

# USER MONTHLY

with Oric Enthusiasts

Europe's longest running Oric magazine

Number 66 February 1993



#### THE EDITORIAL

HELLO AND WELCOME,
TO YET ANOTHER ISSUE OF 'O.U.M'. WE ARE BACK TO NORMAL THIS MONTH (HOPEFULLY) WITH ALL DUR REGULAR FEATURES AND PLENTY MORE BESIDES.

PLANS ARE NOW AFOOT FOR THE NEXT 'ORIC MEET' IN AYLESBURY. WHICH IS LIKELY TO BE ON SATURDAY JULY 17 th.

CONFIRM DATE AND PRICE OF TICKETS IN THE NEXT ISSUE.
MEANWHILE THE C.E.O ARE PLANNING THEIR SPECIAL 10th ORIC ANNIVERSARY MEET IN PARIS SOMETIME IN JUNE. IT IS ABOUT TIME THAT SOMEONE OTHER THAN MYSELF ATTENDED A FRENCH GATHERING. YOU WILL ENJOY IT. THE HOSPITALITY IS GREAT AND DON'T FORGET THAT MANY OF THE USERS OVER THERE SPEAK EXCEPTIONALLY FLUENT ENGLISH.

HOPEFULLY THE SECOND 'O.U.M DISK' WILL BE DISTIBUTED WITH THIS ISSUE, MATTHEW AND I HAVE BEEN BEAVERING AWAY COMPILING

IT AND I THINK YOU WILL FIND IT WORTHWHILE.
DON'T FORGET THE 'ALL FORMATS FAIR' IN HEMEL HEMPSTEAD ON FEBRUARY 27th. I WILL BE THERE ALONG WITH JON HAWORTH AND SON NICHOLAS + DAVID WILKIN + CHRIS HEARN, CONTACT ME SOON IF YOU INTEND TO COME ALONG. NOW TO WHAT YOU WILL FIND IN THIS ISSUE:

#### THE IMPEX

PAGE 1 - ANOTHER SUPER COVER FROM JON HAWORTH (THOSE WHO SUBSCRIBED TO THE 'ORIC OWNER' MAGAZINE WILL REMEMBER IT.

PAGE 2 - THE EDITORIAL AND THE INDEX.

PAGE 3 - NEWS...NEWS...NEWS

PAGE 4 - "ENCHANTED" - A REVIEW OF DAVID GOODRUM'S NEW ADVENTURE. WE WELCOME PETER THORNBURN AS GUEST REVIEWER.

PAGE 5 - BITS 'n ' BOBS

PAGE 6 - THE LISTINGS PAGE

PAGE 7 - THE GAMESTER

PAGE 8 - THE HISTORY OF 'CLUB EUROPE ORIC' AS TOLD BY VINCENT TALVAS.

PAGE 9 - MORE BITS 'n' BOBS - INCLUDES HELP WITH 'ZEBULON'.
PAGES 10/11/12 - MACHINE CODE FOR THE ATMOS - PETER BRAGG CONTINUES HIS TEACH-IN.

PAGES 13/14 - READERS LETTERS - THE POSTBAG IS BRIMMING!

PAGES 15/16 - RAMBLING IN THE ROM - JON HAWORTH CONTINUES HIS EPIC SAGA.
PAGES 17/18 - THE ULTIMATE HI-SCORE TABLE.... YOU HAVE ASKED FOR IT AND SO IT IS:

PAGE 19 - ODDS and ENDS

PAGE 20 onwards - WHATEVER I CAN GET TYPED UP IT TIME

#### 'ORIC ENTHUSIASTS' - AN APOLOGY

ALLAN WHITAKER HAS ASKED ME TO PASS ON HIS APOLOGIES FOR NOT BEING ABLE TO FIND THE TIME TO CONTRIBUTE TO THIS ISSUE. I KNOW HIS ARTICLES ON 'MACHINE CODE & GRAPHICS' etc. WILL BE SORELY MISSED BY MANY READERS.

ALLAN,LIKE MANY OF THE LUCKY ONES CURRENTLY EMPLOYED. IS BEING ASKED TO WORK MORE HOURS SO THAT HIS EMPLOYER AND SUBSEQUENTLY HE CAN SURVIVE.

I DO HOPE TO SEE ALLAN BACK IN PRINT NEXT MONTH. ------

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#### THE NEXT ISSUE

ARTICLES FOR INCLUSION IN THE MARCH ISSUE SHOULD REACH ME BY FEBRUARY 22md. I KNOW IT IS EARLY, BUT SO HOPEFULLY SHOULD THIS ISSUE BE!

#### RE-ORGANISATION

DUE TO THE TREMENDOUS SUCCESS OF O.U.M AND IT'S ANCILLARY SERVICES (software, hardware, peripherals etc.). I AM CURRENTLY RE-DREAMISING D.U.M.

IN THE SHORT TERM THIS WILL MEAN WITHOLDING CERTAIN ARTICLES SUCH AS THE A to Z OF SOFTWARE HOUSES. BRIAN'S LISTS WERE SENT TO ME AS A CUT AND PASTE JOB FROM AN MCP40. I HAVE NOW SENT HIM A WORDPROCESSOR AND AS HE IS NOW DISC BASED HAVE REQUESTED THAT HE SEND ME THE RE-VAMPED ARTICLE ON DISC. I CAN THEN EDIT AND PRINT AT WILL.

ALSO IN THE OFFING IS THE USE OF A 'RONEO-VICKERS' DUPLICATING MACHINE. I HAVE TYPED UP A SAMPLE STENCIL AND WILL SHORTLY VIEW THE FINISHED PAGE. IF SUCCESSFUL YOU THE READERS WILL BENEFIT AS COST SAVINGS WILL BE PASSED ON IN SOME FORM OR OTHER. YOUNG MATTHEW WILL THEN HAVE THE ENVIABLE TITLE OF PUBLISHER AS HE WILL BE RESPONSIBLE FOR BOTH DUPLICATING AND COLLATING.

#### THE TELESTRAT

SOME OF YOU MAY OF BEEN CONTEMPLATING BUYING A 'TELESTRAT' FROM FRANCE. TO NEWCOMERS TO THE GROUP IT IS THE 'ALL SINGING ALL DANCING' MACHINE FROM 'ORIC FRANCE'. ORIGINALLY TO BE KNOWN AS THE 'STRATOS' or IQ164 STILL EXISTED IN BRITAIN, MANY OF THE IDEAS AND IN FACT ORIC MOTHERBOARD ITSELF WERE USED IN THE FINISHED PRODUCT.

I NOW HAVE TO HAND FURTHER INFORMATION ON TWO OF THE NON-FEATURES WITH

REGARD TO THE TELESTRAT.

FIRSTLY - GETTING A PICTURE WITH A T.V. .... IF YOU HAVE A MONITOR THEN THERE IS NO PROBLEM....IF YOU HAVE A T.V WITH A SCART CONNECTION THEN AGAIN NO PROBLEM (UNLESS LIKE ME YOU HAVE A T.V WITH A SCART CONNECTION, WHICH IS ACTUALLY NOT SET-UP).... WITH A PLAIN T.V YOU NEED TO FIT MODULATOR (AKIN TO THE ONE IN YOUR ATMOS AND AVAILABLE QUITE EASILY FOR A COUPLE OF POUNDS). I AM TOLD THAT IN FACT THE MOTHERBOARD STILL HAS MARKINGS SHOWING WHERE THIS WAS TO BE IF IT HAD BEEN BRITISH AND ALL IS NEEDED IS TO FIT IT IN PLACE OF THE MIDI CONNECTION. PERHAPS THAT FRIENDS IN FRANCE COULD BE PERSUADED TO SHIP AS REQUIRED WITH CARRIED OUT.

ITEM TWO IS THE 'MIDI' CONNECTION, WHICH WE HAVE NOW DISPOSED OF AS T.V USERS ARE CONCERNED. REASON BEING IS THATEVEN THOUGH ALL THE HARDWARE IS THERE WITH CONNECTIONS MADE TO THE CORRECT INPUTS; THERE IS NOTHING THAT YOU CAN DO WITH IT. THE ONE IMPORTANT THING MISSING IS THE

SOFTWARE.

NOW IF SOMEONE WERE TO WRITE THE SOFTWARE! BUT NO THEN WE WOULD HAVE TO GET RID OF THE OLD T.V!

I'M SURE THERE MUST BE SOMEONE OUT THERE CAPABLE OF SUCH A TASK. COULD WE CALL IT THE SHAW/BRISTOW FILE?

#### BULL ELECTRICAL

BULL ELECTRICAL OF HOVE IN SUSSEX HAVE JUST SENT ME THEIR 1993 CLEARANCE PRICE LIST, AND WHAT SOME BARGAINS THERE ARE. THE RANGE OF PRODUCTS REMARKABLE. EXAMPLES ARE: 1) ADAPTER BUGS BUILT INTO A STANDARD 13 amp MAINS PLUG. PICKS UP A CONVERSATION ANYWHERE IN THE ROOM OR PALACE AND TRANSMITS TO A STANDARD FM RADIO. I HAVE TRIED THESE OUT MYSELF AND HAVE SENT TAPES OF A CONVERSATION BETWEEN ONE JON HAWORTH AND THIERRY BESTEL TO AN AUSTRALIAN ORIC MAGAZINE. IN THE TAPE JON CAN QUITE CLEARLY BE HEARD TO SAY: "ORIC I LOVE YOU! ".

- 2) 3.5mm JACK SOCKETS 100 FOR 1 POUND
- 3) 5 PIN DIN PLUGS 25 FOR A POUND.
- 4) 2 PADDLES FOR AN APPLE FOR JUST A POUND.
- JOYSTICKS FOR THE DRAGON 2 FOR A POUND.
- SPEAKER WIRE 1500 METRES FOR 30 POUND OR 100 FEET FOR 2 POUNDS.
- 7) CASSETTE GAMES FOR THE 464 12 FOR 5 POUND.
- 8) AMSTRAD VGA MONO MONITORS 49 POUNDS.
- 9) 5.25" DISC CLEANING SYSTEMS 1 POUND EACH
- 10) FAULTY CAMERAS CUSTOMER RETURNS TO 'BOOTS' GET 3 CAMERAS FOR 8 POUNDS.

FOR THE FULL LIST TELPHONE: 0273 203500 PRICES EXCLUDE V.A.T AND YOU NEED TO ADD 3 POUND CARRIAGE PER ORDER (NO MATTER HOW BIG OR SMALL). - CALLERS WELCOME

### ORIC - THE STORY SO FAR

JON HAWORTHS LATEST PUBLICIAION IS PROVING VERY SUCCESSFUL. AFTER ONLY ONE MONTH OF RELEASE SALES HAVE REACHED 16.

IF YOU HAVEN'T GOT YOUR COPY YET THEN SEND 5 POUND TO JON.

AN EXCEPTIONAL READ AND WELL REVIEWED IN THE CEO MAG'.

#### REVIEW PAGE

Title: ENCHANTED (THE JOURNEY TO THE MORNING SUN).

Author: DAVID GOODRUM Software House: MIRAGE

Format: SEDORIC DISC ONLY (3"/3.5"/5.25")
PRICE: 4.50 ON 3", 3.50 ON 3.5/5.25"

After finally laying rest to the Turkey, and becoming a major shareholder in 'JOHN SMITHS'; I could at last get around to reviewing 'ENCHANTED' for the second time, as the first review is probably being passed around from sorting office to sorting office.

office to sorting office.

When 'booted up' the title screen claims that it is "a bizarre adventure strategy game", and I must agree with Dave; the sideways writing is pretty bizarre. I was tempted to tap the Space bar until it went away (the game loads a section at atime as you press the Space bar), but I thought I had better read it in case it lent some clue as to how to solve the adventure. The writing itself, although sideways on, is in a different colour per paragraph while messages of thanks scroll across the top of the screen, not quite as fast as Dave saw it. The writing mentions a 'Walker', who will guide you on your adventure, but nothing else that might be useful; so into the game.

At this point you are asked if you wish to load a saved game and lists at the bottom of the screen the command keywords that can be used. All you have to do is type in the highlighted key letter, which is nearly always the first

letter of said word - what could be easier?

You start outside your room and go North onto a tree-lined road where a number 61 bus passes by (a la Kilburn Encounter?). Moving on you are given a choice of directions with locations to find e.g. the theatre, wine museum, bank, pizza bar and 2 maze type locations, namely the Figure of Eight and the Grid; where rumour has it, there is treasure. There are lots of objects, including some photos, a candlestick, some flowers and even some rubbish to pick up on the way, but you do have a limit as to the amount you can carry. Most of the objects are linked to locations, and it is up to you to decide where and how the objects are used thus gaining about 5% per correct decision.

the objects are used ,thus gaining about 5% per correct decision.

