the show for me was Ray McLoughlin's 'Wordspeed' word processor. It is faster, easier to use, and better presented than any other I know, and lacks nothing in the way of features. Get your orders off to Allan Whitaker - if we support Ray in this, all things are possible.

Let me give you two examples. When I first saw Sedoric Wordspeed, I realised that it did not have the facility to edit Basic programs as did the Byte-Drive version. I mentioned this to Ray, and sure enough, he has now developed the facility for the Sedoric version. What this means is that with the aid of a couple of utility programs, you can load or save a Basic program into Wordspeed, and there you have a full-program editor! Beats the one-liner editor we all live with, eh!

The second snippet is that Ray has promised to look at expanding the bit map sector on Sedoric to enable a 3½" disc to be formatted up to 80 tracks with 17 sectors each. Any other requests?

P.D. Library

One new title this month:

CPD-78 FRENCH LUDO 15k 50p

An excellent implementation of a French board game very akin to ludo. Play against the computer or another human, the computer checks all false moves.

This month's top ten:

- | | | |
|-----|------------|---|
| 1. | DISK SPY | (Andre Widhani's blockbuster) |
| 2. | EVE | (Robert Crisp's bedtime production) |
| 3. | ASTRONOMER | (Good on yer, Kimbo!) |
| 4. | UNERASE | (Er, me) |
| 5. | RESISTOR | (Er, young Nick) |
| 6. | SCRIVENER | (Down from no. 1 for the last eight months) |
| 7. | DATAMAKER | (V. Neat) |
| 8. | OMNICAL | (Another Judy Simms special) |
| 9. | NET 80 | (Patrick van Ewyck's mindbender) |
| 10. | CLIPPER | (Allan was right to ask for this) |
| | C.A.D. | (Brian Kidd's truly wonderful design prog.) |

Incidentally, Dave Goodrum has just sent me Version 4 of Software Index, compatible with earlier version data files. Anyone requiring an update should return the RANDOS disc to me plus 50p stamps for p&p; it's free if you send an order as well!

The Saga....

...takes its annual holiday this month, to be replaced by two pages of photo verité....

Jon Haworth

The results of the Grand draw, which took place at the meet on July 13 are as follows:

	PRIZE	DONATED	BY	WINNER	TICKET	NUMBER
1	- 3" DRIVE	ROB	KIMBERLEY	DAVE	UTTING	8
2	- SEDORIC DOS	ALLAN	WHITAKER	MICHAEL	GYNANE	17
3	- PEN/LETTER OPENER	ROB	KIMBERLEY	CHRIS	HEARN	33
4	- DR.WATSONS ASSY.	ROB	KIMBERLEY	BOB	TERRY	27
5	- POWER SUPPLY	DAVID	WILKIN	PETER	BRAGG	34
6	- TOILETRIES	DAVID	WILKIN	DAVID	HALL	10
7	- BELLS WHISKY	RICHARD	CLIFFORD	DAVID	GOODRUM	66
8	- BOTTLE OF WINE	DAVID	HALL	STEVE	HOPPS	68
9	- SOFTWARE/BOOKS	BRIAN	KIDD	EDDIE	WISNIEWSKI	46
10	- BOTTLE OF WINE	CHRIS	HEARN	JON	HAWORTH	37
11	- JOYSTICK,I/FACE	DAVE	DICK	RICHARD	CLIFFORD	11
12	- P.D LIBRARY SET	JON	HAWORTH	DAVID	WILKIN	22
13	- CHOCOLATES	DAVID	GOODRUM	JOHN	McKAY	54
14	- B & W MONITOR	DAVID	UTTING	PETER	THORNBURN	31
15	- PROTEK INTERFACE	JOHN	McKAY	CHRIS	HEARN	32

PHOTOGRAPHS.....PHOTOGRAPHS.....PHOTOGRAPHS.....PHOTOGRAPHS.....

ON THE FOLLOWING TWO PAGES WE PRESENT NICK HAWORTH'S IMPRESSIONS OF THE THIRD ORIC MEET. AS PREVIOUSLY, I HAVE ATTEMPTED TO PUT INTO WORDS WHAT WAS ACTUALLY HAPPENING AT THE TIME THE PHOTOS WERE TAKEN. I APOLOGISE IN ADVANCE IF I UPSET ANYONE - IT IS ONLY MY SENSE OF HUMOUR AND DOES IN NO WAY REFLECT ANY OF THE THOUGHTS OF THOSE PHOTOGRAPHED - WELL,NOT IN GENERAL. IF YOU CAN'T TAKE A JOKE,YOU SHOULDN'T OF JOINED.

BY THE WAY;AFTER THIS ISSUE'S FRONT COVER --- I RESIGN !!!!

- DAVE DICK

PAGE 8

TOP LEFT

Peter Bragg looks upset that he has no audience. Well Peter, I did tell you that if you let it be known that you were bringing a 20 year old BROWNIE to the meeting,that they would expect a young girl and not an ancient BROWNIE camera.

TOP CENTRE

"See,all these program listings are credited to Daniel Duffau - 1985. And he was supposed to be working in 1985!" - Jean Boileau

TOP RIGHT

"Come on Kimbo;I smuggled that kinky black underwear through customs for you.Surely I can win 1st prize in the raffle"

BOTTOM LEFT

David Lib....(left) wonders why he has to be stuck next to the only soccer hooligan at the meet,as WILKY,the West Ham fan,gives his rendition of 'I'm forever blowing bubbles'.

