I.O.U.

The Newsletter of the Independent Oric Users' Group
ISSUE No. 15 - late April 1987

EDITORIAL

In issue 11 (August 1986) I looked forward to the possible resurrection of the commercial and hobbyists' interests in the ORIC computers. However, it would appear that the commercial opportunity has virtually passed by. The Telestrat has not yet appeared on the British market and IJK did not release the new software hinted for Xmas. In speaking to certain software retailers it appears that they are experiencing a decrease in the number of sales which does not bode well for their continued support. This decrease in sales may well be partly attributable to the small quantity of new software currently available. It demonstrates the 'catch 22' situation in that customers are not attracted into buying software and the retailers/producers do not sell sufficient software to cover the costs associated with developing and/or producing new software.

Still, it is not all gloom. OPELCO has finally brought out its disc system (see the review in this issue), W.E. (Software) is investigating the best of the French software for possible import (see Newsflash) and judging by Arthur Jackson's editorial in the last issue, and the contributions received for this issue, there are still enthusiastic ORIC users around.

Continuing to support the I.O.U. will definitely keep you in touch with fellow enthusiasts and if we can contact other ORIC users, support the remaining commercial retailers of ORIC equipment and keep in touch with one another we will all receive continued use and enjoyment from our computers for years to come.

Thanks to all the contributors to this issue which made my job most enjoyable.

Best Wishes,   Allan Whitaker.

NEWSFLASH

Just in case you haven't heard. OPELCO is promoting its disc drive for the ORIC by offering single and twin disc drive configurations supplied with ROMDOS (ORIC DOS V1.1), only, at special prices during March and April. Prices are :-
          Single 3" drive / ROMDOS - Cost £119.00 + £10 p/p
          Twin drive / ROMDOS - Cost £164.00 + p/p
Furthermore, OPELCO Club members are elligible to an additional £5.00 reduction. This is a very good offer to those saving for their first disc drive and could enable owners of the original ORIC Microdisc to upgrade to twin disc system. By the time you receive this issue you may have to be quick if you want to take advantage of the offers.

For owners of the Cumana disc drive who would wish to be able to run ORIC DOS V1.1, RANDOS or SEDORIC DOS, OPELCO can provide the Microdisc ROM for fitting in the Cumana system. Contact OPELCO at Imperial Court, Station Parade, Virginia Water, Surrey GU25 4DH (Tel Wentworth 4557) for further information.

As stated in issue 14, W.E. (Software) is intending to import the best of the French software and would like to hear from all interested ORIC owners. You can contact W.E. (Software) at Foley Bank, Worcester Rd; Great Malvern, Worcs. WR14 4QW.

Austin Meeson, 41 Roebuck Rd; WALSALL, West Midlands WS3 1AH, (Tel 0922 477422) would like to obtain a copy of Geoff Phillips book entitled "Graphics and Machine Code Techniques". -- Ed: For a small fee, the local library was able to obtain this book which I now regularly take out on loan. So perhaps your local library could help you, Austin.

Continuing on from issue 14, Phillip Dunstall suggests adding a Forth section to the I.O.U. If you have any programs, tips or any information for this language then please send them to Gary for inclusion in the newsletter. Phillip would like to see a host of other languages implemented on the ORIC but I must admit that I do not expect to see any new languages written by a commercial software house now. Perhaps Eureka Informatique may if the Telestrat is selling well in France. Otherwise it is up to fellow enthusiasts. Thanks, Phil, for the info on running a newsletter - most helpful.

I.O.U. EXCHANGE

Tansoft's Author and Forth (computer language for the ATMOS). Exchange for any dedicated ORIC magazines. Contact Mr R Bray, 117 Braehead, Bonhill, Alexandria, Dunbartonshire G83 9NB.

