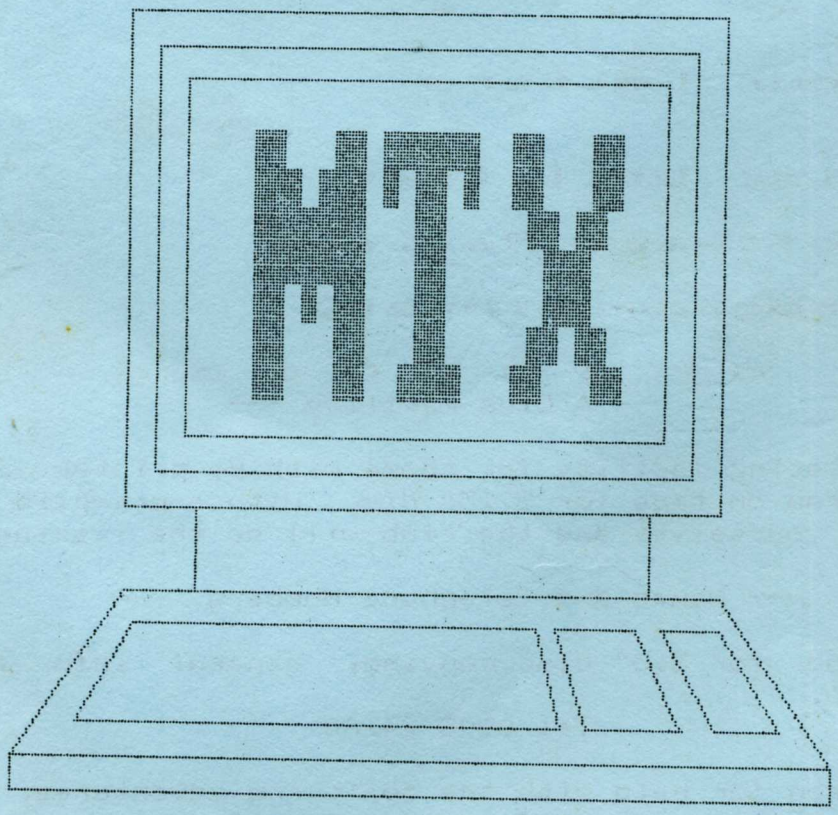
VOL. 3 ISSUE 7 MAY 1987

THE MEMOTECH OWNERS CLUB MAGAZINE

MEMOTECHNIQUES



PUBLISHED BY: MEMOTECH OWNERS CLUB
13 COPSE ROAD
TOWNHILL PARK
SOUTHAMPTON

CIRCA ...272

M.O.C.

VOLUME 3 ISSUE NUMBER 7

CONTENTS

1. Editorial

2. Basic Program
3. New for Old

4. Catalog Program
5. " "

6. Hardware and Software

7. FDXB Enhancements
8. " "

9. Your Letters
10. " "

11. Disc Utilities

12. Software Reviews

13. Program Library

o o o O O O o o o

--- 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

If anyone has any good graphics designs for a front cover then we would love to see them!!!

E D I T O R I A L (May 1987)

Phil Eyres
13 Copse Road
Townhill Park
Southampton

This month has seemingly shot by, I have moved into my new house, so please note the new address above and the new phone number below. I have been frantically doing out the spare bedroom so that all the paperwork can be 'thrown about' up there. (I'm aready being nagged about the mess (computer) in the front room).

You will have probably noticed the Graysoft leaflet enclosed with the magazine, advertising John's latest programming expedition. I hope that you all find this interesting and decide to buy a copy as it is the first new software to appear for several months. Review on page 12.

I can read/write only disc's in 5.25" format and up to 500K, if anyone with 3.5" systems would like something from the club or has something to offer on 3.5" format please send to Paul Wood, his address is listed opposite.

Paul has now also made these programs available on his bulletin board, the phone number for the BBs is 0905 52536. He will sort out a suitable communications package for file transfers and send it to us for disdribution along with a report on the BBs and instructions on how to use it. For now members can use the terminal emulation package in the program library, this will allow users to log on and leave messages etc. The BBs support's baud rates up to 2400 and most common file transfer protcols. Should anyone require any further information then please let him know. Prestel Mailbox 0905524260.

On May the 17th we received a letter from a Mr P.J.Clark informing us that Glenstar Developments Ltd (29 Copse Edge, Barhatch Road, Cranleigh, Surrey) have bought up the entire stock of the old Memotech factory including many spares and a quantity of new computers. They asked us to place an advert in these pages stating that they have MTX500's for sale at £50.00 plus £5 p&p, complete with 5 games. Also that they have 'top quality' joysticks (Fantastic) at a price of £4.75 plus £1.00 p&p.

COMPETITION

```
D + G * E - C = 17
+   *   +   *
A * A - F + B = 10
-   +   /   -
G + B * E + D = 28
*   -   +   +
F + C * D / E = 14
=   =   =   =
12  21  8   5
```

A little logic puzzle. What are the values of A - G?

Note Ignore the usual 'Precedence of operators Rule'

Just do sums from left to right or top to bottom.

Answers to be received before the next magazine, either just on paper or as a program!. The prizes on offer are two copies of John Grayson's Fruit Machine.

