

USER MONTHLY

with Oric Enthusiasts

A Happy Christmas to all our readers

Number 64
December 1992



THE EDITORIAL . THE EDITORIAL . . . THE EDITORIAL

HELO AND WELCOME TO WHAT I HOPE WILL TURN OUT TO BE ONE OF THE BEST ISSUES OF 'O.U.M' (fingers crossed). I THINK THE 'MIX' IS ABOUT RIGHT ON THIS.

FOR THE FIRST TIME O.U.M BRINGS YOU COLOUR! - NEXT A 'SNIFF' PAGE!

THINGS HAVE BEEN RATHER HECTIC SINCE THE END OF OCTOBER. ORDERS HAVE BEEN FLOODING IN. I THINK I HAVE FINALLY SORTED OUT MY
SYSTEM PROBLEMS. I NON HAVE THE 3.5" DRIVE RUNNING AS THE MASTER WITH THE 5.25" AS THE 'B' DRIVE AND THE SLAVE DRIVE OF MY
TWIN 3" OPELCO SYSTEM AS THE 'C' DRIVE. AS WE GO TO PRESS IT IS HOPED THAT CHRIS HEARN AND I WILL HAVE RESOLVED THE CASSETTE DUPLICATION PROBLEMS.

THE LAST ISSUE OF O.U.M. WAS TAKEN BY ANOTHER 5 NEW READERS AND I AM HOPEFUL THAT THIS ISSUE WILL GO OUT TO 120.

NEW PROGRAMS AND QUERIES ARE GRADUALLY BEING DEALT WITH, BUT PLEASE BE PATIENT.

I WOULD LIKE TO TAKE THIS OPPORTUNITY TO SEND MY WARMEST THANKS TO EACH AND EVERY DNE OF YOU FOR YOUR SUPPORT OVER THE LAST YEAR AND HOPE THAT YOU HAVE A PROSPEROUS AND HEALTHY 1993.

NOW TO WHAT YOU WILL FIND IN THIS MAMMOTH ISSUE:-

PAGE 1 - A COVER FROM THE IRREPRESSIBLE JON HAWDRITH

PAGE 2 - THE EDITORIAL

PAGE 3 - NEWS - AN ORIC PC!

PAGE 4 - READERS LETTERS

PAGE 5 - BRIAN KIDD CONTINUES THE 'A to I' OF SOFTWARE HOUSES

PAGES 6/7 - THE GAMESTER

PAGES 8/9 - AN IN-DEPTH REVIEW OF 'FLIGHT SIMULATOR (C.E.D SOFTWARE) WITH NIGEL ALEFOUNDER

PAGES 10/11 - ORIC ENTHUSIASTS - ALLAM WHITAKER DEPARTS FROM HIS 'M/CODE /GRAPHICS' ARTICLE TO HELP OUT 'SEDORIC' USERS.

PAGES 12 - 15 - THE ORIC SERIAL PORT PART 5 - TREVOR SHAW COMES UP WITH THE INSTALMENT THAT YOU HAVE ALL BEEN WAITING FOR.

PAGES 16 -18 - MACHINE CODE FOR THE ORIC ATMOS PT. 21 - PETER BRAGG DELVES FURTHER.

PAGES 19/20 - THE HI-SCORES - WHAT TO BEAT ON THOSE CLASSIC SOFTWARE TITLES.

+++++ PLUS A NOTE FOR 'ALTAI' JOYSTICK INTERFACE USERS.+++++++

PAGE 21 - THE LISTINGS PAGE

PAGES 22/23/24 - BITS AND BOBS FROM THEEDITOR PAGES 25/26/27 - RAMBLING IN TH ROM with JON HAWORTH

PAGE 28 - THE BACK COVER

ORIC - THE STORY SO FAR

SOONER THAN EXPECTED THE SECOND EDITION OF 'ORIC - THE STORY SO FAR' FROM THE PEN OF JONATHAN HAWORTH IS NOW AVAILABLE DIRECTLY FROM JON.

DON'T LET THE PRICE OF 4.50 + 50 pence POSTAGE PUT YOU OFF. THE COST OF TOP QUALITY PAPER IS NOT CHEAP AND THIS IS 56 PAGES OF A4. THIS CHARTS THE 'ORIC' MOVEMENT OVER 10 'ROLLER COASTER' YEARS.

THERE ARE OVER 40 PHOTOGRAPHS TO BACK UP THE TEXT. AND WHAT SUPER PHOTOS THEY ARE. INCLUDED ARE: THE MICROTAN (FORERUNNER TO OUR BELOVED ORICS), A CARTOON OF PAUL KAUFMAN, THE FRENCH FACTORY IN ETOUVY, THE ORIC ANGELS, AND OF COURSE THE LAST AYLESBURY

THE PUBLICATION IS LITTERED WITH 'CLASSIC' QUOTES.

JON HAS DONE A REMARKABLE JOB. HE HAS CERTAINLY EXCELLED RECENTLY BY PRODUCING THIS SO QUICKLY AFTER THE POPULAR 'Q.U.M INDEX'

IF YOU ARE A TRUE ORIC FAN, AND YOU MUST BE IF YOU ARE READING THIS, THEN TREAT YOURSELF TO THIS FOR XMAS. SOMEONE ELSE TO BUY IT FOR YOU.

IT IS WORTH THE MONEY JUST SO THAT YOU CAN THROW DARTS AT THE PICTURE OF DAVE DICK THAT APPEARS IN IT!

THE OUM INDEX

AND WHAT PAGE THAT PARTICULAR ITEM YOU WANTED TO TRACE CAN BE FOUND. IT IS INVALUABLE TO OUR EVER GROWING BAND OF NEW READERS. THEY CAN SEE AT A GLANCE WHAT THEY HAVE MISSED AND COULD WELL SPOT AN ARTICLE THAT WILL HELP WITH A PROBLEM. THE O.U.M INDEX IS AS CURRENT AS WHEN YOU ORDER IT.

TO GIVE AN EXAMPLE TO NEW READERS OF WHAT HAS BEEN COVERED IN THE LAST 5 YEARS, HERE IS JUST A SELECTION:-

WELL OVER 100 SOFTWARE TITLES REVIEWED

OVER 100 TIPS FOR GAMES, ADVENTURES AND UTILITIES.

🗼 15 BOOK REVIEWS.

HARDWARE INCLUDING - ASSCROZ, DISC CONTROLLER PROJECT, WD1793 FDC CONTROL, TELESTRAT etc.etc.

ROM DISASSEMBLY, ORICDOS, SEDORIC

BASIC - MUSIC.GRAPHICS.DISC FILES

OVER 60 LISTINGS TO TYPE IN FROM MUSIC TO ARCADE AND FROM PRINTER DUMPS TO AUTOSTOP ROUTINES

MACHINE CODE, HEX CODING AND 65802 ASSEMBLER IN FORTH 83

EPROM READER, REAL-TIME CLOCK, HIRES SCROLL, CASSETTE RELAY CONTROL. SHOW REPORTS, PD CHARTS etc.etc.

ORDER YOUR COPY NOW - FOR EACH ONE SOLD, O.U.M FUNDS BENEFIT BY 50 pence.

MEMS MEMS MEMS MEMS

ORIC PC

THE LAST ISSUE OF THE 'CEO MAG' REPORTED THAT ADVERTISEMNETS HAD BEEN PLACED IN A FRENCH COMPUTER MAGAZINE FOR IBM CLONES UNDER THE BRAND NAME 'ORIC PC'.

NINE MODELS SUPPOSEDLY AVAILABLE. NEEDLESS TO SAY - THEY DIDN'T ARRIVE AT THE TRADE SHOW.

A TYPICAL SETUP ADVERTISED WAS THE 'ORICPC4', WHICH CONSISTED OF AT286/16MHz/2 Mo MEMORY - SERIAL AND PARALLEL PORTS, 3. 5" DRIVE, AT BUS, VGA CARTRIDGE AND SUPER VGA COLOUR MONITOR. ALL THSI FOR AROUND 600 pounds.

FACT OR FICTION!

WE WAIT FOR OUR COLEAGUES IN FRANCE TO REPORT FURTHER.

SALES FIGURES

A FULL CHART FOR SOFTWARE SALES FOR THE YEAR WILL BE PUBLISHED NEXT MONTH. I WAS GOING TO PRINT IT THIS MONTH, BUT AS ORDERS ARE COMING IN DAILY I THOUGHT IT WOULD BE NICE TO DO THE FIGURES FOR THECOMPLETE YEAR. AT PRESENT IT IS VERY CLOSE BETWEEN - 'TETRIX', 'ZEBULON' and 'WORDSWORTH'

THE 'O.U.M' DISC HAS BEEN A VERY GOOD SELLER - OVER 30 SENT OUT. IT IS STILL PLANNED TO SEND OUT THE SECOND ONE IN

THE 'O.U.M' INDEX HAS ALSO BEEN POPULAR - GET YOURS NOW FOR 1.50

O.U.M READERSHIP HAS GROWN BY OUR CONTINUING MAILSHOTS. WE WILL ASKING YOU TO HELP OUT AGAIN IN THE LAST YEAR. A FULL CHART OF O.U.M SALES IN THE NEXT ISSUE.

A WARM WELCOME TO OUR MANY NEW SUBSCRIBERS AND ALSO TO THESE WHO JUST TAKE ONE ISSUE , BUT SUPPORT OUR SOFTWARE.

MCP40

WE NOW HAVE SOME STOCKS OF MCP40 PENS. PACK A CONTAINS 3 COLOURS. PACK B CONTAINS 3 BLACK. LIMIT IS 2 SETS PER CUSTOMER. PRICE IS 2.20 PER PACK. MANY THANKS TO RON EVANS, WHO HAS BEEN TRAVELLING AROUND THE LONDON 'TANDY' STORES ON OUR BEHALF TO SUPPLY US.

PAPER NOT YET IN STOCK. I WILL TRY 'CASID'. DO YOU KNOW OF AN OUTLET?

THE TELESTRAT

I AM RELABLY INFORMED THAT THE DECEMBER ISSUE OF THE CEOMAG WILL FEATURE A SPECIAL XMAS OFFER ON THE TELESTRAT TO INCLUDE FREE SOFTWARE. IF YOU DON'T SUBSCRIBE TO 'CLUB EUROPE ORIC', THEN JOIN NOW. (IS MY CHEQUE IN THE POST LAURENT!)

I AM TOLD BY JON HAWORTH THAT USERS WHO DO NOT HAVE A MONITOR CAN ADAPT THE TELESTRAT TO WORK WITH A T.V. BY ADDING A MODULATOR AND DOING SOME SIMPLE WIRING. IF, AS I HOPE, I GET A TELESTRAT THEN I WILL LET YOU KNOW HOW IT GOES. THE OTHER POINT WITH THE TELESTRAT IS TAHT IT DOES NOT HAVE AN INTERNAL SPEAKER LIKE THE ORIC. THEREFORE IF YOU ARE GOING TO HAVE IT WORKING WITH A T.V. THEN YOU WILL HAVE TO RIG UP SOME SOUND - PERHAPS USE A SPEAKER FROM ONE OF THESE OLD ORIC BOARDS THAT I HAVE LYING AROUND.

A NEW BOARD GAME

AFTER THE SUCCESS ON P.D. OF SUCH BOARD/STRATEGY GAMES AS 'SCRABBLE', 'PATIENCE' etc; YOUNG NICHOLAS HAWORTH HAS BEEN BUSY WRITING A VERSION OF A POPULAR BOARD GAME FOR OUR ORICS. IT WILL NOT BE READY FOR A COUPLE OF MONTHS AND THEREFORE I WILL NOT YET TELL YOU WHAT IT IS. SUFFICE TO SAY IT SHOULD BE WELL RECIEVED.

O.U.M. DISC No.2

AS I REPORTED IN THE LAST ISSUE - THE NEXT O.U.M DISC IS NOW TAKING SHAPE. PROGRAMS ARE PLANNED FROM SCANDINAVIA, THERE WILL BE SOME COMMERCIAL SOFTWARE TO RUN WITH YOUR 'ALTAI' JOYSTICK INTERFACES, MORE SPANISH, SOME SUPER UTILITIES FROM HARRY PETERS. A WORD PROCESSOR AND LOTS LOTS MORE.

