I.O.U.

The Newsletter of the Independent Oric Users' Group

ISSUE No. 20 - late May 1988.

EDITORIAL

Hello once again. My name is Allan Whitaker and the last time I had the pleasure of editing the I.O.U. was issue 15. Let me start off by thanking all the members expressing their desire to see the newsletter continue, offering to compile future issues and sending the many contributions to this issue. As a result of the number of contributions received and a special rate from Gary's photocopiers, this issue has been extended to 6 pages. Also, judging by the number of queries and contacts I have received over the last few months, there are still active ORIC users about with queries, problems or ideas for programs which require persuing. Also, the response to Gary's editorial in issue 19 has been very encouraging and helped make my job so enjoyable. I am sure that you will find the contributions very interesting. To encourage member participation I have I initiated a new section for the newsletter to deal with these requests or projects, entitled PROJECTS (logically enough) which I am prepared to administer for Gary.

My own recent little project has been to add a second drive to my ATMOS. I purchased this drive from MATMOS Ltd. (see issue 11) and for £32.14 (v.a.t. & p/p inclusive) received an uncased Hitachi 40 track drive, 34-way drive data connector, drive power supply connector and instructions. I obtained the relevant 34-way connector and ribbon cable required to complete the connection to the master drive. Also, using scrap metal sheets I manufactured a battered but functional case to house it in. The instructions provided with the drive are basically intended for the Amstrad 6128 but proved to be adequate apart from the reference to connecting pin 1 of the Amstrad connector to pin 34 of the drive and vice versa. I ignored this instruction and connected the two ribbon cable connectors pin to pin. After soldering the power plug pins to the Microdisc power supply connector (first removing the DIN connector) I nervously connected up and switched on. Amazingly enough there was no smoke and I soon was marvelling at how backing up a disc using two drives makes life easy for the programmer.

If you are considering purchasing a second drive and are prepared to do it yourself then contact MATMOS soon for they told me that their stocks are dwindling and have less than 100 3" drives left, although they are now marketing a 3.5" drive for £65. The company's address and telephone number is MATMOS Ltd., 1 Church Street, Cuckfield, West Sussex, RH17 5JZ. -- 0444 414484/454377 or try its sister company Computer Appreciation, 111 Northgate, Canterbury, Kent, CT1 1BH -- 0227 470512.

A significant proportion of my recent correspondence has concerned the various ORIC disc systems, therefore, I have included a larger section on DISC MATTERS in this issue.

To complete this editorial let me wish you all the best with your ORIC computing.

Allan Whitaker

NEWS

It has been confirmed that Eureka Informatique/ORIC International, in France, has had to call in the receivers. The company has been squeezed out of the French micro market by Amstrad. Also, in this country, O.J. Software and Phildata have withdrawn from the ORIC market.

I have bought F.G.C.'s remaining stock of tapes and copies of the ORIC Advanced User Guide from Ken Smalldon with the intention of providing a continued service of ORIC software at greatly reduced prices. I hope I will be able maintain support for the ORIC for some time yet. If you wish to receive my mail shot write to me at 8 Staley Hall Road, Stalybridge, Cheshire SK15 3DT.

As well as back issues @ 50p each, plus postage in stamps, Matthew Shakeshaft will supply the program supplement for £1 plus postage. He will also supply 25 A5 envelopes for £1.50 incl. p/p. The address is 47 Newton Road, Ashton, Preston, Lancs., PR2 1DY.

Further to Dave Edwards report in issue 17 on printer ribbons, HSV Computer Services Ltd. also sell ribbons for the Panasonic KX-P1080/1/2 printers @ £3.95 for black and £4.95 for coloured ribbons (v.a.t. and p/p inclusive). This represents value for money but the ribbon cassettes supplied do not have the reserve reservoir like the Panasonic version. If they last as long remains to be seen. The company's address and telephone number is 23 Hampstead House, Basingstoke, Hampshire RG21 1LG. -- 0256 841018

3" discs, in packs of 10, are available from COMPUMART at a cost of £22.99 (v.a.t. & p/p inclusive). The address and telephone number is COMPUMART, Jubilee Drive, Loughborough, Leicestershire, LE11 0XS. -- 0509 610444.

RESPONSE

Steve Thornley would like to know if anyone has a disc copy of ORIC Finance converted for the ATMOS and if anyone knows how to convert programs from ORIC DOS to the Byte Drive 500 (see Disc Matters). His address is 3 Delaney Drive, Freckleton, near Preston, Lancs., PR4 1SJ.

Derek Gomer would like to purchase an ORIC DOS manual. Contact him at 42 Graig Street, Graig, Pontypridd, Mid-Glamorgan, CF37 1NF.

