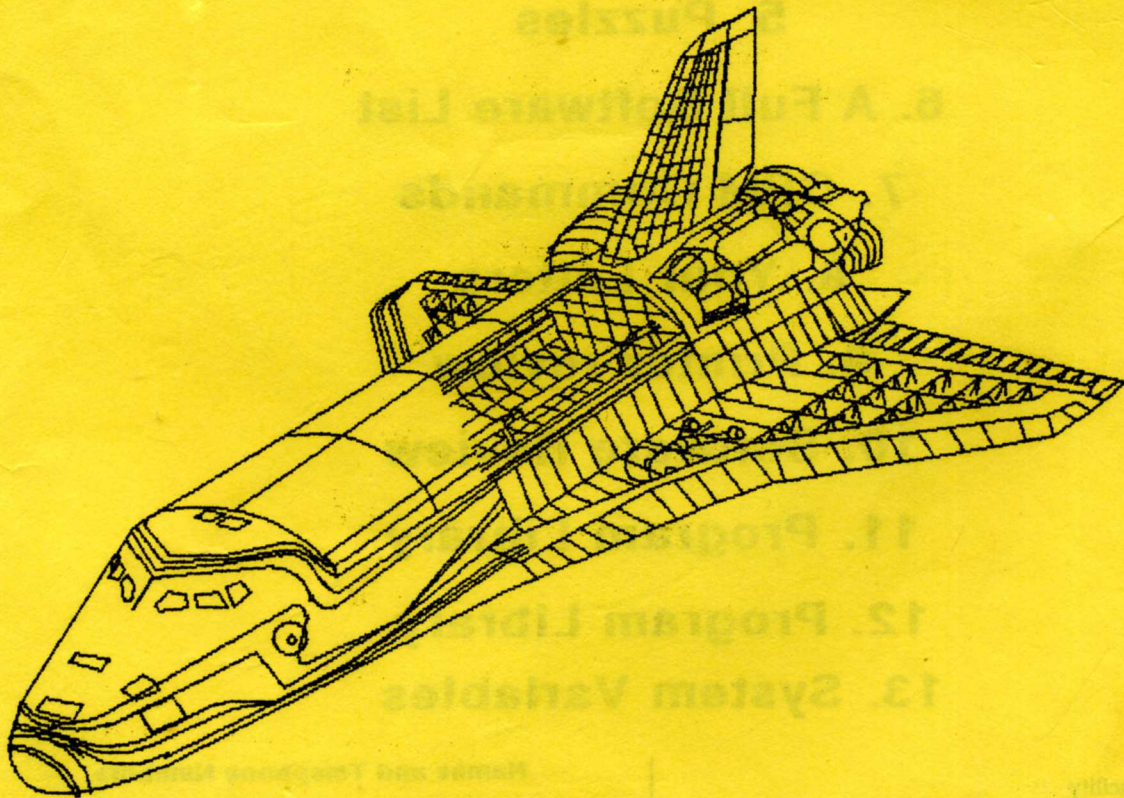


Vol 4 Issue 7

July 1988

The
MEMOTECH
Owners
Club
Magazine

MEMOTECHNIQUES



13 Copse Road
Townhill Park
Southampton
SO2 2GY

CIRCA ...342

M.O.C.

VOLUME 4 ISSUE NUMBER 7

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--- A Club Facility ---

A program listing facility for those with no printer. Just send in your program on tape (or 5.25" disc) with a pre-paid envelope addressed to yourselves and the club will do the listing for you.

--- Names and Telephone Numbers. ---

i. Paul Wood for 3.5" disc copying, general info and Comms specific info.
Tel 0905 24260

ii. Alan Dobson for help with the following adventures: Alice, The ZOO and Man From Granny
Tel 061-980-6288

EDITORIAL (July 1988)

Phil & Hazel Eyres
13 Copse Road
Townhill Park
Southampton

No prizes for spotting anything unusual about this month's magazine. I hope everyone likes the change in format and we hope to continue along this line in the future, perhaps refining it a bit as we go. If anyone is interested, it is all done using Ventura publisher on an Amstrad PC. It knocks a couple of hours off of the production of the magazine and takes away some of the headaches in the process.

I have written to Orion a few times in the last month and have offered to take over the software titles; paying them royalties or buying any leftover software. To my surprise I have not had a reply as yet, so this could lead to a future software problem. Does anyone have any good ideas about how to get around this? If we could contact the software writers, we could offer to take over the software paying them royalties. One option is to copy the software ourselves, keep a record of everything we sell, hopefully as we contact the writers we will then be able to pass on their royalties. I would be grateful for any members views about this idea!!

We intend on running a set of reviews under the heading of 'Board Games' in the next month. If anyone would like to review a game then please contact me on 0703 585106 ASAP.

The system variables document that we have, has always been sought after by those of you interested in the internal workings of the machine. We now have them in wordprocessor form, so it would be a good idea if we could make them more up to date. In order to give everyone a chance to see

what things look like at present, I will print a page a month on the back of the magazine. If you have any changes/additions then please send them in so that I can include them.

I should now be in most evenings, except for the odd game of squash, so I think that it would be best to revert to having the Club Hotline between 7 and 8 pm any evening. Please where at all possible refrain from phoning after 9pm. I hope this is ok for everyone. The number to phone now is (0703) 585106, ask for Phil.

If anyone would like back issues they are available for the small remittance of 80p each. At present there are 36 back issues, 10 for volume 1, 10 for volume 2, 10 for volume 3 and 6 for volume 4.

It should be noted that all articles are the copyright of the sender and M.O.C., anyone wishing to have articles published elsewhere should inform us first.