As I am more often than not out playing squash on Mondays between 6 and 7 pm, I feel it would be best to move the Hotline to after 7.40pm. I hope this is ok for everyone. The number to phone now is (0703) 585106, ask for Phil. However, feel free to phone any evening after 6pm.

If anyone would like back issues they are available for the small remittance of 80p each. At present there are 26 back issues, 10 for volume 1, 10 for volume 2 and 6 for volume 3.

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.

ooo 0-0-0 ooo

Software

Software prices for the best and most popular software:-

Zarkos	£7.00	Chamberoids	£7.00
Qogo2	£7.00	26*26 SpreadSht	£8.50
Karate King	£7.00	Son Of Pete	£7.00
S.M.G	£7.00	T.Snooker	£8.00 5120nly
Doodlebugs	£6.00	Super Bike	£6.00
J.J.Flash	£6.00	Ed/Asm	£8.50
Cee-5	£7.00	MTX Asm Lang Cse	£10.00
Highway Encounter	£8.50		

HEX GRID PROGRAM

BY

JOHN SEAMAN

The attached program has, I would have thought, been written and re-written a million and one times already, but I notice that it or something similar has never appeared in your pages, so perhaps it hasn't.

Anyway, the purpose of the program is to produce on the DMX80 printer a 'hex grid' such as is used by the war game enthusiasts. I made it up when I found myself with a spare moment one evening and I thought you might like to keep it on file for filling in an odd gap in your pages.

```
10 REM HEX GRID PROGRAM
20 REM JWS 24-05-86
30 REM ****************
40 PRINT "ENSURE THAT THE PRINTER IS"
50 PRINT "SWITCHED ON, CONNECTED AND"
60 PRINT "THAT PAPER IS INSERTED."
70 PRINT
80 PRINT "PRESS THE SPACE BAR TO START"
90 IF INKEY$<>" " THEN  GOTO 90
100 LPRINT CHR$(27);CHR$(48)
110 LPRINT CHR$(27);"Y";"A";CHR$(128);CHR$(64);CHR$(32);
    CHR$(16);CHR$(15);CHR$(16);CHR$(32);CHR$(64);CHR$(128)
120 LPRINT CHR$(27);"Y";"B";CHR$(1);CHR$(2);CHR$(4);CHR$(8);
    CHR$(240);CHR$(8);CHR$(4);CHR$(2);CHR$(1)
130 LPRINT CHR$(27);CHR$(48)
140 FOR I=1 TO 16
150 FOR J=1 TO 38
160 LPRINT " ";"A";
170 NEXT J
180 LPRINT " ";"A"
190 FOR J=1 TO 38
200 LPRINT " ";"B";
210 NEXT J
220 LPRINT " ";"B"
230 FOR J=1 TO 38
240 LPRINT "A";" ";
250 NEXT J
260 LPRINT "A";" "
270 FOR J=1 TO 38
280 LPRINT "B";" ";
290 NEXT J
300 LPRINT "B";" "
310 NEXT I
320 PRINT : PRINT "ANOTHER PAGE? (Y/N)"
330 IF INKEY$="Y" OR INKEY$="y" THEN  GOTO 80
340 IF INKEY$<>"N" AND INKEY$<>"n" THEN  GOTO 330
350 LPRINT CHR$(27);CHR$(64)
360 REM END
```

NEW FOR OLD

BY

J.HUDSON (1985)

The program is designed to be used to enable 'newed' or crashed programs to be recovered.To use, just load and run the program at the start of all sessions. Then just prior to running the program you are developing do:-

P.USR(48000) In reply to the Save or Rec question reply S.

This will save the first 8 bytes of your program and various system pointers to £BFF0-£BFFF. If the system crashes or you new the prog or do system reset just do :-

P.USR(48000)

Then this time reply R (Recover). Your program should be restored.

```
10 CODE
4007          LD HL,£801C
400A          LD A,(£FA7A)
400D          AND A
400E          JR Z,M500
4010          LD HL,£401C
4013 M500:    LD DE,£BB80
4016          LD BC,£9F
4019          LDIR
401B          RET
401C START:   RST 10
401D          DB £6D,£B9,"PROGRAM RECOVERY ROUTINE."
4038          DB £B1,10,13,"SAVE OR RECOVER"
404A          DB £8D,13,10,"TYPE R OR S"
4058 IN2:     CALL £79
405B          JR Z,IN2
405D          CP "S"
405F          JR Z,SAVE
4061          LD HL,£BFF0
4064          LD DE,£8000
4067          LD A,(£FA7A)
406A          AND A
406B          JR Z,LAB1
406D          LD DE,£4000
4070 LAB1:    LD BC,8
4073          LDIR
4075          LD HL,(£BFFE)
4078          LD (£FAA4),HL
407B          LD (£FAA7),HL
407E          LD (£FAAC),HL
4081          LD A,H
4082          AND £3F
4084          LD H,A
4085          LD (£FACC),HL
4088          RET
4089 SAVE:    LD HL,£8000
408C          LD A,(£FA7A)
408F          AND A
4090          JR Z,LAB2
4092          LD HL,£4000
4095 LAB2:    LD DE,£BFF0
4098          LD BC,8
409B          LDIR
409D          LD HL,(£FAA4)
40A0          LD (£BFFE),HL
40A3          RET
40A4          RET
```

TAPE CATALOG PROGRAM

By

Mike Kohnstamm

I have only tried this program on my MTX 500, with a cheap Epson P40 parallel printer. In theory it will work on a 512, and can be amended for a serial printer.