With regard to the section, in issue 18, on the printer interface. Owe Fransson has written to say, and I have experienced this, that certain printers (one in particular is the Canon PW1080A), when unpowered, load the computer's printer port and because this is connected to the same bus that interfaces with the keyboard it can lock it up. So the solution, if you have this problem, is to switch the printer on or disconnect it from the ORIC. Disc users having problems with ORIC DOS will be pleased to know that Owe has updated ORIC DOS to V1.13 which corrects the known faults (printer bug, BACKUP etc.) and details should be available in the next issue.

Wanted, disc drive for the ATMOS/ORIC-1. Can collect within a 30 mile radius of Liverpool. Contact Mr C P Rolls, 4 Preston Way, Crosby, Liverpool, L23 9SU.

Wanted, ATMOS disc drive and manual. Contact Richard King at 14 Wellesley Court, Maida Vale, London W9 1RG -- Tel: 01-298-4458.

Wanted, programmable joystick interface. Will pay around £10. Is it possible to use a mouse or tracker ball with the ORIC via a joystick interface? Has anyone converted DELTA4 by Nectarine to disc so that it does not crash after entering the hall of fame for the 2nd time? Replies to Rob Plant, 296 Undercliffe Street, Bradford 3, West Yorks., BD3 0PH.

SHAREWARE

Dave Cheeseman has moved onto an Amstrad PC, selling his ATMOS and Microdisc, but he has sent his best wishes to the group and has donated his Disc Sector Editor

(DISKED) and FORTH upgrade to the group. Details of how to obtain these will forth-coming.

DISC MATTERS For a list of available disc systems see issue 17.

The original ORIC Microdisc provided power to the ATMOS or ORIC-1 by a connector which plugged into the normal power input socket of the computer. Whereas the mains transformer delivered with the computer delivers a +9 volt rectified voltage to the computer, the Microdisc supplies +12v. This can lead to the computer's internal +5v regulator suffering from overheating problems after a few hours of operation. With the +9v supply, the computer's regulator converts 4 volts (i.e. 9-5) at approximately 0.6 Amps into a heat dissipation of 2.4 watts. The 12v supply creates 4.2 watts which can lead to overheating.

Owe Fransson and David Wilkin have written in about their experiences with this problem with the ATMOS and Microdisc. Owe says that after a couple of hours use, the computer displays a BASIC error message in line xxx. Typing CLEAR and RUN usually gives the same error. To regain control of the computer, you normally have to either switch it off and let it cool or use a cooling spray on the computer's internal voltage regulator which can be accessed through the reset hole. However, another solution that can be carried out by the user familiar with electrical work is to add a resistor between the Microdisc and the computer in order to drop some of the voltage. Since the computer can operate with a 7 volt input, the resistor value can be about 4.7 ohms and rated at 5 watts.

The Eureka Informatique version of the Microdisc supplies the computer with +5v through the expansion port so the disc's power supply has only 2 outputs instead of 3 as on the original one. Also, all the voltage regulators are mounted on the heatsink which has been moved from the master disc to the power supply and a power switch has been added. Consequently, the computer and disc runs more reliably even if the disc power supply does run hot, especially with 2 drives running. The transfer of the voltage regulators was carried out by David Wilkin on his system.

Dave Willis reports that the main reason why certain ORIC computers could not load from cassette when connected to the original ORIC Microdisc is the keyboard encoder device installed in them. Earlier computers were fitted with a 4051 keyboard encoder which allows tapes to be loaded while later ones had a 14051 encoder which prevents cassette load. Dave has replaced the 14051 on one of his ATMOSs with the 4051 and confirms that it works. Furthermore, David Wilkin says that the fundamental problem lies with the limited drive capability of the 6502 processor chip's clock output. this can be overloaded when connected to a peripheral, losing the sharp edges on its waveform. The solution is to fit a 74LS04 hex buffer (inverting), having 2 stages, in series with pin 39 of the expansion port of the computer. However, if you own a Eureka Informatique Microdisc you will find that the modifications made to the disc interface board enable any ATMOS to load tapes in successfully.

Dave Willis has been in contact with Cumana and has been offered the remaining stock of Cumana's ATMOS disc interfaces, 25 in all, at a reduced price of £60 each. The interfaces are fitted with Cumana's SuperDOS which contains a corrected version of CUMANA DOS and a DOS reportedly fully compatible with ORIC DOS. You will need to buy a 3" disc unit (see the editorial for a source) but this could be a cheap way of obtaining a disc system for your ATMOS. Dave is co-ordinating any possible order so please contact him at ACS, Morthoe, North Devon, EX34 7DX -- Tel 0271 870610. Failing this, contact either Gary or myself. Dave tells me that the Cumana Interface buffers the ATMOS's expansion port so additional peripherals can be connected without risk of overloading the ATMOS. The Microdisc interface does not buffer the expansion port so care has to be taken connecting additional peripherals. Another little snippet is that Dave has been informed that the OPELCO disc system contains

the same interface as Cumana's therefore it too has a buffered expansion port.