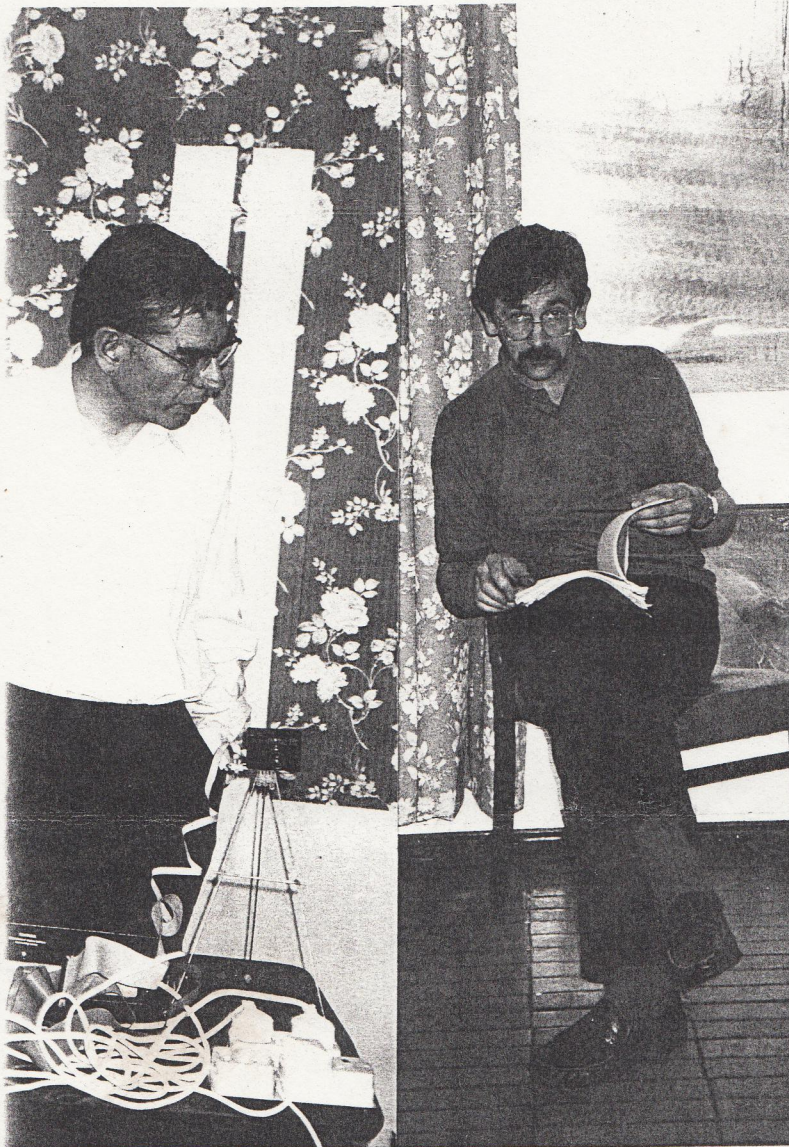
BOTTOM RIGHT

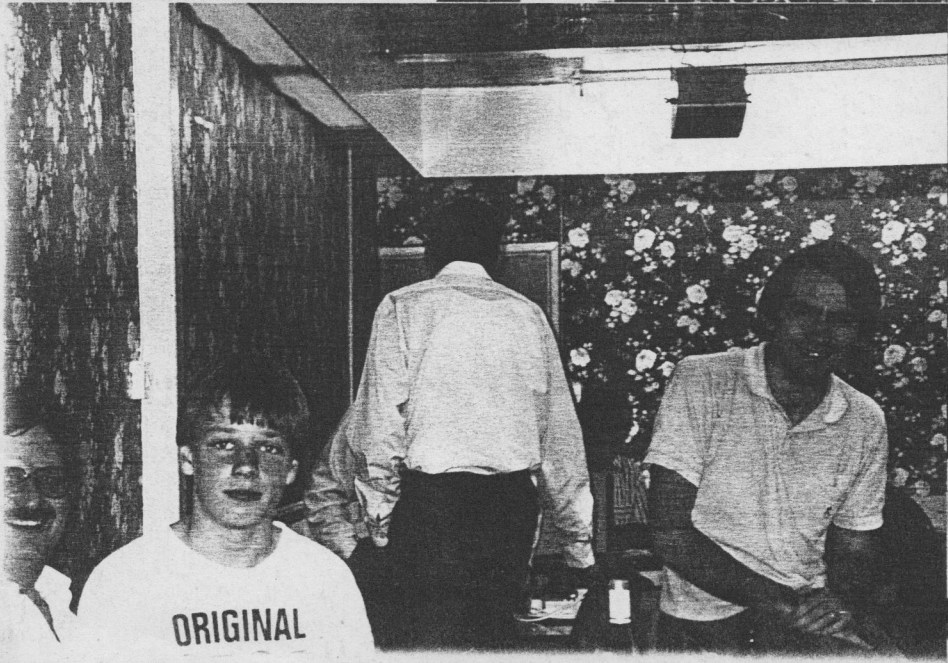
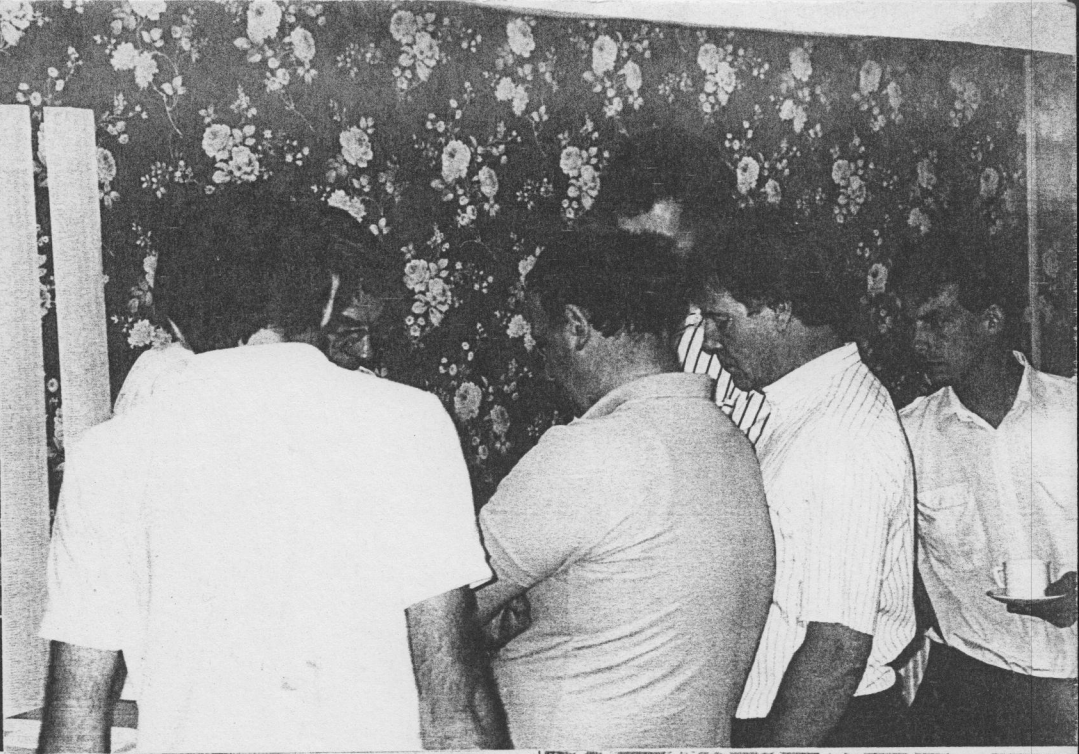
As Mr.Bristow goes through Mused,Chared,Obed,brownbread & Wet the bed,Mr.Goodrum plots his downfall in the DPTLQ competition.

SEE WHAT CAPTIONS YOU WOULD USE FOR THE PHOTOS ON PAGE 9 AND THEN TURN TO PAGE 20 TO SEE IF YOU AGREE WITH MINE. - dave dick

THE JULY MEET

PHOTOGRAPHS BY NICK HAWORTH





The Story so far

----- We have looked at the basic requirements for machine code programming using the Oric. In particular we looked at the Accumulator, Program Counter and Status Register, all of which are needed to operate and control machine code programs. A small table (subset) of instructions together with a description of their operation, was published in the last issue, together with a short machine code program, using instructions from that small table only. It would be useful to have that issue (Part 5) on hand while reading this part.

If all else fails, read the instructions

----- That machine code program in the last issue, was something of a mystery, just three lines of code and no info, just like certain computer manuals I have read. All will now be revealed.