Phil Eyres

BOOKS

Second Hand Books

We have one each of the following

The Memotech Games Book #5.00

The MTX Operators Manual

By Phoenix Publishing #7.00

An Intro To Z80 Assembler

By R.A. Penfold #2.00

84 Basic Computer Games

(Not MTX - But Similar) #4.00

I sent on a first come first served basis. All cheques to Memotech Owners Club Please.

PASCAL LIBRARY

No, don't start writing in to see what I've got! I had in mind the 'starting' of a Pascal text file library. This needs contributions to get it going. NO disc's sorry! I shall produce a list of the contributions received and get Phil to publish it. Send your tapes to: Nigel Cooper 93 Francis Road Leyton London E10 6PL

Naturally, I shall send compiled versions of all text on to Alan Hamilton so that members who do not own ROMs can gain access to the programmes.

PUZZLES

By James Hewson

This month we have two Basic/Assembler programs. The first is based on the plastic puzzle that you can buy in the shops. You have 15 'tiles' which you have to move round to make four words. You are being timed, so don't hang about for too long. There are several different puzzles so that you will not get bored.

The second, called ARAMANG, is a quiz master that jumbles up letters then gives you a set amount of time to find as many words as you can.

SLIDER

So, onto the first program. It is called SLIDER and is written totally in Basic. In the centre of the screen will be drawn the box containing the 15 tiles to be moved around. On the screen are the four words that you have to make up, and the order in which they must be displayed. The cursor keys (or joystick) are used to move the tiles up, down, left and right.

```
10 REM
20 REM
30 REM      SLIDER
40 REM
50 REM      BY JAMES HEWSON
60 REM
70 REM
80 RAND .1
90 VS 4
100 DIM Q$(4,16),W$(4,16)
110 LET L=1000
120 LET BT$="999999"
130 DIM B$(16)
140 GOSUB 630
150 CLS : GOSUB 740
160 FOR C=80 TO 176 STEP 24
170 LINE C,56,C,152: NEXT C
180 FOR D=56 TO 152 STEP 24: LINE
80,D,176,D: NEXT D
190 LET J=0: LET K=1: LET P=15: LET Q=20
200 FOR N=6 TO 15 STEP 3: FOR M=11 TO
20 STEP 3: CSR M,N: PRINT A$(K)
210 LET K=K+1: NEXT M: NEXT N
220 GOSUB 480
230 LET R=P: LET S=Q: CSR 14,1: IF
TIME$ < BT$ THEN PRINT TIME$ ELSE ATTR
0,1: PRINT TIME$: ATTR 0,0: GOSUB 790
240 IF INKEY$="" THEN GOTO 230
250 IF INKEY$=CHR$(8) THEN LET S=Q+3:
IF S > 20 THEN GOTO 230
260 IF INKEY$=CHR$(25) THEN LET S=Q-3:
```

```
IF S < 11 THEN GOTO 230
270 IF INKEY$=CHR$(10) THEN LET R=P-3:
IF R < 6 THEN GOTO 230
280 IF INKEY$=CHR$(11) THEN LET R=P+3:
IF R > 15 THEN GOTO 230
290 IF INKEY$=CHR$(27) THEN PRINT
CHR$(7): GOSUB 630: GOSUB 590: GOSUB
740: GOTO 190
300 IF INKEY$ < > CHR$(8) AND
INKEY$ < > CHR$(25) AND
INKEY$ < > CHR$(10) AND
INKEY$ < > CHR$(11) THEN GOTO 230
310 SOUND 0,500,15: PAUSE 100: SOUND
0,0,0: CSR S,R: LET Z$=SPK$: CSR Q,P:
PRINT Z$: CSR S,R: PRINT " "
320 GOSUB 350: LET P=R: LET Q=S
330 LET J=J+1: CSR 15,3: IF J < =L THEN
PRINT J ELSE ATTR 0,1: PRINT J: ATTR 0,0:
GOSUB 790
340 GOTO 230
350 LET A=1: FOR N=6 TO 15 STEP 3: FOR
M=11 TO 20 STEP 3: CSR M,N: LET
B$(A)=SPK$
360 LET A=A+1: NEXT M: NEXT N
370 IF B$=C$ THEN GOTO 390
380 RETURN
390 FOR N=700 TO 200 STEP -20: SOUND
0,N,15: PAUSE 50: SOUND 0,N/2,15: PAUSE
20: NEXT N
400 SOUND 0,0,0
410 CSR 12,19: PRINT "CORRECT"
420 IF BT$ > TIME$ THEN LET BT$=TIME$
430 CSR 2,21: PRINT "PRESS F1/F8 KEY TO
PLAY AGAIN"
440 IF INKEY$ < CHR$(128) THEN GOTO 440
450 CSR 2,21: PRINT " "
460 CSR 14,1: PRINT "000000"
470 CSR 12,19: PRINT " ": GOSUB 630:
GOSUB 590: GOSUB 740: GOTO 190
480 FOR Y=1 TO 50
490 LET R=P: LET S=Q: LET X=INT(RND*4)
500 IF X=0 THEN LET S=Q+3: IF S > 20
THEN GOTO 490
510 IF X=3 THEN LET S=Q-3: IF S < 11 THEN
GOTO 490
520 IF X=1 THEN LET R=P-3: IF R < 6 THEN
GOTO 490
530 IF X=2 THEN LET R=P+3: IF R > 15
THEN GOTO 490
540 CSR S,R: LET Z$=SPK$: CSR Q,P: PRINT
Z$: CSR S,R: PRINT " "
```

```

650 FOR Z = 600 TO 400 STEP -20: SOUND
0,Z,15: NEXT Z: SOUND 0,0,0
660 LET P = R: LET Q = S: NEXT Y
670 CLOCK "000000"
680 RETURN
690 IF J < L THEN LET J = L
600 CSR 15,3: PRINT "0 " : CSR 2,21: PRINT
"BEST SCORE SO FAR: ";L: " "
610 CSR 2,19: PRINT "BEST TIME SO FAR:
";BT$
620 RETURN
630 LET Q$(1) = "ABCDEFGHJKLMNO "
640 LET W$(1) = "OEMKLJCGAHFDNIB "
650 LET Q$(2) = "PLUGBENTCOSYAIR "
660 LET W$(2) = "RBASYOUNPTEGICL "
670 LET Q$(3) = "HYMNSLIPBEADCOW "
680 LET W$(3) = "NPDOAIMYLEWSBCH "
690 LET Q$(4) = "PARTFLOGBENDSIX "
700 LET W$(4) = "IELATGDXRONS8BPF "
710 LET R = INT(RND*4) + 1
720 LET A$ = W$(R): LET C$ = Q$(R): LET FL = 0
730 RETURN
740 CSR 0,8
750 FOR N = 1 TO 13 STEP 4
760 PRINT " ";C$(N,4)
770 NEXT N
780 RETURN
790 IF FL = 1 THEN RETURN
800 FOR N = 200 TO 700 STEP 10: SOUND
0,N,15: SOUND 0,N-100,10: NEXT N
810 SOUND 0,0,0
820 LET FL = 1: RETURN
830 USER SAVE "SLIDER.BAS": RUN