It is for people like me that keep saving things to tape and forget to label the cassette. It prints out a list of the names of programs on the tape, with time since the program started, and a count that approximates my tape counter.

Unlike my father's Spectrum, where LOAD "x" will find a program at the end of the tape, the MTX version of LOAD "x" will only work if x is the first program found, so you can't use load to list the contents of a tape - doesn't anyone else find this a real bind?

The program lets you list the program names to the TV or to a printer, it does miss the odd program, but is much better than nothing at all.

I know it is sloppily written, and I could not explain how it works - it's all done by trial and error, ROM calls and guesswork - especially when it comes to keeping the time going, and not printing things that look like programs but are not!.

```
5 GOSUB 1000
10 CODE
4011          LD HL,£FD5E
4014          LD (HL),0
4016 READS:   LD HL,£A000
4019          LD B,£FF
401B CLRLOOP:LD (HL),0
401D          INC HL
401E          DJNZ CLRLOOP
4020          LD A,1
4022          LD (£FD68),A
4025 CALLOP:  CALL £79
4028          JP NZ,LASTLAB
402B          LD HL,£A000
402E          LD DE,£10
4031          LD A,0
4033          LD (FOUND),A
4036          CALL AAE
4039          LD A,(FOUND)
403C          CP £FF
403E          JR NZ,CALLOP
4040          CALL PRT
4043          JR CALLOP
4045          RET
4046 AAE:     CALL 097F
4049          CALL £B13
404C          EX AF,AF'
404D          LD A,£90
404F          EX AF,AF'
4050 STTAGN:  CALL £79
4053          JP NZ,FINLAB
4056          LD B,0
4058 BITLOOP:CALL £A6B
405B          JR C,STTAGN
405D          DJNZ BITLOOP
405F NOONE:   EI
4060          XOR A
4061          CCF
4062          CALL £A72
4065          JR NC,NOONE
4067          CALL £A9A
406A          LD A,C
406B          CP £FF
406D          RET NZ
406E          CALL £A9A
4071          LD A,C
4072          CALL CHECK2
4075          RET C
4076          LD A,£FF
4078          LD (FOUND),A
407B          LD (HL),C
407C          INC HL
407D          DEC DE
407E LDBYT:   CALL £A9A
4081          LD (HL),C
4082          INC HL
4083          DEC DE
4084          LD A,D
4085          OR E
4086          JR NZ,LDBYT
4088          CALL £97F
408B          JP £996
408E RETLAB:  RET
408F FOUND:   DB 0
4090          NOP
4091 PRT:     PUSH BC
4092          PUSH HL
4093          PUSH DE
4094          CALL TIME
4097          LD DE,£07
409A          LD HL,£A001
409D PRTLOOP:CALL CHECK
40A0          JR C,DOT1
40A2          LD C,A
40A3          JR NEXT
40A5 DOT1:    LD C,£2E
40A7 NEXT:    CALL CHECK
40AA          JR C,DOT2
40AC          LD B,A
40AD          JR GO
40AF DOT2:    LD B,£2E
40B1 GO:      RST 10
40B2          DB £C0
40B3          DEC DE
40B4          LD A,D
40B5          OR E
40B6          JR NZ,PRTLOOP
40B8          CALL COUNT
40BB          NOP          ;   CALL HEX
40BC          RST 10
40BD          DB 13
40BE          RST 10
40BF          DB 10
40C0 NOGOOD:  POP DE
40C1          POP HL
40C2          POP BC
40C3          RET
40C4 CHECK:   LD A,(HL)
40C5 CHECK2:  CP £20
40C7          RET C
40C8          CP £5B
40CA          INC HL
40CB          CCF
40CC          RET
40CD FINLAB:  POP HL
40CE LASTLAB:LD A,0
40D0          LD (£FD75),A
40D3          RET
40D4 TIME:    LD HL,£FD59
40D7          LD C,(HL)
40D8          INC HL
```