IT IS STILL HOPED TO DESPATCH IT WITH THE JANUARY ISSUE OF D.U.M.

IT WILL BE SENT OUT TO ALL THOSE WHO ORDERED THE FIRST DISC UNLESS YOU INFORM ME BY DEC.31st.

THE COMPLETE A to I

FOLLOWING THE PLEASING RESPONSE TO OUR FEATURES ON SOFTWARE e.g. THE A to Z FROM BRIAN AND JON'S FOREIGN SOFTWARE LIST; I HOPE TO START A NEW SERIES NEXT MONTH. OT SHOULD HELP YOU BECOME MORE INFORMED AND WILL HELP ME IN FULLY INDEXING MY COLLECTION.

I INTEND TO GO THROUGH IN A to Z ORDER, MUY COMPLETE COLLECTION OF SOFTWARE.

IT WILL REMIND ME OF PROGRAMS THAT I MAY HAVE FORGOTTEN ABOUT AND MAY POINT YOU IN THE DIRECTION OF SOMETHING THAT YOU HAVE BEEN LOOKING FOR. MUCH OF IT IS COMMERCIAL AND CAN THEREFORE BE PURCHASED, WHILST A GOOD PERCENTAGE WAS WRITTEN BY USERS TO GET ROUND A PROBLEM etc.

I HOPE TO DO A ONE LINE NARRATIVE WITH EACH PROGRAM

AS SME HAVE HAD MANY NEW SUBSCRIBERS RECENTLY AND THEY DON'T CURRENTLY HAVE A COPY OF THE 'CONTACT LIST', I HAVE DECIDED TO AGAIN PRINT ADDRESSES/TELEPHONE NUMBERS OF WRITERS UNTIL AN UPDATED LIST IS PRINTED.

DEAR DAVE,

I was interested in the letter from Jack Goldthorpe as I have also considered re-housing an ORIC in a steel case. I was considering using an old PC case and disk drives etc. One item which I have thought about is the cassette recorder. I wondered if it would be possible to use a cassette player from a car and modify the cassette player (or case) so that it fits into a disk drive slot, but I can't ever remember seeing a car cassette player with a record function. The main reason I want to put an ORIC into a case is to hide most of the cables hanging from the back of my computer system.

Recently I was given a TANDATA C1420 colour monitor. It came from a Tandata TD4000 Viewdata terminal and I would like to

connect it to an Oric. However I've no details of what the pins on the monoitor's socket do except that it is a 7-pin DIN

socket. The output from the terminal is a 8 pin DIN socket which is wired up as follows:

PIN 1 - RGB Status (SCART) PIN 2 - GROUND PIN 3 - BLUE

PIN 4 - Comp.Sync. PIN 5 - RED PIN 6 - Not connected PIN 7 - SOUND OUTPUT PIN 8 - GREEN

I wondered if you had ever heard of anybody using a Tandata monitor with an Oric before and if so, how was the lead made up?

I enjoyed the article on French software by Jon Haworth. I've liked the series by Brian Kidd on British software houses, but it would be helpful to know if the software ran on an ORIC 1 or the Atmos.

- ROBERT CRISP

44 Bentley Grove, Meanwood , LEEDS. LS6 4AT (Tel: 0532 745294)

A) I personally have never seen a car cassette player with Record function. If it did have one, the local Police would probably pull you up for trying to tape the top 20 off the radio - you wouldn't have a hand free to drive and taping from the radio is illegal. For a small outlay you can pick up a small cassette player, preferably Mono only.

B) I know of nobody with the Tandata. Perhaps one of our resident electrical readers can help out here or alternately try

ONE STOP ELECTRONICS.

C) Glad you liked the articles from Brian and Jon. Am I to take it that you didn't like my one on Loriciels or Arnt's one

on Scandinavian software!

Time and space does not permit us to list what is Oric 1 or Atmos only. The majority are compatible. Some so called Oric 1 only have been amended to run on the Atmos by users. Therefore something like HERO ZERO is Oric 1 only to one user but Oric 1/Atmos to another.

From what I remember from previous correspondence, you only have a few software titles and I would be pleased (on production of a list) to furnish you with information on the titles you have. For many old Oric 1 titles it is just a case of loading in the '#' program first to get it running on the Atmos. Gradually more and more of the newer titles are being written as Atmos only. This is similar to disc software in as much as a lot is now only runable on SEDORIC.

DEAR DAVE,

regarding the term "SHIFT EDITIONS", which I used in my last letter; It was the name of the company that published

'HEBDOGICIEL' and sold the 'yellow cases'.

In order to help Jon H and Brian K's 'fantastic job' on Oric software; here are a few updates ATTACK ON KIXI - 6 Morgan software? (note from the editor: - according to the game's author (Simon Gaschwitz) it was

never officially released. It found it's way to France somehow and was 'passed' around.

BERING - Dialog Informatique, BOMBYX - Dialog Inf., (is there also another one from Infogrames?), EUROPE - Promotique, JASMITEL - TRAN (for the Jasmin disc drive system), MEMORIC - Oric France (ASN), MONASIM - Vismo (a dealer in Paris), MORDOR - Hebdogiciel, PIERRE ETDILE - Heb..., RASPO THE BOUNCY - CEO! Telestrat disc 7, TACATAC - Heb...., TELECHARGEMENT - Heb.... (utility to load programs from their BBS), TORTUE LOGIC - Cobrasoft, WIZARD OF ORIC - Micro - programmes 5, ZAMCOPTERE - Heb....

I will check my cassettes to see which are actually not on Jon's list.

As in England, we here in Paris are having trouble obtaining MCP40 pens in TANDY stores. I sometimes manage to buy 'CANON ball point pens' in a stationary shop. I hope that everyone I met in Aylesbury is doing fine. I guess I didn't quite understand who was the nephew of who and the mother-in-law who is also the grandmother....unless she is a disguised wolf? How is young Matthew's collection of Pigs coming along? Have you enough space for them all? — JEAN BOILEAU (Paris)

Dear Jean,

thanks for all the information you are supplying us on software and thanks also for the info. on the Canon pens. My mother-in-law (the disguised wolf) sends her regards and says there is a place for you in Matthew's collection! Silly old mum-in-law - she thinks Matthew is collecting Frogs.

DEAR DAVE,

are Light Pens still available?

- Tim Hutchins.

they are not listed on the current price list from Club Europe Oric. Jon Haworth can perhaps answer this. If they are no longer available as new, then you could always place an advertisement in the French issue of the CEOMAG.

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It has been a couple of months since we last printed part of 'A to Z of Software Houses' and this month we delve furthe couple of more from 'M', which were omitted last time:-
                                                                                        Kidd'6
                                                                              Brian
                                                                      fur ther.
                                                                                  Firstly
  M.C.P
 --- RUNELORD
MELBOURNE HOUSE/TANSOFT
                                - THE HOBBIT
        - - I WILL LIST THESE AT A LATER DATE
                                                                   parenthesis
 Now on we go with info. from Brian and comments in
                                                                                   from
                                                                                           your
Editor:
 NEBULAE
            - CHAR/SOUND PACKAGE
 NECTARINE
             - DELTA FOUR (See also EMERALD)
        - BASIC COMPILER, ORIC-MAC, PASCAL (With TANSOFT - released?)
 OCEAN
          HUNCHBACK, ISLAND OF DEATH, MR. WIMPY, ROAD FROG
            - KRILLYS, THE HELLION, TROUBLE IN STORE (and I
                                                                      believe MEGABASE...
this software housé was run by messrs. KAUFFMAN and PHILLIPS)
---- - CENTIPEDE, ELEKTROSTORM, HOPPER, INVADERS, LIGHT CYCLE, M.A.R.C, ORIC-MON, THE GAUNTLET (I don't think that one got released), THE ULTRA PASE
---- CHECK, COPY, HI-COPY, INDEX, LABELS, MAILSTOCK, RACING, RECORDS, SHARES, STOCK, SUPER STOCK, TEACHING COURSE, WRITER PEAKSOFT
               CHAMPIONS, THE BOSS
 PROGRAM FACTORY
                   - - INVADERS, TREASURE HOUSE
 PROSOFT
           - ASSEMBLER/DISASS, HERO ZERO ( now that's what i call NAFF!)
 Q.E.D
VARIETY PACK 25, VIDEO CHALLENGE
                                            ACCOUNTS, HOME MANAGEMENT, Q.E.D TOOLKIT,
 QUARK DATA
        ---- - 3D INVADERS, AMAZEA, FLIGHT SIMULATOR, MOONSTER, MYSTE (a nice little version of ELIZA), SPACE CRYSTAL, SUPER FRUIT
                                                     SIMULATOR, MOONSTER, MYSTERY
                                                                                        TOWER.
 QŪĪCKSÌLVA
               - VELNORS LAIR, MINED OUT
        - MUTANT INVADERS, GOLF, QUIZMASTER 1 & 2, SPACE INVADERS, STAR BINGO
 ROMIK
        - LOCHNESS MONSTER
 SALAMANDER
FISHY BUSINESS, FRANKLINS TOMB, GAMES COMPENDIUM, LOST ADVENTURE), ORIC TREK (SPOCK TO THE RESCUE)
                                                                                        GAME )
                                                                 RACE
                                                                        MANAGEMENT
                                                                                      (POPULAR
                                                                     IN
                                                                           SPACE
Trevor 'POPCORN' Shaw famous!), GAMESPACK 16K,STARSHIP
                                                                                    that
                                                                                           made
                                                                        program
 SEVERN
rendition),GRAIL
 SHARDS
         - GAMESPACK
 SIGMA
         - BALROG CASTLE, BLACK ORC CASTLE, ORICTHELLO (yet another version
                                                                                             of
the boardgame)
 SOFTBACKS
3
 SOFTEK
            ACHERONS RAGE, DRACULAS REVENGE, GALAXIANS, ICE GIANT, SUPER EXTENDER,
SUPER METEORS
 SOLUS
         - BESIEGED, JUST A MOT, WORD POWER
 SPECTRA
          - TAPE LOADER
WELL, THAT'S ENOUGH FOR THIS MONTH - KEEP SENDING THOSE UPDATES IN TH'NEXT ISSUE, WHEN WE CONTINUE WITH THE LETTER 'S'
P.S. - I HAVE JUST NOTICED THAT BRIAN HAS OMITTED 'NO MANS LAI
CATALOGUE THEY HAD. FROM THE SUPER ZAP'EM 'STYX' TO THE
                                                                                           MORE
                                                                  'NO MANS LAND'
                                                                                      WHAT
                                                                                           USED
 ATALOGUE THEY HAD. FROM THE SUPER ZA
MULTIFILER'. A FULL LIST NEXT TIME AROUND.
                                                                              THE
                                                                                   WELL
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THE CAMESTER

'HOUSE OF DEATH' - Tansoft

A few issues ago, James Groom asked how to go through the mirror in this adventure. As far as Jean Boileau can remember, you should type 'EAT BUN'.

QUEST OVER CAIRO '

Type the following: TELEPHONIERE, N , UNTERSUCHE BRUNNEN, NEHME MUENZEN, O , UNTERSUCHE TOTEN, NEHME ZETTEL, LESE ZETTEL, N , W , W , FAHRE BUS

To see some more pictures type 'E' and the 'N' to quit the adventure and then type:
R=19:60T0844 or R=21:60T0846 or 60T0446
By the way 'QUEST OVER CAIRO' is a German Adventure.

POKES and PEEKS

First a 'Peek' : - MEMOSTRIP - to 'dishabiler la fille' - 60TO 6500

TOUR DE MONDE EN 80 JOURS - at the bank type 'B' plus a negative value, 'le compte sera alors' credit of the negative value.