My first impressions of the game were a bit negative, because of the sideways writing (pain in the neck), but when the adventure proper began I found having the commands listed a great help (it saves trying lots of words with the same meaning) and would make it easier for a beginner at adventures to play. There are over 160 locations and it can take a bit of time gettinf round them all, but it is quite easy to map out as long as you use a large piece of paper, as the locations are widespread and the first map I drew ended up on 3 separate sheets of paper. I then tried using some of the objects that I had collected, exchanging them for others and had managed to score 15% in no time at all (some of the objects/locations are a bit obvious), but thete were hidden messages to read and the other objects/locations are harder to find.

The 'Walker', who guides you, seems to have an abundance of cryptic but useless messages, when 'Help' is pressed. Then again, I wasn't really stuck when I tried pressing it.

You can save to disk at anytime in the game, which I found useful, but I had to use a completely different filename each time I saved , as otherwise it came up with an 'error' message.

OVERALL OPINION: A VERY GOOD ADVENTURE WITH LOTS OF LOCATIONS AND OBJECTS TO FIND.

PETER THORNBURN

#### DOM'T PANIC

Author: Jonathan Bristow Software house: Mirage/JCB Format: 3"/3.5"/5.25" Price: 4 pound on 3", 3 pound on 3.5/5.25"

The scenario of Jonathan's "DON'T PANIC" was given in the last O.U.M. After getting thoroughly addicted to it, I've now managed to score 1188 points and didn't use the Pause function once. This is destined for number 1. Eat your heart out Whitney Houston fans!

DAVE DICK

## BITS 'n 'BOBS

NOW THAT'S WHAT I CALL NAFF!

We all know that 3" cheapo discs can be found. They are quite alright if you are prepared to grow your finger nails to a length of 3" so that you can extract the discs from your drive when they get stuck. If you are using a word processor akin to EASYTEXT and don't mind getting errors when you try to overwrite file that you have already started.

GET A LIFE! - stick with Maxell or Amsoft discs. The quality outweighs the cheapness and also stops me from swearing a lot when you send me programs to evaluate.

- DAVE

### COMPETITION TIME

BRIAN KIDD of "i'm on the wagon" fame has set a competition for readers this month.

God knows why! I get more letters from DRAGON 32 users than I do competition entries, and that is a FACT!

Don't be put off Brian if you get no entries. After all, when was the last time you replied to one of my competations?

Anyway, Brian wrote a little program for this one ( Ta mate for the disc not a naff one). I had to tweak the end. The program gave an error in line 340. Probably due to all those!!!!'s at the end of the line. I think Sedoric was looking for a file that didn't exist.

Come on readers and prove me wrong. Get those entries into Brian Kidd at:

## BRIAN'S PRIZE PUZZLE # 1

Hello and welcome to this the 1st of many puzzles that will appear in future editions of 0.0.M.

Your task for this month is simple -Just tell me :

- A) What is the next number in the sequence at the foot of this this column.
- B) Name the special term for these numbers.

Solutions to ME (Dave doe nt know the the answer himself yet). Mark your envelope COMPETITION #1'.
THE PRIZES:

1st prize - 5 issues of 0.U.M. free. 2nd prize - PAINTER by A & F softw. THE SEQUENCE : 0,1,153,370,371,???

ANSWER/WINNERS IN THE NEXT ISSUE.

YOU CAN TELL WHEN I HAVE HAD

SEE HOW MANY SARCASTIC PHRASES
THAT YOU CAN SPOT ON THIS PAGE?
- DAVE (NO HOLDS BARRED) D
ICK

340 LPRINT:LPRINT"DON'T FORGET - PROGRAMME IT ..!!!!"

### ANOTHER ADDITION

RAUL HAKLI from Helsinki is another of our University lads. Congratulations to Raul and his wife who gave birth to their first child on December 23rd. As yet the girl is un-named. Now that would be a great competition. How about ORICA!

### CHANGE OF ADDRESS

STAN ELLISON HAS RECENTLY MOVED
HE CAN NOW BE FOUND AT: THE TAX MAN: , but DO'NOT tell the

### TURBO TAPE

One Stephen Meachen from Rotherhithe has been corresponding with Brian Kidd recently. Stephen is developing a TURBO TAPE routine. I suppose living in Rotherhithe is like living in a tunnel! Anyway at some time some I'll test it out to compare it with the TURBO TAPE that I've had for years!

ZAP ZAP ZAP HENT THE ZAPPERS

PAGE 6

### THE LISTINGS PAGE

AN ADAPTION OF THE OLD MATCHSTICK GAME FROM BRIAN KIDD FOR ALL YO 'TAPPERS' OUT THERE.
BRIAN TELLS ME THAT HE WAS WORKING ON A 'BASIC' PROGRAM AND NEEDED TO RENUMBER IT. DUE TO HIS FAULTY KEYBOARD HE ENTERED: RENUM 100,0, WHICH IS ALLOWABLE IN SEDORIC. AS BRIAN SAYS: "BUT BOY OH BOY - IT DON'T HALF COCK-UP LINE LINKS!"