The usual way to write a machine code program is to use assembler labels, so the first job is to provide those for our little mystery routine. The listing shown here is the same routine, as before, except here all the instructions have been separated out and labelled using the small instruction table, shown last time. A brief description in two columns, has also been added.

Addr...	Code.....	Assembly.....	Description.....	SCREEN FILL
SET UP SCREEN WRITE INSTRUCTION				
1010:	A9 AB	LDA# AB	: Put AB into Accu and copy	: Put the address
1012:	BD 1D 10	STA 101D:	it into location 101D	: BBAB into
1015:	A9 BB	LDA# BB	: then repeat that, to put	: STA instruction
1017:	BD 1E 10	STA 101E:	BB into location 101E.	: 101C.
WRITE ITEM TO SCREEN				
101A:	A9 2B	LDA# 2B	: Put "+" character into	: Put item into
101C:	BD AB BB	STA BBAB:	current screen address.	: display via Accu
UPDATE SCREEN WRITE ADDRESS				
101F:	18	CLC	: Clear Carry Flag to "0"	: Set next address
1020:	AD 1D 10	LDA 101D:	Fetch 101D contents and	: where next item
1023:	69 01	ADC# 01	: add 01 to them, then	: "+" is to be
1025:	BD 1D 10	STA 101D:	put them back.	: displayed, by
1028:	AD 1E 10	LDA 101E:	Fetch 101E contents and	: simply adding 01
102B:	69 00	ADC# 00	: add Carry (if any) and	: to instruction
102D:	BD 1E 10	STA 101E:	put them back.	: 101C address.
IS IT SCREEN END YET ?				
1030:	C9 BF	CMP# BF	: Does 101E contain value BF ?	: Test the address
1032:	D0 E6	BNE 101A:	back to Screen Write if not.	: of instruct 101C
1034:	AD 1D 10	LDA 101D:	Fetch 101D contents and test,	: If it is at
1037:	C9 E0	CMP# E0	: does it contain value E0 ?	: BFE0 (screen end
1039:	D0 DF	BNE 101A:	back to Screen Write if not.	: then finish/exit
FINISH				
103B:	60	RTS	: Exit, back to Basic.	

Making it clear

----- If you entered the program as listed in the last issue and then used the CALL#1010 to run it, you should have got an instant screen full of crosses. The program is in fact, a simple screen clearing routine, not a lot different in effect to that produced by using the Basic's own CLS command.

11

The crosses are only used to check operation, it is all too easy to get a blank look from the Oric by accidental means. If you were to change the code in location 101B from 2B(+), to 20(Space), you will indeed clear the screen display. Of course our little "eager beaver" will print "Ready" on our nice clear screen but lets ignore that for the moment and stick to crosses. The main idea behind the program was to demonstrate how some of the instructions listed in the Instruction subset, last issue, can be used.

Note - all values are in hex. Hash (#) indicates "Immediate" instructions only.

In an earlier issue, we used a short routine to put just two crosses on the screen and and subsequently worked out, that an extension to that particular routine, to cover the whole screen with crosses, would need something in the order of 6K bytes. The program/routine shown here does the job, using only a small fraction of that and is obviously a more practical solution. The improvement is the result of having a few more instructions, now at our disposal. This program/routine can be divided into four distinct operations.

WRITE ITEM TO SCREEN

----- Lets start with this. The purpose of the program is to fill the screen with one character ("+"), so most of the action is centred on this operation. It consists of just two instructions. The first loads the Accumulator with the character code (2B for "+"). The second instruction is a STA instruction, set to a screen address. This instruction at 101C, is then used to put the character ("+") from the Accumulator onto the screen.

UPDATE SCREEN WRITE ADDRESS

----- Clearly there is a need to change and update the address/operand of STA instruction 101C, after each screen write operation. Without that, the end result of the program, would be just one "+" on the display screen. This operation updates the instruction address, simply by increasing its value by one every time it has been used.

The update operation uses a couple of ADC# instructions to add 01 to the value held in 101D and 101E, for STA instruction address. As a result the address which starts at BBAB, will eventually progress through every screen address in turn, putting a "+" in each one, as the program runs.

Addition operations must start with a CLC instruction to Clear the Carry (to 0) before first ADC instruction, because the ADC instruction always includes the Carry Flag in any addition.

The address to be updated is a two byte operand, so the addition has to be done in two parts. The value 01 is added to the low part of the address first and the result is saved. Then a value 00 is added to the high part of the address. The second action may sound a bit daft, but in fact it is done to allow any surplus from the first addition to be carried over by the Carry Flag.

For an example of how this works, assume that the address has reached BBFF. The addition operation will start by fetching the address low part (FF) from 101D into the Accumulator. Adding 01 plus the Carry (at 0) to the value FF, will produce the result 100, which is too large to fit into the Accumulator. What happens then is that the "00" goes into the Accumulator and the Carry Flag is set for the "1". The Accumulator result is put back into 101D. The next part of the operation deals with the high part of the address, which in this example is BB. This time it is BB plus 00 plus 1 (for Carry). Result of this is BC, which is then put back into 101E. So the end result of this particular addition is that the instruction 101C operand/address is changed from BBFF to BC00.

If you find all that difficult, a little practical demonstration might help. Load the program into the Oric as shown. Now put instruction code 60 into location 1030. That is an RTS instruction which will terminate the routine there. Now CALL#101F several times and use the Hexloader (published in Part 2), or similar code reading utility to see the effect on locations 101D and 101E each time. Experiment with different values in those locations and also in the two ADC# instructions. This should make it easier to see how "addition" operations work. This type of operation can be extended for even larger values and can be used in many computer programs (eg. plotting for graphics).

IS IT SCREEN END YET ?

----- Having arranged to update the screen writing operation, we can now use a simple jump to loop back and continue filling the screen with "+". However this produces a small problem. What happens when we reach the end of the screen memory area ? Left to it's own devices, the Oric would be quite happy to trundle through the RAM, depositing crosses everywhere, it can cover the entire memory in less than three seconds, but of course our little electronic friend would have plastered something vital and "gone ape" long before that. We need some way of telling Oric that it has reached the end of the screen memory area and would it please stop.

The best way, is to test the screen writing address in the instruction 101C after each update operation. The screen display area we are using runs from the top left screen corner, at BBAB, down to bottom right corner at BFDF, so the address to stop at, is BFE0. We can use the Compare and the Conditional Branch instructions, which we looked at last time, to test for that address.

Again, we are using the Accumulator so we have to deal with one byte at a time. The address BFE0, being two bytes, is split for the test into BF and E0.

The Accumulator already holds a copy of the address high byte as a result of the update operation, when the program reaches the Compare instruction at 1030, so we might as well test that first. The second CMP# at 1037 tests a copy of address low byte, which is fetched by instruction 1034. If either one of the CMP#/BNE instruction pairs fail to find the value that it is looking for, it will clear the Zero Flag to "0" which activates the Branch (BNE) instruction, so that the Oric is sent straight back to the screen write operation again.