Dave, who by now you will realise, is a keen ORIC user has also been in touch with an ex-member/co-ordinator of the Byte Drive Users' Group who has sent him a number of hybrid cables, of unknown serviceability, but if anyone who has a Byte Drive 500 and is interested in obtaining a hybrid cable for the cost of p/p then contact Dave at the address above.

I am pleased to offer owners of SEDORIC DOS a fix for the TAKE command as mentioned in issue 15. Owe Fransson has been delving deep into SEDORIC and has sent in the corrective machine code. Using a disc sector editor, the code could be inserted onto your master disc directly. However, as the MOVE command allows you to modify the DOS once it is in RAM Overlay (see issue 19) I have written a short BASIC program which can be saved onto your master discs and loaded in as part of the disc's initialisation instructions. For example, save the file as SEDFIX.COM and use the INIST command to initialise the disc. For example, PING:!SEDFIX:!MENU.

```
10 ORG=#BFE0: INC=ORG
20 REPEAT
30 :  READ DT: IF DT=0 GOTO 50
40 :  POKE INC,DT: INC=INC+1
50 UNTIL DT=0
60 !MOVE ORG, INC-1, #F5FE
70 END
100DATA #A5,#02      :REM  LDA $02
110DATA #A4,#03      :REM  LDY $03
120DATA #20,#BA,#D2 :REM  JSR $D2BA
130DATA #4C,#20,#F6 :REM  JMP $F620
140DATA #EA          :REM  NOP
150DATA #EA          :REM  NOP
```

TOOLBOX TWO REVIEW

The author of this graphic design utility, Ken Ward, has been inspired by the ICON driven packages produced for the IBM type computers. His creation for the ATMOS with 3" disc drive is over 57k bytes long and includes Help pages. It produces monochrome pictures that can be stored on disc and recalled , updated or manipulated with great effect.

Its main facilites are LINE DRAW, FREEHAND DRAW, AIRBRUSH, TEXT, MAGNIFY SCREEN, CIRCLE, INVERT SCREEN, CUT & PASTE, FLOOD FILL, PRINTER DUMP, CHANGE FONT, TITLE, BRUSH WIDTH, SAVE PICTURE, LOAD PICTURE, ELLIPSE, ERASER, CLEAR SCREEN and TOOLBOX FILE DIRECTORY. Each facility is represented by an a permanently displayed ICON and is selectable by moving an arrow, the cursor, onto the appropriate symbol. This makes the selection process very "user-friendly".

Having used the utility, I can say that it has the potential to be the best graphics utility available for the ATMOS. Ken writes his software with great flair and in a well presented form. Unfortunately, the programs that make up the utility have been written in BASIC so the speed of operation is very slow. This is especially so for the more complex functions such as MAGNIFY. I feel that this would be too frustrating for most users therefore I would recommend to Ken that he convert some, if not all, of the programs to machine code. Another drawback is that the printer dump facility has been written only for MCP40 owners therefore it excludes it use for the more commonly found EPSON type printers. Ideally the utility should provide a driver for both types. This type of utility is really suited to joystick or mouse control, so I would particularly like to see an enhancement to include the ORIC/IJK Joystick Interface.

Having made my critical comments about the utility, I must say that it still has not stopped Ken from producing some very amazing and amusing example screens with the utility. Certainly, if you could tolerate its slow operation at present, I can recommend Ken's software to you. If Ken updated the software then perhaps he might be prepared to offer an upgrade scheme for interested people.

To take advantage of Ken's offer detailed in issue 19, write to him at 2 Tollgate Terrace, Catchgate, Stanley, County Durham, DH9 8EG.

PROGRAMS

Ken Chua has added this supplement to his program which inhibits tape autostart (see issue 16). For 16k ORIC-1 owners, the address #EC03 becomes #6C03 and the routine may be relocated to address 0 (L=0 in line 30). The complete code (in hex.), starting from address 0, is as follows
48,A9,00,85,63,68,4C,03,6C. To return to normal operation, in line 230, DOKE#229,#6C03. The routine may be relocated to address 0 on the ATMOS or ORIC-1.