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100 REM MATCHSTICK GAME
110 REM FOR OUM TAPPERS
120 REM (C) B.KIDD/DUM - 01/93
130 REM REMS CAN BE OMMITTED
140 :
150 CLS:PAPERO:INK7
160 POKE#BBA4,0:POKE#26A,10
170 PRINT "We start the game with 21 matches."
180 PRINT"We will alternate turns removing"
190 PRINT "matches - up to 4 per turn."
200 PRINT "Whoever picks up the last match loses.":PRINT
210 N=21
220 PRINT "PRESS ANY KEY TO PLAY"
230 A$=KEY$:GETA$
240 CLS:PRINT
250 PRINT "MATCHES LEFT = ";N:PRINT:PRINT
260 PRINT "How many will you take ?";
270 T$=KEY$:GET T$
280 T=ASC(T$)-48
290 IF T<1 OR T>4 THEN PING:GOTO 270
300 PRINTT:PRINT:PRINT
310 N=N-5
320 PRINT"OK - I will take ";5-T;"matche/s"
330 PRINT:PRINT"PRESS ANY KEY TO CONTINUE"
340 A$=KEY$:GETA$
350 IF N>1 THEN 240
360 CLS:PRINT
370 PRINT "MATCHES LEFT = ";N:PRINT:PRINT
380 PRINT"Oh dear - 1 left for you to pick up."
390 PRINT "That means you lose the game.":PRINT:PRINT
400 PRINT TRY AGAIN (Y/N) ?"
410 A$=KEY$:GETA$
420 IFA$="Y" THEN RUN
430 IFA$<>"N" THEN PING:GOTO410
```

### A TWO - LINER

440 HIRES:TEXT:END

NON-SUBSCRIBERS TO THE CEO-MAG WILL HAVE MISSED THIS INTERESTING 2 LINER FROM BRUNO DOSSIER, WHICH USES A BUG OF THE ATMOS 'CIRCLE' COMMAND.

SEE IF YOU CAN GUESS THE MESSAGE FULLY BEFORE THE PROGRAM ENDS.

1 HIRES: PRINT: PRINT "RAY 13; 2" NEXTY: PRINT "I FOR Y=143 TO 1996, 96

P.7

A NEW SUBSCRIBER TO O.U.M IS DENNIS REDFORD.

DENNIS HAS EXTRA ORIGINALS OF CERTAIN CASSETTE TITLES, NAMELY

GUBBIE, HANGMAN and HARRIER ATTACK.
DENNIS HAS KINDLY OFFERED THESE SURPLUS TITLES TO O.U.M SO THAT WE CAN THEM AND PUT MONIES IN THE KITTY. MOST APPRECIATED DENNIS, BUT I AM GOING TO ASK YOU TO DEAL WITH IT AS IT WILL SAVE ON POSTAGE TO SEND ITEMS ONCE AND TWICE.

PERHAPS YOU THE READERS HAVE CORRUPTED YOUR ORIGINALS OR LIKE SOME ARE AT SCHOOL/UNIVERSITY AT CAN'T AFFORD TO BUY MUCH. STILL

ANYWAY JUST WRITE TO DENNIS WITH YOUR OFFER AND HE WILL DECIDE WHO GETS WHAT.

IF IT MEANS THAT AFTER POSTAGE THAT THERE IS NONE OVER FOR O.U.M, THEN SO BE IT. IF YOU ARE HAPPY - THEN WE ARE HAPPY.
"AND IF YOU WANNA BE HAPPY FOR THE REST OF YOUR LIFE. NEVER MAKE A PRETTY WOMAN YOUR WIFE" - JIMMY SOUL

DENNIS CAN BE FOUND AT : LANCS. TRULE SPREED NOODAN

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### TEN LITTLE INDIANS

Peter Thornburn would like help on the adventure "TEN LITTLE INDIANS". wants to know how to get off the train. 

ONE IN THE EYE FOR G.B

New to the group is Kieron Smith from Portswood in Southampton.

fianl year With the aid of his MCP 40 and ATMOS he has been working on his

project at Southampton Univ. He is to predict the aerodynamic performance of a balloon on the moon of Saturn - Titan.

Now for the IMPORTANT bit as written in his footnote, and I quote: - "P.S. I HAVE JUST SCORED 8740 (LEVEL 20) ON RATSPLAT, SO THAT'S ONE LESS FOR GRAEME BURTON (I HOPE!!).

### BACK IN STOCK

I HAVE BEEN WADING THROUGH THE NEW STOCKS OF CASSETTE SOFTWARE THAT

ARRIVED RECENTLY.
PRICES INCLUDE POSTAGE - NO MINIMUM ORDER CHARGE - DEDUCT 50 pence IF YOU

ORDER 2 OR MORE TITLES.

PANIC (NO MANS LAND) - A NICE LADDER GAME WITH APPLES - 1.50

LAND OF ILLUSION (TANSOFT) - A PLEASING GRAPGICS ADVENTURE - 1.50 RATSPLAT (TANSOFT) - FUN IN THE SEWERS - 1.25 ORIC MUNCH (TANSOFT) - THE BEST PACMAN AROUND - 1.25

CW MORSE (NO MANS LAND) - FOR SERIOUS TAPPERS - 1.25

ELEKTROSTORM (PSS) - THE ATMOS VERSION! - 1.50 SUPER METEORS (SOFTEK) - ATMOS VERSION - 1.50

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## MORE GALLIC HUMOUR FROM JEAN

A FEW ITEMS OF INTEREST FROM OUR RESIDENT FRENCH WIT; JEAN BOILEAU.

OVER TO YOU JEAN. " THE CEO MEETING WENT WELL. ATTENDEES APPRECIATED 'ZEBULON' AND 'SQUEEK 2' ADDITIONS TO BRIAN KIDD'S A TO Z ARE 'CHAOS - CHASM' AND FROM '5 ALIKE PASE .

I HAVE NO IDEA IF 'MELLOWSOFT' EVER RELEASED A 'MILKMAN DAVE'.
THE C.E.O HAS 5 OR 6 JOYSTICK INTERFACES LEFT. I MADE ONE MYSELF. YOU
NEED 10 DIODES, 2 x 9 - pin JOYSTICK SOCKETS, AND A 10 - pin PRINTER PLUG.
P.S. I HAVE A CASSETTE TITLED "BRIDHE PLAYER" FROM CP SOFTWARE. JUST

INLAY SAYS : 'PLAYS LIKE CP SOFTWARE SPECTRUM BRIDGE'. WHAT IF SPECTRUM?"

### THE GAMESTER IS A DAVE DICK PRODUCTION.

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#### PAGE 8 UB EUROP R I

Recently Brian Odurny asked for some background to the C.E.O, which is our sister

Vincent Talvas , President of the C.E.O and famed target for pigeons in the Eiffel Tower area, has sent in his article. Thanks to Vincent what he has to say:-

I HAVE JUST RECIEVED THE DECEMBER ISSUE OF 'O.U.M' AND MOULD LIKE TO YOU HELP YOU WITH YOUR DESIRE FOR WRITING AN ARTICLE ABOUT AND ITS PREDECESSORS.

BUT I WOULD LIKE TO GIVE YOU FIRST THE TWO HI-SCORES THAT 'INSECT INSANITY' - 38,600 and 'CHOPPER' - 69,950. I WILL TRY OTHERS AND WILL LET YOU KNOW THE RESULT OF MY EFFORTS. I HAVE BEATEN: HARD TO BEAT

TO LOOK AT THE HISTORY OF THE 'CEO' UP TO NOW. THE IDEA OF THE CLUB BORN IN 1987; THE IDEA WAS TO CREATE A STRUCTURE, WHICH WOULD HAVE ALLOWED OWNERS TO EXCHANGE PROGRAMS AND GET THE FAMOUS 'JOURNAL ELECTR'OR NEWSPAPER TOTALLY REALIZED ON THE COMPUTER'S SCREEN. THE FIRST APPEARANC THIS CLUB WAS IN THE 'HEBDOGICIEL' MAGAZINE AND THE CLUB WAS THEN C CLUB WAS ORIC ELECTR'ORIC APPEARANCE CLUB ORIC INTERNATIONAL

STEPHANE SARLANDE WAS THEN THE GUY IN CHARGE OF IT. SUBSCRIBED TO DID OVER 100 OTHER ORIC OWNERS IN FRANCE. I HELPED STEPHANE WITH THE RUNNING OF THE CLUB BY DEALING WITH THE 'VPC SECTION' (MAIL ORDER).

AT THE END OF 1987, JEAN-CLAUDE TALAR REQUIRED US TO C CONSIDERING THAT 'ORIC INTERNATIONAL' WAS A TRADE MARK. WE CALL IT 'CLUB DISC'ORIC', SINCE WE HAD ABANDONED THE 'JEO' ON CHANGE DUR NAME THEN DECIDED TÓ CASSETTE MONTHS BEFORE.

CHARGE

MONTHS BEFORE.

FOR PROFESSIONAL REASONS, STEPHANE SARLANDE WISHED TO NO LONGER BE IN COUNTINUED TO TRANSLATE THE MAGE.

FOR PROFESSIONAL REASONS, STEPHANE SARLANDE WISHED TO NO LONGER BE IN COUNTING BY THE CLUB. I DECIDED THEN TO REPLACE HIM.

IN MARCH 1990 THE CLUB BECAME A LEGALIZED NON-PROFIT MAKING BODY FRENCH LAW. MY FIRST AIM WAS REACHED. THE SECOND ONE WAS TO EXTEND STRUCTURE TO OTHER EUROPEAN COUNTRIES. I MUST SAY THAT JON HAWORTH RELEPED US IN THAT PART OF THE 'CEO' HISTORY. TO ALLOW NON-FRENCH SPEPEDLE TO SUBSCRIBE TO OUR CLUB; WE DECIDED TO TRANSLATE INTO ENGLISH 'JEO' AND THE LITTLE NEWS SHEET WE SENT EACH MONTH. THIS WAS A SUCCESS, MORE THAN A THIRD OF OUR MEMBERS LIVE IN OTHER EUROPEAN COUNTRIES.

HOWEVER, THE RELEASE OF THE 'JEO' WAS STOPPED DUE TO LACK OF TIME. WE DETHEN TO CONCENTRATE OUR EFFORT ON THE PAPER SHEET WHICH BECAME A MAGAZINE THANKS TO ALAIN WEBER, WHO BECAME THE EDITOR AT THE BEGINNING OF WHEN LAURENT CONTINUED TO TRANSLATE THE MAG. INTO ENGLISH.

SINCE 1990 WE HAVE RELEASED A WIDE CATALOGUE OF GOOD QUALITY SOFTWARE SOFTWARE); WE ORGANISE MEETINGS IN PARIS EVERY 4 MONTHS, AND WE REGU UNDER EXTEND OUR REALLY NON-FRENCH SPEAKING ENGLISH THE SUCCESS, SINCE

DECIDED A REAL 1991;

SOFTWARE); WE ORGANISE MEETINGS IN PARIS EVERY 4 MONTHS, AND WE REGULARLY EXTEND OUR SERVICES TO OUR MEMBERS.

### SOME DATA ABOUT CLUB EUROPE ORIC

Founded in march 1990 by: Laurent Chiacchierini,Daniel Duffau and Vincent Talvas:

Members of the Board of Directors: Vincent Talvas - President Jean-Marie Hoy - Vice - Presideny Laurent Chiacchierini - secretary Alain Weber - treasurer Roger Barbier - member Jean Boileau - member

Bruno Dossier - member

SUBSCRIPTION RATES HAVE ONLY INCREASED FROM 200 TO 220 FRENCH FRANCS SINCE 1986. MEMBERSHIP IN 1986 WAS ABOUT 130 AND SINCE THEN HAS BEEN BETWEEN 100 and 120.

(NOTE FROM DAVE DICK : PERHAPS VINCENT COULD EXPLAIN WHY IN PEOPLE PAID 200 FRANCS EACH TO SUBSCRIBE TO A CLUB THAT WAS IN 1986 THAT 130 BORN UNTIL NOT 1987 - SOUNS LIKE A REAL MONEY SPINNER TO ME!).

NEXT MONTH WE WILL LOOK AT CEO SOFTWARE, WHAT THE LITTLE FURTHER, PERHAPS WITH THE HELP OF JON HAWORTH. THE CLUB DWNS AND DELVE A - VINCENT

## CURRENT CEO SUBSCRIPTION RATES

1 YEAR (12 ISSUE) SUBSCRIPTION TO MAGAZINES ONLY - 11 pounds.
4 QUARTERLY SOFTWARE DISCS + 12 MAGS - 22 pounds.

FORMS AVAILABLE FROM O.U.M OR JON HAWDRIH, 2 MACHINEY 100

#### BITS BOBS MOKE

### 3" DISCS

KEN EVANS INFORMS ME THAT 'OFFICE WORLD' , WHO HAVE BRANCHES ALL OVER THE PLACE, ARE CURRENTLY SELLING MAXELL 3" DISCS AT 8 pounds + V.A.T FOR 5 off.

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### AMSTRAD 464

CAN ANYONE OUT THERE ADVISE IF AN MCP 40 CAN BE COUPLED TO AN AMSTRAD 464 TO PRODUCE LISTINGS etc.
SOMEONE (I CAN'T REMEMBER WHO) SET THIS POSER AND IF I GET
THEN I WILL PRINT THEM. REPLIES ANY

## FOR SALE

WHILST ON THE SUBJECT OF THE MCP40, THERE IS CURRENTLY ONE FOR SALE. IN ATMOS COLOURS AND WITH PAPER, BUT NO PENS (THESE ARE REPORTED IN THE O.U.M MAIL ORDER SECTION).

PRICE INCLUDING POSTAGE IS 30 pounds. OFFERS CONSIDERED. VENDOR IS PAUL BAKER of: ARE READILY AVAILABLE

DERENTISM SUCRELASSION CONNET, STORE-ON-

### O.U.M DISC Number 1.

THE FIRST O.U.M DISC WENT OUT TO 34 READERS. AS NO ONE WROTE TO SAY THAT THEY DIDN'T WANT THE LOOKS LIKE THE SECOND DISC WILL ALSO BE A SUCCESS. ,THEN IT THE SECOND ONE 

### ZEBULON

JONATHAN BRISTOW'S INTRIGUING GAME 'ZEBULON' HAS CERTAINLY CAUSED SOME HEADACHES FOR READERS. TO HELP WITH THEIR PLIGHT I SET YOUNG MATTHEW THE TASK OF SHOWING ME ROUND SOME OF THE MORE DIFFICULT SCREENS. ESPECIALLY FOR RICHARD FARRELL, CHRIS HEARN AND OTHERS IS THE ANSWER TO YOUR PROBLEMS.