BOMBYX - infinite lives and access to table of your choice : - at level 0 do a CTRL C and then type - POKE121,250: POKE127,x (where x = number of table). Then type - CONT

STRIP 21 - to dishabiler la fille rajouter la ligne 3801 T=1 puis faire RUN ou taper 60T06000

DAMSEL IN DISTRESS - to start on any screen - hold down the following keys all at once: QD5V8L'

Then utilise the top row on the keyboard 1 2 3...... 0 for screens 1 to 10 and use the second row keys Q to P for screens 11 to 20

Don't forget that if you want Pokes or help on a particular game then just drop a line to O.U.M. On checking through the OUMINDEX I find that we have to date printed maps, pokes, tips etc. on around 100 different titles.

SAUSAGES

A PREVIEW

'SAUSAGES' is the latest 'Quilled' adventure from Paul Baker. Not yet quite finished, but I recently recieved a preview copy.

The inlay design that Paul has produced is extremely colourful and professionally done. It is well worth using as an O. U.M front cover.

Now for the adventure itself. I am not a great lover of adventures and therfore when I get the finished version I will get someone else to review it fully. However, here are my first reactions.

The text is in pleasing colours. You start in the cockpit of your shuttle and can see the surface of another planet outside. Three other things can be seen - a Wax blaster, a disk and a flare. I started by typing HELP and rather than getting the usual non-help at the start of a game was pleasantly surprised. The Help section is quite a lengthy introduction. You have to help Norm Foley get off a planet. You must control him as he has a computer strapped to his head. Also on one of the Help pages is a 'tongue in cheek' paragraph about the author.

I attempted the game itself, but within a short time was blown to bits. Being prompted every so often that there were 'x' seconds until something blew made me feel as though I was in real time and I hurriedly typed in commands. Every time I tried something the time ticked away.

This contains lots items to get, red herrings and a good scattering of wacky humour.

If you like text adventures then I think you will love this.

· WATCH THIS SPACE for availability.

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ORTO USER MONTHLY NIEL PRY RIGHTS IF YOU MRITE A GOOD PIECE OF SOFTMARE

MORE GAMESTER

ZERULOM

The final de-bugged version of ZEBULON from the pen of Jonathan Bristow was used on all copies despatched from November 1st.

The message on completion of the game has been corrected. Also Laurent Chiacchierini has sent by a clearer character set and amended one of the registers. Anyone who has the bugged version or who wants the clearer set, should return the original disc to me. All cassette versions will be O.K as none were despatched until November.

COMPETITION TIME

This month's competition is especially for the Gamesters. Price to be decided.

Printed below are parts of the th instructions to a popular Oric game. All you have to do is write and tell me the title. I'll give you a clue - it is not Harrier Attack!

..... Here you will find deposits of a rare..... Once in the xxxxxxxxxx ,you will find treasure in the form of piles of gold bars...

Get those entries in now - CLOSING DATE is Dec. 28th.

SUPER JEEP

This is a super game from Loriciels, but you might find it easier if you had more lives. Use an 'Auto Stop' program and the amend line 545. This line normally shows V=V+1

THE GAMESTER PAGE is especially for Gamesters. To keep it in the magazine, please keep sending those items in — Dave Dick.

DON'T PANIC

- it is coming soon to a screen near you!

MAHJOMG

LATEST HI-SCORE ON 'MAHJONG' FROM THE MARKE FAMILY IS 13,442. THIS TIME IT IS RENE. COME ON HENRY - CAN'T HAVE THE MISSUS BEATING YOU!

ENCHANTED

A few months ago we had a glimpse at the loading screen of ENCHANTED - a text adventure for Sedoric disc users. Now the author, David Goodrum, has sent me the first working demo version, which contains the the complete location texts and objects etc. It currently uses about 40K of memory.

I won't detail the introduction again, except to say that the first few pages are printed sideways and though a novel idea to start with; is now a 'pain in the neck'. There are also a couple of lines of 'thank yous' which scroll too fast to read. Well that's the bad points out of the way.

You embark on a journey and on the way can talk to 'The Walker', who sometimes gives good advice. You start outside of your room. Choosing what do is a pleasant surprise. Keywords are displayed at the bottom of the screen all the time and the letter of the alphabet to use is highlighted e.g. W = WEST, C = SCORE.

I travel North along a tree lined road. I talk to 'The Walker', who tells me to keep going. Each location you visit has a number (very handy for keeping a map). After visiting about 10 locations I discover an object. I find a candlestick just inside a small haunted house. I take the candlestick and I take it again as I'm not sure if I have it (some sort of prompt here I think David). I take a green bottle 3 times (an error in the program I think). I travel on past derelict buildings with the sound of the fairground in the background - smell those hamburgers. On and on I travel ontil I find a castle. Response time now is slowing a little - not surprising really as I am at location 167. To date I've had 36 moves and my score is ZERO %. I seem to be wandering from one place to another without achieving anything. Of course, the USE function is not yet activated on this demo version, but when it is I can see that there will be all sorts of zany action.

I look forward to the finished product and will get local adventurer Chris Hearn to review it properly.

For a long time I've been a keen fan of flight sims. No other piece of software allows you to break free from the constraints of everyday living while retaining that foothold in reality others decide to forget about. Fantasy games, adventures, space invaders are all splendid ways to provide colourful entertainment; but they all ultimately have a goal. You find the wicked wizard and do him in. You use the latest neutron blasters to vapourise invaders for other planets, and move up a level. But when it's all over and you collapse panting to the floor, fingers and thumbs throbbing from the exertion, you let your keyboard cool down for a while and then have to go and buy another.

Where flight sims come into their own is that once you've mastered the basic rules, you're allowed to go off and do your own thing. There aren't any goals, you can use your own imagination. People do shoot at you in some of them but if you go for one of the civil aircraft types there aren't any baddies out to get you and you can fly in safety. The sky beckons, the ground slips away below - and all cares with it. It's just you and the birds.

Considering the size of the Oric's memory there is only so much that can be crammed-in to it, and trying to convince you that you're sailing through the clouds at the controls of a Cessna, or what have you, was never going to be easy. When the tape of CEO's Flight Simulator dropped onto my doormat I loaded it with the biased eye of someone who has seen Microsoft's Flight Sim. running on a powerful IBM PC and was expecting great things. Could software produced outside of mainstream commercial institutions cut it up with the big boys?

The tape has three programmes on it. The first is a loader which asks you if you want to read the instructions or go straight to the simulation. If you're new to it you had better study the instructions carefully. There is quite a lot to learn and although the keyboard template which comes with the tape covers all the controls, you don't stand much chance of comprehending it all until you do.

When that has been done you can load in the main programme. You're greeted by the sound of your engine ticking-over and a view out through the front of the cockpit, a clear blue sky over a desert somewhere - it looks hot enough to fry eggs on the cowling! Beneath the external view sits the main control panel with all the necessary instruments to get the bird flying. At the top of the screen is a line of very useful information about your position in this virtual world.

The landscape is pretty sparse out the front but you can look in any one of eight different directions to see if there is anything more interesting around you. Unfortunately there isn't. It had to be expected though because, in a programme of this sort, sitting in only 48k of memory, the one thing which was going to suffer was the scenery. You're actually

See over....

sitting on runway one and off to the left stands a pylon. On the right lies an area where you can refuel, and that's about it - except for the lines marking each side of the runway.

Don't be discouraged though, there's a whole world out there to explore (well 64 km in each direction that is) and apply the power using the X key. The engine noise rises in pitch with the revs and you begin to move, slowly picking up speed. In real 3D the landscape rolls past and when the indicator shows you're going fast enough pull back on the stick - ok, right-shift key! - and ease her into the air. The horizon drops down and suddenly you've left the planet, reaching for the sky.

To my spoiled mind the only other major disappointment gets you about now. If you try banking the plane nothing appears to be happening at first. This is because no matter how steeply you turn the plane the horizon stays level. It's very disconcerting and you don't really know what's going on until you realise that to check what's happening it's a good idea to press the "?" key. This updates the status line and if you check your course heading you'll see that it is changing as you turn. (A tip here is to hold down the key with a spare finger all the time, if you can manage it. That way the status is updating constantly).

In the air the plane is a pretty docile creature and just what is needed for a lazy Sunday afternoon's flight. If you're a masochist, or an experienced pilot, you can alter the prevailing wind speed, shown on the Beaufort scale from 0 to 12, and really have fun! The rudder pedals and joystick are 'linked' so coordination while turning is not required.

If you have a paper and pen handy while reading the instructions it pays to jot down all the positions of the scenery so you can go look at it. Indeed if you have a printer you have the option to print it all out. My favourites were the balloons, but it was a shame there was no collision detection, because my kamakazi-dives into them had me flying straight through instead! This made flying under the arches a little too easy as well.

If you want to look around you while flying you can, in eight compass directions, and a small row of letters above the canopy tells you which way you are looking. Considering the lack of a tilting horizon I thought this part was very sophisticated for a programme this size, and made myself dizzy looking around as I flew.

All in all this programme shows you just what can be achieved by individuals dedicated to their craft. The profits from software released for the Oric were never going to be high so that can't have been their motive. As a 'copy' of Microsofts' Flight Simulator it makes a credible attempt. It uses a coordinate system to map out the area and has all the instrumentation you need to convince yourself that you're in a plane.

The promised terrain editor programme will be interesting to get hold of, though I doubt you'll be able to cram too

much detail in because of memory constraints.

Buy it, fly it and marvel at the fact you can get something like this - produced six or seven years after the mainstream industry gave up on our Orics!

ORIC ENTHUSIASTS

This month I thought that I would take a deviation into SEDORIC DOS to clarify some commands. Eddie Wisniewski contacted me about one or two points in the user guide and when I re-read it I could see that there is perhaps a need to set the record straight. So all those SEDORIC users out there and in particular those with issue 3 of the User Guide please note the following so that you can update the paragraph or section of your copy.

Conventions and notations (page 2)

A COMMAND appears in bold capital letters, general syntax in ordinary capitals. Optional parameters are enclosed in brackets. A command is entered by pressing the RETURN key.

DISC OPERATING COMMANDS (page 4)

(drive) -

On its own, its sets the default (or current) drive. Used with a filename it allows temporary access to the specified drive but the default drive is unchanged. The drive name is optional in the filename. If used with the LOAD command it must be within the quotes for the filename. If not specified, the default drive is accessed.

B- selects drive B as the default.
A-MENU load MENU(.COM) from drive A, but B would still be the default drive.
LOAD"C-HELP.BAS"

INITIALISING AND COPYING OF DISCS (page 10)

INIT (drive, no. of sectors ,S or ,D)

NOTE 2: If asked to insert a Master disc then replace it with the disc being initialised before answering the Format (Y/N) request, otherwise you could reformat your master disc if it is not write protected.

DISC CONFIGURATION (page 12)

When first receiving your SEDORIC V2.0 Master disc you need to check the configuration of your disc system and correct it if it is set wrong on the master disc. You can check the configuration by using the DSYS command. For instance, if you have two 3" disc drives connected and when you checked, using DSYS, your system was set to the following:-

drive A 42 tracks 17 sectors, single sided drive B 82 tracks 17 sectors, double sided

(this happens to be my configuration) then use the DTRACK command to set the correct configuration on the master disc (ensure the master

disc is not write-protected. This is achieved by entering :-

DTRACK 42,42 or DTRACK A,42,42

To configure one double sided 3.5" disc it would be :-

DTRACK 80;D

FUNCTION KEY SET-UP (page 19 bottom)

An example of setting the '1' key to list all the filenames with the extension ".COM" is set out in the 3 steps that follows.

- 1 Enter KEYUSE 0, "DIR" + CHR\$(34) + "*.COM" + CHR\$(34) + CHR\$(13)
- Enter KEYDEF 0
- 3 Press key '1'

Now if you press the FUNCT key with '1', the files will be listed to the screen.

KEYSAVE FN

NOTE: KEYSAVE automatically behaves like SAVEU in that a backup file is created if you save a file to a disc having the same filename on it.

VUSER

This does not show which keys the user commands are allocated to. This would be suitable for an upgrade if it is required by users.

I hope that this helps users get the most out of SEDORIC DOS.