Further to my tape catalogue program in issue 17, John Hurley has sent in a version for the MCP40 printer/plotter with an enhancement to the print out of attribute characters. The lines to add or change are :-

```
240 LPRINT CHR$(18):LPRINT"S0":LPRINT CHR$(17)
250 LPRINT "- Cassette Identification -";CHR$(10)
370 NM$="":P1$="[":P2$="]"
410 IF CHR<32 OR CHR>123 THEN SUB$=P1$+STR$(CHR)+P2$ ELSE SUB$=CHR$(CHR)
600 LPRINT FC$;:LPRINT TAB(4);NM$;
610 LPRINT TAB(25);PT$:LPRINT TAB(34);A$;:LPRINT CHR$(11);
620 LPRINT TAB(43);HEX$(SA);:LPRINT TAB(53);HEX$(EA);
```

Owe Fransson's ON ERROR program in issue 16 had an typing error in line 40. Hex 18 (one-eight) should have been #1B. He has also offered a further correction to the program which added a printer function for ORION. Replace '55' with 'EA', four times, in line 250.

INFINITE LIVES

In the following tips, submitted by Mr R Bray and Mr D J Hall, load the relevant program and inhibit its auto run (use Ken Chua's tip in issue 16) then enter the appropriate commands :-

Program	Enter
Centipede	POKE#12BA,255
Donky Kong	DOKE#51FC,#90
Fireflash	DOKE#48C8,#EAEA
Ghost Gobbler	POKE#16EE,16:POKE#10,127
Hopper	POKE #794,255
Insect Insanity	DOKE#4B57,#EAEA

Maze Rally CLOAD as normal until the map of the maze is displayed then stop the tape and switch the computer off and back on. Enter CLOAD"" and play tape. When the tape is finished enter either :-

POKE5093,12 for 6 lives, or
POKE7784,200 for infinite lives.

For the ATMOS enter CALL2693:CALL5856
For the ORIC-1 enter CALL5856 to start the game.

Mr Wimpy	POKE#4A3D,value where value < 126
Painter	POKE #8FC,#7E

Mr Wimpy	POKE#4A3D,value	where value < 126
Painter	POKE #8FC,#7E	

Rat Splat	Disregard 1st file and use the 2nd file. POKE10117,9 for 9 lives, or POKE11240,165 for infinite lives, CALL1533 to start the game.
Styx	DOKE#5BDF,#EAEA
The Ultra	POKE #684,255
Them	POKE#24B9,#9E
Two Gun Turtle	POKE#43A8,#29
Xenon 1	POKE 1895,9:RUN for 9 lives, or POKE24617,173:RUN for infinite lives.

PROJECTS The following are initial ideas for members to consider.

a) A utilty to convert ORICBASE files to MEGABASE format and to merge fields from old MEGABASE files into fields of new files.
b) Users of ORIC CALC would like some means of producing graphical output from the program.
c) Has anyone produced a printer driver for setting up of an EPSON type printer?

d) Has anyone made their own EPROM software?
e) For cassette users, has anyone used the ROM/RAM control lines in order to utilise the RAM Overlay? This modification could be used to provide a further 16k bytes for machine code programs and data, or for ORIC-1 owners to load the ATMOS V1.1 BASIC from cassette into the overlay in the sameway as can be done with the SEDORIC disc.
f) Has anyone written a Desk Top Publishing type program?
g) Print out of RANDOS disc directories.
h) Hires screen dump for EPSON type printers which distinguishes between different colours and plots them in different shades of grey.
i) Disc file handling within COMPOSER by Sector 7.
j) Use of the ORIC as a printer buffer.

ISSUE 21

Gary is aiming to distribute issue 21 between June 25th and July 9th. Members should allow two weeks after the latter date before contacting Gary. Cost is 40p. Please send payment, either in cash (2 x 20p pieces only, please) or by cheque/P.O., payable to I.O.U.G., plus an A5 s.s.a.e. to :-

I.O.U.G., c/o Mr G. Ramsay, 1 Kingsway Crescent, Burnage, Manchester M19 1GA.

Orders should reach Gary by June 18th. NB. A5 envelopes are approx. 228 x 162 mm or 9 x 6.5 inches. Please do not send envelopes smaller than this.

Items for consideration for issue 21 should preferably reach Gary by June 11th who will pass them onto the editor of the issue.

SUBSCRIPTION DETAILS

Gary is re-introducing the subscription service as from issue 21. All new subscriptions will commence from issue 21 and run for five issues, costs permitting. Therefore, from issue 22 onwards, it will only be possible to order issues individually or up to issue 25.

Subscription payment, at issue 21, will be £2.00 by cheque/P.O., payable to I.O.U.G. only, plus five A5 stamped self-addressed envelopes. Stamped envelopes are requested, now, in order to make the distribution of each issue less time consuming.