### SCREEN 10

THE 3 SWITCHES UNDER EACH OTHER IN THE MIDDLE OF THE SCREEN SHOULD BE SET AS FOLLOWS - TOP = FACING LEFT, MIDDLE = FACING LEFT, BOTTOM = FACING FACING RIGHT.

THEN GO TO BOTTOM LEFT OF SCREEN, MOVE IN RIGHT AND FLICK SWITCH TO RIGHT. CARRY ON AND GET THE KEY. RETURN TO BOTTOM MIDDLE OF SCREEN (JUST BEFORE SWITCH) AND GO UP. DO NOT ATTEMPT TO GET THE KEY ABOVE YOU AS THIS IS A RED HERRING. WEND YOUR WAY RIGHT TO GET THE BOLT AND THEN UP TO OPEN DOOF WITH KEY AND THEN TO FLOWER TO BE TRANSPORTED TO NEXT SCREEN. BEFORE

### SCREEN 12

TITLED "ZORKS GOT A MATE"; THIS IS ONE WITH SLIDING WALLS.
PICK UP THE BOLT AT THE BOTTOM. KILL THE FIRST ZORK, GET THE FOOD AND
PUZZLE PIECE. GO TO THE BOTTOM RIGHT AND THE WALL FALLS DOWN AFTER
GO UNDER THE SECOND ZORK AS YOU HAVE NO BOLTS LEFT TO KILL HIM.
COLLECT THE FLOWER AND ON YOU GO TO SCREEN 13. THE YOU. THEN

### SCREEN 13

THE MA FLIP OVER THE BOTTOM LEVER AND GET BOTTOM PUZZLE PIECE. STAND UNDER BOULDER, WHICH IS BELOW THE PUZZLE IN THE MIDDLE. MOVE LEFT AND THE WALL BOULDER FALLS. GET THE SECOND PUZZLE PIECE. MOVE RIGHT AND MORE BOULDERS FALL. WEND YOUR WAY UP AND RIGHT TO PUSH OTHER LEVER. IGNORE THE ZORK AND GET THE FLOWER.

IF YOU ARE STILL STUCK THEN SEND AN S.A.E TO O.U.M AND WE WILL LET YOU KNOW THE NAME OF THE ISLAND THAT WILL ALLOW YOU TO CHEAT!

### Machine Code for the Oric Atmos (Part 22) Peter N. Bragg

The Story so far

programming on the Oric. Recently, we have looked at sub-routines and other ways to make programming easier. We then went on to look at instructions that increment and decrement, that is add or subtract one (Ø1) from Register or memory location contents and the reason why that is so useful.

The last issue, in particular used a short routine to demonstrate how one item in the Accumulator could be copied and duplicated to fill a whole line or more, by using a simple "indexed" instruction, controlled by the contents of Register X or Register Y.

It has been some time since our last look at the instruction set. Since then, we have added three new operations, plus Register Y so now might be a good time to update our "small" instruction set. The new updated instruction set appears at the end of this article and the first thing you will probably notice about it is, that it has grown much larger.

The reason for the considerable expansion is that operations such as "indexing" can be applied to many of the instructions that we have used earlier in the series. Those instructions can be "indexed" in exactly the same way as the instruction STA was "indexed" for the demo routine, in the last article (Part 21). The extra instructions mean that you can now not only store, but also fetch, modify and test data in fairly large quantities. The "indexed" instructions still do the same jobs as their non-indexed counterparts, it is just that the address used in the "indexed" version is a base address and the final address actually used, can be set and controlled by the contents of the appropriate Register, making it easy to set up a simple loop for repetitive operations.

Hopefully, this will also show you, how understanding a single operation like "indexing", can make a large number of extra instructions available to you, without too much effort. You will find that this applies throughout the Instruction Set. There are a large number of instructions, in the Set, but in fact they only use a relatively small number of operations. It is much easier to concentrate on understanding those few operations, rather than trying to memorise all of labels and codes in the Instruction Set. When you are programming in any language, it is the operation that you need, the instruction set labels and codes are simply there to tell you what is available and how to use it.

To illustrate this point, look at the set of Transfer instructions, in the table below. You will see that there are four listed. This is the first time that we have seen any of them. They all operate in the same way. The first instruction is labelled TAX and it is a single byte instruction (code AA), whose label is short for "Transfer a copy of the Accumulator into Register X". It copies the contents of the Accumulator into Register X. I should emphasise that this is a copy operation, not a swap operation. Both Register X and the Accumulator end up with the same value, after the instruction's operation.

With that information in mind, it should be fairly easy to work out what the other three instructions in the set do. As they all operate in the same way, it should not be necessary to describe them in detail, their labels and the above description should make any further description, unnecessary (although I have noted what they do in the listing, anyway).

Each time this small Instruction set has appeared, I have tried to keep to the same layout so that the additions are easier to follow. The only real changes to the layout so far, are the addition of a quick reference columm on the right and the use of "v" and "h" to show data and address (operands). The latter change was made to avoid confusion with Registers X and Y.

6502	Instruction Sub	set

							Info ca	an be
Accumulator Instructions	Absolute			Immediate		1	found	
	instruct	code		instruct	code			
Load Accumulator	LDA	AD VV	hh	LDA#	A9 VV	-	Part	3
Store Accumulator	STA	8D vv	hh					
Add with Carry	ADC	6D vv	hh	ADC#	69 vv	-	Part	6
Subtract with Carry	SBC	ED vv	hh	SBC#	E9 vv			
Compare Accumulator	CMP	CD vv	hh	CMP#	C9 vv	-	Parts	5/6
Register "X" Instructions	Abso	lute		Immed	liate			
	instruct	code		instruct	code			
Load Register "X"	LDX	AE VV	hh	LDX#	AZ VV	1-	Part	16
Store Register "X"	STX	8E vv	hh					
Compare Register "X"	CPX	EC vv	hh	CPX#	EØ vv			
Register "Y" Instructions	Abso	lute		Immed	iate	1-	Part	19
	instruct	code		instruct	code			
Load Register "Y"	LDY	AC VV	hh	LDY#	AØ VV			
Store Register "Y"	STY	BC VV	hh					20
Compare Register "Y"	CPY	CC vv	hh	CPY#	CØ vv			
Transfer Instructions								
duran as some as a star will	instruct	code				1-	Part	22
Copies Accu into Reg X	TAX	AA	no	operand/d	iata			
Copies Accu into Reg Y	TAY	AB		operand/o				
Copies Reg X into Accu	TXA	8A		operand/d		1		
Copies Reg Y into Accu	TYA	98	no	operand/o	iata			
Increment Instructions						]-	Parts	19/20
(add Ø1)						1		
	instruct					1		
Contents of Address	INC	EE vv	hh	addr oper	and			
Register X contents	INX	EB		no operar		1		
Register Y contents	INY	CB		no operar	nd			
Decrement Instructions						-	Parts	19/20
(subtract Ø1)						1		
_	instruct	code				1		
Contents of Address	DEC	CE VV	hh	addr oper				
Register X contents	DEX	CA		no operar				
Register Y contents	DEY	88		no operar	nd			0
Flag Instructions		E70-170 A 11-4	No. of Participants of St.			]-	Part	4
C)	instruct	code					-01	
Clear Carry Flag to 0	CLC	18		operand/o		-	Part	6
Set Carry Flag to 1	SEC	38	no	operand/o	lata	1		

Conditional Branch Instructions		
and the deciding		- Part 5
Condition instruc	t code Flag set by -	
	90 vv No Carry	
	BØ vv Carry	
Branch if Zero Flag = Ø BNE	The second of th	- Part 6
Branch if Zero Flag = 1 BEG	FØ vv Result Zero	
Branch if Negative Flag = 0 BPL	. 10 vv Result Plus	
	30 vv Result Minus	1
Jump Instructions		-
instruct	code	1
Jump JMF		- Part 10
		1
	20 vv hh (address hhvv)	- Part 10
Return/jump from SubRoutine RTS	60 no operand/data	- Part 3 &10
IMMEDIATE (#) instructions supply t	he required data byte	- Part 5
as the opera		9
ABSOLUTE instructions on the other	hand,	- Part 5 & 8
don't include the data byt	e, instead they give	
the address of a memory lo	cation which holds it.	
The addresses are written	in reverse order,	200 3003
low part in "vv" and high	part in "hh".	- Part 3
INDEXED instructions also use an a	bsolute address as above.	
However, it is a base addr	ess. The final address	- Part 21
actually used is controlle	d by adding the contents	1
of the Register indicated	in the instruction label.	
(eg. LDA X uses Register "	X"). Indexed versions	
of frequently used intruct	ions are listed below.	
THE REPORT OF THE PROPERTY OF		1
Marches A 18 10 to 18	a instruct sod	
instruct code instruct cod		
instruct code instruct cod LDA X BD vv hh LDA Y B9	vv hh LDX Y BE vv hh	
instruct code instruct cod LDA X BD vv hh LDA Y B9 STA X 9D vv hh STA Y 99	vv hh LDX Y BE vv hh vv hh LDY X BC vv hh	
instruct code instruct cod LDA X BD vv hh LDA Y B9 STA X 9D vv hh STA Y 99 ADC X 7D vv hh ADC Y 79	vv hh LDX Y BE vv hh vv hh LDY X BC vv hh vv hh INC X FE vv hh	
instruct code instruct cod LDA X BD vv hh LDA Y B9 STA X 9D vv hh STA Y 99 ADC X 7D vv hh ADC Y 79 SBC X FD vv hh SBC Y F9	vv hh LDX Y BE vv hh vv hh LDY X BC vv hh	
instruct code instruct cod LDA X BD vv hh LDA Y B9 STA X 9D vv hh STA Y 99 ADC X 7D vv hh ADC Y 79 SBC X FD vv hh SBC Y F9 CMP X DD vv hh CMP Y D9	vv hh LDX Y BE vv hh vv hh LDY X BC vv hh vv hh INC X FE vv hh vv hh DEC X DE vv hh vv hh	
instruct code instruct cod LDA X BD vv hh LDA Y B9 STA X 9D vv hh STA Y 99 ADC X 7D vv hh ADC Y 79 SBC X FD vv hh SBC Y F9	vv hh LDX Y BE vv hh vv hh LDY X BC vv hh vv hh INC X FE vv hh vv hh DEC X DE vv hh vv hh have the same operation	
instruct code instruct cod  LDA X BD vv hh LDA Y B9  STA X 9D vv hh STA Y 99  ADC X 7D vv hh ADC Y 79  SBC X FD vv hh SBC Y F9  CMP X DD vv hh CMP Y D9  Apart from "indexing" all  as their non indexed count	vv hh LDX Y BE vv hh vv hh LDY X BC vv hh vv hh INC X FE vv hh vv hh DEC X DE vv hh vv hh have the same operation	