When the address tested, finally reaches BFE0, both CMP# instructions set the Zero Flag to "1" which disables both BNE instructions and the Oric will then pass on straight through to RTS instruction at 103B, for Finish/Exit to Basic.

Again, you can experiment with the values in the instruction 1030 and 1037 to stop the routine at different parts of the screen display.

The above operation shows how you can use the Compare and Branch instructions to test for a specific value and then take appropriate action on the result. Testing for a single byte value such as a key press input would be even simpler needing only one Compare and Branch instruction pair.

SET UP SCREEN WRITE INSTRUCTION

----- This was left to last, because if you have understood what has been written so far, the listing really says it all. It may even seem a little unnecessary to load the start address into instruction 101C, when it has already been written in there. True, but think about what happens when you CALL#1010 twice !!

Thats the simple graffiti.....next time "HexLoader II" for real wrecking !!

ORIC Enthusiasts

INTRODUCTION

This month I have continued a page each on file handling via BASIC and Geoff Phillips' book. Unfortunately, due to work commitments I haven't had time to do any further analysis of the returns to my questionnaire.

In fact, mentioning work brings me to a decision that I have had to make because of it. I have recently been promoted to manager of a team of people involved in the automation of manufacturing systems. This carries responsibilities on a divisional level and will involve spending more of my computing time catching up on new developments and languages. With this in mind I have decided, sadly, that my ORIC support must be curtailed to a large extent. However, I do not intend to leave anyone in the lurch so I will decrease my activities gradually. First of all, from now on, all commercial software on disc will be sold by Dave Dick. So if you wish to buy any titles from my previous price lists, contact Dave. This means that Books, certain hardware and shareware products will be still available from me. I will leave this subject for now but I will relay further developments through these pages.

QUESTIONNAIRE RESULTS

Last month I suggested that Mr Knight probably had the record for the most ORIC computers owned by one person. Well, Robert Crisp has written to me stating that he too has 6 ORIC computers, consisting of 4 ATMOSs and 2 ORIC-1s. Quoting from Robert's letter - "The 4 ATMOSs were bought for £10. One ATMOS was bought in working order with a manual. The other 3 were bought for spares.... The ORIC-1s were bought for £13 for the pair with one manual and a welcome tape. I intend to get all my ORICs restored to full working order and upgrade the processor chips to enhanced versions of the 6502 and add disc drives to a couple of them.... I am mainly interested in writing programs in machine code, but I do not intend to do much until I get the disc drives." Thanks, Robert for your letter. So while the record hasn't been exactly broken, it looks like it has been matched.

SHAREWARE

ACCOUNT BOOK/ORIC CALC

Sorry. Due to the work situation I haven't been able to complete my promise.

SEDORIC DOS

Issue 2 of the manual is being produced and it introduces a few corrections and updates to the original manual, including all known bugs and fixes with versions V1.006 and V1.007. I will be contacting all registered users directly about this when I have received the updates from Jon Haworth.

WORDSPEED

Unfortunately, I have nothing to report on this. I believe Ray McLaughlin did manage to demonstrate the program at the Aylesbury meeting but I am still waiting to hear from Ray in order to progress its distribution. I have written a little utility to convert AUTHOR text files to the correct format so that WORDSPEED may read and edit them so as soon as details are available, I will pass them on.

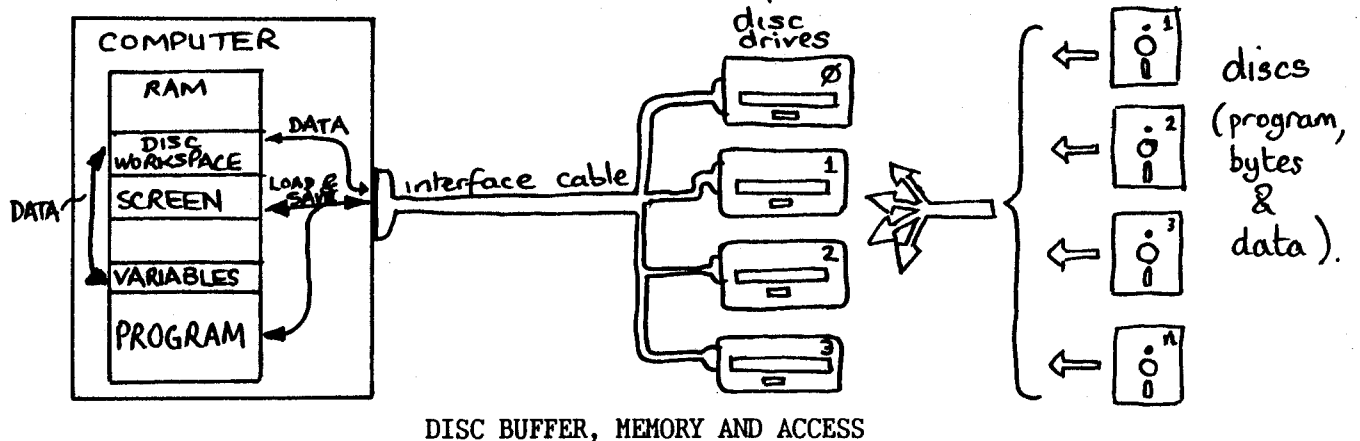
DISC FILE HANDLING TECHNIQUES USING BASIC

Continuing the definition of terms...

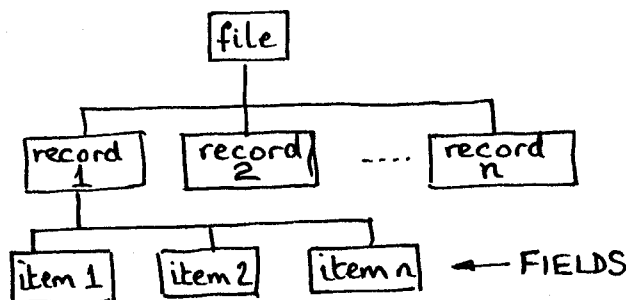
DEFINITIONS

Just to clarify a point from last month's article. When I referred to MS-DOS I should have specified GW-BASIC (or PC-BASIC as it sometimes is known) which is usually supplied with MS-DOS, both products written by MICROSOFT.

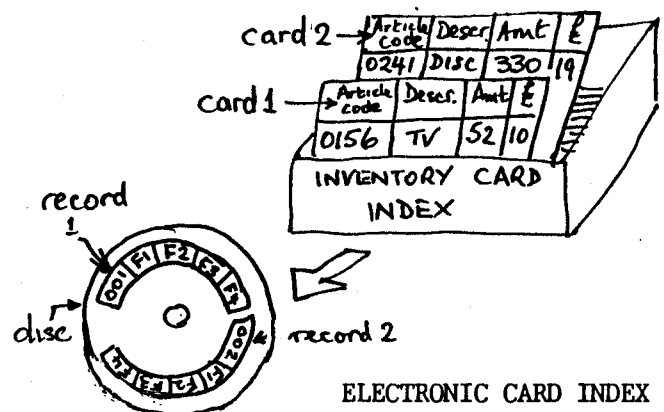
BUFFER - The block diagram represents this basic concept.