ORIC ENTHUSIASTS Price List (Autumn 1992)

SHAREWARE DISC SOFTWARE

ORICOMMS (ATMOS), by Trevor Shaw/John Rushton - £1.00, registration/manual £3.00 MEGABASE by Geoff Phillips - £1.00, registration and manual £3.00 SEDORIC DOS (V2.0) update by Dr Ray McLoughlin - 50p, registration/manual £7.50 (42 registered users) GRAPHPAD, ORIC Enthusiasts - 50p, registration & instructs £1.00 (1 registered user) E-FILE by Geoff Phillips - 50p, registration/instructs £2.00 (2 registered users) ONE-KEY BASIC by Allan Whitaker - 50p, registration & instructs £2.00 (1 registered user)

WORD-SPEED by Dr Ray McLaughlin - £1.00, registration/manual £7.00

(14 registered users)

DISC-FORTH by Dave Cheeseman - 50p, registration & instructs £2.00 (3 registered users)

Hello again. Sorry it has been a while since the last article. I began studying for an MSc this autumn, in my spare time. Therefore what with work, family, and now studying I have even less time for Oric-ing! I have not completely forgotten OUM however, as you may have noted from the odd message passed on to Dave. I have been working on and off on the serial port, and have done quite a lot of experimenting to discover just what can be achieved with it in BASIC. I have got an incentive since the course I am taking uses computer conferencing (distance learning). In order to reduce my phone bills it is in my own interests to develop some file transfer software!

In the last article we looked at file transfer and discussed various techniques and protocols. Since then I have updated my knowledge and know more about various newer protocols that I mentioned such as MNP. I have also found out that there is a newer version of Xmodem; it is called Zmodem (I don't know if there was a Ymodem). However, many bulletin boards (BBs) will still offer file transfer using Xmodem or Kermit, and all should allow ASCII file transfer, which is just as well since I suspect the code to run Zmodem would be too long to run in the 48k of (once elephantine!) memory on the 8-bit Oric computers. I may discuss these other protocols later in the series.

Oric Modem Problems Solved

The other thing I have been doing is trying to find out a little more about some of the problems reported to me by some Oric Modem users. These mainly relate to problems logging on to BBs. My suspicions (reported in Modem Matters, Issue 51) seem to have been correct in general i.e. that the age of the Oric Modem means that some of the newer BB modems may not easily recognise it, partly due to the timing of transmission of the carrier signal (the whistle you hear if you listen down the phone when the Oric Modem is switched on-line). The problem arises partly from the increased sophistication and standards of newer modems. Most have several baud rates (i.e. speeds) and can automatically detect what the speed of the calling modem is (i.e. yours) from the carrier signal. If the Oric Modem sends its carrier signal slightly too late or soon then the host may not think that anyone is there, or may have cycled past the Oric Modem carrier frequency. However, the good news is there are ways around this without modifying the modem or buying another one.

The first thing to try when logging onto a remote system (e.g. a BB) is to press the RETURN key a number of times, but not too quickly - this is mentioned in the Oricomms manual. This helps the host modem to identify your modem speed, and in some cases, wakes up the host system! The next thing you should try, if you still have problems, is experimenting with when you press the SPACE BAR (if using Oricomms for example) to go on-line. The important thing to do is to listen down the phone. Do not go on-line until a moment after you can hear the host modem's carrier tone. If you keep listening after pressing the SPACE BAR you will hear the host cycling through the different carrier tones as it searches for a match with the Oric's carrier. You should also have heard the Oric Modem carrier start up (see how long a delay there is between pressing the SPACE BAR and the tone starting - you can do this without actually calling a BB, simply pick up the phone and listen to the line), and you will also hear each of your key presses as a 'click'. This is a technique which John Rushton and I used when developing the Oricomms software so that we knew what results we were getting, even when we couldn't see them on the screen! You needn't worry too much about putting the phone on the hook straightaway, however it is a good idea to hang it up once you have established a connection and the host's welcome message is scrolling up the screen. If you don't you may get corrupted characters especially if there is any noise In the same room as your phone.

You may be interested to know that we Oric owners are not alone with this problem. I gather there are a lot of other micro owners with similar 'old' 1200/75 modems who experience the same problems. However, using the above methods I have not yet failed to log onto a BB. It may take a couple of attempts the first time while you discover just when to press the SPACE BAR. If you end up using a host BB regularly then, as mentioned in the earlier article, you could always ask the Sysop if they can adjust their system to be a little less sensitive! It may also be possible to put a delay into Oricomms between the SPACE BAR being pressed and it switching the modem on-line. The problem with this is that the delay may need to be different for different host systems. Personally I find the listening method no trouble, and it helps you to know what is going on. I hope the above tips are helpful.

Communications Networks

I have rediscovered the excitement of the world of computer communications and would urge any of you with the slightest interest to investigate this area. It is the future! There are now links between

computers all over the world, giant networks linking every continent. These provide messaging and electronic mail facilities, and access to various databases full of information. There are three in particular that I will mention just to whet your appetite: FidoNet, JANET, and GeoNet.

The first is FidoNet, which arose out of lots of computer hobbyists linking their Fido BBs together. (Fido is the name of a particular type of BB software - not a dog!). FidoNet first emerged around 1984, and now has many many nodes (a node is an individual BB). If you call up a FidoNet node you can leave a message which can be sent all over the world! Being run by hobbyists, charges are minimal, but since any Sysop incurs running costs you can't expect such systems to be completely free, although you may be able to have a free try.

The second major network I will mention is JANET - the Joint Academic Network. This links Universities, Polytechnics, research institutes etc all over the world. It is this system that I use to do the computer conferencing for my course. You cannot normally use this system unless you are registered as an employee or student with one of these institutions in which case there are no charges. However, FidoNet users can now exchange electronic mail with JANET.

The third system is GeoNet, which is a growing commercial network. It can be accessed from anywhere in Britain for about the cost of a local phone call via a system called the Manchester Host. This system requires a registration fee and subscription charges, as do most systems of this nature, however I believe it is one of the cheaper ones, having as one of its aims the potential for community organisations to communicate and search various databases. If anyone is particularly interested in any of these systems, or indeed any others (e.g. the new Micronet, called Silicon Village), let me know and I will provide all the information I have.

Progress With Oric File Transfer Software

Okay, so lets assume that you are all going to buy Oric Modems and start using them, presumably you would like to have some file transfer software to enable you to do so more effectively. Well I'll now tell you about the progress that I have made in this direction.

Using BASIC only I'm afraid it is not possible to get the Oric to work well with BBs. Even at 300/300 baud (the Oric Modem will not operate at this speed) characters are lost when trying to display the received data on the screen in real time. The problem, as mentioned in the last article, is the slow speed of the Oric display. 1200/75 is totally useless, you can't even guess what the received words are! In fact with some BBs even when using Oricomms at 1200/75, which is in pure machine code, characters are lost at the start of each line due to the slow Atmos (Oricomms uses the ROM display routines — it may be possible to produce a faster routine, any offers?). The only way BASIC might be fast enough is if the received data is simply stored in memory for displaying later, rather than being displayed as it is received. The only problem with this is that you don't know what you are receiving or when it has come to an end!

However, the above discussion is from the point of view of receiving data from a BB etc. I have successfully transferred files TO a host system using a BASIC program. This works well and reliably. So, as suggested in the last article, the only way BASIC can be used for file transfer FROM the host is where the host is another Oric using the same BASIC program, and 1200/1200 baud half-duplex transmission, or where the host is connected directly to the Oric and can transmit at a slow rate (e.g. 75 baud). For this to work, the BASIC program must slow down the transmission with a delay in the send routine.

So using this technique I now present an Oric User to User File Transfer program. Whilst I haven't tested this in action it should work, so you should now be able to transfer files between each other over the phone line!! If there are any problems then they are most likely to relate to the value of the transmit delay (DEL in line 8), or will be due to bad phone lines corrupting data. The program does not include any error correction procedures.

The listing should be typed in, and then run in combination with listing 1 given in part 2 of The Serial Port, OUM issue 57. You should then be able to transfer files as follows:-

- 1. Phone up another Oric Modem user, who also has this software, and after establishing contact decide who is to transmit and who is to receive before using the program and modems. Note that the file should have been loaded into memory before using the software, because Oric Dos will not work reliably when the serial port is activated.
- 2. The person sending the file needs to be in transmit mode. They can type in a message first if they want

to.

- 3. Then they must press CTRL-S to enter the file transfer routine. The program prompts you for the start & end addresses where the file is stored in memory. The file must be stored between 4000 and 49151 already.
- 4. The sender will then be asked whether to transmit or not, and if they press 'T' then file transfer should proceed automatically.
- 5. Once finished, the sender can carry on typing messages, or could transfer another file (provided it is already in memory). Or they can swap roles by pressing 'ESC' and swapping over who is transmitting and who receiving. Or they can finish using the program which will drop the line (unless the phones are lifted at that point).
- 6. The receiving and can now save the file to disc, or tape, using the usual methods.

You may be interested to know that I am examining one of John and my early unfinished Oricomms programs with file transfer. This does not yet work, but I think I can get it to. I! II let you know! It should be a lot quicker than the BASIC listing provided here, but I may not get it done for some time!

Good luck with the software, I hope it works reliably. The best thing would be for two people living within a local phone call from each other to test it fully. If there are any problems let me know. Merry Christmas to all!