Continued Overleaf

```
40D9          LD B,(HL)
40DA          RST 10
40DB          DB £C0
40DC          INC HL
40DD          LD C,(HL)
40DE          INC HL
40DF          LD B,(HL)
40E0          RST 10
40E1          DB £C0
40E2          LD BC,£2020
40E5          RST 10
40E6          DB £C0
40E7          RET
40E8 HEX:     LD HL,£A000
40EB          LD DE,£08
40EE HEXLOOP: INC HL
40EF          LD B,(HL)
40F0          LD A,B
40F1          SRL A
40F3          SRL A
40F5          SRL A
40F7          SRL A
40F9          CP £0A
40FB          JR C,NUM
40FD          OR £40
40FF          SUB £09
4101          JR CREG
4103 NUM:     OR £30
4105 CREG:    LD C,A
4106          LD A,B
4107          AND £0F
4109          CP £0A
410B          JR C,NUM2
410D          OR £40
410F          SUB £09
4111          JR BREG
4113 NUM2:    OR £30
4115 BREG:    LD B,A
4116          RST 10
4117          DB £C0
4118          DEC DE
4119          LD A,D
411A          OR E
411B          JR NZ,HEXLOOP
411D          RET
411E 097F:    DI
411F          IM 2
4121          LD A,£FF
4123          LD I,A
4125          LD A,£03
4127          OUT (£09),A
4129          OUT (£0A),A
412B          OUT (£0B),A
412D          RETI
412F          RET
4130 COUNT:   NOP
4131          PUSH AF
4132          PUSH BC
4133          PUSH DE
4134          PUSH HL
4135          LD HL,£FDDE
4138          LD DE,£FDDF
413B          LD (HL),0
413D          LD BC,12
4140          LDIR
4142          LD A,(£FD5A)
4145          AND £0F
4147          SLA A
4149          LD C,A
414A          SLA A
414C          ADD A,C
414D          LD C,A
414E          LD A,(£FD5B)
4151          AND £0F
4153          ADD A,C
4154          SLA A
4156          SLA A
4158          LD C,A
4159          LD A,(£FD5C)
415C          AND £0F
415E          SRL A
4160          ADD A,C
4161          LD L,A
4162          LD H,0
4164          LD (£FDCB),HL
4167          CALL £0DFE
416A          LD HL,£FDE5
416D NN:      LD DE,NO
4170          LD A,(HL)
4171          CP 255
4173          JR Z,RETLB
4175          CP 0
4177          JR Z,NM
4179          LD (DE),A
417A          CALL PR
417D NM:      INC HL
417E          JR NN
4180 RETLB:   POP HL
4181          POP DE
4182          POP BC
4183          POP AF
4184          RET
4185 PR:      RST 10
4186          DB £81
4187 NO:      DB £30
4188          RET
4189          RET
418A          RET
```

Symbols:

LDBYT	407E	STTAGN	4050
BITLOOP	4058	NOONE	405F
CLRLOOP	401B	AAE	4046
RETLAB	408E	FOUND	408F
PRT	4091	READS	4016
CALLOP	4025	CHECK	40C4
PRTLOOP	409D	NOGOOD	40C0
LASTLAB	40CE	DOT1	40A5
DOT2	40AF	GO	40B1
NEXT	40A7	TIME	40D4
HEX	40E8	HEXLOOP	40EE
NUM	4103	CREG	4105
NUM2	4113	BREG	4115
097F	411E	CHECK2	40C5
FINLAB	40CD	COUNT	4130
NM	417D	PR	4185
NN	416D	RETLB	4180
NO	4187		

```
100 STOP
110 FOR I=40960 TO 41968
120 PRINT I,PEEK(I)
130 NEXT I
140 STOP
210 FOR I=40960 TO 41968
220 POKE I,0
230 NEXT I
240 STOP
1000 CLS : CSR 2,2: PRINT "S - SCREEN
     OUTPUT"
1002 CSR 2,4: PRINT "P - PRINTER"
1004 CSR 2,6: PRINT "H - HELP"
1006 CSR 4,10
1010 INPUT A$
1012 IF A$="S" THEN  GOTO 1100
1014 IF A$="P" THEN  GOTO 1020
1015 IF A$="H" THEN  PLOD "HELP1": GOTO
     1000
1016 GOTO 1006
1020 LPRINT "TIME  PROGRAM      COUNT"
1021 LPRINT "____  _______      _____"
1023 POKE 64143,1
1024 POKE 64885,1
1030 GOTO 1200
1100 POKE 64885,0
1110 CLS : PRINT "TIME  PROGRAM
     COUNT"
1120 PRINT "____  _______      _____"
1200 REM
1205 PAPER 12
1210 CLOCK "000000"
1220 RETURN
```

HARDWARE AND SOFTWARE PRICE LIST

Basic Computer
256K Computer + Tape operating System £99.95

System One
1 Mgbyte 3 1/2" Drive + I/F £166.00

System Two

1 Mgbyte 3 1/2" Drive + I/F
512K Silicon Disc, 80 Col.
+ CP/M + Newword £264.00

HX12 Green Screen Monitor £95.00

Twin RS232 Serial Interface £29.95

We can offer DMX 80 printer ribbons for only £7.00 each, so why not order one today and be prepared for the day your ribbon finally 'bites the dust'!!!

The MTX FIG-FORTH requires an MTX512 or expanded 500, the dictionary associated with Forth is held as part of the Ram-Disc which can be saved separately, fairly quickly. The Ram-Disc allows for 24 'edit' screens to be created and in memory simultaneously. A tutorial will be necessary for the beginner, for this the club has obtained a quantity of the publication Fundamental Forth(This may vary according to availability).

Fig-Forth Program £6.00
Tech Data Sheets £2.00
Tutorial Book £7.50 (240 pages)

Cheques payable to MDC please, orders from stock normally despatched by return, else, please allow 2 working weeks.

Ron Gladwin of UK Home Computers, (Tel 0793 695034) has on offer a Spectrum Loader that will convert your 512 into a 40K Spectrum, this will allow you to type in Spectrum programs, it is also said to load some Spectrum software. At £2.95 you may find it worth a try.

Ron also has some FDX Silicon disc's on offer, he has both 256K and 1Meg boards. The 1 Meg boards are only £100 and are available from us. Just think, you could be running your Supercalc or Newword at 3 to 4 times the speed you are used to.

All 'SUPER CHEAPIES' will be despatched by return of post.