instruct code instruct cod  LDA X BD vv hh LDA Y B9  STA X 9D vv hh STA Y 99  ADC X 7D vv hh ADC Y 79  SBC X FD vv hh SBC Y F9  CMP X DD vv hh CMP Y D9  Apart from "indexing" all  as their non indexed count	vv hh LDX Y BE vv hh vv hh LDY X BC vv hh vv hh INC X FE vv hh vv hh DEC X DE vv hh vv hh have the same operation	
instruct code instruct cod  LDA X BD vv hh LDA Y B9  STA X 9D vv hh STA Y 99  ADC X 7D vv hh ADC Y 79  SBC X FD vv hh SBC Y F9  CMP X DD vv hh CMP Y D9  Apart from "indexing" all as their non indexed count  Useful Operating System Calls  Call JSR Operation Ef	vv hh LDX Y BE vv hh vv hh LDY X BC vv hh vv hh INC X FE vv hh vv hh DEC X DE vv hh vv hh have the same operation erparts.	- Part 11

DEAR DAVE,

I ENJOYED THE JANUARY ISSUE OF 'O.U.M' AND NEEDLESS TO SAY WAS PARTICULARLY INTERESTED TO SEE COLIN COOK'S DIGITIZER. IT IS A VERY

INGENIOUS SYSTEM.

COLIN MAY BE INTERESTED TO KNOW ,THAT SOME YEARS AGO, THERE WAS A SYSTEM THE MARKET, PRODUCED BY 'TECHNOMATIC', I THINK, FOR DIGITIZING IMAGES USING FLAT BED PRINTER/PLOTTER. A PHOTOCELL WAS USED IN PLACE OF THE PLOTTER ON USING PEN AND THE IMAGE WAS READ INTO THE PRINTER PORT. COMPUTER USING THE 'ACK' ON THE

NEEDLESS TO SAY THAT AS IT WAS A "ONE BIT AT A TIME" SCANNER, IT WAS VERY SLOW. BUT IT CERTAINLY SEEMED TO WORK.

PETER BRAGG (SUTTON)

DEAR PETER,

THANK YOU FOR THE INFORMATION, WHICH I AM SURE WILL BE OF INTEREST, AS INDEED WAS COLIN'S ARTICLE. I DO NOT KNOW HOW QUICK COLIN'S METHOD IS, THOUGH I WOULD ASSUME IT TO BE QUITE SLOW. I HAVE ASKED CHRIS HEARN TO TRY THE PROGRAM OUT.

DAVE

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DEAR DAVE,

VARIOUS USEFUL ITEMS HAVE BEEN MENTIONED IN 'O.U.M' RECENTL I SHALL BE VERY GLAD TO HAVE A COPY OF THE 'O.U.M INDEX', AS ALTHOUGH INVARIABLY READ THE MAGAZINE AVIDLY AS IT ARRIVES; I HAVE A BIT OF BAREADING TO DO TO FOLLOW UP SOME OF THE USEFUL ITEMS THAT I KNOW WE RECENTLY. BACK WERE PRINTED - AS SOON AS TIME PERMITS.

RON KEY (BANGOR)

DEAR RON,

I'M GLAD TO HEAR THAT YOU ARE FINDING THINGS OF INTEREST. THANKS

GO OUT TO OUR MANY CONTRIBUTORS.

TO THOSE READERS WHO HAVE NOT YET GOT THEIR INDEX - GET IT NOW FROM M'. IT IS ONLY 1 pound and 50 pence INCLUDING POSTAGE AND O.U.M BENEFIT BY 50 pence FOR EACH COPY SOLD. AT A GUESS; I WOULD SAY THAT WE ALREADY SOLD NEARLY 30 OF THEM. 'O.U. FUNDS

DAVE

DEAR DAVE,

I HAVE JUST COMPLETED 'ZORGONS REVENGE' WITH A SCORE OF 14,750.

- PAUL HUTTON

DEAR PAUL, A GOOD EFFORT PAUL, BUT NOT ONE FOR THE HALL OF FAME. ONE E. TOLLEMER FROM FRANCE CLAIMED 155,830. HE MUST OF COMPLETED IT QUITE A FEW TIMES IN ONE SITTING AND PROBABLY ENDED UP WITH A SORE 'DERRIERE'!

\_\_\_\_\_\_

DEAR DAVE, IN THE DECEMBER ISSUE OF 'O.U.M', SOMEONE WAS ASKING ABOUT CONNECTING A MONITOR. I DIDN'T KNOW THE REQUIREMENTS OF MINE EITHER, BUT SIMPLY USED TRIAL AND ERROR BY SOLDERING SMALL PINS (NAILS) TO THE WIRES RATHER THAN A PLUG. YOU KNOW 'SYNC' IS RIGHT WHEN THE IMAGE IS STABLE AND THE RIGHT SIZE. RED, GREEN AND BLUE CAN BE TESTED USING 'INK' AND 'PAPER'. I BELIEVE THE VOLTAGES ARE SO LOW THAT YOU CAN'T DO ANY HARM BY THIS METHOD. I DID IN FACT KNOW THAT THE MONITOR WAS COMPATIBLE, AS IT WAS ADVERTISED AS WORKING WITH THE BBC MICRO, AND I HAD ALREADY CONNECTED MY OLD ORIC-1 TO A BBC COMPATIBLE MONITOR ( I WORKED ON THE BBC MODEL - B WITH DISC FOR 18 MONTHS AND IT WAS FRUSTRATINGLY SHORT OF MEMORY).

THE MONITOR WAS A 'PHILIPS' IT WAS REFURBISHED AND COST 120 pounds

INCLUDING INSURANCE/DELIVERY.

ALL THE BEST, AND I HOPE THAT 'O.U.M' CONTINUES TO THRIVE. - DAVID J MACKENZIE (HAWICK)

DEAR DAVID,

THANKS FOR THE TIPS.

I CERTAINLY MISS MY OLD MONITOR. THE CLARITY WAS SO MUCH BETTER THAN

PORTABLE TELEVISION THAT I NOW USE.

IF YOU STILL HAVE THE 'BBC B' THEN WHY NOT USE THE DRIVE WITH YOUR ATM CUMANA' DISC INTERFACES ARE STILL AVAILABLE FROM STEVE HOPPS FOR AROUND ATMOS. pounds.

HELLO DAVE,

AM HAVING PROBLEMS WITH USING THE 'TAKE' COMMAND TO GET

-ARTHUR CRAWFORD ( BILLERICAY)

WELL ARTHUR,

THIS WAS A COUPLE OF MONTHS AGO NOW AND HOPEFULLY THE PROBLEM WAS RESOLVED. IT WASN'T A LETTER YOU SENT ME ,BUT IT WAS A PHONE QUERY. I KNOW I COULDN'T HELP YOU DIRECTLY,BUT REMEMBERED THAT JUDY SIMMS HAD EXPLAINED THE USAGE TO ME OVER THE PHONE. I HOPE YOU HAVE NOW RESOLVED THE PROBLEM. MEANWHILE PERHAPS JUDY COULD DROP ME A LINE SO THAT I CAN PRINT HER INTERPRETATION SO THAT IT MAY BE OF BENEFIT TO SEDORIC USERS.

DAVE

DEAR DAVE,

IN THE NOVEMBER ISSUE OF 'O.U.M' THERE WAS A 'BASIC' LISTING OF THE PROGRAM 'DISKMON'. BUT THAT LISTING WAS INCOMPLETE. TO OPERATE THE PROGRAM YOU NEED ALSO SOME MACHINECODE. THAT CODE IS MERGED TO THE BASIC FILE AND AT LOADING OF THE PROGRAM IS LOCATED AT #9000-#9100 AND #B800-#B900. THE 'DMON' PROGRAM IS AN EXTENDED VERSION OF 'DISKMON'. BEST WISHES FOR 1993 AND A GOOD 'ORIC' YEAR.

- HARRY PETERS (NETHERLANDS)

DEAR HARRY,

00PS !

ONE OF OUR REGULAR READERS ALSO SPOTTED THAT SOMETHING WAS MISSING.
ANY READER WANTING THE FULL PROGRAM SHOULD JUST SEND ME A DISC AND I
WILL TRANSFER IT FOR THEM.

DAVE

annual of the first to the firs

DEAR DAVE,

I FEEL VERY GUILTY AT THE MOMENT, BECAUSE ON CHRISTMAS EVE MY FAMILY GAVE ME A NEW COMPUTER FOR XMAS. WOULD YOU BELIEVE - AN ALL SINGING, ALL DANCING P.C. (486 x 33LL. HARD DRIVE 5.25", 3.5" etc>etc.). TOO MUCH TO TAKE IN!!

I HAVEN'T GOT A LOT OF TIME TO COMPUTE THESE DAYS, BUT THERE'S A LOT TO

FIND OUT ABOUT.

MY FIRST THOUGHTS WERE TO KEEP BOTH MACHINES UP AND RUNNING, BUT AT THE MOMENT THAT'S IMPOSSIBLE; SO I'V PUT THE 'ATMOS' AWAY FOR THE TIME BEING. I WOULD LIKE TO KEEP MY SUBSCRIPTION GOING, BECAUSE THE 'ORIC' HAS BEEN AN IMPORTANT AND MOST ENJOYABLE PART OF MY LIFE FOR THE LAST 10 YEATS, AND SO IT WAS WITH GREAT REGRET THAT I STOWED IT AWAY TEMPORARILY (HOPEFULLY).

I'VE PROBABLY SAID THIS BEFORE, BUT NOBODY IN THE 'ORIC' WORLD HAS BEEN ANYTHING BUT MOST FRIENDLY AND HELPFUL TO ME, BUT I MUST SINGLE OUT YOUR GOODSELF AS THE CRITERIA AND HOPE YOU CAN GO ON RUNNING THE CLUB AND MAKING IT THRIVE EVEN IF SOME OF US FALL BY THE WAYSIDE.

- PETER WOOLLEY (PORTSMOUTH)

DEAR PETER,

FOREVER ONWARD!

I'D LIKE TO WISH YOU MANY FRUITFUL YEARS WITH YOUR NEW MACHINE, AND I'M SURE IF YOU HAVE ANY PROBLEMS WITH IT THAT WITHIN OUR FRATERNITY WE HAVE SOMEONE WITH A SIMILAR MACHINE WHO HAS BEEN THROUGH THE SAME LEARNING CURVE. OF COURSE BY BUYING A MORE MODERN MACHINE YOU WILL PROBABLY FIND MANY USERS IN YOUR VICINITY.

I MUST HEARTILY AGREE THAT PEOPLE IN THE 'ORIC' WORLD ARE A VERY FRIENDLY AND HELPFUL BUNCH. MY LIFE WOULD CERTAINLY BE OF POORER QUALITY WITHOUT THEM. AS WELL AS TALKING 'ORIC', I HAVE ENJOYED MANY PLEASANT SOCIAL OCCASIONS WITH THEM AND DAVID WILKIN EVEN BOUGHT ME A DRINK ONCE, THOUGH I DID HAVE TO LEND HIM THE MONEY TO DO SO. ONLY JOKING DAVID - YOU DIDN'T BUY ME A DRINK!

- DAVE

#### RAMBLING IN THE ROM - 37

### Rambling on...

### "!' (COMMAND)

CC89 JMP (02F5)

CD13 JMP (02F5)

Continue to user address....

### 'TRON' (COMMAND)

Irritant:

on V1.0, the flag is set to 0 at each 'Ready'

Programming:

SEC: BYT #24: CLC: ROR 02F4 would have been better.

CC8C LDA #80

CD16 LDA #80

set TRON flag

CC8E BYT #2C

CD18 BYT #2C

and jump next instruction

#### TROFF (COMMAND)

CC8F LDA #00

CD19 LDA #00

set TROFF flag

CC91 STA 02F4

CD1B STA 02F4

and save it

CC94 RTS

CD1E RTS

### Treating READ/GET/INPUT errors

READ ends up here when, after a variable, it finds neither a ',' (another data item to read) nor the end of the instruction.

CC95	LDA 2C	CD1F	LDA 2C	Take flag
CC97	BEQ CCAA	CD21	BEQ CD36	jump if INPUT
CC99	BMI CC9F	CD23	BMI CD29	jump if READ
CC9B	LDY #FF	CD25	LDY #FF	GET: simulate direct mode
CC9D	BNE CCA3	CD27	BNE CD2D	unconditional: error
CC9F	LDA AE	CD29	LDA AE	READ
CCA1	LDY AF	CD2B	LDY AF	recover the READ line
CCA3	STA A8	CD2D	STA A8	
CCA5	STY A9	CD2F	STY A9	which is the true current number
		CD31	LDX #A8	TYPE MISMATCH ERROR' for V1.1
CCA7	JMP \$CFE4	CD33	JMP \$C47E	and 'SYNTAX ERROR' for V1.0
CCAA	LDA #F9	CD36	LDA #85	INPUT
CCAC	LDY #CD	CD38	LDY #CE	AY points to 'REDO FROM START'
CCAE	JSR \$CBED	CD3A	JSR \$CCB0	and display the message
CCB1	LDA AC	CD3D	LDA AC	
CCB3	LDY AD	CD3F	LDY AD	recover TXTPTR
CCB5	STA E9	CD41	STA E9	
CCB7	STY EA	CD43	STY EA	and restart the INPUT
CCB9	RTS	CD45	RTS	

### 'GET' (COMMAND)

#### Principal:

The GET is treated as a READ. The DATA pointer is at #0036, where a 0 is placed. READ will detect an empty data item and treat it differently as a GET, by seeking a character from the keyboard to put in #0035 and then read it as a data item. TXTPTR must be manually adjusted to #0035 since if the space bar is pressed it is ignored by the routine at #00E8.

As usual, passing via the READ routine enables several instructions to be treated together and thus saves space.

Bug: On V1.0 the apostrophe was not correctly programmed and produced a syntax error on a JSR #00E8.

CCBA	JSR \$D419	CD46	JSR \$D4D2	Verify program mode
CCBD	LDX #36	CD49	LDX #36	set start of data item
	LDY #00	CD4B	LDY #00	and mark the end of the entry
CCC1	STY 36	CD4D	STY 36	by a 00
	LDA #40	CD4F	LDA #40	code for GET (not nul and b7=0, b6=1)
	JSR \$CD03	CD51	JSR \$CD8F	do a READ
