

Editor: G.A.BOBKER of ZX-GUARANTEED

Although it was hoped to print Microdrive Exchange monthly, and that the MDX year would be from April to April. This has not been possible as I regret that items to print are "drying-up". There are two reasons for this; 1/. More is known about transferring to Microdrive and most has already been covered in previous MDXs. 2/. Interfaces (including Interface 007) has meant users are doing the transfers and not considering how to do so manually. The year two membership WILL mean 12 issues, albeit a bit late as I will NOT print till sufficient available. Due to the continuation of "protection" methods used making it more difficult to Break into latest programs, I regret that it means techniques for some games may never be revealed.

SPECTRUM 128K now in the shops at £179. I tend to agree with the comment in the PCW magazine which said they considered this only a 6 month wonder as Sinclair will have to bring something better out in order to compete with Amstrad, etc. (I now have an Amstrad 6128 and find it the most UN-user friendly computer I've ever used, and most definitely does not deserve the high sales).

TASWORD 3 NOW AVAILABLE. This can ONLY be used with a Microdrive as it occasionally "calls" other sections from off the cartridge. Presumably by HOOK CODES as it CANNOT be used on the OPUS. Major changes include on screen "help page" at top of video which can be "scrolled" to see all the info. Also it can hold over 1000 lines of type. Altho' there are only a few lines of Basic in the program, care and thought has been given to allow user several options to be changed if required, possibly TASWORD 3 was derived due to Amstrad as it is very similar to Amstrad version.

CHUKIE EGG II in MDX17

Due to a typing error, part of program omitted and an extra DATA Byte appeared. Note 1 of the routine should read;

1. Enter the following:

```
10 CLEAR 65535: FOR X=65300 TO 65332: READ A: POKE X,A: NEXT X
20 DATA 221,33,62,31,17,0,192,62,255,55,205,86,5,33,45,221,17,
    239,253,1,46,157,237,184,33,193,96,34,178,92,195,183,17
30 RANDOMIZE USR 65300
```

My apologies to S.J.NUTTING and members who tried the routine.

TREASURE ISLAND TRANSFER

This is deceptively difficult game (released by MR.MICRO). The idea is to cross the road, then can continue to Island. Avoid the pirates, but you have to only narrowly miss them to obtain their cutlass....or else you cannot continue. Game consists of a Basic A Screen\$ with a Headerless-File Loader tagged on to load the final block, then Block moves part of it. This loading and Block Move can be done by a DATA statement.

1. Enter this Basic Loader:

```
10 BORDER 0: CLEAR 28999
20 LOAD*"m";1;"TREASURE$" CODE 16384 <---Omit this line if
30 LOAD*"m";1;"TREASUREc" CODE 29000 Screen$ not wanted.
40 DATA 33,88,227,17,105,254,1,80,0,
    237,176,195,106,113 <---Last three values
50 FOR X=23300 TO 23313: READ A: do a JP 29034 which
    POKE X,A: NEXT X starts the game.
60 RANDOMIZE USR 23300
```

Save to Microdrive by; SAVE*"m";1;"TREASURE" LINE 10

2. Load the picture plus extra Bytes, but save only picture by:

- LOAD "" CODE 16384: SAVE*"m";1;"TREASURE\$" CODE 16384,6912
3. The following DATA will Load in the last part and Save it:
- ```

10 CLEAR 65535
20 DATA 221,33,72,113,17,178,137,62,255,55,205,86,5,201
30 FOR X=23300 TO 23313: READ A: POKE X,A: NEXT X
40 RANDOMIZE USR 23300

```
- Run the above then play in last long Headerless part of game.

2  
max  
19

#### TAPPER TRANSFER by S.J.NUTTING of HISTON,CAMBRIDGE

This is a "SPEEDLOK" protected game, and a Back-Up copy must be made using 007 DEPULSER first. (Ignore the first short Basic on the tape).