!!!SUPER CHEAPIES!!!
(ONLY FROM STOCK)

DESC	QTY	PRICE (Each)	DESC	QTY	PRICE (Each)
			THE ZOO	3	£4.50
RETURN TO EDEN	1	£7.00	COBRA	1	£4.50
EMERALD ISLE	1	£7.00			
BLOBBO	5	£4.50	MINER DICK	1	£4.50
KILOPEDE	3	£4.50			
REVERSI	1	£4.50	HELI-MATHS	2	£4.00
MINEFIELD	3	£4.50			
FIRE HOUSE FREDD	2	£4.00			
TOADD	4	£3.50			
NEMO	1	£4.50	PONTOON &B'JACK	3	£4.50
SNAPPO	3	£4.50			
PAYROLL	1	£10.00			
PURCHASE LEDGER	1	£7.00			
PHYSICS 1	3	£5.50			
MATHS 1	1	£5.50	TAPEWORM	1	£4.50

Software prices for the best and most popular software:-

Zarkos	£7.00	Chamberoids	£7.00	
Qogo2	£7.00	26*26 SpreadSht	£8.50	
Karate King	£7.00	Son Of Pete	£7.00	
S.M.G	£7.00	T.Snooker	£8.00	512 Only
Doodlebugs	£6.00	Super Bike	£6.00	
J.J.Flash	£6.00	Ed/Asm	£8.50	
Cee-5	£7.00	MTX Asm Lang Cse	£10.00	
Highway Encounter	£8.50			

Order a copy today!!!!!!

Remember PRINTER RIBBONS are only £7.00
REVEAL is only £6.00
SMG II is only £6.00

Don't forget to order your copy of Fruit Machine from Graysoft today!!!!

FDX ENHANCEMENTS

by Geoff Gardiner.

When my original 500K disc drives became temperamental from age I replaced them with 1Meg drives. The 500K drives were Qume, made I think in Taiwan, but the new ones are NEC made in Japan, and seem to be good quality. They are noisier, clanking a lot, because they have head solenoids to bring the heads into contact with the discs, whereas the Qumes had the heads pressed onto the discs by spring pressure only. I would guess that the NEC system causes less wear to discs and heads.

To reduce drive wear even more I had a 1Meg silicon disc fitted. The ability to use silicon discs, or RAM discs as they are now more commonly called, was one of the features that made the Memotech such a fine design, and the feature has been imitated. A silicon disc is a piece of volatile memory made from memory chips but it behaves like a floppy disc except that access to the RAM disc is far, far faster. This is marvellous when using Newword because menus that have to be taken from the overlay file, NWMSGS.OVR, which remains on disc, appear on screen instantly. Handling a big file is far faster than when the file is on a floppy. Of course the contents of the silicon disc disappear if one switches off, though they do survive a reset. Before switching off one must save to a floppy.

A one meg silicon disc stays one meg when it is formatted, unlike a one meg floppy which is reduced to about 620K. One meg easily holds the Newword program and its overlays, which are about 150K, and 75,000 words of text, a complete book in fact. But even a 1meg disc can be too little if one is trying to handle a file that is several hundred kilobytes long.

The implementation of RAM disc on the Amstrad PCW is more user friendly, and no doubt the Amstrad designer was able to learn from the experience of FDX users. But the FDX is a more flexible system and not only can one make it user friendly but also make it friendly to one's own specific needs and for specific purposes. After some thought and experiment I devised the following means to suit my work pattern.

I decided to prepare for each program a work disc to be used in drive B. I included on it those programs from the CP/M system disc that I was likely to need as well as the application program and its overlays and utilities. So my Newword disc contains NW.COM, NWINSTAL.COM, NW.OVR, NWPRINT.OVR, NWMSGS.OVR, NWKEY.COM. NW.COM is customised for my needs but I keep NWINSTAL.COM on the disc in case I want to alter some aspect of the program for a special purpose. With 620K available I don't have to economise on disc space. Then there are the system programs STARTUP.COM, CONFIG.COM, FORMAT.COM, SIDISC.COM, SYSCOPY.COM, PIP.COM, STAT.COM, and SUB.COM. There is also WC.COM, which is an assembly language wordcount program that I got from a magazine. Finally there is my SUBMIT program, SETUPNW.SUB. Note that SISPOOL.COM is not on the disc; that is because SISPOOL and SIDISC cannot be used together as they seem to occupy the same space in memory and under my arrangement SIDISC will alway be in memory when this disc is in use.

I have used STARTUP to automate the opening procedure. One must take great care when typing in a STARTUP instruction. If you make a mistake, delete the whole line, press return, and start again.

The syntax was as follows:-

```
A> STARTUP SIDISC\CONFIG B:07,C:07,F:43\SUB SETUPNW <CR>
A> STARTUP <CR>
```

The second invocation of STARTUP puts these instructions onto the system tracks and whenever I insert this disc after switching on, SIDISC is automatically installed into high memory. Until that has been done one cannot configure the silicon disc into

the system. Then CONFIG is called automatically and this configures the three drives. Some FDX owners may have a system that requires another program, INITIATE.COM to be called as well.

When initiating a silicon disc there is no need to SYSCOPY it.