PROGRAMMING UTILITIES

Frank Day sent in this program which develops previous programs for mixing Hires and Lores graphics on the screen and using protected areas of the screen (see I.O.U. issues 14 and 6). -- Ed: I have added a few lines to the program so that it will run on the ATMOS but in doing so I have discovered that the ATMOS corrupts part of the program when it is run and listed. Perhaps someone could explain this?

```
100 HIMEM#97FF:HIRES:TEXT:PAPER3:INK0:POKE#26A,10
110 IF DEEK(#C001)=#EA59 THEN O1=TRUE
120 IF (O1) THEN SA=#BDD8:NL=12:GOSUB1010 ELSE SA=#BE00:NL=12:GOSUB1030
130 POKE#BFDF,30:POKE#B3FF,26:POKE#2C0,3
140 FOR N=1 TO 64:FILL1,1,20:FILL1,1,17:NEXT
150 FOR N=1 TO 6:CURSET20,N*20,3:FILL1,1,21:NEXT
160 FOR N=1 TO 8:READ B,B$:CURSET N*24+5,120-B,3:FILL B,3,#AA:NEXT
170 CURSET10,112,3:CHAR48,0,1
180 CURSET5,12,3:CHAR49,0,1:CURMOV6,0,3:CHAR48,0,1:CURMOV6,0,3:CHAR48,0,1
190 DATA 40,AUG,50,SEP,50,OCT,45,NOV,50,DEC,50,JAN,55,FEB,50,MAR
200 POKE#2C0,2:FOR N=1 TO 6:POKE#BDD8+80*N,22:NEXT
210 PLOT17,17,"PRODUCTION CHART":PLOT22,19,"1986-7":PLOT17,21,"Press any key"
220 PRINT:RESTORE:FOR N=1 TO 8:READ B,B$:PRINT B,B$:NEXT
230 GET A$:HIRES:TEXT:END
1000 REM -- Set up window subroutine --
1010 DOKE#26D,SA:POKE#26F,NL:CLS:RETURN   ' ORIC-1 routine.
1020 ' ATMOS routine.
1030 DOKE#27A,SA:DOKE#278,SA+40:DOKE#27E,NL:DOKE#27C,NL*40:CLS:RETURN
```

Robert and Michael Bray have sent in the following BASIC program which demonstrates one way of accessing files on disc (using ORIC DOS V1.1) from a machine code program. The routine should work for all DOS commands. The parameters for the commands are stored at #400 onwards in the example but any location could be used provided that the contents of the program counter at #E9/EA is adjusted accordingly.

```
0 REM **              MICHAEL BRAY              **
1 REM **                                        **
10 POKE#400,#44:REM 'D' character.
20 POKE#401,#49:REM 'I' character.
30 POKE#402,#52:REM 'R' character.
```

```
 40 POKE#403,0:REM 0 must be at the end of the command.
 50 FOR A=#3000 TO #3017:READ B$:B=VAL("#"+B$):POKE A,B:NEXT
 60 PRINT "Press any key":GET K$:CALL#3000:PING:WAIT50:PING:WAIT50:PING
 70 REM
 90 REM   Save contents of program counter to stack.
100 DATA A5,E9       :REM LDA $E9
110 DATA 48          :REM PHA
120 DATA A5,EA       :REM LDA $EA
130 DATA 48          :REM PHA
139 REM   Put $0400 into program counter.
140 DATA A9,00       :REM LDA #$00
150 DATA 85,E9       :REM STA $E9
160 DATA A9,04       :REM LDA #$04
170 DATA 85,EA       :REM STA $EA
179 REM   Call V1.1 disc location.
180 DATA 20,C4,04    :REM JSR $04C4
189 REM   Restore contents of program counter.
190 DATA 68          :REM PLA
200 DATA 85,EA       :REM STA $EA
210 DATA 68          :REM PLA
220 DATA 85,E9       :REM STA $E9
230 DATA 60          :REM RTS
```

Peter Reynolds has sent in this short program for converting "EXMON" to run on the
ATMOS.

```
1 ' ATMOS conversion for "EXMON" - A. Reynolds Chippenham Feb 1987.
2 '
3 ' Load EXMON on an ORIC-1 and enter 'Z' to return to BASIC.
4 ' Type in the program below and then RUN it.
5 ' CSAVE "EXMON",A#8000,E#9660
6 ' To run on the ATMOS, CALL#8000 as usual.
10 DOKE#8598,#F8B2:DOKE#91B9,#CCD9:DOKE#91C6,#C5E8:DOKE#9248,#EE22
20 DOKE#9342,#F5C1:POKE#858D,34:POKE#8592,238:DOKE#800E,#245

30DOKE#8009,#246:DOKE#8594,#246:DOKE#858F,#245
```

DISC ERRORS

Ed: I've discovered that SEDORIC DOS (v1.006) has a few bugs :-
    a)   The TAKE command doesn't work correctly when reading integer variables from
disc sequential files.
    b)   The LDIR command does not filter out screen attributes when printing the
directory to the printer.

REVIEWS

Review of the OPELCO Disc System -- by David Goodrum

This disc system is the latest offering for the ORIC user from this company. The
system is contained in a metal case which measures 310mm x 254mm x 67mm and is
capable of supporting a TV or monitor. The OPELCO drive interface is Shugart

compatible, and is available in single or dual internal drive options.

The hardware inside is very similar to the ORIC Microdrive system except that the power supply has been replaced by a more suited device which will be more reliable. It comes with all leads needed to set the drive up and the only complaint that I have in this area is about the size of the lead between the disc drive and the computer. It is extremely short! Connections and bootup are practically the same as for the original ORIC system.