- Type in the following;
 

```

10 CLEAR 65535
20 DATA 221,33,0,64,17,0,190,55,62,255,205,86,5,211,98,34,178,
 92,195,183,17
30 FOR X=65300 TO 65321: READ A: POKE X,A: NEXT X
40 RANDOMIZE USR 65300

```
  - RUN the above, then play in the long Depulsed Headerless-File  
When all loaded, Spectrum will NEW but the DATA statement has set a CLEAR 25299 to protect part we require.
  - Enter POKE 33233,0 if Infinite Lives to be included.
  - Save to Microdrive by; SAVE\*"m";1;"TAPc" CODE 25300,39640
  - Type in this Basic Loader;
 

```

10 CLEAR 25299: LOAD*"m";1;"TAPc" CODE 25300:BORDER 0:RUN USR

```
- 32797
- Save to Microdrive by; SAVE\*"m";1;"TAP" LINE 10

Apart from the routine to transfer TAPPER, S.J.NUTTING sent in a blow by blow description of the action involved.

The actual program (the Headerless-File) starts at 16384, which is the screen, and is a total of 48640 Bytes. The screen and a few thousand Bytes at the end are not saved. In fact the code we require starts at 25300. If you have a Dissassembler, use on the DATA in line 20. Easiest way to do this is to Load Dissassembler then type in the lines 20 DATA statement and make a line such as FOR X=23300 TO 23321: READ A: POKE X,A: NEXT X Run this, then activate Dissassembler and look at location 23300 onwards.

| LOCATION | HEX      | NEMONIC      | COMMENTS                       |
|----------|----------|--------------|--------------------------------|
| 23300    | DD210040 | LD IX,16384  | Set address program to go into |
| 23304    | 1700BE   | LD DE,48640  | Number of Bytes to be Loaded.  |
| 23307    | 37       | SCF          | Set Carry Flag.                |
| 23308    | 3EFF     | LD A,255     | Code of the File.              |
| 23310    | CD5605   | CALL 1366    | CALL (GOSUB) Load routine.     |
| 23313    | 21D362   | LD HL,25299  | Make HL register pair = 25299  |
| 23316    | 22B25C   | LD(23730),HL | Set RAMTOP variables to 25299  |
| 23319    | C38711   | JP 4535      | Jump to "NEW" in ROM           |

This sets the start & length to be read in and then "CALLS" the ROM routine at address 1366. A CALL is Machine Code GOSUB. After Bytes read in, Locations 23730 (and 23731) are set to 25299 and program jumps to NEW action in ROM. This is equivalent to doing a CLEAR 25300....obviously cannot be done before Bytes read in as they read in over this location. All that remains is to SAVE out Bytes required. In this game, 39640 from 25300 onwards. It is only by studying the DATA in each routine that you'll be able to see what changes each time to be able to derive your own routine

#### ARTIST TRANSER by A.R.BRADNOCK of TOTTENHAM,LONDON

This is probably one of the best graphic utilities available. A.R.B. states that he considers it a bit pricey at £12.95 and considers a price tag of about £7 would be more realistic. (Does anyone not agree on software prices being so high...plus you add another £2 to £5 if for Amstrad or Commodore).

- Load "The Artist" from the beginning as usual by LOAD ""

2. When Loaded, go to the storage Menu and press Break key.
3. Type in the following;
 

```
60 CLEAR VAL "36090": POKE 23675,72: POKE 23676,216:
 LOAD*"m";1;"artist" CODE: POKE VAL "61092",NOT PI:
 GOTO VAL "1"
```
4. Enter the following as a direct command;
 

```
SAVE*"m";1;"ARTIST" LINE 60: SAVE*"m";1;"artist"CODE 49920,15615
```

---

XCEL TRANSFER by A.J.NUTTING of HISTON,CAMBRIDGE

This newish Arcade game has a small Basic Loader then Machine-Code Loader of 535 Bytes. This Loader loads in 12000 Bytes used to scroll a screen effect. This can be ignored. The final part is 40000 and only 38940 Bytes of it are required. A few POKES are added to "bypass" the screen scroll, now not used, and prog is made to Stop after loading so we can save it out.