After the configuration the SUBMIT file, SETUPNW.SUB, is called as I seem to have exhausted STARTUP's capabilities. STARTUP itself works like a SUBMIT file but of very limited size. The SUBMIT file, which is a non-document, reads as follows;-

```
FORMAT F:
PIP F:=A:NW.COM
PIP F:=A:*.OVR
F:
NW
```

So the first thing that SETUPNW does is to prepare to format drive F, the silicon disc. Then the program pauses to await one's instruction to continue with the formatting or to abort. One could, I assume, use XSUB to give the necessary <CR> automatically, but there are occasions when one does want to abort, after a reset to clear a lock-up for instance. After the formatting, which takes hardly any time at all, the NW program and overlays are copied to drive F:, control is switched to drive F:, Newword is loaded and as the sign-on text has been set with the installation program to come on for one millisecond only we are quickly faced with the opening menu and are ready to go to work. From the insertion of the disc to the opening menu is about 1' 12".

With Newword a file on another drive can be called simply by putting the disc identifier in front of the file name, but if one does this from drive F: all the file handling takes place on the other drive's floppy disc and one loses the benefit of the speed of the silicon disc. To work on an existing file one should copy it to drive F:, and copy it back to floppy disc when one has completed work on it.

I use drive C: to hold a disc with a library of files. If I am writing a book the completed chapters are held on the disc in drive C. To summarise, the applications program, utilities, and temporary files are on drive B, all work is done on drive F, and permanent files are on drive C.

I have another work disc which holds Supercalc. With Supercalc one can load a file straight from a library disc without copying; all one has to do is to prefix the file name with the drive identifier, and the same with saving the amended CAL file. So to save my file "BUDGET.CAL" I will type /S(ave) c:budget.

If there is any problem making a SUBMIT program work, erase and retype. Like STARTUP the programs are temporamental until one gets them right.

If one has 1 meg (80 track) drives one can still read and write 500K (40 track) drives, although the manual gives the impression one can only read them. Assuming CONFIG.COM is resident on your active drive just type after the prompt > CONFIG C:03 <CR> and drive C becomes 40 track. But to write to a disc you must format it for 40 track by putting it in drive C and formatting it there. Unfortunately it took me months to discover I could write to 40 track discs as well as read them.

****

GWG 24.3.87

YOUR LETTERS

Questions

1. Could we have more information about the new range of equipment and advice on the best growth path from my humble original 64K 512. This is still doing sterling service thanks almost entirely to the Brunword word processing package. What I really need is a disk drive, more memory and better software in the form of a more sophisticated WP package and especially a decent spreadsheet on the lines of LOTUS 1-2-3 & Supercalc.

Mr A. Morris, Bristol.

Ed->Upgrading a computer is always very difficult, you have to weigh up what you would like and then trade things off against how much you can afford. Also it is always easy in hindsight to say "oh, I wish I'd bought something else".

You can upgrade your MTX 512 in several ways, but really if you want a good wordprocessor you must go for an 80 column screen and a good monitor. As far as the MTX goes this means you must have a CP/M system. This in itself nullifies the need for more memory, as CP/M 2.2 which comes with the MTX disc systems only supports 64K of memory. When you use the wordprocessor the parts of your document you wish to edit are swopped between disc and memory thus allowing you to have large documents, usually you have about three A4 pages in memory at one time, swopping takes a few seconds when you use floppy discs. This really leads to another good point that if you buy the new 3.5" system you get a 500K silicon disc, this is a disc which is logically made up in memory and as such, is lightening fast and well worth having if you use the WP a lot.

On the spreadsheet front you get Supercalc as standard, this is good as far as it goes, but it is a long way short of LOTUS 1-2-3. I believe you can get Supercalc 2 for the disc systems which would take you a little closer.

On the hardware front it is worth remembering that you have to budget for a monitor or TV that is capable of supporting RGB input.

I find the screen update speed when I'm using SC to be very slow, especially when scrolling, this is the fault of the 80 column board which is now a bit out of date, compared with new standards. All you can really say to justify putting up with it is that you pay for what you get.

Having not really committed myself so far in this reply to Mr Morris, I think a 3.5" system with CP/M is the best Memotech have to offer if you can afford it. You may consider the money you can save, by buying an older style system from one of the vendores selling kit with only limited warranty, to be worthwhile, but please do not complain about paying for maintainance, when they do go wrong.

2.Thanks for the two Library disks. Unfortunately I cannot reconfigure my 1Meg drive in any other way than ROM 03; at least there isn't any way described in my manual. Do you or does anyone else know of such a way?.

Ed-> Well, this is the first time I have come across this problem, and not knowing exactly what the machine configuration is, I cannot offer a definite solution. I would think it is possible to alter your configuration to any other configuration, the only way I know of to do this is to use the CONFIG.COM program. To make a drive 500K the command including parameters is:-

Continued From Page 9

CONFIG C:03

This does bring up another problem which has been showing its head of late, members with 1Meg drives have been sending me discs which they have formatted as 500K, which in theory I can use as normal. In practice they give me a lot of trouble, one minute data appears to be ok, the next all I can get is BDOS errors. Other members experiences would be gratefully received.

3.I purchased a 3.5" disc system back in September and have found the system very good. The documentation for Newword & Supercalc is good, but more information is required on the use of the silicon disc drive, and disc Basic. I have experienced problems with loading/saving of Basic programs. Whilst most programs appear to save faultlessly, others will not load properly. It seems to be a bit of a hit and miss situation! I have made a couple of 54K system discs, but each one hic-ups on the same programs. I'm convinced it is not a hardware problem, as CP/M works like a dream and the majority of my Basic and assembly programs have saved first time. I would be interested to know if any other 3.5" FDXB users have experienced any such difficulties.