```

ARAMANG

The second program is called ARAMANG. The idea is that a set of letters will be placed on the screen. You then have a set amount of minutes, decided by you, in which to find as many words as possible. (Much like the Countdown programme on the TV!)

A couple of points to note:

The assembler part does not have to be typed in if you do not want to. Just replace line 370 with Print C\$ instead of the USER command.

The assembler section will enhance the screen characters, making them larger on the screen.

If you choose to type in the assembler, you will have to run the assembled code once before you are able to type in line 370. This will prevent Basic from 'falling over' when it reaches the USER command.

Apart from that it is all straight forward....

1 CODE

```

4007 SYSTEM: LD HL,(#FA8A)
400A LD BC,#F5B3

```

```

400D AND A
400E SBC HL,BC
4010 JR NZ,SYST
4012 SYSD: LD HL,NEWCOM
4015 LD (#F5B4),HL
4018 LD A,#C3
401A LD (#F5B3),A
401D LD HL,#F5B6
4020 JR SYSV
4022 SYST: LD A,07
4024 LD (#FA88),A
4027 LD A,#C9
4029 LD (#FA87),A
402C LD HL,NEWCOM
402F LD (#FA8A),HL
4032 LD A,#C3
4034 LD (#FA89),A
4037 LD HL,UNDEF
403A SYSV: LD (#FA8D),HL
403D LD (#FA8C),A
4040 RET
4041 NEWCOM: LD A,(DE)
4042 CP "H"
4044 JR Z,DHIGH
4046 CP "W"
4048 JR Z,DWIDE
404A NAMERR: LD A,(#FAD2)
404D JP #FA8C
4050 DWIDE: CALL GETSTR
4053 DW: LD A,(HL)
4054 CALL DWO
4057 INC HL
4058 DEC BC
4059 LD A,B
405A OR C
405B JR NZ,DW
405D JR PRTPOS
405F DWO: PUSH BC
4060 PUSH DE
4061 PUSH HL
4062 CALL CHADDR
4065 PUSH DE
4066 DI
4067 DW1: CALL GETCHR
406A DJNZ DW1
406C EI
406D POP HL
406E LD DE,CB1
4071 LD B,08
4073 DW2: LD A,(HL)
4074 INC HL
4075 PUSH HL
4076 PUSH DE
4077 PUSH DE
4078 POP HL
4079 LD DE,13
407C ADD HL,DE

```

407D POP DE
 407E PUSH BC
 407F CALL DW3
 4082 PUSH BC
 4083 CALL DW3
 4086 LD (HL),C
 4087 POP BC
 4088 LD A,C
 4089 LD (DE),A
 408A INC DE
 408B POP BC
 408C POP HL
 408D DJNZ DW2
 408F CALL CR1
 4092 RST 10
 4093 DB #82,129,130
 4096 POP HL
 4097 POP DE
 4098 POP BC
 4099 RET
 409A DW3: LD B,04
 409C LD C,00
 409E DW4: RLCA
 409F PUSH AF
 40A0 RL C
 40A2 POP AF
 40A3 RL C
 40A5 DJNZ DW4
 40A7 RET
 40A8 PRTPOS: LD A,(DE)
 40A9 CP ','
 40AB JR NZ,PR1
 40AD RST 10
 40AE DB 09
 40AF JR PR2
 40B1 PR1: CP #3B
 40B3 JR Z,PR2
 40B5 CALL #001B
 40B8 RET
 40B9 PR2: INC DE
 40BA RET
 40BB DHIGH: CALL GETSTR
 40BE DH: LD A,(HL)
 40BF CALL DH0
 40C2 INC HL
 40C3 DEC BC
 40C4 LD A,B
 40C5 OR C
 40C6 JR NZ,DH
 40C8 RST 10
 40C9 DB #0A
 40CA JR PRTPOS
 40CC DH0: PUSH BC
 40CD PUSH DE
 40CE PUSH HL
 40CF CALL CHADDR
 40D2 PUSH DE