CCC8	RTS	CD54	RTS	JMP would have been better

#### 'INPUT' (COMMAND)

### Principal:

INPUT leads to a READ where the data to be read will be in the keyboard input buffer. The only special thing is therefore the treatment of errors (EXTRA IGNORED etc....)

Note: On leaving this specific INPUT routine, Y is #00. This is the code for INPUT. You then jump to the second byte of LDA #98 which is in fact a TYA code. Neat!

CCCB CMP #" CD57 CMP #"" is INPUT followed by a message? CCCD BNE CCDA CD59 BNE CD66 no, jump CCCF JSR \$CF99 CD5B JSR \$D025 yes, evaluate the string CCD2 LDA #;' CD5E LDA #;' CCD4 JSR \$CFDB CD60 JSR \$D067 require a ';' CCD7 JSR \$CBF0 CD63 JSR \$CCB3 display the string CCDA JSR\$ D419 CD66 JSR \$D4D2 verify program mode CCDD LDA #',' CD69 LDA #',' take comma CCDF STA 34 CD6B STA 34 to simulate a data separator CCE1 LDA #00 CD6D LDA #00 CCE3 STA 17 CD6F STA 17 initialise Ctrl C mode CCE5 JSR \$CCF4 CD71 JSR \$CD80 fill the buffer (YX becomes #0034) CCE8 LDA 35 CD74 LDA 35 has data been entered? CCEC LDA 17 CD78 LDA 17 no, is it because of a Ctrl C? CCEC LDA 17 CD78 LDA 17 no, start entry again CCF0 CLC CD7C CLC yes, BREAK CCF1 JMP \$C94E CD7D JMP \$C980 CCF4 JSR \$CC10 CD80 JSR \$CCD7 display '?' CCF7 JSR \$CC0D CD83 JSR \$CCD4 display '' CCFA JMP \$C5A2 CD86 JMP \$C592 and take a command in the buffer	CCC9	LSR 2E	CD55	LSR 2E	inhibit Ctrl O
CCCD BNE CCDA  CCCF JSR \$CF99  CD5B JSR \$D025  CCD2 LDA #;'  CCD4 JSR \$CFDB  CD60 JSR \$D067  CCD7 JSR \$CBF0  CD60 JSR \$CCB3  CCD7 JSR \$CBF0  CD63 JSR \$CCB3  CCDA JSR\$ D419  CD66 JSR \$D4D2  CCDB JDA #;'  CCDF STA 34  CCB1 LDA #00  CCE3 STA 17  CCB5 JSR \$CCF4  CCB7 JSR \$CCF4  CCB7 LDA 35  CCB8 LDA 35  CCB8 LDA 35  CCBC LDA 17  CCBC BBC CCCB1  CCCCCCCCC LDA 17  CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC		CMP #"	CD57	CMP #""	is INPUT followed by a message?
CCCF JSR \$CF99 CD5B JSR \$D025 yes, evaluate the string  CCD2 LDA #;' CD5E LDA #;' CCD4 JSR \$CFDB CD60 JSR \$D067 require a ';' CCD7 JSR \$CBF0 CD63 JSR \$CCB3 display the string  CCDA JSR\$ D419 CD66 JSR \$D4D2 verify program mode  CCDD LDA #',' CD69 LDA #',' take comma  CCDF STA 34 CD6B STA 34 to simulate a data separator  CCE1 LDA #00 CD6D LDA #00  CCE3 STA 17 CD6F STA 17 initialise Ctrl C mode  CCE5 JSR \$CCF4 CD71 JSR \$CD80 fill the buffer (YX becomes #0034)  CCE8 LDA 35 CD74 LDA 35 has data been entered?  CCEA BNE CD02 CD76 BNE CD8E yes, ok  CCEC LDA 17 CD78 LDA 17 no, is it because of a Ctrl C?  CCED BEQ CCE1 CD7A BEQ CD6D no, start entry again  CCF0 CLC CD7C CLC  CCF1 JMP \$C94E CD7D JMP \$C980  CCF4 JSR \$CC10 CD80 JSR \$CCD7 display '?'  CCF7 JSR \$CC0D CD83 JSR \$CCD4 display '?'			CD59	BNE CD66	no, jump
CCD4 JSR \$CFDB CD60 JSR \$D067 require a ';' CCD7 JSR \$CBF0 CD63 JSR \$CCB3 display the string CCDA JSR\$ D419 CD66 JSR \$D4D2 verify program mode CCDD LDA #',' CD69 LDA #',' take comma CCDF STA 34 CD6B STA 34 to simulate a data separator CCE1 LDA #00 CD6D LDA #00 CCE3 STA 17 CD6F STA 17 initialise Ctrl C mode CCE5 JSR \$CCF4 CD71 JSR \$CD80 fill the buffer (YX becomes #0034) CCE8 LDA 35 CD74 LDA 35 has data been entered? CCEA BNE CD02 CD76 BNE CD8E yes, ok CCEC LDA 17 CD78 LDA 17 no, is it because of a Ctrl C? CCED BEQ CCE1 CD7A BEQ CD6D no, start entry again CCF0 CLC CD7C CLC CCF1 JMP \$C94E CD7D JMP \$C980 CCF4 JSR \$CC10 CD80 JSR \$CCD7 display '?' CCF7 JSR \$CC0D CD83 JSR \$CCD4 display '.'		JSR \$CF99	CD5B	JSR \$D025	yes, evaluate the string
CCD7 JSR \$CBF0 CD63 JSR \$CCB3 display the string CCDA JSR\$ D419 CD66 JSR \$D4D2 verify program mode take comma take comma to simulate a data separator CCB1 LDA #00 CD6D LDA #00 CCB3 STA 17 CD6F STA 17 cD71 JSR \$CD80 fill the buffer (YX becomes #0034) cCCB LDA 35 cD74 LDA 35 has data been entered? cCCB LDA 17 cD78 LDA 17 cCCB BEQ CCE1 cD7A BEQ CD6D cD7C cLC cD7C CLC cD7C CLC display 'P' cCF7 JSR \$CC10 cD80 JSR \$CCD7 display 'P' cCF7 JSR \$CC0D cD83 JSR \$CCD4 display 'P' cD75 display 'P' cCF7 JSR \$CC0D cD83 JSR \$CCD4 display 'P' commanded to simulate a data separator commanded take commanded ta	CCD2	LDA #';'	CD5E	LDA #';'	
CCDA JSR\$ D419 CD66 JSR \$D4D2 verify program mode CCDD LDA #',' CD69 LDA #',' take comma CCDF STA 34 CD6B STA 34 to simulate a data separator CCE1 LDA #00 CD6D LDA #00 CCE3 STA 17 CD6F STA 17 initialise Ctrl C mode CCE5 JSR \$CCF4 CD71 JSR \$CD80 fill the buffer (YX becomes #0034) CCE8 LDA 35 CD74 LDA 35 has data been entered? CCEA BNE CD02 CD76 BNE CD8E yes, ok CCEC LDA 17 CD78 LDA 17 no, is it because of a Ctrl C? CCEC BEQ CCE1 CD7A BEQ CD6D no, start entry again CCF0 CLC CD7C CLC CCF1 JMP \$C94E CD7D JMP \$C980 CCF4 JSR \$CC10 CD80 JSR \$CCD7 display '?' CCF7 JSR \$CC0D CD83 JSR \$CCD4 display '.'	CCD4	JSR \$CFDB	CD60	JSR \$D067	require a ';'
CCDI) LDA #',' CCDF STA 34 CCBB LDA #00 CCBB STA 17 CCBB LDA 35 CCBB LDA 35 CCBB LDA 35 CCBB LDA 35 CCBB LDA 17 CD78 LDA 17 CCBB LDA 17 CD78 LDA 17 CCBB LDA 17 CCBB LDA 17 CCBB LDA 17 CCBB LDA 17 CD78 LDA 17 CCBB LDA 17 CC	CCD7	JSR \$CBF0	CD63	JSR \$CCB3	display the string
CCDD LDA #',' CD69 LDA #',' take comma  CCDF STA 34 CD6B STA 34 to simulate a data separator  CCE1 LDA #00 CD6D LDA #00  CCE3 STA 17 CD6F STA 17 initialise Ctrl C mode  CCE5 JSR \$CCF4 CD71 JSR \$CD80 fill the buffer (YX becomes #0034)  CCE8 LDA 35 CD74 LDA 35 has data been entered?  CCEA BNE CD02 CD76 BNE CD8E yes, ok  CCEC LDA 17 CD78 LDA 17 no, is it because of a Ctrl C?  CCEC BEQ CCE1 CD7A BEQ CD6D no, start entry again  CCF0 CLC CD7C CLC yes, BREAK  CCF1 JMP \$C94E CD7D JMP \$C980  CCF4 JSR \$CC10 CD80 JSR \$CCD7 display '?'  CCF7 JSR \$CC0D CD83 JSR \$CCD4 display '.'	CCDA	JSR\$ D419	CD66	JSR \$D4D2	verify program mode
CCE1 LDA #00 CD6D LDA #00 CCE3 STA 17 CD6F STA 17 initialise Ctrl C mode CCE5 JSR \$CCF4 CD71 JSR \$CD80 fill the buffer (YX becomes #0034) CCE8 LDA 35 CD74 LDA 35 has data been entered? CCEA BNE CD02 CD76 BNE CD8E yes, ok CCEC LDA 17 CD78 LDA 17 no, is it because of a Ctrl C? CCEC BEQ CCE1 CD7A BEQ CD6D no, start entry again CCF0 CLC CD7C CLC yes, BREAK CCF1 JMP \$C94E CD7D JMP \$C980 CCF4 JSR \$CC10 CD80 JSR \$CCD7 display '?' CCF7 JSR \$CC0D CD83 JSR \$CCD4 display '.'	CCDD	LDA #',	CD69	LDA #','	take comma
CCE3 STA 17 CD6F STA 17 initialise Ctrl C mode CCE5 JSR \$CCF4 CD71 JSR \$CD80 fill the buffer (YX becomes #0034) CCE8 LDA 35 CD74 LDA 35 has data been entered? CCEA BNE CD02 CD76 BNE CD8E yes, ok CCEC LDA 17 CD78 LDA 17 no, is it because of a Ctrl C? CCEE BEQ CCE1 CD7A BEQ CD6D no, start entry again CCF0 CLC CD7C CLC yes, BREAK CCF1 JMP \$C94E CD7D JMP \$C980 CCF4 JSR \$CC10 CD80 JSR \$CCD7 display '?' CCF7 JSR \$CC0D CD83 JSR \$CCD4 display '.'	CCDF	STA 34	CD6B	STA 34	to simulate a data separator
CCES JSR \$CCF4 CD71 JSR \$CD80 fill the buffer (YX becomes #0034) CCE8 LDA 35 CD74 LDA 35 has data been entered? CCEA BNE CD02 CD76 BNE CD8E yes, ok CCEC LDA 17 CD78 LDA 17 no, is it because of a Ctrl C? CCEE BEQ CCE1 CD7A BEQ CD6D no, start entry again CCF0 CLC CD7C CLC yes, BREAK CCF1 JMP \$C94E CD7D JMP \$C980 CCF4 JSR \$CC10 CD80 JSR \$CCD7 display '?' CCF7 JSR \$CC0D CD83 JSR \$CCD4 display '.'	CCE1	LDA #00	CD6D	LDA #00	
CCE8 LDA 35 CD74 LDA 35 has data been entered?  CCEA BNE CD02 CD76 BNE CD8E yes, ok  CCEC LDA 17 CD78 LDA 17 no, is it because of a Ctrl C?  CCEE BEQ CCE1 CD7A BEQ CD6D no, start entry again  CCF0 CLC CD7C CLC yes, BREAK  CCF1 JMP \$C94E CD7D JMP \$C980  CCF4 JSR \$CC10 CD80 JSR \$CCD7 display '?'  CCF7 JSR \$CC0D CD83 JSR \$CCD4 display '.'	CCE3	STA 17	CD6F	STA 17	initialise Ctrl C mode
CCE8 LDA 35 CD74 LDA 35 has data been entered?  CCEA BNE CD02 CD76 BNE CD8E yes, ok  CCEC LDA 17 CD78 LDA 17 no, is it because of a Ctrl C?  CCEE BEQ CCE1 CD7A BEQ CD6D no, start entry again  CCF0 CLC CD7C CLC yes, BREAK  CCF1 JMP \$C94E CD7D JMP \$C980  CCF4 JSR \$CC10 CD80 JSR \$CCD7 display '?'  CCF7 JSR \$CC0D CD83 JSR \$CCD4 display '.'	CCE5	JSR \$CCF4	CD71	JSR \$CD80	fill the buffer (YX becomes #0034)
CCEC LDA 17 CD78 LDA 17 no, is it because of a Ctrl C?  CCEE BEQ CCE1 CD7A BEQ CD6D no, start entry again  CCF0 CLC CD7C CLC yes, BREAK  CCF1 JMP \$C94E CD7D JMP \$C980  CCF4 JSR \$CC10 CD80 JSR \$CCD7 display '?'  CCF7 JSR \$CC0D CD83 JSR \$CCD4 display '.'		LDA 35	CD74	LDA 35	has data been entered?
CCEE BEQ CCE1 CD7A BEQ CD6D no, start entry again CCF0 CLC CD7C CLC yes, BREAK CCF1 JMP \$C94E CD7D JMP \$C980 CCF4 JSR \$CC10 CD80 JSR \$CCD7 display '?' CCF7 JSR \$CC0D CD83 JSR \$CCD4 display '.'	CCEA	BNE CD02	CD76	BNE CD8E	yes, ok
CCF0         CLC         CD7C         CLC         yes, BREAK           CCF1         JMP \$C94E         CD7D         JMP \$C980           CCF4         JSR \$CC10         CD80         JSR \$CCD7         display "?"           CCF7         JSR \$CC0D         CD83         JSR \$CCD4         display "."	CCEC	LDA 17	CD78	LDA 17	no, is it because of a Ctrl C?
CCF1 JMP \$C94E CD7D JMP \$C980 CCF4 JSR \$CC10 CD80 JSR \$CCD7 display "?" CCF7 JSR \$CC0D CD83 JSR \$CCD4 display "	CCEE	BEQ CCE1	CD7A	BEQ CD6D	no, start entry again
CCF4 JSR \$CC10 CD80 JSR \$CCD7 display "?" CCF7 JSR \$CC0D CD83 JSR \$CCD4 display "	CCF0	CLC	CD7C	CLC	yes, BREAK
CCF7 JSR \$CC0D CD83 JSR \$CCD4 display '	CCF1	JMP \$C94E	CD7D	JMP \$C980	
1 1 1 1 1	CCF4	JSR \$CC10	CD80	JSR \$CCD7	
CCFA JMP \$C5A2 CD86 JMP \$C592 and take a command in the buffer	CCF7	JSR \$CC0D	CD83		
	CCFA	JMP \$C5A2	CD86	JMP \$C592	and take a command in the buffer