DATA FILE STRUCTURE - Although you could argue that a program file has a structure in that bytes are organised in a sequential order, it is with data files that the organisation of the file is particularly important and chosen to suit the application. A data file is structured hierarchically and consists of individual records, which themselves comprise fields. A field is therefore the smallest unit of a file. The figure below-left illustrates this point.



STRUCTURE OF A FILE



For example, a record can be divided into several fields. Say a file named **Inventory** consists of a number of records each comprising 4 fields, named **Article Code**, **Description**, **Amount** and **Price**. In a card system this would be represented in the form above-right and this can be mapped onto a disc as in the diagram below it.

Files differ from one another in respect of their organisation in terms of their storage form and access mode. There are four of the former and two of the latter. Storage forms are **Sequential**, **Scattered**, **Index Sequential** and **Linked**. Access modes are **Indirect (Sequential)** and **Direct (Random)**.

Next month I will illustrate these storage forms.

To be continued next month....

ORIC ATMOS and ORIC-1 GRAPHICS & MACHINE CODE TECHNIQUES

Chapter 1 - LOOKING INSIDE THE ORIC

copyright of Geoff Phillips

Note : 1.2 The ROM is covered in chapter 8 of the Advanced User Guide (AUG). - 1.3 Use of RAM is covered in detail in chapter 5.

1.4 Differences between machines. From the point of view of hardware, there is very few differences between machines. There are two major categories :-

- 1 Your ORIC is either a 16K or a 48K machine.
- 2 Your ORIC ROM is either version 1.0 (i.e. the ORIC-1) or 1.1 (ATMOS).

When you first power up your ORIC, you will be advised of which version you are running but generally there is no apparent difference when looking at the hardware. However, earlier ORIC-1s had two 8K EPROMs fitted instead of the 16K ROM. **Note** : Since very few owners have the 16K ORIC-1 I do not propose to cover the hardware details of this machine. Also earlier ORIC-1s suffered from display distortion when loud sounds were emanating from the computer but a modification to the printed circuit board corrected this problem. In these articles, the ROM addresses primarily referred to will be V1.1 followed by the equivalent V1.0 address.

Note : 1.5 The microprocessor - 6502 is covered in chapter 1 of the AUG.

1.6 The 6522 - VIA. **Note** : This is mainly covered in chapter 2 of the AUG, however, Geoff's book provide some pertinent information.

TALKING TO THE VIA. The 6522 chip is linked to page 3 of the ORIC's memory map, so that whenever you read or write to an address between (hex)300 and 30F you are enabling the VIA. These 16 addresses are normally mirrored throughout page 3 - so 380 is the same as 300 - but there is no reason to use any location between 310 and 3FF. **Note** : Use can be made of other page 3 addresses if the IO control line is used. More on this later.

1.7 The 8912 sound chip is mainly covered in chapter 3 of the AUG. To add to it, Geoff writes :

The 8912 registers cannot be accessed directly by the 6502 - but instead via port A of the 6522 and a couple of control lines. CB2 of the 6522 is set in order to select the 8912, and then immediately cleared (the 8912 chip will accept data as fast as you send it.). CA2 of the 6522 is either set when a register number is being passed in port A or cleared if it is data for the register. So in order to write (hex)F7 to register 1, you would :

- 1 Store 1 in 30F - port A without any handshake signals.
- 2 Set CA2 and CB2.
- 3 Immediately clear CB2.
- 4 Put F7 in 30F.
- 5 Clear CA2 and set CB2.
- 6 Immediately clear CB2.

There is a sub-routine in the ROM to handle the above procedure - see Chapter 6 - but as this is unbelievably inefficient, you will find a faster version used in the speech synthesis program of Chapter 9 (see 9.2).

1.8 Test screen - ATTRIBUTES. If the screen memory contains a control value, i.e., an ASCII value between 0 and 31, then this value is taken as an attribute, and the character set is not referenced. **Note** : That is the memory area which defines the pixels for each character. This means that the first 256 bytes of both the standard and alternate character sets is wasted (AW : not used). Also, you may have noticed that the alternate character set overlaps with the screen!

Next month -- Completion of Chapter 1 and the start on Chapter 2.

THE CONTACT LIST

NEXT

NOW FOR THE ~~CONCLUDING~~ PART OF THE CONTACT LIST. PETER THORNBURN HAS RECENTLY MOVED FROM BIRMINGHAM AND HIS NEW ABODE IS SHOWN IN AREA 12.

AREA 12 - KENT

Graeme Burton, 5 Honeybourne Way, Petts Wood, KENT BR5 1EZ (Atmos/Oric1/Cass. Tandy CGP115 Printer/Kenema Speech Synthesiser....Author of 'Indiana Smith').....Peter Thornburn, 12 Lady Wootens Green, Canterbury, Kent CT1 1NG - TEL:0227 766510 (Atmos/Oric1/Cumana 3" Drive....Arcade, Music & Adventures).....

AREA 13 - BUCKS, HERTS & BERKS

Dave Dick, 65 Barnard Crescent, Aylesbury, BUCKS. HP21 9PW - TEL:0296 26050 (Atmos/Oric1/Opelco 3" Twin/Cumana 3" & 5.25"/Seikosha SP-2000 Printer/MCP 40....Currently have 8 Atmos's and 2 Oric1's - some of which work - is that a record Alan??).....Steven Friend, 'Living Waters', 29 Hazelmere Rd, Penn, High Wycombe, BUCKS. HP10 8AD - TEL:049481 5566 (Atmos/Opelco 3"/Star Gemini 10X.....Utilities, strategy, games, accounts, educational).....Chris Hearn, 7 Longbridge Close, New Mill, Tring, HERTS. HP23 5HG - TEL:044 282 5758 (Atmos/Oric1/Cass./Brother HR5 & MZ800.....Adventures, utilities and tinkering with the soldering iron).....Bob Terry, 2 Windrush Court, Aylesbury, BUCKS. - TEL:0296 436280 (Atmos/3" Microdisc....Databases).....Pete Weisner, 212 Wendover Rd, Weston Turville, Aylesbury, BUCKS. HP22 5TG (Atmos/Twin 3" Opelco....Prepared Account Book/CALC disc package for Shareware).....Steve Hopps, 56 Manor Park Drive, Finchampstead, Wokingham, BERKS. RG11 4XE (Atmos/3" Opelco....Markets Opelco Drives, Cumana Interfaces and Atmos's.....thinks that MANIC MINER is the greatest game ever written for the Oric.....Ring Steve on 0734 328251 (evenings/weekends for prices and info.)....