40D3 DI
 40D4 DH1: CALL GETCHR
 40D7 LD (DE),A
 40D8 INC DE
 40D9 DJNZ DH1
 40DB EI
 40DC POP HL
 40DD CALL CREATE
 40E0 RST 10
 40E1 DB #85
 40E2 DB 129,10,8,130,11
 40E7 POP HL
 40E8 POP DE
 40E9 POP BC
 40EA RET
 40EB CHADDR: LD L,A
 40EC LD H,00
 40EE ADD HL,HL
 40EF ADD HL,HL
 40F0 ADD HL,HL
 40F1 LD DE,#1800
 40F4 ADD HL,DE
 40F5 LD B,08
 40F7 LD DE,BUFFER
 40FA RET
 40FB GETCHR: LD A,L
 40FC OUT (2),A
 40FE LD A,H
 40FF OUT (2),A
 4101 INC HL
 4102 PUSH HL
 4103 POP HL
 4104 IN A,(01)
 4106 LD (DE),A
 4107 INC DE
 4108 RET
 4109 GETSTR: INC DE
 410A CALL #3E7E
 410D PUSH DE
 410E LD HL,(#FA81)
 4111 CALL #3FEC
 4114 LD (#FA81),DE
 4118 EX DE,HL
 4119 POP DE
 411A RET
 411B CREATE: LD BC,08
 411E LD DE,CB1
 4121 LDIR
 4123 LD BC,08
 4126 LD DE,CB2
 4129 LDIR
 412B CR1: RST 10
 412C DB #8B,15,1,129
 4130 CB1: DS 08
 4138 RST 10
 4139 DB #8B,15,1,130
 413D CB2: DS 08

```

4145 RET
4146 UNDEF: RST 28
4147 DB #26
4148 BUFFER: DS 16
4158 RET
Symbols:
SYSTEM 4007 SYST 4022
NEWCOM 4041 SYSD 4012
SYSV 403A UNDEF 4146
DHIGH 40BB DWIDE 4050
NAMERR 404A GETSTR 4109
DW 4053 DWO 405F
PRTPOS 40A8 CHADDR 40EB
GETCHR 40FB DW1 4067
CB1 4130 DW2 4073
DW3 409A CR1 412B
DW4 409E PR1 40B1
PR2 40B9 DH 40BE
DH0 40CC DH1 40D4
CREATE 411B BUFFER 4148
CB2 413D

```

```

100 REM ....ARAMANG....
110 REM 9.8.87
120 REM J.W.HEWSON
130 REM THE LETTERS
210 DIM A$(16,7)
215 GOSUB 8000
220 FOR N = 1 TO 16
230 READ B$: LET A$(N) = B$
240 NEXT N
300 VS 4: CLS
310 FOR N = 1 TO 4
320 FOR M = 1 TO 4
330 LET R = INT(RND*6) + 1
340 LET C = N*M
350 LET C$ = A$(C,R): IF C$ = "q" THEN LET
C$ = "qu"
360 CSR N*3,M*3
370 USER HC$ : REM (OR MISS OUT THE
CODE AND USE PRINT C$)
400 NEXT M
410 NEXT N
490 REM TIMING
500 CLOCK "000000": LET E$ = "000000"
510 IF TIME$ < > H$ THEN GOSUB 9000:
GOTO 510
520 FOR N = 800 TO 500 STEP -100
525 FOR M = N TO N-400 STEP -5: SOUND
0,M,15: NEXT M
530 NEXT N: SOUND 0,0,0
540 CSR 1,20: INPUT "ANOTHER GO (Y/N) ";D$
550 IF D$ = "y" OR D$ = "Y" THEN RUN ELSE
STOP
1000 DATA
WILUGR,SRJMAO,YEGUKL,WDNSEO,NVDZAE,FY

```

```

HEEI,BTLYAI,RIFOXB,TEVIGN,OIAACT,OQAMBJ,L
ERACS,SUTEPL,EPINHS,MADEPC,NUDOKT
8000 CLS
8010 CSR 1,10: INPUT "ENTER TIME REQUIRED
IN MINUTES (1-9) ";G
8015 IF G < 1 OR G > 9 THEN PRINT CHR$(7):
GOTO 8000
8020 LET G$ = STR$(G): LET G$ = G$(2,LEN
(G$)-1)
8030 LET H$ = "000" + G$ + "00"
8040 INPUT "DO YOU WANT SOUND? (Y/N)
";I$
8050 IF I$ = "n" OR I$ = "N" THEN LET F = 0
ELSE LET F = 15
8060 RETURN
9000 CSR 20,10: PRINT RIGHT$(TIME$,4)
9010 IF TIME$ = E$ THEN GOTO 9040
9015 LET E$ = TIME$
9020 SOUND 3,4,F: PAUSE 50: SOUND3,0,0
9040 RETURN

```

ASSEMBLY LANGUAGE COURSE

NORMAL R.R.P. #10.00

SPECIAL CLUB PRICE

ONLY #7.00

HARDWARE AND SOFTWARE PRICE LIST July 1988

*MOC Phil Eyres 13 COPSE ROAD, TOWNHILL PARK, SOUTHAMPTON.
Tel 0703 585106*

Below is the list of available software for the MTX series, titles held in stock will be dispatched by return, all other titles ordered immediately and sent by return when received. All MOC titles always in stock and sent by return. Please make cheques payable to Memotech Owners Club.

Title	Price
3D TACHYON FIGHTER	7.70
AGROVATOR	6.60
ALICE	7.70
ASTROMILLON	7.70
ASTROPAC	7.70
ATTACK OF KILLER TOMS	8.80
BLOBBO	7.70
BOUNCING BILL	6.60
BRIDGE	7.70
CAVES OF ORB	6.60
CHAMBEROIDS	7.70
CHESS	10.00
COMBAT	4.40
CRYSTAL	7.70
DISASM	8.80
DOODLEBUG	6.60
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TUTORIAL	7.00

BASIC CPM CONTROL

This is the first of a series of articles on the use of CP/M and some of its utilities.