Trevor Shaw.

```
5 REM
        ** FILE TRANSFER 1200/1200 BAUD HALF-DUPLEX
                                                        * *
        ** MANUAL SEND/RECEIVE A BLOCK OF MEMORY **
6 REM
8 LET DEL=5
10 GOSUB 200
                 'SET UP INTERFACE PARAMS
20 PAPERO: INK7: CLS
30 GOSUB 100
                  'SELECT TRANSMIT OR RECEIVE MODE
70 PRINT"BYE - DROPPING LINE - DON'T FORGET TO SAVE ANY FILES RECEIVED"
80 POKE#382,0
90 END
97 '
98 1
99 REM ** SELECT TRANSMIT OR RECEIVE MODE **
100 PRINT"SELECT WHETHER YOU ARE TO SEND OR RECEIVE A FILE (S/R) "
110 GETS$
120 IFS$<>"R"ANDS$<>"S"THEN GOTO110
130 IFSS="S"THENGOSUB300
140 IFS$="R"THENGOSUB400
150 PRINT"DO YOU WISH TO QUIT NOW? (Y/N)"
160 GETAS
170 IFA$<>"Y"ANDA$<>"y"ANDA$<>"N"ANDA$<>"n"THENGOTO160
180 IFAS="N"ORAS="n"THENGOTO100
190 RETURN
197 '
198 '
199 REM ** SET UP INTERFACE PARAMETERS **
200 POKE#382,0 'RESET RS232 INTERFACE
210 POKE#383,24 'SET TO 1200/1200 8N1
220 POKE#382,5
                'PARITY DISABLED TRANSMIT MODE ON
230 RETURN
297 '
298 '
299 REM ** TRANSMIT MODE ROUTINE **
300 POKE#382,5 'TURN RTS LINE ON
```

```
305 PRINT"TRANSMIT MODE - PRESS 'ESC' TO FINISH"
                                                 'CTRL-S' TO SEND A FILE"
310 PRINT"YOU CAN TYPE A MESSAGE OR PRESS
320 IF(PEEK(#381)AND16)THENINS=KEY$
330 IFINS=CHRG(27)THENRETURN
340 IFINS=CHR$(19)THEMPOKE#380,2:GOSUB1000:GOT0305
350 IFIN$<>""THEMPOKE#380, ASC(IN$):PRINTIN$;:IFASC(IN$)=13THEMPRINT
370 GOT0320
397
398
399 REM ** RECEIVE MODE ROUTINE **
                TURN RTS LINE OFF
   POKE#382,1
                        - PRESS 'ESC' TO FINISH"
410 PRINT"RECEIVE MODE
420 INS=KEYS: IFINS=CHR$(27) THENRETURN
425 IF(PEEK(#381)AND32)THENPRINT"WARNING! NO DATA CARRIER DETECTED"
430 IF(PEEK(#381) AND8) THENR=PEEK(#380): ELSEGOT0420
440 IFR=2THENGOSUB2000:GOT0410
450 PRINTCHR$(R);:IFR=13THENPRINT
460 GOT0420
997
998 '
999 *** SEND A SECTION OF MEMORY ***
1000 PRINT: PRINT" ENTER THE START AND END ADDRESSES OF
                                                        THE MEMORY ";
1010 INPUT"TO BE SENT ";S,E
1020 IFS>ETHEMPRINT"START GREATER THAN END - PLEASE REDO":GOTO1000
1025 IFE>49151THENPRINT"MEMORY AREA OVERLAPS ROM - PLEASE REDO":GOTO1000
1026 IFS<4000THEMPRIMT"MEMORY AREA OVERLAPS PROGRAM - PLEASE REDO":GOTO1000
1030 PRINT"PRESS 'T' TO TRANSMIT, 'Q' TO QUIT":GETAS
1035 IFA$<>"Q"ANDA$<>"T"THENGETA$:GOT01035
1040 IFAS="Q"THENPRINT"TRANSMISSION ABORTED!":RETURN
1050 IFAS="T"THEMPRINT"TRANSMISSION STARTED"
1060 SH=INT(S/256):POKE#380, SH:WAITDEL:SL=S-(SH*256):POKE#380, SL:WAITDEL
1065 EH=INT(E/256):POKE#380,EH:WAITDEL:EL=E-(EH*256):POKE#380,EL:WAITDEL+15
 1070 FORX=STOE:WAITDEL
 1080 IF(PEEK(#381)AND16)THENPOKE#380,PEEK(X):ELSEGOT01080
 1090 NEXTX
 1100 PRINT:PRINT:PRINT"TRANSMISSION COMPLETE ":PING:RETURN
 1997
 1998
 1999 *** RECEIVE A SECTION OF MEMORY ***
 2000 PRINT: PRINT" FILE ABOUT TO BE RECEIVED"
 2010 IF(PEEK(#381)ANDS)THENSH=PEEK(#380):ELSEGOT02010
 2020 IF(PEEK(#381)AND8)THENSL=PEEK(#380):ELSEGOT02020
 2030 IF(PEEK(#381)AND8)THENEH=PEEK(#380):ELSEGOT02030
 2040 IF(PEEK(#381)AND8)THEHEL=PEEK(#380):ELSEGOT02040
 2050 S=SH*256+SL:E=EH*256+EL:IF(E<S)OR(E>49151)OR(S<4000)THENPRIMT"ADDRESS ERRO
 2055 PRINT"START ADDRESS = ";S:PRINT"END ADDRESS
 2060 FORX=STOE
 2070 IF(PEEK(#381)ANDS)THENPOKEX, (PEEK(#380)): ELSEGOTO2070
 2080 NEXTX
 2100 PRINT: PRINT: PRINT" FILE RECEIVE COMPLETE ": PING: RETURN
```

send 2x24_p stamps to:
0. U.M
for a
B.B DIRECTORY

The Story so far

requirements for machine code programming on the Oric. Part 16 of the series provided a simple machine code programming kit consisting of a small instruction set, plus a couple of Operating System calls to read the keyboard and write to the display screen. Since then we have looked at sub-routines and other ways to make programming easier. The last couple of issues have concentrated on instructions that increment and decrement, that is adding or subtracting one from a value, contained in a Register or memory location.

So what's it all about then ?

from a value so useful? The answer is quite simple. It is rare to use a computer to do a single operation such as transfer one byte to a single location. It is far more usual to copy a large number of bytes from a block in one place to another in memory. However, the instructions that we have used so far, are restricted to single byte operations and have to be reset for each and every change of location and therefore every byte transferred.

While this can be done and indeed, it was done in a copy routine early on in the series, it is really a bit of an awkward way to handle lots of data. Remember, data can be anything from text to graphic backgrounds and sprites.

For example, if you are writing a game, how would you show a spaceship flying across a rocky moonscape? Having drawn your rocky background for the screen display and set up a spaceship shaped sprite, it is then a case of copying and preserving any background before it is covered by the moving sprite and then restoring that part of the background as the sprite moves on. Obviously this involves a lot of data being copied back an forth and it all needs to be done quickly and as simply as possible to avoid a flickering display. The same of course applies to any kind of software, whether serious or games. However, as games often feature lots graphics effects, they usually benefit most from the speed provided by machine coded programming.

With so much data being copied/transferred to and fro, any copying routine needs to be quick without being too complicated. Up to now instruction addresses have been for a single location. This means that, for example, if you wanted to put a "Z" (code 5A) into location BE00, which is the first location in line fifteen on the screen display, you would probably load it into the Accumulator and then use the instruction STA BE00 (code 8D 00 BE) to place it in that location.

OK so far, but suppose you wanted to fill the whole of that line with the letter "Z". How would you go about that. As each STA instruction deals with just one address, you would need another thirty nine STA instructions to cover all the remaining locations to the end of that line, one for each address from BEØ1 to BEZ7. It would work, but it is not a good way to do it. Of course, you could use a single STA instruction and write a short routine to change it's address. This was done in that "Copy Routine" back in Part 8 of the series. Again, that method works, but it is not the best solution, particularly if you are interested in speedy operation. The 6502 Instruction Set does contain better instructions for this kind of operation, so let's have a look and see if there is a better way.

There are instructions that provide the means to copy/transfer data in larger amounts. They use an automatic system called "Indexing" which allows the instruction address to be controlled by simply altering the contents of Register X or Register Y. This means that you can in effect, change the address of an instruction operation, by simply incrementing or decrementing the contents of the appropriate Register, using a single byte instruction.

You will find that there is quite a range of "Indexed" instructions covering all sorts of useful operations, but for the moment we will stick to those that handle familiar operations such as LDA and STA, used for loading and storing the Accumulator contents. The "indexed" versions of these instructions are very similar to the Absolute LDA and STA instructions that we have already encountered. Indeed, they can be made to operate in exactly the same way as those LDA and STA instructions. However, there is a subtle difference. The address in "indexed" instruction is used as a base address for one of a range of addresses.

To see how this works, let us look again at that instruction STA BE00 mentioned above. We could instead, use an "indexed" version of it, namely STA X BE00 (code 9D 00 BE). The "X" written between STA and the address in the label indicates that the instruction address is indexed by Register X. If you look at the Opcode in the instruction code, you will notice that it is now 9D (instead of 8D as for plain STA).

Now, providing that Register X contains zero (00) when "indexed" instruction STA X BE00 is used, it will have exactly the same effect as plain STA BE00 and will put the Accumulator contents into location BE00.

However, suppose we set Register X contents to 01 and then use instruction STA X BE00? In this case, the Accumulator item will not go into BE00, it will be copied into location BE01 instead. Increase the value of Register X to 02 and use STA X BE00 again and the Accumulator item will now be copied into location BE02. Increase Register X contents to 03 and the item will go into location BE03 and so on.

This happens all the way up to Register X containing FF, which will put a copy of the Accumulator item into BEFF. What is happenning, is that the instruction address (BE00 in this case) is being "indexed" by having the contents of Register X added to it. Of course, you can use any address 0000 to FFFF as a base address in the instruction. The simple single byte instruction INX will increment or in other words add 01 to the contents of Register X. This provides a simple and quick way to place up to 256 (100hex) copies of a byte in the user memory, using a short routine.

This would be done by incrementing Register X and then using an STA X to place the item. Those two instructions are repeated until the whole operation is complete. Of course you need to make the neccessary arrangements to end the operation in right place, but you always need to do that anyway and here you can do it by simply testing the contents of Register X.

Getting a Buzz !

works. Register X is started off from zero and then incremented in order to put a copy of the item "Z" into each location on the line. A new instruction, CPX tests Register X and will disable the BNE instruction, allowing the operation to finish, when the line of forty "Z" characters is complete.

Oric

Demo Routine

19 Nov 92

[CALL#1010]-----[ZZZZZZ Line]-----[/]

---start--- ---Initialise---

1010:A2 00 : LDX# 00 : Set Register X to zero

1012:A9 5A : LDA# "Z" : Put code for "Z" into Accumulator

---Put items into Screen Line---

1014:9D 00 BE : STA X BE00 : Put item ("Z") into location in Line 15

1017:EB : INX : Increment Register X (add 01 to it)

---Test for end of Line---

1018:E0 28 : CPX# "40" : Test - Fortieth "Z" put into line yet ?

101A:D0 F8 : BNE "1014" : No - so back to put next "Z" into line.

Yes - so finish....

---Finish---

101C:60

: RTS

: Exit.

---end---

The CPX instruction works in exactly the same way as the CMP instruction that we have already used. The only difference is that it tests the contents of Register X instead of the Accumulator. It operates on the flags in the Status Register in the same way as CMP. Here, it is used to set the Zero Flag for the BNE instruction.

Variations on a Theme

you will find that it will do two lines and in fact it will deal with any value from 00 to FF(256 dec). What about larger values than FF? No problem, we could simply increment the high address byte (BE) in location 1016, but we will look at that later.

If you change the address in instruction 1014 from BE00 to BBAB, the operation will start from the first line at the top of the display. The same operation can also be done by decrementing Register X, using the instruction DEX. To use that method, you would start with the line end address in the STA X instruction which for our example would be BE27 and decrement Register X down from 27 to 00. In that case, you would find that when Register X reached zero, it would set the Zero Flag in the Status Register automatically, so you would not need to use CPX to test for it.

We have other ways !

"indexing" works There are other "indexed" instructions available. The instruction LDA X, for example, will fetch an item into the Accumulator from an address "indexed" in the same way, as demonstrated here. So LDA X and STA X can used together to copy one area of memory to another.

Likewise, the instructions LDA Y and STA Y will also operate in the same way, but using Register Y instead.

Thats the latest from the random buzz-word generator....so I'll buzz off !! As this should be in the December issue. I will take the opportunity to wish everybody a Very Happy Christmas and New Year. Have fun with the Oric and keep the "gloom and doom" merchants away with the old RAF motto

"Nil Carborundum....."