AREA 14 - DORSET and DEVON

Adrian Matthews, 47 Lynwood Drive, Merley, Wimborne, DORSET BH21 1UT (Atmos/Oric1/3" Microdisc).....Stan Holden, 4 Convent Lodge, Buckeridge Road, Teignmouth, DEVON TQ14 8LZ - TEL:0626 775569 (Atmos/Oric1/3" Microdisc/Star LC10 and MCP 40).....George Popple, Flat 11, Leonard Houlden Court, Dorchester Rd, Taunton, Devon TA2 7LN (Atmos/5.25" drive...interested in RTTY)

AREA 15 - AVON and SOMERSET

Nicol Blount, 74 Branksome Drive, Filton, Bristol, AVON BS12 7EF (Atmos/Oric1/Cass/MCP40....arcade games).....Jean Pitt, 46A Tabernacle Road, Hanham, Bristol, AVON BS15 3DZ (Atmos/Cass/MCP40...interested in converting C64 software to Oric and vice versa).....John Hurley, 24 High Lea, Yeovil, SOMERSET BA21 4PF (Atmos/3" Opelco/MCP40....strategy games and listings)

AREA 16 - HAMPSHIRE

Sean Healy, 23 Rochford Rd, Wymering, Portsmouth, HANTS - TEL:0705 386430 (Atmos/Cass/MCP 40....games and Word Processing).....Henry Marke, 26 Rosebery Ave, East Cosham, Portsmouth, HANTS - TEL:0705 385497 (Atmos/Cass....arcades and board games - excellent at Goldmine and Mluch).....Peter Woolley, 4 Spice Quay, Old Portsmouth, HANTS PO1 2JU - TEL:0705 851543 (Atmos/Cumana 5.25"/Canon PW1080/Oric V23 Modem).....

AREA 17 - NOTINGHAMSHIRE

Jim Oswin, 54 Coppice Road, Arnold, NOTTS NG5 7HU - TEL:0602 209042 (Oric1/Cassette)

MORE CONTACTS

AREA 18 - STAFFORDSHIRE

Paul Baker, 14 Carnation Close, Weston Coyney, Stoke-On-Trent, STAFFS ST3 6QG (Atmos/Oric1/Cassette/MCP40.....games and programming) - TEL:0782 320718

AREA 19 - CHESHIRE

Allan Whitaker, 8 Staley Hall Road, Stalybridge, CHESHIRE SK15 3DT - TEL: 061 303 7369 (Atmos/Oric1/Opelco 3", 3.5", 5.25"/MT and MCP40/Graphics Tablet.....Utilities, W.P 'ORIC ENTHUSIASTS').....Ivan Gleaves, 1 Frederick Street, Latchford, Warrington, CHESHIRE WA4 1HX (Atmos/Cassette)

AREA 20 - WALES

Derek Gomer, 42 Graig Street, Graig, Pontypridd, Mid-Glamorgan CF37 1NF - TEL:0443 400875 (Oric1/3" Microdisc/HR5.....games).....Ronald Key, 15 Stryd Fawr, Rachub, Llanllechid, Bangor, GWYNEDD LL57 3EL (Atmos/Microdisc/MCP40/QData/Panasonic/MODEM).....Brian Kidd, 7 Hawthorn Fosse, Newport, GWENT NP9 9AB (Atmos/Cass/almost onto 3" drive.....programming (CAD), arcades, board games ----- the OUM PUBLICITY OFFICER).....Gavin Williams, 13 Pen-y-Dre, Rhiwbina, Cardiff, GLAMORGAN CF4 6EH (Atmos/Cumana 3"/Panasonic 1180.....Accounts)

AREA 21 - LANCASHIRE

Alan Chidgey, 411 Rochdale Road, High Crompton, Shaw, Lancs. OL2 7NW - TEL: 0706 849485 (Atmos/Oric1/Twin Opelco 3"/GLP and MCP40.....interested in transfer of data with his PC).....Stan Ellison, 35 Alness Rd, Whalley Range, Manchester, Lancs. M16 8HL - TEL:061 226 1709 (Atmos).....Michael Gynane, 164 Stockbridge Lane, Huyton, Liverpool, Lancs L36 8BH - TEL:051 480 8073 (Atmos/3"Drive).....David Hall, 38 Colwyn Ave, Marton, Blackpool, Lancs FY4 4EU - TEL:0253 66576 (Atmos/Oric1/Cumana 3" & 5.25"/Panasonic KXP1081..Adventures, gamesBlackpool User Group).....Eddie Jackson, 30 Booth Drive, Davyhulme, Manchester, Lancs. M31 2PF (Atmos/Oric1/Cumana 3.5" and 5.25"....programming and delving into the ROM).....Mr I J Parkinson, 319 Manchester Road, Leigh, Lancs. WN7 2LZ (Atmos/Cassette/Modem).....Matthew Shakeshaft, 47 Newton Road, Ashton-on-Ribble, Preston, Lancs. PR2 1DY TEL:0772 727420 (Atmos/Oric1/Cass).....Simon Thibeault, 2 Keswick Drive, Redvales, Bury, Lancs. BL9 9LT - TEL:061 797 0179 (Atmos/Cass).....Paul Fellows, 156 Hardman Ave, Hall Carr, Rawtenstall, Rossendale, Lancs. BB4 6BL (Oric1/Cassette).....

AREA 22 - HUMBERSIDE

Mr M Kitching, 109 Cotterdale, Sutton Park, Hull, Humberside HU7 4AB

AREA 23 - SOUTH YORKSHIRE

Ray McLoughlin, 28 Farmfields Close, Waterthorpe, Sheffield, S.Yorks. S19 6LR TEL:0742 470094 (Atmos/3" Drives including BYTE DRIVE 500.....wrote WORDSPEED and responsible for the BD500).....Glen Poulton, 60 Chestnut Ave., Wheatley Hills, Doncaster, S.Yorks. (Atmos/Cass).....Jim Rollitt, 81 Gainsborough Rd, Dronfield Woodhouse, Sheffield, S.Yorks. S18 6QT (Atmos/Cass.).....

AREA 24 - WEST YORKSHIRE

Robert Crisp, 44 Bentley Grove, Meanwood, LEEDS LS6 4AT - TEL:0532 745294 (Atmos/Oric1/cass. - ROM dissy, PC Transfer - wrote 'EVE')....Graham Shaw, 5 St Annes Place, Beestonley Lane, Stainland, HALIFAX HX4 0PR (Atmos/Oric1/3"Microdisc/MCP40).....Richard Walker, 30 St Wilfrids Grove, LEEDS LS8 3PJ (Atmos/Cass.).....Eddie Wisniewski, 6 Stutely Grove, Bradley, HUDDERSFIELD HD2 1SA - TEL: 0484 546850 (ATMOS/ORIC1/BD500)

*NEXT ISSUE - N.YORKS, C.EVELAND, NORTHUMBERLAND, N.IRELAND, EIRE & EUROPE

PACKET RADIO

Page. 18

- PART 3.

WE HAVE LOOKED AT BASIC CONCEPTS AND SOME OF THE EQUIPMENT THAT IS REQUIRED TO SET YOURSELF UP IN PACKET RADIO. THE THIRD PART OF YOUR EQUIPMENT IS A COMPUTER; SOMETHING THAT I HOPE THAT YOU ALREADY HAVE.