Control Characters for line editing

The ^ symbol signifies that the CTRL key should be pressed down whilst pressing the characters next to the ^.

^C Restart CP/M

Control C triggers a CP/M warm start (boot). A warm boot restores CP/M's internal information to a predefined state without destroying programs or data stored in memory. The warm boot has two primary uses:

- To 'log on' a disc when disc is changed in one or more drives.
- To interrupt a program a return to CP/M command level.

If you change discs without telling CP/M, all sorts of strange things may happen. Not least a BDOS error just when you do not want one. Always press ^C whenever you insert a different disc unless the disc is requested by a program.

^E Continue typing on next line.

If you want to continue typing a long command line, you can do so by pressing CTRL-E. This will move the cursor to the next line, allowing you to continue typing. Pressing Enter will execute the entire command line. Pressing ^E several times in succession is one way of easily clearing a CP/M screen.

^U or ^X Cancel current command

If you enter a command line incorrectly, instead of backspacing, use CTRL-U. CP/M will then ignore what has already been typed and move to the beginning of the next command line. A * will be placed at the end of the cancelled line.

^J and ^M Linefeed/Carriage Return

CTRL-M or CTRL-J is exactly the same as pressing return.

DELETE Cancel a character and echo it

The delete key cancels the last uncanceled character in the command line and then repeats it. This command is not much use these days. It comes from the teletype era, when it was not possible to delete things from the command line.

^H Delete last character

CTRL-H acts in the same way as the BS (Backspace) key.

These are just some simple keyboard controls available from the CP/M prompt. Still to come:

A basic insight to CP/M How to use some of the utility programs.

... More next month.

INTERFACING PROJECTS

Why not get into the exciting world of micro electronics. Infact what better way to start than with an MOC D.I.Y. kit. Everything you need is supplied, except a soldering iron, wire cutters and of course a few hours of your time!! So why not order now.

This is the last month we can hold the price of the Speech Synthesiser kit due to price increases for the chips.

Interface price list A full set of components and instructions for the LED kit	#6.95
A full set of components and instructions for the Speech Synthesiser kit	#18.00
Connecting cable for the internal port (needed for projects)	#4.50

All prices are fully inclusive.

Please allow 14 days for delivery and make cheques payable to MOC.

Your Letters

Services

Several members have expressed concern over not knowing where to go to get their machines repaired. Three possibilities are :-

MCL Contact Geoff Hook Unit 24 Station Lane Witney, Oxon. OX8 6BA Tel. 0993 78691

UK Home Computers Contact Ron Gladwin 82 Churchward Ave Swindon SN2 1NH Tel. 0793 695034

Paul Wood 12 Bishops Ave Worcester WR3 8XA Tel. 0905 24260

Problems

1. I am having problems with NODDY. When I save NODDY pages to disc (FDX system) it saves only the file name but does not save the data. I followed the instructions several times with the only alteration of Disc Save so as to save to disc instead of tape.

Having phoned the 'other place' I ascertained that the problem lies in the early ROM. NODDY has difficulty determining the disc space therefore does not enter the data. I was told the way round this is to start with a blank disc with only NODDY. This means that once created short programs can then be moved together on another disc with NSWEEP or PIP. Is this the only way?

Phil - I have not come across this problem before. I know that if you try to save a basic program to a full disc, it will happily do it, just saving the name and no data. Most frustrating when you try to load it in the future.

Does anyone have any ideas of why this is so?

2. Several members have been complaining of problems they have experienced when using NewWord. They say that the R (run another program) menu option comes up with 'Newword can't find return file'. This appears to only be the case after Newword has been changed using NWINSTAL. I have chased the problem round and round, the answer is really simple, the R menu option will not work unless you are using NW.COM. It does not matter if you make changes to NW.COM. The point is it has to be called NW.COM. So all your NWA.COM files which fall over will have to be re-named if you wish to use this feature.

Chat Chat

1. I would like you to know that I look forward to receiving my copies of Memotech-niques monthly and am aware that the club must continue at all cost in order that communication be maintained with all subscribing owners of the 'Black Beauty'.

I read in your editorial in the February issue, as to your concern regarding members requirements from the magazine and I should like you to know that although I have had my machine for two years and have dabbled with it quite frequently during that time, I'm still very much a novice and that I much appreciate the simple routines which occur from time to time. Perhaps more could be included in future issues, along with the reasoning behind them. I am only too aware that the majority of your readers are young and have a grasp for the new technology but others of us may need a bit more help!

I also read in your magazine of the Program Library, and would like to know more about it. Does one borrow what is available and then return it, or is it routines which are in list form to be kept. Is there a comprehensive list of what is available?

G.E. Payne Whitchurch, Bristol.

Phil - Thanks for your comments about the magazine. Now that we can control the style of the magazine better, we will hopefully have more room for the little 4 and 5 line programs which have been missed before. The Program Library programs are supplied on tape or disc, as suggested on page 13. For \$1.50 you get a tape with two programs (which are your own then to keep). On disc the same applies except you get 20 programs at a time. We have reviews of all programs available, just send a SAE to me.

2. Mr P Hopkins of Peterborough has sent us photocopies of an article from Practical Electronics. It is an article describing how to build an 8 channel Analogue to Digital converter for the Memotech. It is still possible to buy the ready made PCB's. If anyone is interested, please send us a SAE and we will send you a copy. The only draw back with it according to Mr Hopkins is the price of the ADC chip - \$20.00.