```
YOU ASKED FOR IT AND HERE IT IS.

SINCE WE LAST PUBLISHED THE HI-SCORE TABLE THERE HAS BEEN MUCH MOVEMENT THE RANKS. GAMESTERS HAVE BEEN BUSILY TRYING TO EMULATE SOME OF GROBURTON'S FEATS, WHILST GRAEME HAS BEEN BUSY BUILDING UPON HIS SUCCESS. IN DITHERS HAVE GONE FOR MORE OBSCURE TITLES TO GET THEIR NAMES IN LIGHTS. FOR ME - WELL I HAVE BEEN HAMMERING AWAY AT "DON'T PANIC" (THE LATEST FOR ME - WELL I HAVE BEEN HAMMERING AWAY AT "DON'T PANIC" (THE LATEST FOR ME - WELL I HAVE BEEN HAMMERING AWAY AT "DON'T PANIC" (THE LATEST FOR ME - WELL I HAVE BEEN HAVE COME UP WITH A WORTHWHILE SCORE. UNTIL COURSE GRAEME OR HENRY MARKE GET INTO ONE OF THEIR ALL NIGHT SESSIONS.

AND SO WITHOUT FURTHER ADD WE PUBLISH THE 'ULTIMATE HI-SCORE TABLE'.
                                                                                                                                                                                                NUCH MOVEMENT
SOME OF GRA
                                                                                                                                                                                                                                  GRAEME
                                                                                                                                   DAVE DICK
     3D FONGUS - 18,100 - GRAEME BURTON
3D STARTER - 26,970 (1st/7th LAP) - GRAEME BURTON, WHO WILL NOW BE SHOWN AS
   G.B.
ATLANTID - 13,990 (DUREE 62) - MATTHEW DICK - GO ON MY SON!
A.T.M - 67,990 - ROBERT COOK - FAMED EX-EDITOR OF D.U.M. AND NOW
INSURANCE.
SELLING
```

INSECT INSANITY - 40,000 - G.B
INVADERS (IJK) - 17,700 - ALEX KRAUSS
INVADERS (PSS) - 4,430 - PETER THORNBURN
IMAGO - 2,850 (LEVEL 3) - DAVE DICK - WELL
JIMMY POUBELLE - 11,440 - PETER THORNBURN
KRILLYS - 28,290 - G.B
KINGDOM - 109 - G.B - WELL I HAD TO TRY THE OBSCURE ONES! KRILLYS - 28,290 - G.B
KINGDOM - 109 -G.B
KROKATILE WALTZ - 10,025 -G.B
KARATE - 12,300 - G.B
LOKI - 62,675 - TIM COLGATE
LOCHNESS MONSTERS - 14,683 - G.B
LONE RAIDER 13,775 - G.B
LUNAR MISSION - 13,129 - G.B
LIGHT CYCLES - 3,709 - PETER DO I HEAR THE BABY CRYING? THORNBURN
MANIC MINER - 38,154 (AT THE CENTRE OF THE EARTH) - G.B
MANIC MINER with infinite lives - 115,583 -ROBERT COOK
MUSHROOM MANIA - 471,420 - TIM COLGATE

MACADAM BUMPER - 169,660 - G.B

MIDNIGHT FEAST - 1,070,330 - HENRY MARKE

MINED DUT - 4,100 - G.B

M.A.R.C - 1,360 - G.B

M.A.R.C - 1,360 - G.B

MAJE RALLY - 88,920 - G.B

MAJENELY - 88,920 - G.B

MAHJONG - 16,200 (LLEVEL S CLEARED TWICE TO GIVE 6 LEVELS) - HENRY MARKE

MR.WIMPY - 8568 - PETER THORNBURN

OPERATION GREMIN - 22,510 (ALL IB LEVELS COMPLETED AND 7 LIVES LEFT) - HENRY MARKE

MR.WIMPY - 9558 - PETER THORNBURN

OPERATION GREMIN - 29,509 - MILLELERC

CLIVE AND POPEYE' - 49,570 - RENE MARKE

PASTA BLASTA - 34,480 - MATTHEW COATES

DARKET - 103,950 - J-PHILLIPE MERC

PAINTER (With 255 I Joes) - LAS,310 - PETER THORNBURN

RATSPLAT - 3,470 - DAUB DICK

RABBIT - 169,760 (MAVE 18) - G.B

STANLEY 23,280 - PETER THORNBURN

SUPER METERORS - 364,700 - G.B

SNAKE VENDM - 28,840 - S.G DUTTON

SUPER METERORS - 364,700 - G.B

TRIATHLON - 2,19 - G.B

TETRIX - 241; - HENRY MARKE

TETRIS - 9983 - JON HAMORTH

TRICKSHOT - 1044 - S.G DUTTON

TRIBENT NET - 104,860 - STALE EIKBRAATEN

ULTIMA - 35,700 - G.B

TETRIX - 241; - HENRY MARKE

TETRIS - 9983 - JON HAMORTH

TRICKSHOT - 1044 - S.G DUTTON

TRIBENT NET VEND - 124,367 - G.B

TETRIS - 9983 - G.B DUTTON

TRIBENT - 149,860 - STALE EIKBRAATEN

ULTIMA - 3,570 - G.B DUTTON

TRIBENT - 104,860 - STALE EIKBRAATEN

ULTIMA - 3,670 - G.B

ZEBBLE - 726,110 - JOHN GIDDENS

ZOOLVMPICS - 13,477 - G.B

ZEBBLE - 726,110

HEY...WAKE UP...O.U.M IS NOW LOADING!
WELL DON'T EXPECT ME TO TYPE THAT LITTLE LOT OUT AGAIN IN A HURRY. I THINK
THE NEXT TABLE WILL BE PUBLISHED IN THE SUMMER. KEEP THOSE SCORES COMING IN
AND LET ME KNOW IF I HAVE MISSED ONE OF YOURS.
IN ALL WE HAVE COVERED 105 TITLES.
NOT BAD FOR A 'DEAD' MACHINE THAT WAS LACKING IN SOFTWARE!
AMONGST THE ZAPPERS ARE 12 CURRENT O.U.M READERS AND MANY MORE READERS
WERE NOT QUITE ZAPPY ENOUGH TO MAKE THE HI-SCORES. SO ,THOUGH THE SERIOUS
COMPUTING PEOPLE MAY FROWN UPON THIS AS 2 PAGES WASTED; IT DOES PROVE THAT
OLD ADAGE - "TO EACH HIS DWN".
OF THE LIST OF TITLES OVER 70% ARE READILY AVAILABLE VIA DUM AND CEO,
EITHER BY MAILORDER OR ON BACK ISSUES OF THR CEO JEO DISCS.
YOU WILL FIND 'LONE RAIDER' ON OUM DISC NF.2 - GO ON BEAT GRAEME BURTON'S
SCORE! SCORE! P.S. - "GOVERNMENT HEALTH WARNING" -SERIOUSLY DAMAGE YOUR HEALTH. TOO MUCH GAME PLAYING









#### D D S E NDS a d

THERE NOW FOLLOWS A MISHMASH OF ANSWERS AND SOME PROBLEMS FOR YOU TO RESOLVE

### LOKI

Those of you wanting to run your ORIC 1 version of 'LOKI'

a) Load in the '\*' program first.
or b) When loaded just type CALLDEEK(#2A9) and press RETURN.
or c) When loaded type CALL 16384 and press RETURN.

Start and End addresses of Machine Code files on the ATMOS are stored at #2A9 and #2AB.

To ascertain them just do PRINTDEEK (#2A9) and PRINTDEEK (#2AB) respectively.

#### MESSAGE TO TREVOR SHAW

Trevor - you may remember that last August you sent me a disc containing the corrected HPLANS program (now on P.D). Also on the disc was a BIORHYTHM program converted for the ORIC by John Rushton with print facility for the MCP40.

Well I sent the disc to Rob Kimberley, who did the conversion of HPLANS. In September Rob wrote to me saying: " I tried to run the BIORHYTHM program, but it is not obvious to the user how the date of birth should be entered. So after a few tries of the usual ways I gave up in disgust".

Come on Trevor PLEASE give us a clue!

I really am up to date with my mail!

#### JOYSTICKS

Recommended for use with the ORIC by Chris Hearn is the PRO 500. Also check out the new ATARI type ones. 

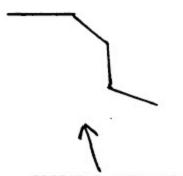
#### LORIGRAPH

Nicol Blount writes to say that in the November issue of O.U.M that it was stated that "PICTURE DESIGNER" from OPEL was not as good as French design aid "LORIGRAPH"; yet has the 'free-hand' facility which he has not yet discovered in LORIGRAPH.

Nicol asks for tips. I must admit that I just use it for downloading pictures and subsequent editing. Are there any seasoned LORIGRAPH users out there who can PLEASE help?

I know that Robert Cook drew many nice pictures with it e.g. GOOFY and DEBBIE.

There now follows a sketch to show Nicol's problem



BUT THIS ? WITHOUT DRAWING (& DELETING)

NUMEROUS CIRCLES OR

'ELASTIC' TANGENTS/CHORDS

POSSIBLE WITH LORIGRAPH

### THE PATTER OF TINY FEET

A NEW RELEASE PLANNED FOR MARCH FROM THE FRENCH DUTLET OF 'LAURENT and ANNE' THIS PROMISES TO BE A 'SCREAMER'. CONGRATULATIONS TO THEM. BY THE LAURENT, MY WIFE SAYS SHE WILL KNIT SOMETHING.

### OUM DISC Nr.2

YES IT IS HERE - THE SECOND O.U.M DISC.

PRICE IS 3.50 AND MANY OF YOU WILL RECIEVE IT WITH THIS ISSUE.

ON THE DISC ARE: - 'LONE RAIDER' - THE CLASSIC SKRAMBLE GAME FROM SOFTWARE (WORKS WITH THE ALTAI/PASE JOYSTICK INTERFACE), 'GO SNOW' - A WINTER SCENE FROM JONATHAN BRISTOW, 'DON'T PANIC' - JUST THE LOADING OF OUR LATEST RELEASE (YOU WILL HAVE TO BUY IT TO PLAY IT), 'TAPEDISK' TAPE TO DISC UTILITY (I'M AFRAID 'SUPERCOP' HAS BEEN FOUND TO BE BU 'ORIC-CAD' - THE DESIGN AID FROM TANSOFT FULLY ADAPTED FOR DISC BY PETERS AND COMPLETE WITH THE OFFICIAL MANUAL, 'SPANISH LESSONS' - 4 SEVERN A NICE BEEN FOUND TO BE BUGGED), ADAPTED FOR DISC BY HARRY MORE LESSONS FROM FRANK BOLTON.

IS THAT ALL???? NO THAT IS ONLY THE FIRST SIDE - YOU WILL HAVE TO BUY IT TO SEE YOU GET AND AT 3.50 - WHAT A BARGAIN! WHAT ELSE

### FROM THE ARCHIVES

I HAVE BEEN GLANCING THROUGH AN OLD ISSUE OF THE 'TANGERINE USERS GROUP (TUG) 'NEWSLETTER AND FOUND ONE OF THEIR REGISTRATION FORMS. HOW MANY OF YOU BOUGHT THE PENS AT 95 pence OR THE TEE SHIRTS AT 7.50? AMONGST THE SECTION TITLED 'WHAT OUR MEMBERS HAVE TO SAY' WAS THE FOLLOWING QUOTE FROM B.BULL OF WILTSHIRE - "KEEP UP THE EXCELLENT STANDARDS YOU HAVE SET". COULD THAT BE SECTION

WILISHIRE - " KEEP UP THE EXCELLENT STANDARDS YOU HAVE SET". COULD THAT E BRIAN BULL; ONE OF OUR NEWER READERS! ADVERTS IN THE ISSUE WERE FOR 'VIKING RAIDER' - THE BIGGEST EVER ADVENTURE A HISTORICAL BLOOD AND LUST ADULT ADVENTURE FOR THE MICROTAN 65 AND ORIC - 1 COMING SOON! DID YOU EVER SEE IT? ALSO ADVERTISED WAS 'PALLIDA MORS' - A ADVENTURE FOR THE ORIC -1 AND FOR THE PRINCELY SUM OF 12 pounds YOU GE 'HELLS TEMPLE'. AN GET

### 'ORIC OWNER' MAGAZINES

WE HAVE SOME OF THE ABOVE MAGAZINES FOR SALE ( ALL EXCEPT ISSUE 8) O ISSUE SET. THANKS TO BRIAN KIDD AND OTHERS FOR DONATING THEM TO THIS TO '0.U.M' 10 ISSUE SET. FUNDS. PRICE PER ISSUE INCLUDING POSTAGE IS 1 pound EACH. WRITE OR CONFIRMATION OF ORDER. YOU CAN PHONE ME ON 0296 26050 AFTER 12 RING FOR NOON. BUT PLEASE NOT THURSDAY OR FRIDAY.

\_\_\_\_\_

### A NOTE FROM BRIAN KIDD

DEAR READERS, A NEW FEATURE IN O.U.M IS TO BE MY PRIZE PU PROBLEMS RANGE FROM VERY EASY TO EXTREMELY DIFFICULT. HO SOLVED BY USING YOUR ORIC -1/ATMOS AND A LITTLE BRIAN POWER. PRIZES WILL VARY FROM FREE O.U.M SUBS. TO SOFTWARE TO THE PUZZLE PAGE . THE HOWEVER, ALL OCCASIONAL BOTTLE OF SOMETHING.

IT IS, HOWEVER, UP TO YOU TO DECIDE IF IT CONTINUES. PREVIOUS CHAVE HAD POOR RESPONSE, AND SO WERE FEW AND FAR BETWEEN. NOW'S YOUR SHOW ME THAT YOU ENJOY THEM. COMPETITIONS CHANCE

ANSWERS SHOULD ALWAYS BE DIRECTED TO ME, AS DAVE HAS TO WORK OUT THE ANSWERS HIMSELF.

WHERE POSSIBLE ALSO SEND COPIES OF YOUR SOLUTION, BE IT ON PAPER, 3'5" TAPE. THIS IS MY WAY OF SEEING HOW YOU SUBSCRIBERS TICK. WHERE DIS DISC,OR TAPE. THIS IS MY WAY OF SEEING HOW YOU SUBSCRIBERS DISCS/TAPES ARE SENT, THEN THESE WILL BE RETURNED WITHIN A WEEK.

WINNERS WILL BE NOTIFIED BY POST AND THROUGH O.U.M.

CLOSING DATE FOR COMPETITIONS WILL ALWAYS BE THE SAME AS THE DATE PUBLISHED FOR ARTICLE INCLUSIONS FOR O.U.M.

AND PLEASE , PLEASE - ENTER! GOOD LUCK -

- BRIAN KIDD (PUBLICITY OFFICER), BUT WALL SECURITY OF THE PARTY OF THE PA

### NOTE FROM THE EDITOR:

LIVER COMPLAINT. IT APPEARS THAT IT WILL NOT BE FULLY FUNCTIONAL FOR YEARS AND TO MAKE IT WORSE - THE 'BOOZE' IS A DEFINITE NO, NO! I'LL DRINK HIS FOR SOME YOUR HEALTH!

SIMB OH SHE SH

MANY MANY LITTLE ITEMS THIS TIME AROUND - PLEASE HELP IF YOU CAN!

#### IJK BACKGAMMON

IAN BRADBURN FROM MIDDLESBROUGH HAS A PROBLEM WITH HIS CASSETTE VERSION OF

'BACKGAMMON' FROM IJK.

BACKGAMMON' FROM IJK.
HE SAYS - "EVERY GAME I HAVE PLAYED, IT ALWAYS STARTS THE GAME BY ME
STARTING FIRST AND THE SEQUENCE OF DICE IS THE SAME FOR EVERY GAME , WHEN
SURELY THE ROLL OF THE DICE SHOULD BE RANDOM. IF I QUIT THE GAME IT WILL NOT
RE-RUN THE PROGRAM FOR A NEW GAME, WHICH EVER KEY I PRESS."
WELL IAN, I LOADED MY DISC VERSION AND FOUND THAT ON EACH OCCASION THAT
THE ORIC WENT FIRST AND INITIALLY MOVED FROM 'A' TO 'C'. PERHAPS RANDOM TO
IJK WAS TO HAVE EACH COPY SOLD STARTING DIFFERENTLY! I THINK YOU WILL FIND
THAT A PROTECTION IS BUILT INTO THE GAME TO STOP YOU FROM LISTING IT ONCE YOU
HAVE QUIT, YOU WILL NEED TO USE AN AUTO-STOP ROUTINE TO GET INTO THE PROGRAM. HAVE QUIT. YOU WILL NEED TO USE AN AUTO-STOP ROUTINE TO GET INTO THE PROGRAM.

TRY THE ONE I SENT YOU TO ALLOW POKES FOR INFINITE LIVES.
GLANCING THROUGH THE PROGRAM I FOUND THE RANDOM SET-UP TO BE AT LINES

29,000 ONWARDS. IN MANY TITLES THE RANDOM IS ALWAYS THE SAME ON FIRST LOW PROGRAM. THIS IS BECAUSE DRIC'S RANDOM IS NOT TRULY RANDOM. A TRAIT THAT BEEN WELL DOCUMENTED. PLAYERS OF 'TETRIS' FROM FRANCE WILL HAVE SPOTTED IT IS QUITE EASY TO GET 1000 PTS. BY MEMORISING THE INITIAL SEQUENCE. HOW PLAYERS OF 'TETRIX' FROM GERMANY WILL FIND A TRULY RANDOM GAME.