Paul Brookes. Southsea, Portsmouth.

4.I have spent many hours trying to program the CUSTOM PRINT fonts of Newword to operate italics and other fonts on my printer (Epson MX and FX). Can you, or any other of the members help?.

Ed-> We printed the solution to this in Vol 2 Iss 6.

Answers
Geoff Gardiner has this to say about the Ascii to Newword program published in a previous issue:-

I do hope you will forgive me for this one:- Unless I have totally misunderstood what you are up to I think your problem over Newword and Ascii files would never have arisen if you had installed Newword with non-justify as the default (as I have). Use VDEB to display the Ascii of a Newword file and you will find that in non-justify mode the file is all Ascii. It is only in justify mode that 80h is added to the byte preceding a space. Obviously the program uses the setting of bit seven to tell where the word ends. Files can be converted from on form to the other by putting the .ojon/off command at the beginning and then CNTRL Q B to align the whole file.Sorry, but it seems to me that your beautiful BASIC program is unnecessary.

...Nevertheless your program is most useful as a masterly example of the use of DISC BASIC. I found the manual very obscure and a few simple explanations of its use would be very welcome. Once understood the file handling commands must be very useful. One also needs an explanation of those remarks in the manual about DISC BASIC being more user friendly, and just what does that comment about LET and GOTO statements being optional mean?.

Ed-> Thanks for the info about Newword, every month I seem to find something new about it, it really is such a useful tool for the club, I don't know how long everything would take without it.

The LET and GOTO being optional in DISC BASIC means that you do not have to type them

Two Reviews By Phil Eyres

Title: ASTRO PAC AUTHOR: A.KEY
Machine: MTX
From: CONTINENTAL SOFTWARE
Price: £7.72 RRP £7.00 MOC

The program loaded well in about 45 seconds, after the usual Continental screen had appeared.

This is a good game remenicent of all Andy Key games. The graphics are large and not at all complex, so would probably suit an 'average' or 'new' games player.

As with all 'zap-em' games, you have several levels of play (8 in all), lots of obstacles and things to zap and collect. As you proceed you collect treasures, fuel cannisters, radioactive material etc, for your continuing journey.

This all happens in a rather basic predictable fashion, all your 'goodies' slowly sink down from the top of the screen and all the 'baddies' zoom across in front of you. The screen works on a scroll type action whereby if you go off the right you come on to the left, your shots have the added effect of disappearing off the right hand side and appearing on the left, zapping some innocent baddies.

Conclusion
The quality of graphics/sound/features is not as good as Andy's latest games, but it is still very good and should provide several hours of enjoyment for the average games player. The sound does go on a bit, so is probably best turned off.

Graphics, Sound and Playability 7/10

oooOOOooo

Title: ADVANCED GRAPHICS DESIGNER AUTHOR: J.GRAYSON
Machine: MTX512 AND SDX 5.25" SYSTEMS
From: GRAYSOFT
Price: £15.85 DISC & 13.99 TAPE.

At last we have some new software!, it comes in the form of an Advanced Graphic Designer. As there is already in existence a graphics generation package in Memosketch, I will were possible compare the two.

Firstly, the package is available in two versions, disc based and cassette based. To use the disc based version you need to have an SDX system that uses ROM 3 to get into disc basic, this is because you will be needing the full 64K machine to run the program. The cassette version will run on any 64K machine. This does exclude FDX systems from the disc version as they only have 32K memory available in disc basic.

The review is of the disc based version which I had the pleasure of using for an evening the other day. The program is split into several files and initially takes a fair while to load. Once loaded and into the drawing area you can start to make use of some of the many commands you have available via the keypad and function keys, these include all the usual drawing functions and the ability to rub them out, you also have the ability to fill, copy,mirror,invert or reverse shapes.

Although some of these features took a long time to complete their drawing activity on the screen, they were visually accurate and enabled you to do all the things you could not do with Memosketch. I think it is also important to point out that the drawing area has been designed such that circles appear true on screen and very nearly true on paper. A status panel on the right of the screen shows which options are currently in use and where the cursors are. A really good feature is that if you move the cursor anywhere near the status panel, the panel will be moved to the left of the screen out of the way.

Conclusion
This review is really to brief for a package of this size, which has taken some 7 months to program. All I can say is that the program behaved perfectly the whole time and had many useful features.

It is, in my opinion much better at drawing than Memosketch, which had some nice features, but was all but impossible to use because picture generation was so slow. ADG is not the last word in graphics packages, but then again the Memotech is not the last word in computers.

Disc Utilities

By

Paul Brookes, Geoff Gardiner & Phil Eyres

The biggest problem which I faced initially with the 3.5" disc system, was copying the system discs, since this involved tediously copying each file using the COPY command. Now that I have gained some experience with the set up, I have found a way of copying the discs in one go. This is outlined as follows:

Insert system disc.
A>frmdsx b: <RET>
Follow prompts.
(Insert blank disc; then insert system disc when
finished)
A>sidfmt f: <RET>
A>syscopy f: <RET>
a>pip f:=*.* <RET>
At the A> prompt remove system disc and insert formatted
disc.
A>pip b:=*.* <RET>
End of routine.