For Sale

1 FDX CP/M 2*500K 5.25"	#300
1 SDX CP/M 2*500K 5.25"	#200
RS232 CARD	#20
SPECULATOR	#15
MTX 512 & 80 COLUMN CARD	#100
OLD GENPAT MAGS	
VOLUME 1 ISS 1-12	
VOLUME 2 ISS 1-12	
#20 THE LOT	

Please contact Alan Hamilton if you are interested in the above items.

REVIEWS

Available From: Memotech Owners Club

Price: #6.60

Reviewed By: Andy Owen

Missile Kommand And Arcazions

These are both conversions of games which were very popular about 5 years ago in the arcades.

Missile Kommand

There is a missile base in the centre of the screen, flanked by four cities. It is your job to protect these cities from missile bombardment, by destroying the missiles with your own. You may have a maximum of ten missiles in the air at once; whereas I have seen no limit to the number of enemies there can be. For control you have crosshairs which you place where your missile is to explode (the explosion stays on the screen for a while, and while present will destroy any enemy missiles which collide with it). For each enemy missile destroyed 10 points are awarded. But should any slip through your defenses, one hit is enough to decimate a city, or temporarily immobilise your base. At the end of each level a bonus of 'surviving cities*100*level' is awarded. Should all the cities be destroyed your game is over and you may enter your name in the high score table.

The first three levels are fairly easy, but on the fourth the missiles start to split up (multiple war heads) and the attack waves become longer as you progress through the levels.

Although the graphics are pretty basic they are effective, as are the sound effects; even the tunes do not get on your nerves. On screen there is a clear indication of your score, the high score and level. On screen instructions (all too few in MTX games) are simple and effective. The pause mode is useful, but one thing that is lacking is the two player option.

Graphics 6 Sound 6 Instructions 7

Addictivity 7 Overall 7

Acadlans

The idea of this game is simply to shoot down the aliens. The screen layout consists of a background of twinkling stars with four layers of aliens (3 blue and 1 yellow) which move back and forth across the screen, occasionally mounting a bomb run (consisting of no more than 5 aliens). Your only means of defence/attack is a single shot laser gun (ie only one shot at a time can be on the screen). Shooting a blue or yellow alien scores 50 or 100 points respectively, and during the final phase of their bombing run, 500 and 800. The only variation between levels is the increase of speed.

The general layout of the screen is good with clear indication of your score, the high score and the number of lives left, also whether player 1 or 2 is 'up'. The graphics are bold and colourful, but the ship is too big for my tastes. The sound is reasonable throughout, but the constant 'humming' (which increase in pitch as you shoot more aliens) is annoying, as is the lack of pause mode or instructions.

Overall I think this game plays well, but can get a little monotonous.

Graphics 6 Sound 6 Instructions 2

Addictivity 5 Overall 6

These two games together on one tape represent very good value. The following are scores for the tape as a whole:

VFM 8 Overall 7

Combat

Available From: Memotech Owners Club

Price: #4.40

Reviewed By: Andy Owen

The aim of this game seems to be to break through a wall.

To aid you in this 'stars' fall from the wall and have to be bounced back off your 'crossbow'. Upon hitting the wall they knock a brick off, which then has to be avoided, or hit with an arrow; if you are unsuccessful your game is over.

Another aide in your task is a 'frog', which whizzes across the screen at breakneck speed, and can be controlled by the vertical controls on the joystick. This frog can eat the bricks and the 'spider', which occasionally travels across the screen, from the left and repairs the wall. On the latter levels the spider starts firing lightning at you which must be avoided.

As far as I can see you only have one life, but this is plenty as it is fairly difficult to get killed. The game play gets monotonous very quickly as the only difference between levels is that later on the spider shoots thunder bolts.

Graphics and animation are on the whole pretty basic, as is the sound. The screen layout is fairly clear, with your score and the present high score at the top of the screen. Again there are no instructions.

Graphics 4 Sound 4 Instructions 0
VFM 5 Overall 4

Brother HR-10 Daisywheel Printer

Review By Alan Hamilton

The Brother HR-10 printer is a fairly unknown element in Brother's very extensive printer line. The printer actually went out of production about a year ago when they brought out the HR15, HR25 and HR35.

The first and most noticeable thing I discovered was that the printer had a continental power plug moulded onto the cable. Initially I wondered if the printer would work on the British mains but a quick look at the power rating to the rear of the machine proved that it would indeed work. I put a square pin plug on and powered up. A quick whir of the daisywheel and the head moving over to the left end of the carriage proved that all was well.

The printer is cream in colour, as are all Brother printers and about the same size as any large dot-matrix. It is essentially a friction feed machine but I also got a tractor feed unit which allows the full and proper use of continuous stationery and ensures that the paper is always straight. The tractor feed is smooth and accurate with the minimum of hassle involved in installing the unit to the printer.

The printer has a number of nice features which are not normally supplied with others. Firstly, the lid of the printer which hides the massive ribbon and head mechanism has a small micro-switch under the rim which prevents the printer from going on-line when it's open and hence to make sure that you can't get jewellery/fingers stuck in the machinery. Also, there is a carrying handle located at the front which allays any apprehension about moving the printer any distance in case you drop it - printers don't bounce very well. Also, the paper guide bar is moveable from outside the lid - something that you get very rarely these days. In addition to this, there are two cable clips on the back

to allow you to coil the extra power cable out of the way.