HI-SCORES 4444

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HI-SCORES THE HI-SCORES THE HI-SCORES THE
WELL YOU ASKED FOR THEM. THE HIGHEST HI-SCORES EVER ACHIEVED AND WHO WAS RESPONSIBLE. INFORMATION IS GLEANED FROM THE FOLLOWING SOURCES: O.U.M, C.E.O Mag, THE ORIC, YOUR ORIC, READERS LETTERS and THE DICK FAMILY HI-SCORE LOG. IT HAS TAKEN MANY HOURS. THE ONLY SOURCE I HAVE NOT YET BEEN THROUGH ARE THE BACK ISSUES OF THE C.D.O and J.E.O DISKS, WHICH AT ONE TIME HAD A MAGAZINE SECTION. THESE WILL BE ADDED AS WILL ANY OTHER SCORES THAT YOU SEND ME, AND AN UPDATE WILL BE PUBLISHED IN THE FEBRUARY ISSUE OF O.U.M.
  D.K. OFF WE GO WITH THE BEST ON NEARLY 100 TITLES !
  3D FOMGUS - 18,100 (Graeme Burton).... 3D STARTER - 180 (K.Thompson)
  ATLANTID - 13,990 - level 62 (Matthew Dick) . . . A.T.W - 67,990 (Robert
 Gook)... AREMA 3000 - 302,000 - arena 22 (C.Thompson)...
                                                                  ATTACK
CYBERNEN - 380 (Dave Dick - SURELY SOMEOME HAS BEATEM THAT!)
  BOMBYX - 23,030 - level 1 (Graeme Burtom).... Bozy Bon
Diek
 CHOPPER — 51,900 (Graeme Burton).... CHUCKFORD — 185,050 (Robert Cook)..
 .... CENTIPEDE - 30,820 (James Groom)
 DANSEL IN DISTRESS - 4,860 (Graene Burton)... DEFENCE FORCE - 1,268,020
(Tim Colgate).... DPTLO - 972,140 (Tim Colgate).... DRACULAS REVENCE - 9,
900 (K.Thompson).... DOGGY - 6,600 (Louise Dick).... DELTA FOUR - 6,920
(Laurent Delhorbe).... DRIVER - 66,500 (J-Yves Brun)
 ELEKTROSTORM - 25,600 (Tim Colgate)
 FRIGATE COMMANDER - 504 (K. Thompson) ... FIREFLASH - 59,210 .... FLY
FOR YOUR LIFE - 40 (Dave Dick).... FRELOW - 8,952 (Simon Dick)
 GUBBIE - 90,860 (Graene Burton).... GRAVITOR - 4,129 (Graene Burton)...
 . GHOSTMAN — 17,680 (Graene Burton)... GALACTOSMASH — 50 (Matthem Coates)
 .... GALAXIAMS - 69,600 (Micolas Menoux).... GHOST GOBBLER - 32,505 (
Staffan Jacobsson).... GOLDMINE - 14,300 - level 7 (Simon Dick)
HARRIER ATTACK - 82,200 (Staale Eikebraaten).... HELLION - 257,550 (Matthem Green).... HOMEY KONG - 5,468 - level 7 (Dave Dick)....
HUNCHBACK - 750,200 (Benedicte Gareau)
 ICE GIANT - 12,650 (Graene Burton).... INSECT INSANITY - 25,050
(Graene Burton).... INVADERS (I.J.K) - 17,700 (Alex Krauss).... IMAGO -2,
$50 - level 3 (Dave Dick)
 KRILLYS - 28,290 (Graeme Burton).... KINGDOM - 109 (Graeme Burton).....
 KROKATILE MALTZ - 10,025 (Graene Burton - MHO ELSE!)..... KARATE - 12,
100 - level 8 (K.Thompson and Simon Dick)
 LOKI - 62,675 (Tim Colgate) ... LOCHNESS MONSTERS - 7,057 (Graene Burton)
.... LOME RAIDER - 5,925 (Matthew Dick).... LIGHT CYCLES - 3,151 (J-Luc
Haurais)
 MARIC MINER - 38,156 - at the centre of the earth (Graeke Burton).....
MANIC WIMER with infinite lives - 115,583 (Robert Cook).... MUSHROOM
MANIA - 471,420 (Tim Colgate)... MAZE RALLY - 71,365 (Matthew Coates)....
 MRCADAK BUMPER - 169,660 (Graene Burton).... MIDNIGHT FEAST - 1,070,330
(Henry Marke).... MAHJONG - 13,442 (Rene Marke).... Mr.WIMPY
(Clint Thompson).... MLUCH - 9,400 - level 8 (Ann Dick)
 OPERATION GREWLIN - 22,617 (Graene Burton) ... ORION (Loriciels) - 49,
950 (David Devin).... ORIC MUMCH - 895,439 (Hichel Leclerc)
 PASTA BLASTA - 34,480 (Hatthen Coates) ... PLAYGROUND 21 - 92,000
                                                                             (Tim
Colgate) .... PSYCHIATRIC - 11,200 (Matthew Coates) ... PROBE 3 - 2,399
(S.G Dutton)... PANIC - 520 (Louise Dick)... PAINTER
                                                                 - 103,850 (J.
Phillipe Merk).... PROTECTOR - 99,594 (Thierry Avannier)
 QUARRELIGHT - 709 (Graene Burton).... Q#BERT - 15,470 (Dave Dick)....
QUACK A JACK - 28,950 - level 7 (Dave Dick)
 RABBET - 169,760 - level 29 (Peter Thornburn) ... RATSPLAT - 940 (Louise
Dieko
 STYX - 194,600 - Mave 18 (Graeme Burton)... STAMLEY - 22,830 (Graeme
Burton)... SUPER JEEP - 81,723 (super Graene Burton).... SUPER METEORS -
 PS, 650 ( GUESS MHO! - Graene Burton).... SMAKE VEHOM - 28,840 (S.G
Dutton).... Spooty Hamsion — 1,100 (Louise and Dave Dick)... Sopyieb
245 (Louise Dick)
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TROUBLE IN STORE - 1,060,758 (Graeme Burton)... THO GUM TURTLE - 5,890 (Graeme Burton)... TRINITHLOM - 2,919 (Graeme Burton)... TETRIX - 2,266 (Denis Bonfield) - note that Henry Marke MAS OM 2411 MHEM AM ERROR Heant that he couldn't save thr proof)... TETRIS - (Jon Hamorth)... TRICKSHOT - 1,049 (S.G Dutton)... TRIDENT MEPTUME - 7,200 (Dave Dick)... TALISMAM - 3,697 - 4 keys (Simon Dick)

ULTRA - 30,500 (J-Phillipe Meric)... ULTIMA ZOME - 148,860 (Stable eikbraaten)

VIDEO FLIPPER - 23,450 (Robert Cook)

XEMON I - 117,230 (Eric Eduez)... XEMON III (THE GEMESIS PROBE) - 3,491 (Matthew Coates)

ZOOLYMPICS - 12,226 (Graeme Burton)... ZEBBIE - 726,110 (John Giddens)...

I THINK I SHOULD OF CALLED THIS THE GRAEME BURTON PAGE. COME ON ZAPPERS. GET STUCK IN OVER XMAS AND LET'S SEE IF SOME OF THOSE SCORES WILL GO FOR A 'BURTON'!

- DAVE DICK

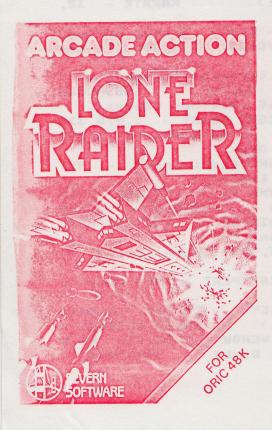
MESSAGE FOR OWNERS OF THE "ALTAI" JOYSTICK INTERFACE

During the rush to get orders processed I am afraid that I did not check to see if all the ALTAI interfaces were packed with the supplementary notes for ATMOS users. You can of course still use these with games that are PASE compatible, but you will need the following notes to patch into ATMOS programs. Apologies for the oversight on my part.

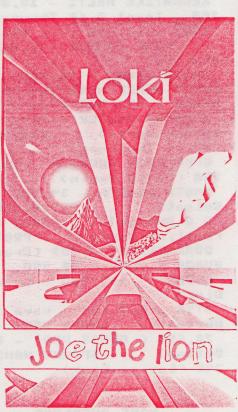
change line 9991 to:

9791 DATA #68,#4C,#22,#EE
change line 9794 to:
9794 IF DTA<>#EE THEN MEM=MEM+1:GOTO9993
change line 9795 to:
9795 DOKE#2045,#996D

AND NOW FOR SOMETHING THAT WORKS WITH YOUR INTERFACE -



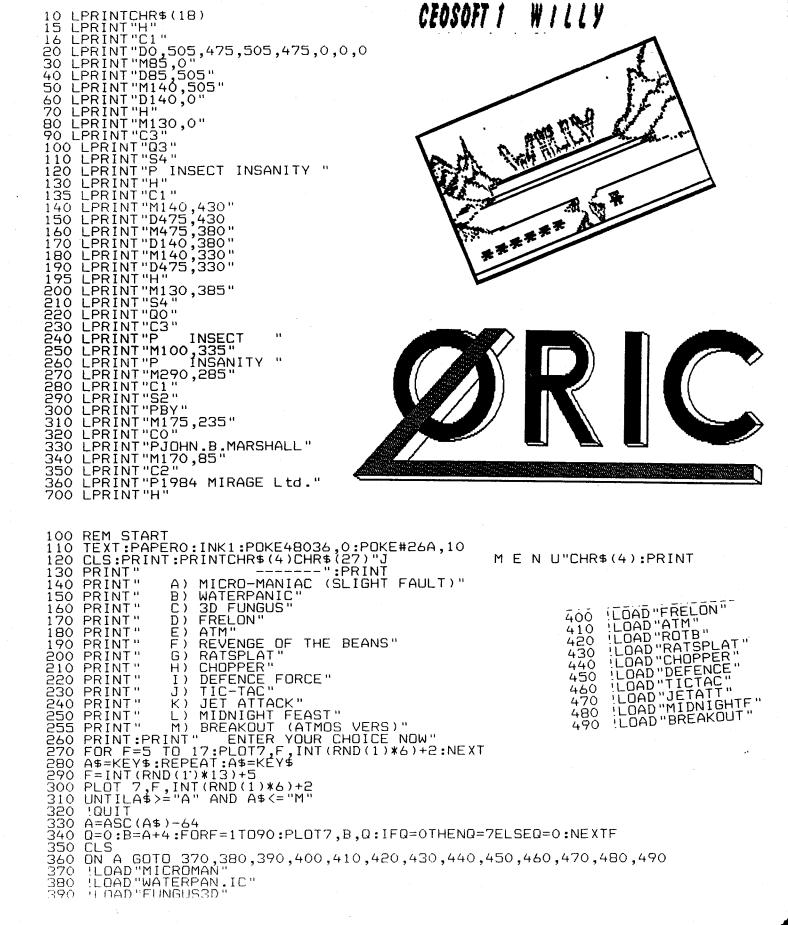




LISTINGS SECTION

THE FIRST LITTLE PROGRAM FROM CHRIS HEARN IS FOR MCP40 USERS. IT PRODUCES A NICE CASSETTE INLAY UTILISING ALL FOUR COLOURS AND CAN BE USED FOR YOUR DATA OR MUSIC CASSETTES. THE EXAMPLE PROGRAM PRINTED BELOW ACTS A NICE INLAY FOR 'INSECT INSANITY.

THE SECOND PROGRAM CAME FROM BRIAN KIDD AND GIVES A NICE MENU PROGRAM FOR SEDORIC DISC USERS. THE COLOUR EFFECTS ARE VERY PLEASING AND IT SHOULD RUN ON OTHER DOS'S BY EXCLUDING THE 'QUIT COMMAND.



BITS an much BOBS

DUE TO O.U.M BEING TYPED OVER A PERIOD OF A COUPLE OF WEEKS, SOMETIMES UPDATES TO ARTICLES ARRIVE JUST AS I'VE HAD PAGES PHOTOCOPIED. THEREFORE AMONGST THE 'BITS AND BOBS' YOU WILL FIND AMENDMENTS TO ITEMS ALREADY REPORTED UPON IN EARLIER PAGES.

EHCHANTED

THE SEDORIC DISC VERSION TEXT ADVENTURE 'ENCHANTED' IS NOW COMPLETELY FINISHED AND DE-BUGGED. A COPY IS CURRENTLY WITH PETER THORNBURN, WHO WILL DO A COMPLETE REVIEW FOR THE NEXT ISSUE OF O.U.M.

DEPENDING ON HIS VIEWS, WE WILL DECIDE HOW TO MARKET THIS MASSIVE ADVENTURE FROM THE PEN OF DAVID GOODRUM.

PETER IS A RENOWNED 'ADVENTURE' AND CAN GIVE A BETTER OPINION OF PLAYABILITY THAN ME.

ALTAI' JOYSTICK INTERFACES

I AM JUST ABOUT TO RECIEVE THE LAST STOCKS OF THE 'ALTAI'. THESE HAVE BEEN A TREMENDOUS SELLER. NO MORE ORDERS CAN BE TAKEN FOR THEM UNTIL I CAN ASCERTAIN IF I HAVE ENOUGH TO FULFILL EXISTING ORDERS. I WILL SPEAK WITH JEAN BOILEAU WITH REGARD TO THE 'PASE' COMPATIBLE INTERFACES THAT HE SELLS.

3.5" DRIVES

BULL ELECT.' IN SUSSEX ARE CURRENTLY SELLING NEW J.V.C 3.5" DRIVES FOR 15

pounds + 3 pound CARRIAGE + V.A.T.