...And to take this a little further

I have used STARTUP to modify the startup routine. It now starts by calling SIDISC, and then CONFIG B:07,C:07,F:43. Finally it calls SETUPNW and hands control to it. As all the components of the SUB file are straightforward calls to standard utilities there has been no need to use ENTER. The first item is FORMAT F:. I suppose I could have used ENTER to provide the CR in response to the message FORMAT emits but I preferred to have the option not to format F. For instance one would not want to format after a reset. So after FORMAT F: is called I have to respond with a CR to go ahead or a CNTRL C to abort. After the formatting the program pip's the NW program and overlays to F, and calls Newword. So 1 minute 12 seconds after inserting my work disc I am ready to start work having pressed only one key. I do not use the V or O options with pip because the first slows things down to no proved benefit and the latter is in this instance unnecessary.

A couple of other points to add:-

1. Concerning disc copying, the method above is the easiest method I know of for copying a disc on the 3.5" single physical disc machine. The only warning is to make sure that the silicon disc does not have anything of interest on it before you start, as it will be lost during the format. (It sounds silly, but I've lost data like that before now!).

2. Probably many members have been using the SUB files over the last few months as we published them. If you use the ENTER command in the SUB file and the machine corrupts half way through the procedure, your STARTUP file will be corrupt, so you can no longer start up the machine with that disc. To cure this you need to use the STARTUP.COM program to make startup as it was before. If you startup on a good disc you can see that this will be something like calling SIDISC and then CONFIG. (This fault happens on my machine sometimes when it is cold, and it can be a pain remembering the syntax of STARTUP, so when you get it to work - write it down!).

P R O G R A M L I B R A R Y
£1.20 Per Cassette, 2 Programs per Cassette

This month we have an Elements program and an update to the DBase program that I wrote in about 6 articles in the magazine. Remember that reviews of all the programs are available, just send in an A4 stamped addressed envelope.

1.Basic & Assembler Programs

All programs available on cassette, 2 programs per cassette, £1.20 per cassette. Or on disc, £2.50 per disc, please enclose a disc, stating capacity.(Some programs are only available on cassette!!).

---- Diskette Three ----

62.Account		The Third Money Manager
63.Mastermind		Another Good Game
64.Connect4		Two Player Game
65.Journey Into Danger		Adventure Game
66.Connect4 Version 2		As for number 64
67.MTX DRAWv1.8		As for number 6
68.Patience		Card Game
69.Life		Curious Puzzle
70.Enigma		Like Mastermind
71.FKEY		Function Key Definer
72.Skydiver		Graphical Game
73.Digger		Graphical Game
74.MPG		Calculates MPG
75.FIG-FORTH	(Cass)	RAM Disc
76.Optics/Colours		Educational Programs
77.Elements	***New***	Educational Programs
78.Dbase3	(Cass)***New***	Database

3.Articles From Previous Magazines

(Available as listings, please provide sufficient postage to cover club costs. TA!)

1.PANEL2 Utility. An updated version of PANEL1, which includes a second feature.
2.Undocumented Neword dot commands.(Vol1 Iss.7)
3.Hisoft Pascal Review (vol1 Iss.8)
4.Neword Rom Review (Vol1 Iss.5)
5.RST10 Codes Explained (Vol1 Iss.3)
6.VDP Explained Using assembler (vol1 Iss4,5,6)
7.System Variables (Not Previously Published!!)
8.SDX Disc Review.

4.CP/M Programs/Utilities

(!!! Available only on 5 1/4" disc !!!, please send in a formatted disc (stating capacity) for each item and enough postage to cover - £2.50 per disc).

1.A simple mail label system for up to 3 across labels, written in EBasic. Disc includes Ebasic compiler and run-time program. Consists of a suite of half a dozen programs. Includes a sort routine.

2.PLOT33 A new graphics plotting package for Turbo Pascal owners. Create and print your own graphics. Set up for DMX type printers but will support most others. Must be seen to be believed. Please ensure you have at least two weeks free when ordering this one, you'll need it!!.

3. Z80.ASM This is a Z80 assembler to replace the ordinary CP/M assembler which uses the 8080 mnemonic command set. Z80.ASM supports all the features of the notable Ed/Asm, especially macro libraries and a slightly more standard Z80 mnemonic command set. The disc also contains a Z8 assembler.

4. SMALL C COMPILER. This is from the Swiss user group, it is however written in English so easily understandable. You will need to buy a Tutorial to use it, but even so it offers unbeatable value for money.

5. BASIC-E PROGRAMS. All the 'good old' text style games, originally designed for teletype style displays, non-the-less some good games.10 games in all, including Startrek. Disc includes Basic-E compiler and Run time program. Also included are several .PIC files with interesting pictures to print out - including a PINUP.PIC file, I wonder what that could be a picture of?? a drawing pin!! ....maybe?

5.Program Reviews

77. Elements - Alan Ayre

This is the last in a suit of three programs by Alan on an educational theme. (Colours and Optics reviewed last month).

This program will:-

1 Show the periodic table and allow you to interogate each element. (The table is shown visually broken down into Metals/Non Metals and Transition Metals).
2.Allow a comparison of properties.
3.Allow the data for each element to be viewed and printed.

This program is very large, and contains lots of useful data.

78.Dbase III - Updated by Alan Hamilton

This program is an enhanced version of the program previously published in several parts in the magazine. It is now really good with changed menus and help screens.