The speed of line feeding on the printer (the speed at which the roller moves) is very very fast - faster than any other printer I have seen. Most others are somewhere between 1 and 1.5" per second whereas the HR-10 is 2.5". It certainly surprised me to see the paper going so fast - don't blink or you'll miss it. I think it is about time I mentioned the printing. It's not a fast printer - daisywheels never are but the wait is definitely worth it. The print quality is absolutely first class as you would expect, the clarity of the printing is the best I have experienced. For a change, it is very easy to change ribbons and daisywheels with this printer: Lift of the lid, and pull the top of the ribbon towards you and away it comes. Fitting another is just as easy. The daisy replacement is a joy with only the flicking back of a small green lever to cope with.

So, to sum up then, if you do mostly text printing and are looking for a low-cost printer which won't embarrass you when you write to people, then you can't go wrong with the HR-10. When you consider that it takes the same ribbons as the other HR's (except the HR5), you can see that it certainly is a bargain at #115. It doesn't do graphics, no screen dumps or UDGs and isn't particularly quiet but is well worth the cash.

Overall rating - 95%

Hardware & Software

We are on the look out for any second-hand hardware and/or software at reasonable prices. Especially Disc systems and printers. Contact Phil Eyres on 0703 585106.

SPACE FILLER

BACKUPS

When was the last time you made a copy of your valuable data (or for that matter your program disc's)?

Your backup disc's will not last for ever. Once written your data will only stay readable for a couple of years. After that the magnetism of the disc surface fades, making the disc unreadable.

So make another copy of your data today, and save tomorrows problems.

Remember also to keep your backup disc's away from your working disc's, just in case of disaster.

PUBLIC DOMAIN SOFTWARE LIBRARY

12 Roobank Road
Bellis,
Ayrshire
KA16 2DX
Tel: 05055 2491

All cheques payable to Memotech Owners Club please

New this month:

CA15 - Filetech II

The first upgrade of this popular item from the library. Thanks to Malcolm Taylor, the program now has been extended to have 8 fields instead of the original 5 and he has taken out most of the annoying little bugs.

CA16 - Forth Extensions

An interesting collection of words to add to your Forth system. They have been written by Peter Burns on MOC's FIG-Forth and can only be used with it. See also LL07

GPM15- ZBASIC

This piece of mega programming is the Public Domain version of the very good full version by the same name. Comes complete with on-board help and, for the first time, comes with graphics. You can't afford to miss this one!

LL07 - Forth Extensions Documentation

The full documentation to CA16. It outlines the exact usage and nature of all the new words and some very good references for anyone who wishes to learn Forth the "easy" way.

LL11 - Enhanced SuperCalc

The reprint of the very handy article in last month's magazine in case anybody missed it.

This month sees the extension of the Library to include that ever more popular language, Pascal. The MOCPSL now has a list of Pascal Macros which are really just some handy programs and routines which have been written on several different versions of Pascal. They come on paper, thus avoiding problems with formats and so on and are easily convertible to/from Hisoft ROM Pascal, Turbo, Pascal-80 and the likes. I

haven't got room here to list all the macros, but if you contact me, I'll send you a full list. I have to charge 50p per macro to cover paper, postage etc which is the same as the library documents. If anyone has any programs in Pascal which they could contribute, I would be most grateful. Also, if anyone would like to see this service extended to other languages such as Forth, Fortran or even, dare I say it - Assembler then please feel free to contact me.

Prices: #1.50 for 2 programs on tape (we supply the tape). 5.25" users: #2.75 for any disc (#3.75 for the disc too). 3.5" users: #3.65 for any disc (#4.75 for the disc too).

Alan Hamilton

MTX Printer Connecting Cables

Only #7.00

Will fit all standard Centronics type printers

DMX 80 Printer Ribbons

Only #7.00 Incl. P&P

ADVERTS

If you would like to place an advert like this one, all you have to do is send me the words you would like printed, along with your name and address. There is a £5.00 charge for 'FOR SALE' ads. All 'SERVICE' ads are free of charge and will be included in any free spaces.

Memotech Owners Club Public Domain Software Library

12 Rosbank Road
Balloch,
Ayrshire
KA15 2DX
Tel. 05055 2491

This is the shortened list of programs and documents available from the MOCPSL at the above address. The copying fees for software are: #1.50 for two programs on cassette (we supply the tape) and #2.75 on disc for 20 programs (or #3.75 if you want us to supply the disc). 3.5" disc copies are available also at #4.75 including disc, #3.75 excluding. When ordering discs please state exactly the system you have: Disc capacity, operating system & disc size. All cheques/postal orders payable to Memotech Owners Club please.

Cassette ONLY

- | | |
|--------------------|--------------------|
| CA01 Renum III | CA02 Merge |
| CA03 Money Manager | CA04 FKEY |
| CA05 DBase III | CA06 Filetech |
| CA07 Flight | CA08 RAMDisc |
| CA09 TextEd | CA10 Deci_Clock |
| CA11 Elements | CA12 MkBook |
| CA13 Optics | CA14 Dbase IV |
| CA15 Filetech II | CA16 Forth Extnsns |

CP/M Software (CP/M disc only)

- | | |
|---------------------|-----------------------|
| CPM01 Z80 assembler | CPM02 EBASIC programs |
| CPM03 Mail label | CPM04 Turbo programs |

- | | |
|-------------------|---------------------------|
| CPM05 Comms disc | CPM06 Small C compiler |
| CPM07 Utilities 1 | CPM08 Prolog/Valgo |
| CPM09 Utilities 2 | CPM10 Utilities 3 |
| CPM11 Ext'ed CP/M | CPM12 Forth |
| CPM13 Adventure | CPM14 8080/Z80 Translator |
| CPM15 ZBASIC | |

Library Documents

Available at 50p per document, this includes post and packing.