THEY ALSO HAVE A WHOLE HOST OF OTHER ITEMS ,INCLUDING THE AMSTARD GX 4000 GAMES MACHINE. YOU CAN GET IT WITH 'BURNING RUBBER' + A 4 PACK CARTRIDSE FOR AROUND 32 pounds INCL. POST AND V.A.T

THE LAST COMPETITION

THE WINNER OF THE LAST COMPETITION IS ARMY ERIK ISAKSEN. WHY DOES HE WIN? WELL HE SAYS THAT WITH 2 ANSWERS TO THE COMPETITION HE DESERVES TO WIN ARNT SAID THE ANSWERS WERE 'LILLA ET JACKY' AND 'BUMSIE'. WELL ARNT I USED THE PICTURE FROM 'LORICIELS' TITLE 'SEX GAME'. THEY MUST USE THE SAME PICTURE ON ALL. ANYWAY ABOUT YOUR PRIZE AND WHAT A SUPER PRIZE IT IS. YES YOU WIN A SIGNED PHOTO OF THEEDITOR!.

ARNT ASKS IF ANYONE HAS TRANSLATED 'LILLA ET JACKY' FROM FRENCH INTO

SCRRY I CAN'T HELP THERE ARNT AS I ONLY HAVE A NORWEGIAN TRANSLATION.

SEIKOSHA PRINTERS

THE 'SILICA SHOP' ARE CURRENTLY SELLING THE EXCELLENT SEIKOSHA 1900+ FREE STARTER KIT FOR AROUND 117 pounds INCLUDING CARRIAGE AND V.A.T. ALSO DO 600D DEALS ON CITIZEN PRÍNTERS.

AN IDEA FROM PETER THORNBURN AND ALSO ONE THAT I CAN PRINT!
PETER SAYS THAT WE SHOULD START A HI-SCORE COMPETITION ON
USING THE 'ALTERNATE CHARACTER SET TO MAKE IT MORE DIFFICULT. 'TETRIX',BUT WHAT'S YOUR BEST? CLUB EUROPE ORIC

EVEN THOUGH THE FOUND HAS FALLEN DRAMATICALLY AGAINST THE FRENCH FRANC, THE C.E.O DOES NOT INTEND TO RAISE SUBSCRIPTION PRICES FOR 1993. CEÓ SOFTWARE PRICES WILL ALSO BE FROZEN.
HOWEVER, ITEMS SENT DIRECT FROM FRANCE e.g TELESTRATS, SPEECH SYNTHESISERS

AND NON- C.E.O SOFTWARE WILL HAVE PRICE INCREASES IN THE NEW THOSE-GOODIES NOW



Everything you wan't to know about Sausages but were too afraid to ask.

An adventure like Sausages comprehends many commands which you may enter. The commands to control the character can be entered thus;

Put the carrot in the bucket Eat the micro-circuit

Sausages understands the following words, I will not list them all as it will takes half the fun out of the game.

LOAD, SAVE, WAIT, LOOK, EXAMINE, NORTH, SOUTH, EAST, WEST, UP, DOWN, OPEN, CLOSE, PUT, PRESS, EAT AND HELP.

Sausages is copyright (c) Mirage Software 1992 and was written especially for Oric User Monthly and it's users. Coding commenced March 1992.

Another Amazing Adventure in 100% machine code.



M R E В Ι T 5 & B \mathbf{B} S

AMENDMENTS/ADDITIONS TO HI-SCORES

ULTRA - 31,460 (PETER THORNBURN) WITH THE AID OF STRONGBOW CIDER. ANTICS (THE TRANSLATED VERSION OF 'SINGERIE') - 54,221 (RENE MARKE) MLUCH - COMPLETED GAME (HENRY MARKE).

FLIPPER - 32,350 (GRAEME BURTON) - WHO IS THIS MAN! DRACULAS REVENGE - 13,600 (GRAEME BURTON) MINED OUT - 4,100 (GRAEME BURTON)

GOLDMINE - 25,700 (GRAEME BURTON), M.A.R.C - 1,560 (GRAEME BURTON) STOCKMARKET - 82,936 (G.B), GRID WARRIORS - 26,155 (G.B) MAZE RALLY - 87,810 (G.B), RATSPLAT - 7,360 (G.B) FLY FOR YOUR LIFE - 172 (G.B)

KARATE - 12,300 (G.B), 3D STARTER - 26,970 (1st/7th LAP - G.B. = GRAEME BURTON)

RAMBO

PAUL BAKER WOULD LIKE TO KNOW HOW THE 'RAMBO' SOUNDTRAC INTO THE ORIC. I BELIEVE IT WAS DONE BY THE 'MICRO MANIAC'! PAUL IS CURRENTLY WORKING ON A DISC VERSION OF HIS 'PLANETS'. IT WILL INCLUDE A GLOSSARY, DRAWINGS OF PLANETS SOUNDTRACK WAS SCANNED P.D. **PROGRAM PLANETS** AND WILL MENU DRIVEN.

PUBLIC DOMAIN

THE P.D. CATALOGUE IS ABOUT TO GET AN UPDATE. SOME MORE TITLES WILL BE ADDED SHORTLY. JON H. INFORMS THAT

COCKIN

'COCKIN' IS AN ARCADE GAME FROM 'PRISM' AND I'VE NEVER BEEN 100% SURE OF THE COMPLETE OBJECT OF THE GAME. IF YOU LIKE ME ARE NOT QUITE SURE, THEN THESE TIPS FROM THE 'WELSH WIZZARD' (BRIAN KIDD) SHOULD HELP -

1) EAT FOOD TO STAY FIT WHILE:

2) PROTECTING UNHATCHED EGG.

3) IN BETWEEN THIS, FIND TIME TO ENTER HENS COOP (VIA DOOR) - STAY FOR WHILE (HEARTS WILL APPEAR AT TOP OF SCREEN) - EACH REPRESENTING SUCCESSFUL 'LAY'.
4) LEAVE COOP - HEN WILL NOW LAY MORE EGGS.

5) REPEAT ABOVE STAGES - ENSURING AT LEAST ONE EGG REMAINS UNHATCHED ALL TIMES.

YOU GET BONUSES FOR EACH EGG LAID, EACH PREDATOR PECKED, AND EATEN.

BRIAN'S BEST TO DATE IS 2 RATS, 2 SNAKES, 1 HEDGEHOG, AND 8 UNHATCHED EGGS. (AND I SUPPOSE A PARTRIDGE IN A PEAR TREE!)

ORIC 1 TO ATMOS

W.OAKES HAS A NUMBER OF GAMES FOR THE ORIC-1 AND WANTS TO KNOW IF IS

VERY DIFFICULT TO CONVERT THEM TO RUN ON THE ATMOS.

SOME OF COURSE ARE JUST A MATTER OF CHANGING THE X CO-ORDINATE ON PL
WHEREAS OTHERS USE 'CALLS' WHICH ARE DIFFERENT IN THE ATMOS ROM.

THERE ARE MANY OUT THERE WHO HAVE SUCCESSFULLY TRANSFERRED SO CAL
ORIC 1 TITLES (ONLY) TO ATMOS. HOW ABOUT SOMEONE SENDING IN A FEATURE SO CALLED ON HOW THEY SET ABOUT IT ??

THE C.E.O and O.U.M

BRIAN ODURNY WANTS TO KNOW WHERE CLUB EUROPE ORIC FITS INTO THE PICTURE

AND WHAT CONNECTIONS, IF ANY, IT HAS WITH O.U.M.
WELL THIS IS PROBABLY SOMETHING THAT A LOT OF NEW READERS ARE WONDE
I PLAN TO DO A FEATURE FOR THE NEXT ISSUE OF O.U.M, BUT WOULD APPRE
SOME INFO. FROM THE C.E.O OR JON.H ON THE HISTORY OF THE C.E.O AND WONDERING. APPRECIATE PREDECESSORS e.g CDI.

E E M R F

S

 \mathbf{C}

BITS BOBS MORE &

CHRIS and DAVE

IT IS SUNDAY NOVEMBER 29th AND STILL NO ORDERS HAVE BEEN DESPATCHED FOR CASSETTE VERSIONS OF 'ZEBULON' AND 'ACCOUNT BOOK'. CHRIS AND DAVE ARE STILL RACKING THEIR BRAINS -

DAVE - "Well Chris, old Bristow says it should definitely run on cassette. Mind you I don't think he has tried doing it. How

far have you got this week?"

CHRIS - "I've found that the second file on 'ZEBULON' is one of those that saves as it loads and so we have to record just as we load from disc. It runs O.K, but the last part of the game won't. I.ve tried listing it as it's in Basic, but it freezes after displaying 2 lines".

DAVE - "When I had to edit a line in it I found that I could as long as I only listed the program from line 3 onwards. I tell you what Chris,we will delete line 2 as that just appears to be some form of protection to stop duplicating and then list it"

CHRIS - "O.K we have saved it so lets load in this cassette version....so far so good. It's loading in the last part of the program, but oh no we have lost that character set, the game is playable, but the characters are all wrong. Well we've got a bit further. I'll try and sort it out at home and if you give me the disc version of 'ACCOUNTS BOOK' I'll adapt it back to cassette"

YES FOLKS THE SAGA CONTINUES - IF WE DON'T SORT 'ZEBULON' OUT SHORTLY THEN WE WILL HAVE TO REFUND MONIES TO THOSE WHO HAVE ORDERED IT ON CASSETTE.

AS FOR 'ACCOUNT BOOK' - WE ARE HOPEFUL. THE PROBLEM HAS BEEN THE FACT THAT BOTH CHRIS'S AND MY CASSETTE VERSIONS ARE DODGY.

COSMORIC

REMEMBER 'COSMORIC', WHICH WAS ON THE LAST O.U.M DISC. WELL YOUNG DAVID NOAKES HAS FOUND A CHEAT. IN FACT I FOUND IT SOME WHILE AGO, BUT COULDN'T REMEMBER WHAT I'D DONE. ANYWAY HERE GOES: WHEN ASKED TO TO PICK SHIELDS SAY 7,8 OR 9. MOVE TO THE EXTREME RÍGHT AND THEN BACK TO THE LEFT AND THE BASE WILL EXTEND ALL THE WAY ALONG THE BOTTOM LINE. MÓRE OF A BUGGED PROGRAM THAN A CHEAT.

NEARLY GOT CAUGHT EH!

YOU HAVE GOT THE DRIVE 'A' AS YOUR 3.5" AND WANT TO FORMAT A 3" DISC ON DRIVE 'C'. THE 'B' DRIVE IS LINED UP AS 5.25". O.K. SEDORIC MASTER V2.0 IN 'A' AND SEDORIC MASTER V1.007 IN 'C'. EASY 'INIT!

TYPE IN INIT:C. REMOVE THE MASTER FROM THE 3" DRIVE AND INSERT A FRESH DISC. WHEN ASKED - FORMAT Y/N, PRESS 'Y' - HANG ON THERE - NO YOU DON'T. YOU WILL RE-FORMAT YOUR 3.5" DISC IN DRIVE 'A'.

YOU MUST FIRST PASS CONTROL TO THE 'C' DRIVE WITH - 'C-'. YOU WILL STILL NEED YOUR SEDORIC IN THE 'A' DRIVE , BUT IT WILL BE SAFE.

WITH SOMETHING SAFELY COPIED FROM 3.5" TO 3"; I THEN DECIDE TO UNPLUG THE SYSTEM AND SET BACK UP MY OPELCO TWIN 3". I WANT TO MAKE A BACKUP OF THIS 3" DISC. I WILL USE THE DISC THAT I'VE JUST COPIED TO AS A MASTER TO FORMAT A FRESH DISC. HERE WE GO - OOPS! I HAVE JUST FORMATTED A 3" DISC AS 82 TRACK DOUBLE SIDED. THOUGH THE DISC I AM USING IS 42 TRACK SINGLE SIDED, IT HAS BEEN WRITTEN WITH THE TRACK CONFIGURATION OF THE 3.5" DISC. SO PLEASE BE CAREFUL IF YOU ARE SWITCHING THINGS AROUND AND CHECK OUT THE SET UP OF A PARTICULAR DISC WITH 'SYS' PRIOR TO USING IT TO FORMAT. HOPEFULLY WITH ALLAN'S EXPLANATIONS AND MY 'TRIAL AND ERROR'; IT WILL SAVE NEW SEDORIC USERS A HEADACHE.