IN A RECENT ISSUE OF D.U.M I SEEM TO REMEMBER PUBLISHING A TRULY RANDOM GAME. LOADING THIS.

RANDOM PROGRAM, WHICH I WILL SEND ON TO YOU FOR TO TRY YOU AND INSTALL INTO THE

PROGRAM.

#### DATA PLUS

'DATA PLUS' IS A PROGRAM ON THE PUBLIC DOMAIN AND EDMUND WISNIEWSKI RAISES QUERY - " I FIND THE PROGRAM VERY INTERESTING.... JUST A SLIGHT PROBLEM IN THAT IT SEEMS TO AUTOMATICALLY PUT A COMMA AFTER EVERY SECOND ENTRY ( e.g. ST, IN AR, TN, DW, IF, YO, UW, AN, T).... ARE THERE SOME MEANS OF ALTERING THIS."
ANSWERS PLEASE TO O.U.M

#### "MASQUE D'OR"

ILLUSTRIOUS ADVENTURER PETER THORNBURN WOULD LIKE TO KNOW IF ANYONE HAS DONE MAP FOR "MASQUE D'OR". IF YOU HAVE THEN PLEASE SEND IT TO O.U.M AND WE A MAP FOR "MASQUE D'OR". WILL PUBLISH IT. PERHAPS OUR FRENCH COLLEAGUES CAN HELP.

#### \_\_\_\_\_\_\_\_\_ CEO-MAG

THE JANUARY ISSUE OF THE CEO-MAG DULY ARRIVED AND CONTAINED SOME INTERESTING ARTICLES; NAMELY - AN EXCELLENT ARTICLE FROM GILES BOUSSARD GIVING A DPINION OF THE 10th ANNIVERSARY OF THE ORIC, A REVIEW OF JON'S NEW BOOK, REVIEW OF SEDORIC V2.0, THE HISTORY OF THE ORIC THROUGH FRENCH ADVERTS AND GAMESTERS DICTIONARY, WHICH LISTS 100 BASIC WORDS TRANSLATED FROM FRENCH ENGLISH TO HELP YOU WITH YOUR FRENCH TITLES. IF YOU ONLY EVER BUY ONE ISSOFT THE 'CEO-MAG' THEN THIS HAS GOT TO BE THE ONE. CONTACT JON HAWORTH NOW! TO ISSUE \_\_\_\_\_

#### GISSA JOB

THE CEO PRESIDENT A COUPLE OF MONTHS BACK I HAD A LETTER FROM VINCENT TALVAS, WHO IS CURRENTLY STUDYING AT THE GRADUATE SCHOOL OF BUSINESS IN NANCY.

THERE NOW FOLLOWS PART OF THE LETTER FROM VINCENT - PERHAPS YOU CAN HELP OUT

"AS I AM IN A SCHOOL OF BUSINESS, I HAVE TO BE IN TOUCH WITH OTHER
COUNTRIES AND CIVILIZATIONS IN ORDER TO BE A GOOD MANAGER. THAT IS THE REASON DTHER REASON WHY I HAVE TO DO SOME SERIOUS RESEARCH ABOUT FOREIGN COMPANIES AND FIND SUMMER JOB IN THE COUNTRY I CHOOSE. AS YOU KNOW, I LIKE ENGLAND VERY M THEREFORE I WOULD LIKE TO WORK AND VACATE IN ENGLAND. I NEED TO FIND INFORMATION ABOUT PRIVATISED FIRMS UNDER MARGARET THATCHER'S GOVERN VERY MUCH. MARGARET ABOUT GOVERNMENT (BRITISH TELECOM, BRITISH GAS, BRITISH RAIL THE POST OFFICE... THAT IS TO SAY ALL 'PUBLIC' SERVICES IN TELECOMMUNICATIONS, TRANSPORT AND SERVICES) OR TO FIND A SUMMER JOB IN ENGLAND. THESE TASKS ARE VERY DIFFICULT IF YOU DON'T LIVE IN ENGLAND.'

WELL READERS ANOTHER TASK FOR YOU. EVEN IF THE POST OFFICE AND RAIL HAVE NOT BEEN HIVED OFF YET, I AM SURE VINCENT WOULD STILL LIKE I THEM. PLEASE SEND ANYTHING YOU HAVE TO D.U.M AND I WILL PASS IT BRITISH INFO. ON WILL IT

VINCENT.

REGARDING A SUMMER JOB FOR VINCENT - WELL I AM SURE VINCENT HAPPY BE WOULD TO DO ANYTHING, BUT SO UNFORTUNATELY WOULD ABOUT 3 MILLION BRITONS! IF YOU CAN HELP THEN PLEASE LET ME KNOW.

324 REM I'VE DONE IT IN 57 MOVES!

- PAGE 22 AND SO TO THE END OF ANOTHER ISSUE, WHICH IF NOTHING ELSE IS DIFFERENT!
THE BACKLOG OF ORIC MATTERS CONTINUES TO THRIVE!. OR IN THE LYRIC FROM
OLD TEMPTATIONS SONG: - "LIKE A SNOWBALL ROLLING DOWN THE SIDE OF A SN A SNOW-COVERED HILL - IT'S GROWING". JUST WHEN I THOUGHT I HA THEY DON'T WRITE SONGS LIKE THAT ANYMORE. THOUGHT I HAD NEARLY ST WHEN I THOUGHT I HAD NEARLY CAUGHT UP, SO ANOTHER DERS/QUERIES ARRIVED. WE WILL GET THERE - PLEASE BE PATIENT. TO ROUND OFF THIS ISSUE I THINK I WILL PERHAPS FIND A LITTL ANOTHER POSTBAG ORDERS/QUERIES ARRIVED. LITTLE LISTING FOR VOU. AND THEN I WILL RELAX BY TRYING TO BREAK THE 2000 POINT MARK "DON T UN PANIC"!

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212 PLOT 3,F,10
   102 REM ## SUPER REVERSE ##
                                                                                                            214 NEXT
   104 REM 12222222222222222
                                                                                                            216 PLOT 14,15,"60 No.:"
218 FOR F=15 TO 16
   106 REM ## BY BRIAN KIDD ##
   220 PLOT 21,F,10:PLOT22,F,F-9:NEXT F
   110 REM ## AN OUM
                                                                                                            SSS REPEAT
   112 REM ## TAPPER PROG ##
                                                                                                            224 2=2+1
   114 REM 18133332333333333333
                                                                                                            226 FOR F=11TO12:PLOT7,F, Z$:PLOT22,F+4,STR$(Z):NEXT
228 PRINT:PRINT @ 10,24; "ENTER No. TO REVERSE ";
230 PLOT 11,25, "ENTER 1" TO GUIT."
   116 :
   118 O$="ABCDEFGHIJKLMNOPORSTUVWXYZ":H$=Q$
   120 DIM B(LEN(Q$)+1)
                                                                                                            232 B$="":A$=KEY$
   122 T=LEN(G$)
                                                                                                            234 GETV$
  124 :
                                                                                                            236 IFV$="#"THEN316
  126 TEXT:PAPERO: INK?
  128 POKE #26A,10
                                                                                                            238 IFV$(*0*0RV$)*9*THEN234
                                                                                                            240 IFV$>"2"THENG$=V$:60T0258
  130 POKE48036,0
                                                                                                            242 IFV$="0"ANDG$=""THEN234
  132 6010 138
  134 OLS:FORF=1T02:PL0T3,F,F:PL0T4,F,14:PL0T13,F,*SUPER REVERSE*:NEXT
                                                                                                            244 8$=8$+V$:PRINTV$;
                                                                                                            246 AS=XEYS:BETUS
  136 PRINT:PRINT:PRINT:PRINT:RETURN
                                                                                                            248 1FV$=CHR$(127)THENPRINTCHR$(127):6$="":V$="":60T0228
  138 60SUB 134
                                                                                                            250 IFV$=CHR$(13)THEN258
  142 PRINT* I will show you a string made up*
                                                                                                            252 IFV$("0"ORV$)"9"THEN246
 144 PRINT of the 26 letters of the alphabet."
146 PRINT:PRINT* It is your job to sort this string into alphabetical order.":
                                                                                                           254 IF6$="2"ANDV$>"6"THEN234
                                                                                                            256 6$=6$+V$
                                                                                                           258 G=WAL (G$)
                                                                                                           260 PRINTYS:WAIT10
  148 PRINT At prompt , enter a number (1 - 26).
  150 PRINT*This number being the number of lttrs.
                                                                                                           262 S$=RIGHT$(Z$,(LEN(Z$)-G))
                                                                                                           264 DS=LEFT$ (Z$,6):E$=""
  152 PRINT that have to be reversed from the "
  154 PRINT"left hand side."
                                                                                                           266 FORF=GT01STEP-1
                                                                                                           268 E$=E$+HID$(D$,F,1)
 156 PRINT" To make things more difficult ,"
 158 PRINT after each turn I will also reverse
                                                                                                           270 NEXTF:DS=ES
 160 PRINT the centre 6 letters."
                                                                                                           272 2$=0$+5$
 162 PRINT
                                                                                                           274 REM NOW TO SWOP MIDDLE
                                                                                                           276 1=(1/2)-2
 164 PRINT*
              Can you sort out this array ?":PRINT:PRINT
                                                                                                           278 S$=LEFT$(Z$,H-1)
 168 PRINTCHR$(4)CHR$(27)"B"CHR$(27)"N PRESS ANY KEY....."CHR$(4)
                                                                                                           280 D$=RIGHT$(Z$, (LEN(Q$)-(H+5)))
                                                                                                           282 F$=MID$(Z$,H,6)
 170 REPEAT
 172 A=RND(1)
                                                                                                           284 64=**
                                                                                                           286 FORF=LEN(F$) TO 1 STEP-1
 174 UNTILKEYSO ""
 176 60SUB134
                                                                                                          288 G$=G$+HID$(F$,F,1)
                                                                                                           290 NEXT
               MIXING STRING - "CHR# (27) "LPLEASE WAIT" : PRINT
 178 PRINT*
 180 B(1)=INT(RND(1)*T)+1
                                                                                                          292 25=S$+S$+D$
 182 FOR F=2 TO T
                                                                                                          294 PLOT29,24,*
296 UNTIL 25-05
184 B(F)=INT(RND(1)$T)+1:J=0
                                                                                                          298 FORF=11T012:PLOT7,F,Z$:NEXT
 186 FOR 6=1 TO F-1
188 IF B(6)=B(F) THEN J=J+1
                                                                                                          300 FORF=1TO3:PING:WAIT30:NEXT
                                                                                                          302 PRINT @ 07,24; "MELL DOME - SUCCESS AT LAST"
304 PRINT @ 11,25; "ANOTHER GO (Y/N) ?"
306 PLOT 9,25,12:PLOT10,25,4
190 NEXT 6: IF JOO THEN 184
192 NEXT F
194 75=**
196 FOR F=1 TO T
                                                                                                          308 AS=KEYS:GETAS
198 Z$=Z$+HID$(Q$,B(F),1)
                                                                                                          310 IF AS="N" THEN CLS:END
                                                                                                          312 IF AS="Y" THEN RUN
200 NEXT:PING
202 GOSUB 134
                                                                                                          314 GOTO 308
                                                                                                          316 HIRES: TEXT: POKE#26A, 3
204 Z=0
206 PLUT 14,09, "THE STRING."
                                                                                                          318 PRINT:PRINT"YOU GUIT - NEVER HIND"
208 FOR F=11 TO 12
210 PLOT 2,F,F-8
                                                                                                          322 :
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