THE COMPUTER

THE COMPUTER IS CONNECTED TO THE 'TNC' (Terminal Node Controller) VIA AN RS232 SERIAL LINK OR SIMILAR. A COMMS. PACKAGE IS THEN NECESSARY FOR CONTROLLING THE RS232 LINK TO THE 'TNC'. THE 'TNC' IS INTELLIGENT, IN THAT IT WILL ACCEPT COMMANDS TO SET UP THE PROTOCOLS, DATA RATES, TONE FREQUENCIES, DESTINATION AND SOURCE CALLSIGNS, REPEATER STATIONS AND MANY OTHER FUNCTIONS. THE DATA RATE ON THE RS232 TO 'TNC' LINK NEED NOT MATCH THE RADIO TRANSMISSION DATA RATE. THERE IS AT LEAST ONE SOFTWARE PACKAGE IN ONE OF THE PUBLIC DOMAIN LIBRARY'S THAT IS SPECIFICALLY FOR PACKET RADIO. KNOWN AS 'YAPP', IT IS FOR 'PC' MACHINES, ALTHOUGH THERE MAY BE SIMILAR VERSIONS FOR THE 'BBC' etc. THIS PROGRAM IS OF AMERICAN ORIGIN AND ALLOWS SCREEN SCROLLING, STORAGE TO DISC, TRANSMISSION FROM DISC, INPUT DIRECT TO PRINTER, DIRECT TRANSMISSION FROM KEYBOARD AND OTHER USEFUL FACILITIES.

FURTHER PACKET CONCEPTS

WE NOW LOOK AT ADDITIONAL FACILITIES THAT CAN BE PROVIDED AND COMMENT ON OPERATING A PACKET STATION.

GATEWAYS

IN AMATEUR PACKET RADIO TERMS, A GATEWAY IS THE TRANSITION FROM ONE NETWORK TO ANOTHER; USUALLY FROM A LOCAL PACKET NETWORK TO NETWORKS WHICH MAY COVER A SINGLE COUNTY, COUNTRY, CONTINENT OR THE WORLD. THIS WILL BE VIA A SPECIFIC STATION THAT CONTAINS THE FACILITIES. IN MANY INSTANCES WHERE TERRAIN etc. DOES NOT PERMIT ALL USERS IN ONE GROUP TO CONTACT ALL IN ANOTHER GROUP; A REPEATER SYSTEM IS USED, WHEREBY ONE IN A GROUP CAN ACT AS A GATEWAY BY RELAYING MESSAGES FROM ONE AREA TO WITHIN HIS OWN AREA.

MAILBOXES

THE ONLY ELEMENT NOW MISSING FROM OUR PACKAGE IS THE 'MAILBOX'. THIS IS A METHOD OF SENDING AND STORING MESSAGES FOR A PERIOD OF TIME UNTIL THERE EVENTUAL COLLECTION OR READING. THERE ARE PERSONAL MAILBOXES (PMS) AND GENERAL MAILBOXES. THE PMS IS ASSOCIATED WITH THE HOME STATION AND IS SOLELY FOR MESSAGES TO AND FROM THAT STATION. THE GENERAL MAILBOX OR BULLETIN BOARD IS SPECIALLY LICENSED IN THE UK UNDER A 6B7 CALLSIGN. THESE CAN BE USED AS A GATEWAY TO A MAILBOX NETWORK SO THAT MESSAGES CAN BE SENT TO, AND LEFT IN, REMOTE MAILBOXES, ANYWHERE IN THE WORLD.

TO BE ABLE TO PERFORM THIS LATTER FUNCTION (LINKING) GENERAL MAILBOXES MUST BE ABLE TO PROVIDE SOME OF THE FOLLOWING:-

- * BE NODE IN A PACKET NETWORK
- * BE A GATEWAY INTO A MAILBOX NETWORK
- * STORE INFORMATION
- * DELETE INFORMATION
- * ADD ROUTING INFORMATION

THE PERSON RESPONSIBLE FOR THE GENERAL MAILBOX IS REFERRED TO AS THE SYSTEM OPERATOR (SysOp).

OPERATING

THIS IS NORMALLY COVERED WELL IN THE MANUAL WHICH COMES WITH A 'TNC'. IT TAKES SOME TIME TO GET USED TO, AS DO THE QUIRKS OF SOME UNITS ON THE MARKET. IT IS NOT FEASIBLE TO GO THROUGH THE MANY OPTIONS HERE BUT A TYPICAL LIST IS:-

- * SET DAT RATES * SET TONES * SET DESTINATION CALLSIGN
- * MAKE SURE ONE'S OWN CALLSIGN IS PRESENT * SET UP REPEATING ROUTE
- * PREPARE ANY LONG MESSAGE TO TRANSMIT * TRANSMIT OR RECEIVE * ACCEPT PERSONAL INCOMING MAIL
- * RESPOND ONLY TO CERTAIN STATIONS *

THIS ARTICLE HAS ONLY BEEN AN INTRODUCTION TO PACKET RADIO. THERE ARE ARGUMENTS FOR AND AGAINST THIS MODE. ONE COMMENT OFTEN HEARD BEING - "IS IT REALLY AMATEUR RADIO?"

ALTHOUGH IT IS POSSIBLE TO BUILD A TNC, IT DOES REQUIRE A CERTAIN AMOUNT OF EXPERTISE. ONE PROBLEM IS THAT WHILST ONE IS STILL WORKING ON THE MARK 1 AND DEBUGGING THE BLACK BOX, MANUFACTURERS ARE PROVIDING MARK 99 WITH ALL THE LATEST GIMMICKS. BUT STILL, BEING ORIC OWNERS WE ARE USED TO THAT ANYWAY. IT DEPENDS HOW FAR YOU WISH TO EXPLORE BUT THE WORLD IS LITERALLY YOUR LIMIT.

- DAVE DICK

DAVE,

Perhaps a machine code programmer out there could write a program to convert a basic listing of unlimited size (within reason) to be converted to executable machine code. I would try myself, but am just a beginner at machine code.

Also I would like to know if it is possible to transfer data from the ORIC to the TANDY COCO (TANDY TRS-80) colour computer.

- PAUL BAKER (Stoke)

FROM THE ED.

Well folks - please let us know your thoughts on these two.

DAVE,

the ORIC meet went far too quickly for me and there were still some questions that I forgot to ask. That point about the ORIC 1 Rom, which I remembered at the last moment. I am not too bothered about most of the main ROM routines, because the 'Advanced Guide' lists both ROM versions, however I have not yet found an Oric 1 equivalent for the "GTORKB" routine, which reads the keyboard and is noted on page 267 of the Atmos manual.

By the way, I have briefly tried the 'NIBBLE' disc editor, which appears to work very well, it even appears to read discs from the ARCHIMEDES.

PETER BRAGG - Sutton

FROM THE ED.

Well Peter, the address of the GTORKB routine on the Atmos is EB78. After a brief search I found that the address of the equivalent routine on the ORIC 1 is stored at E905. The information was gleaned from Page 76 of the Geoff Phillips book "Graphics and machine code techniques", which is currently being serialised by Allan Whitaker. Another interesting address that I found was E70E, which prints the author's names on the Oric 1 and does not appear to have an equivalent on the Atmos.