WORDSPEED

IT WAS REPORTED IN THE NOVEMBER 'CEOMAG' THAT THE UPDATED VERSION (VI.1) OF 'WORDSPEED' FROM Dr.RAY WAS NOW AVAILABLE FROM ALLAN WHITAKER.

YOU READ IT LAST HERE IN O.U.M!!!

HARRIER ATTACK ON DISC

AFTER A LONG SEARCH I STILL COULDN'T FIND A DISC VERSION OF 'HARRIER ATTACK'. FOR NEW USERS OF BODISK THIS IS HOW TO TRANSFER IT.

IGNORE THE '#' PROGRAM. TRANSFER THE OTHER TWO PROGRAMS. THEY BOTH HAVE THE SAME NAME AND WILL THUS BE SAVED AS - 'HARR' and 'COPIE1

LET'S TRY AND LOAD THE DISC VERSION WITH - HARR:COPIE! (NOTE AS IT IS ON A SEDORIC MASTER THE! COMMAND IS NOT REQUIRED). NO LUCK THERE. O.K, WE KNOW THE FIRST FILE IS ONLY TO LOAD IN THE SECOND, SO LET'S HAVE A LOOK AT THE SECOND. WE CAN LOAD IT IN AND SEE WHAT IT IS. THE FIRST FIGURE IS THE START ADDRESS (CAN'T REMEMBER OFF HAND WHAT IT WAS, WE WIL CALL IT XXXX). THE SECOND FIGURE IS THE END ADDRESS AND THE THIRD IS THE NUMBER '40'. THE NUMBER '40' TELLS US THAT IT IS A MACHINE CODE PROGRAM, WHICH IS NON-AUTO AS OPPOSED TO '41', WHICH IS AUTO. IF MY MEMORY SERVES ME RIGHT, ONE OF THE TRAITS OF BDDISK IS THAT IT TRANSFERS ALL CASSETTE FILES ACCROSS TO DISC AS NON-AUTO AND YOU MUST SORT THEM OUT.

WE CAN NOW WRITE A SHORT HEADER TO LOAD THE PROGRAM -

10 HARRIER: COPIE1: CALL#xxxx

NO - THAT DIDN'T QUITE WORK. REMEMBER THAT WITH A SEDORIC MASTER WE OFTEN HAVE TO 'QUIT' PRIOR TO RUNNING GAMES. WE WILL RE-WRITE A HEADER NOT FORGETTING THAT AS WE ARE DOING A 'QUIT', WE MUST NOW USE THE ! TO LOAD FILES. AND SO -

10 GUIT: !HARRIER: !COPIE1:CALL#xxxx

WE WILL SAVE THIS USING - SAVE "HARR, COM", AUTO

NOW EACH TIME WE WANT TO LOAD THE GAME WE JUST TYPE IN - 'HARR'

WELL THAT'S YOUR LOT FOR ANOTHER ISSUE AND INDEED FOR ANOTHER YEAR. I HOPE YOU FIND SOMETHING OF INTEREST AMONG THE PAGES OF THIS ISSUE - DAVE

RAMBLING IN THE ROM - 37

Rambling on...

PRINT A STRING POINTED TO BY AY

Entry: AY points to a string (terminated by a #00)

Exit: After evaluation by the standard routines, the string is displayed on the screen or printer

depending the state of #2F1.

CBED JSR \$D4FA CCB0 JSR \$D5B5 evaluate string pointed to by AY

PRINT A STRING POINTED TO BY ACC1

Bug: When a character is displayed on the screen, byte #30 is always in play. But the resetting of it to zero is not done for the printer, so that if you send a line feed there will be problems with a TAB command. The line feed could have been better organised!

CBF0	JSR \$D715	CCB3	JSR \$D7D0	Take address and increase reservation
CBF3	TAX	CCB6	TAX	for length in X
CBF4	LDY #00	CCB7	LDY #00	prepare index
CBF6	INX	CCB9	INX	prepare the next
CBF7	DEX	CCBA	DEX	count the characters
CBF8	BEQ CBAB	CCBB	BEQ CCCD	if end, exit
CBFA	LDA (91),Y	CCBD	LDA (91),Y	take character
CBFC	JSR \$CC12	CCBF	JSR \$CCD9	and display it
CBFF	INY	CCC2	INY	prepare next character
CC00	CMP #0D	CCC3	CMP #0D	is it a RETURN?
CC02	BNE CBF7	CCC5	BNE CCBA	no, continue
CC04	JSR \$CBAB	CCC7	JSR \$CC0B	- RTS! Very useful
CC07	JMP \$CBF7	CCCA	JMP \$CCBA	and continue
	•••••	CCCD	RTS	there was one a little further on (#CD12)

'CLS' (COMMAND)

CC0A	LDA #0C	CCCE	LDA #0C	Take code for Ctrl L
CC0C	BYT #2C	CCD0	BYT #2C	and jump the following instructions

TOGGLE CURSOR FLASH

 •••••	CCD1 LDA #11	Take code for Ctrl @
 ***************************************	CCD3 BYT #2C	and jump the following instructions

DISPLAY A SPACE

CC0D	LDA #''	CCD4	LDA #'	Take code for space
CC0F	BYT #2C	CCD7	BYT #2C	and jump the following instrcution

DISPLAY A '?'

CC10 LDA #'?' CCD7 LDA #'?' Take code for '?'

DISPLAY THE CHARACTER IN A

Entry: A contains the character to display. The differences between the screen and printer in this routine are that the screen routine does not activate the printer, nor does it any longer activate tabulation (#30).

Exit: the character is displayed on the screen or the printer depending on #2F1.

A, X and Y are unchanged Z and N are set depending on A

e: #27 is used to save A in V1.0, but X in V1.1

Remark:

V1.0 returns a message (which does not interrupt the program) if the printer has not accepted the character after 15 seconds – practical because it allows you to exit from an incorrect LPRINT.

CC12	BIT 2E	CCD9	BIT 2E	Is Ctrl O active?
CC14	BMI CC6A	CCDB	BMI CD10	yes, exit immediately
CC16	BIT 02F1			are we printing?
CC19	BPL CC4D		*****	no, jump
CC1B	PHA	CCDD	PHA	yes, save the code to print
CC1C	CMP #20	CCDE	CMP #20	is it a control character?
CC1E	BCC CC2B	CCE0	BCC CCED	yes, jump tabulation
CC20	LDA 30	CCE2	LDA 30	take tab position
CC22	CMP 31	CCE4	CMP 31	maximum reached?
CC24	BNE CC29	CCE6	BNE CCEB	no, O.K.
CC26	JSR \$CB9F	CCE8	JSR \$CBF0	yes, do a line feed
CC29	INC 30	CCEB	INC 30	increment the tabulation
CC2C	STA 27			save the character to display
		•••••	•••••	save X
CC2E	TXA	•••••	•••••	Save A
CC2F	PHA	•••••	•••••	anna V
CC30	TYA	•••••	**************	save Y
CC31	PHA	•••••	***************************************	
CC32	LDA 27	•••••	•••••	recover the code
CC34	JSR \$F433	•••••	•••••	and send to the printer
CC37	TAX	•••••	•••••	wait for a too lengthy ACK perhaps?
CC38	BPL CC44		•••••	no, it/'s O.K. (TAX useless)
CC3A	LDA #6D	•••••	•••••	
CC3C	LDY #CC	•••••	•••••	AY points to 'PRINTER ERROR'
CC3E	LSR 02F1	•••••		set the printer off line
CC41	JSR \$CBED			and display the message
CC44	PLA		•••••	
CC45	TAY		********	recover Y
CC46	PLA		***************************************	
CC47	TAX		***************************************	and X
CC48	LDA 27	*******	***************************************	and A
CC4A	AND #FF			position N and Z
CC4C	RTS			r
CC4D	STA 27			save the character
CC4E	TYA			
CC50	PHA	•••••		and Y
CC51	TXA	•••••		and 1
		••••••	*****************	and X
CC52	PHÀ	********	**********	and A
CC53	LDA 27	•••••	•••••	
CC55	CMP #20	•••••		control character?
CC57	BCC CC60	•••••	***************************************	yes, jump
CC59	TAY	********	•••••	1 1 TOTAL (MAIN 4 MOO) 0
CC5A	INY	••••••	***************************************	is it DEL (#7F+1=#80)?
CC5B	BMI CC60	•••••	•••••	yes, jump
CC5D	ORA 02F7		••••••	do an ORA ????!
CC60	TAX		•••••	character in X
CC61	JSR \$F409			and call the screen routine

CC64	PLA		
CC65	TAX		recover X
CC66	PLA		
CC67	TAY		and Y
CC68	LDA 27		and A
CC6A	AND #FF		and position N and Z
CC6C	RTS		
CC6D	•••••	BYT #0D, #0A	
CC6F		BYT 'PRINTER ERROR'	
CC7D	•••••	BYT #0D, #0A, #00	

CREATION OF A HYPOTHETICAL INVERSE VIDEO

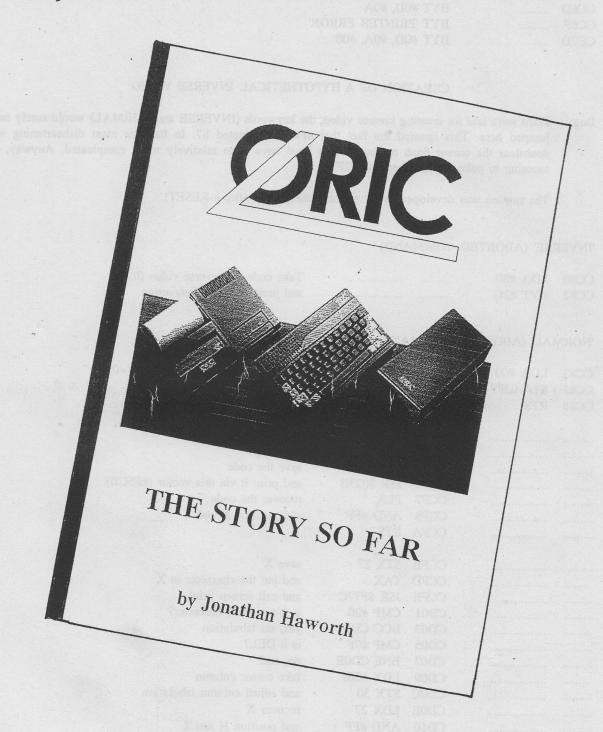
Bug: Plans were laid for creating inverse video, the keywords (INVERSE and NORMAL) would surely have jumped here. This ignored the fact that #F409 eliminated b7. In fact the most disheartening was doubtless the cursor flash routine, which must have been relatively more compicated. Anyway, it's amusing to poke any number into #2F7.

The routine was developed as far as initialising #2F7 after a RESET!

'INVERSE' (ABORTED COMMAND)					
CC80	LDA #80			Take code for inverse video (b7=1) and jump the next instruction	
CC82	BYT #2C	••••••	***************************************	and jump the next instruction	
'NORM	IAL' (ABORTED				
CC83	LDA #00		,	Take code for normal video (b7=0)	
CC85	STA 02F7			and save in the video flag	
CC88	RTS				
	***************************************	CCEE	BIT 02F1	output to printer?	
	***************************************	CCF1	BPL CCFB	no, jump	
		CCF3	PHA	save the code	
		CCF4	JSR \$023E	and print it via this vector (#F5CB)	
		CCF7	PLA	recover the code	
		CCF8	AND #FF	and position N and Z	
		CCFA	RTS		
		CCFB	STX 27	save X	
		CCFD	TAX	and put the character in X	
		CCFE	JSR \$F77C	and call screen print	
	•	CD01	CMP #20	is it a control character?	
		CD03	BCC CD09	yes, set tabulation	
	•	CD05	CMP #7F	is it DEL?	
		CD07	BNE CD0E	no, end	
		CD09	LDX 0269	take cursor column	
		CD0C	STX 30	and adjust column tabulation	
		CD0E	LDX 27	recover X	
		CD10	AND #FF	and position N and Z	
		CD12	RTS		

Jon Haworth

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