- | | |
|-------------------------|------------------------|
| LL01 System Vars | LL02 VDP Chip |
| LL03 NewWord ROM | LL04 RST10 Explained |
| LL05 Undoc.NewWord | LL06 CP/M Prog. Course |
| LL07 Instr.s for CA16 | LL08 Pascal Course |
| LL09 CP/M Intro | LL10 Flitter |
| LL11 Enhanced SuperCalc | |

PASCAL PROGRAMMERS :

Don't forget to send for your free Pascal macro catalogue from the MOCPSL.

3.5" copies of library from: Paul Wood,
12 Bishops Ave, Worcester, Warcs. WR3 8XA.

- | Disc 1 | Disc 2 | Disc 3 |
|----------------------|-------------------|--------------------|
| 01. Hex/Dec/Bin | 21. Composer | 41. Reversi Vers 2 |
| 02. CGEN | 22. Anova | 42. ISOT |
| 03. D-Draw | 23. Cashflow | 43. DBase |
| 04. Whist | 24. Reversi | 44. Diary |
| 05. Mem-Save | 25. Full Time | 45. Terminal |
| 06. MTX-Draw | 26. Panel 3 | 46. Skittles |
| 07. LOGO-Draw | 27. Word Pro | 47. Card-Ind |
| 08. Simplex Tableau | 28. SwMice | 48. 2 * H & W |
| 09. Breakeven | 29. TNT TIM | 49. Hangman |
| 10. Statistics | 30. Sw3D Funct1 | 50. Account |
| 11. Unsolved Problem | 31. Sw3D Funct2 | 51. Mastermind |
| 12. Radio Routines | 32. SwSpEd | 52. Connect 4 |
| 13. Light Cycles | 33. SwMathe | 53. Jrny Into Dngr |
| 14. Hex/Dec/Bin | 34. OXO | 54. Connect 4 V2 |
| 15. Character Ed. | 35. Solitaire | 55. Patience |
| 16. Quasimodo | 36. Cross Numbers | 56. Life |
| 17. Planner | 37. Avoid Seven | 57. Enigma |
| 18. Hanoi | 38. Numerology | 58. PKEY |
| 19. Noble | 39. Chemin | 59. SkyDiver |
| 20. Hi-Lo | 40. Dice | 60. Dice |

Disc 4 (Incomplete at present)

- | | | |
|---|---------------------------------|------------|
| 61. MPG | 62. Spooler Miscellaneous | 63. Labels |
| 64. Ski Version 2 Compilation disc | · mixed bag of programs | |
| 65. PNT/BJCK of all sorts · #1 (excluding disc) | all 66. Biorythms disc systems. | |

SYSTEM VARIABLES PART I

CTRBADR

DS 40

Control Buffers for sound See Information Section at end for Sound Tables .

FA7A LSTPG

DS 1

This contains the number of 32K RAM pages present minus 1 .

FA7B VARNAM

DS 2

This contains the address of the bottom of the variable name table .

FA7F CALCBOT

DS 2

This contains the address of the bottom of the calculator stack .

FA81 CALCST

DS 2

STACK POINTER.

This contains the address of the top of the calculator stack plus 1 , ie the next available free byte .

FA83 KBDBUF

DS 2

This contains the address of the Keyboard Buffer.

FA85 USYNT

DS 4

This contains the syntax bytes which are used to tell the computer what to expect when the BASIC command USER is met . These bytes may be defined by the operator , and are listed :
Effect of various Syntax Bytes in the USYNT location .

Syntax checked for Byte (Decimal)	0
Numeric Expression	1
String - do	2
Arithmetical Expression.....	3
List of expressions separated by ";" or ":".....	4
List of numbers separated by " . " in range 0 to 64K.....	5
Arithmetic Expressions	6
Single number in range 0 to 64K.....	7
NO CHECKING - allows anything.	8
Checks syntax for INPUT statement.....	9
Checks syntax for IF statement.....	10
Checks syntax for STEP in FOR statement.	11
GOTO or GOSUB.....	12
I =(Arithmetical expression) in FOR statement.....	13
Numeric variable or nothing.	

Any value greater than 32 (20H) will cause the computer to expect that value to be input . The syntax bytes are examined from the top of the 4 byte block to the bottom, and the last one must contain a RET instruction .

FA89 USER

DS 3

This contains the address of the routine which will be jumped to when the BASIC command word USER is met . Usually it contains RET , but may be redefined . If you wish to put a new Jump address into USER , then it is important that

it is changed in reverse order , ie FA8B first, then FA8A second, then FA89 last ; otherwise the computer will jump to 0000H , which is the equivalent to a RESET . This basic idea applies to all jump locations .

e.g. original contents of USER

FA89 RET	
FA8A	00
Not used.	
FA8B	00
Not used.	
.....to force a jump to #DOFF	
FA89	C3
JUMP to hange last	
FA8A	FF
Low byte first then.. hange second	
FA8B	DO
High byte. hange first	

FA8C

DS 3

Not used by computer but a JUMP address here will be saved to tape.

FA8F IOPL

DS 1

Pointer to the List Device , see Information section below for set-up.

FA90 REALBY

DS 1

PANEL breakpoint. Stores byte of breakpoint in GO.

FA91 KBFLAG

DS 1

Bit set effect .See Information Section at end.

FA92 STKLIM

DS 2

STACK LIMIT. Points to top of free space .

FA94 SYSTOP

DS 2

Points to the top of the Variables to be saved.

FA96 SSTACK

DS 2

Points to the start of the Machine Stack. This value is loaded into the SP (Stack Pointer) Register whenever the machine goes back to BASIC . or an error occurs

FA98 USERINT

DS 3

Contains JUMP address used dependent upon the bit set up in INTFF at #FD5E - See Information Section at end .