DAVE,

I have modified ORIC 1 games to run on the ATMOS and added joystick patches to others e.g. 'Harrier Attack'. I have also modified EXMON to run on the Atmos and relocated it just below the screen memory to give maximum usable memory.

EDDIE JACKSON - Manchester

FROM THE ED.

Eddie wrote me a long and very interesting letter; some of which is reproduced above. I will be in contact with him shortly regarding the other points he has raised; but meanwhile perhaps Eddie could get in touch with me on the subject of joystick patches as I know that there are a lot of gamers out there who are itching to try out different titles with joysticks.

At present I have Chris Hearn looking at a French game called 'LA BOUTEILLES' (The Bottles) to ascertain which routine that it uses. And don't forget that Jonathan Bristows "GULPP" will be released for use with the joystick.

CAPTIONS TO THE PHOTOS ON PAGE 9 ARE AS FOLLOWS:

TOP

--- "SORRY IAN, YOU'VE DRAWN THE SHORT STRAW. YOU WATCH RAY'S DEMO OF WORDSPEED AND WE GET TO GO TO THE BAR"

LEFT CENTRE

--- THE ONLY 4 LEGGED ORIC OWNER IS HAPPY NOW THAT HE HAS COMPLETED 'DOGGY' FROM LORICIELS.

RIGHT CENTRE

--- A ROSE BETWEEN 2 THORNS - NOT QUITE! JUST BETWEEN A THORNBURN AND A.WAY.

BOTTOM

--- THE 'SEARCH FOR A STAR' PANEL, COMPRISING OF JON (CHIEF JUDGE), NICK AND LAURENT ARE QUIETLY AMUSED AT DEMIS PAVAROTTI ROUSSOS'S VERSION OF 'LA CHIACCHERINI'.

+++++

COMPETITION

--- TO CELEBRATE OUR FOURTH BIRTHDAY WE ARE GIVING AWAY ABSOLUTELY FREE THE LATEST SOFTWARE PACKAGE, WHICH AFTER MANY DELAYS IS TO BE RELEASED ON AUGUST 18th. IT IS OF COURSE THE 'CHARED/OBED' PACK FROM THE PEN OF JONATHAN BRISTOW. THIS CHARACTER EDITOR AND OBJECT EDITOR WILL ALSO HAVE WITH IT A FREE GAME ENTITLED 'SQWEEK', WHICH SHOWS WHAT CAN BE DONE WITH THE EDITORS. WHEN RELEASED THE PACKAGE WILL BE 5.50 ON CASSETTE OR 7.50 ON DISC.

NOW FOR THE QUESTION WHICH YOU HAVE TO ANSWER.

A COUPLE OF EVENINGS AGO I HAD AN INTERESTING CONVERSATION WITH AN ENGLISH GUY WHO RESIDES IN GERMANY. HE WROTE 'GRAFFIX', WHICH WAS RELEASED BY 'WINDMILL' AND WIDELY ADVERTISED IN 'ORIC OWNER' MAGAZINES. WRITE AND TELL ME HIS NAME AND YOU COULD BE THE WINNER. ENTRIES BY AUGUST 25th.

=====

GRAFFIX

--- THE AUTHOR OF GRAFFIX HAS AGREED TO PUT IT ON SHAREWARE, IF IT IS o.k WITH ALLAN. ONE PROBLEM IS THAT HE NO LONGER HAS A MANUAL FOR THE PROGRAM. IF ANYONE OUT THERE HAS ONE, PERHAPS THEY WOULD BE WILLING TO LEND ME IT OR SEND ME A PHOTOCOPY. I HOPE WE WILL BE HEARING A LOT MORE FROM THIS GUY WHO IS GOING TO SUBSCRIBE TO O.U.M. HE NOT ONLY OWNS AN ORIC, BUT ALSO A JUPITER ACE AND OTHER MACHINES. HE ONCE WON A PROGRAM OF THE MONTH AWARD FROM 'QL' MAGAZINE FOR AN ACCOUNTS PROGRAM.

+++++

EXPLORING ADVENTURES ON YOUR ORIC

--- YOU MAY REMEMBER IN A PREVIOUS ISSUE THAT THERE WAS A MENTION OF A TAPE FOR THE 3 ADVENTURES THAT KEN DUDDLE HAS HAD PROBLEMS WITH. THANKS TO DAVID UTTING, I NOW HAVE A COPY OF THAT TAPE. ANYONE WISHING A COPY SHOULD SEND ME ONE POUND TO COVER CASSETTE, POSTAGE AND PACKING.

+++++

THE GAMESTER

A FURTHER LOOK AT POKES AND DOKES TO BE ABLE TO PLAY YOUR FAVOURITE GAMES WITH INFINITE LIVES AND SOME TO START ON ANY SCREEN.

D A M S E L I N D I S T R E S S

To start on any one of 20 different screens - play the first game until you have lost your 3 lives. Then (and it is possible - just), hold down the following keys all at once: Q D 5 V 8 L ' (NOTE - the last one is the apostrophe). You will then see a number appear top centre of your screen. To choose screens 1 - 10 press key 1 - 0; to play screens 11 - 20, press key Q - P. e.g. pressing 'R' will give you screen 14.

H U N C H B A C K

For infinite lives : POKE#6FA4,39:POKE#5B55,255:CALL#5AF5

T W O G U N T U R T L E

Infinite lives: POKE#43A8,29

3 D F O N G U S

Infinite lives: POKE#28C8,44:POKE#270A,44

P Y S C H I A T R I C

Infinite lives: DOKE#7839,#EAEA:POKE#783B,234

G H O S T G O B B L E R

Infinite lives: POKE#16EE,10:POKE#10,127

or
DOKE#16ED,#EAEA:DOKE#16EF,#EAEA

B O M B Y X

Infinite lives and access to table of your choice:

At level 0, press 'CTRL C', then POKE121,250:POKE127,X (where X is table of your choice. Then type 'CONT'.

TOUR DU MONDE EN 80 JOURS (Around the world in 80 days)

At the bank type 'B' and a negative value. You will then be credited with the negative value.

FOOTBALL.....FOOTBALL.....FOOTBALL.....FOOTBALL.....

THE RIGHTS TO "FOOTBALL", HAVE BEEN PASSED FROM HGC TO MIRAGE. THIS ALL ACTION FOOTBALL GAME FROM THE PEN OF ALISTAIR WAY IS NOW AVAILABLE FOR 3.99 ON CASSETTE OR 6 POUNDS ON DISC. MANY OPTIONS INCLUDE: 9 DIFFERENT PLAYING STYLES, DIFFERENT PLAYING SURFACE, UP TO 10 MINUTES DURATION EACH GAME, CHANGE PLAYER NAMES, CHANGE COLOURS, SOUND EFFECTS, ON-SCREEN THE PLAYER ON THE BALL IS NAMED. FOR 1 OR 2 PLAYERS. THE ONLY ACTION FOOTBALL GAME FOR YOUR ORIC.