The OPELCO system comes with 2 disc operating systems, namely ROMDOS and RANDOS each with their own manual. Both Disc Operating Systems are disc resident, i.e. they have to be loaded into the computer's memory overlay before they can be used. ROMDOS is, in fact, ORIC DOS V1.1 and details on this can be read from earlier articles on the ORIC Microdisc therefore this review will concentrate on RANDOS.

As an introduction to the disc system, a file called DEMO can be found on the system disc. It gives some details of the disc drive, and also acts as an introduction to the Help pages. After backing up the system disc you can start using the system.

The commands provided by RANDOS (ORIC Random Access DOS) are :-
!FORMAT, !BACKUP, !COPY, !DRV, !CHANGE, !MAKE, !BUILD, !HELP, !OLD, !TYPE, !TRANS, !SAVE, !LOAD, !DEL, !REN, !PROT, !STORE, !RECALL, !OPEN, !CLOSE, !PUT, !GET, !SET, !CREATE, !EXTEND and !FILES.

RANDOS provides a total of 180k bytes of storage per disc side compared to 160k for ROMDOS. It is very comprehensive and allows many advanced features to be used. You can create sub-directories therefore allowing you to organise the files on your disc in a structured order. You can create directories using the command !MAKE and change the current directory by using !CHANGE.

The file handling of RANDOS is an improvement on ROMDOS in that it supports random access. As well as the sequential access commands !OPEN, !CLOSE, !PUT and !GET found in ROMDOS, RANDOS also has !CREATE, !EXTEND, !FILES, !SET and an extention of the !OPEN command all used for random access of files. !CREATE reserves space on the disc for a random access file, !EXTEND allocates additional disc space for a file previously defined by the !CREATE command and !FILES allocates buffer space in RAM for each file to be used. !SET defines whereabouts in a random access file a !GET or !PUT operation commences. This command controls the ability to access any point in a file, thus providing full random access capability.

RANDOS also allows you to !BUILD a file. That is, to create a file of characters entered from the keyboard and store it on disc. Very handy. Also provided, but as a file on the system disc is !TYPE which displays the contents of a file on the screen.

RANDOS also has !STORE and !RECALL but adds a qualifier to the command i.e. ",M" which stores the array in memory rather than on disc. This is particularly useful when transferring variables from one program to another when loading in at different stages.

Also on RANDOS is !TRANS which allows the transfer of files from ROMDOS to RANDOS but not vice-versa, this can only be achieved by using the cassette system.

The manual is good, possibly one of the best I have seen. It contains a full list of error messages and provides details of how to use RANDOS from machine code. An index to each manual would be nice but a 'comprehensive' contents page suffices.

Thanks to Mr S Hopps of OPELCO and Mr G Cornell for all their help in getting my

4

disc system to work. I had problems booting up DOS because of misalignment of the drive heads introduced during transportation.

This is not the drive that OPELCO originally advertised which was to have supported CP/M etc. and would have been developed for an overseas customer, but, I think the drive is a very good buy.

CORRECTION

Reference to the 6502 Assembler "EAD65C" in Issue 14, page 2, stated that the program was available from FGC. However, this program is only available from OPELCO. Apologies to all for this unintentional error.

ISSUE 16

Gary is aiming to distribute issue 16 between June 20th and July 4th (there's independence for you!) with an expected cost of 40p. Please allow at least one week (and no more than three) after the latter date before querying about non-receipt of your copy. If you are ordering it individually then send your payment, cash (2 * 20p pieces, please) or cheque/P.O. + a S.A.E., to reach Gary by June 13th.

Ed: The extended period between issues is intended to allow Gary to recover from his degree final exams, etc., so I trust you will bear with him. Gary apologises to those people who had to wait longer than usual to receive issue 14. On the whole it involved new subscribers or people who had ordered a little late. Obviously, it will help Gary a great deal if requests for issue 16 are made on time. Thanks!

SUBSCRIPTION DETAILS

The rates cover a maximum of 5 issues, production costs permitting.

                First Class Postage - £2.90
                Second   "   " - £2.65

In both cases also send five A5 self-addressed (no stamp) envelopes. Note: A5 envelopes are approx. 228 * 162 mm in size. Cheques/P.O. to be payable to the I.O.U.G.

RENEWAL OF SUBSCRIPTIONS

Those of you whose subscription commenced at issue 11 now need to renew it. Unless informed otherwise, 'first-class' and 'second-class' subscribers have balances of 0p and 5p, respectively. Details of renewals are as above.

Printed using Tansoft's "author" on a Panasonic KX-P1080 printer

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