1. Type in the following;
 

```
10 CLEAR 24999: LOAD "" CODE: POKE 65006,98: POKE 65014,0:
 POKE 65015,0: POKE 65016,0:POKE 65031,207:POKE 65032,8
 20 RUN USR 65000
```
2. RUN the above program and play in all of tape from beginning until STOP Error message appears at bottom of screen.
3. Type CLEAR 25343: NEW then press Enter key.
4. Save to Microdrive by; SAVE\*"m";1;"XCELc" CODE 25344,38940
5. Type in this Basic Loader;
 

```
10 CLEAR 25343: LOAD*"m";1;"XCELc" CODE 25344: RUN USR 39584
```

 Save this to Microdrive by; SAVE\*"m";1;"XCELc" LINE 10

---

SPELLBOUND TRANSFER by A.J.GLEDHILL of BARNSELY

Main section is Headerless so a False Header for Code of length 39470 has to be made.

1. Wind tape to be just after the Screen\$ part. Load in False Header by; CLEAR 26063: LOAD "" CODE 26064 then play in the long Headerless-File.
2. Save to Microdrive by; SAVE\*"m";1;"SPELLc" CODE 26064,39470
3. Type in this Basic Loader;
 

```
10 CLEAR 26063: LOAD*"m";1;"SPELLc" CODE 26064
 20 RANDOMIZE USR 26625
```

 Save to Microdrive by; SAVE\*"m";1;"SPELL" LINE 10  
 NOTE: The RANDOMIZE USR value is 26625 and NOT 26624 as it appears to be in original Listing. (Try it and see what happens)

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DEUS EX MACHINE TRANSFER by JAN KENT of NORWAY

This is one of those awkward programs in two parts, with second part normally being expected to be Loaded off a tape. Jan managed to transfer all game to 'drive and make it call second part off the 'drive. (By using CLEAR 25999 it'll be correct for later).

1. Enter CLEAR 25999: LOAD "2" CODE 29000 then play in tape.
2. Save to Microdrive by; SAVE\*"m";1;"DEUS1c" CODE 29000,39536
3. Type in the following;
 

```
10 DATA 221,33,144,101,17,112,154,55,62,255,205,86,5,201
 20 FOR X=23300 TO 23313: READ A: POKE X,A: NEXT X
 30 RANDOMIZE USR 23300
```
4. RUN the above then play in all of side 2 of the game.
5. Save to Microdrive by; SAVE\*"m";1;"DEUS2c" CODE 26000,39536
6. Clear Spectrum by entering RUN USR 0
7. Type in this Basic Loader;
 

```
10 CLEAR 25949
 20 DATA 168,48,1,0,0,21,90,8,48,136,248,0,1,1,1,0,0,0,15,10,0,
 1,1,100,20,100,1,99,99,99,99,99,99,99,99,0,0,8,95,22,
 213,0,2,66,64,0
 30 FOR X=23297 TO 23343: READ A: POKE X,A: NEXT X
 40 LOAD*"m";1;"DEUS1c" CODE 29000: POKE 53124,77
 50 POKE 53261,195: POKE 53262,118: POKE 53263,27:
```



60 RANDOMIZE USR 58267: RANDOMIZE USR 29000

70 LOAD\*"m";1;"DEUS2c" CODE 26000

80 RANDOMIZE USR 52200

Save this to Microdrive by; SAVE\*"m";1;"DEUS" LINE 10

READING KEYS BY MACHINE-CODE (Continued)

The READ KEYS routine in the ROM is at location 654 (hex 8E02), This puts a value in DE reg pair. Value is FFFF if no key pressed The E register holds a unique value for each key, and the D reg indicates if Sym Shift or Cap Shift pressed. Best method is try it and see.

```

10 DATA 205,142,2,213,193,201
20 FOR I=23300 TO 23304: READ A: POKE X,A:
30 NEXT X
40 FOR X = 1 TO 1000
50 LET A=USR 23300
60 IF A>255 THEN LET A=A-65280
70 PRINT X: NEXT X

```

..... This is actually .  
 . CALL 8E02 .  
 . PUSH DE .  
 . POP BC .  
 . RET .  
 .....

Run program and press keys to see value it gives. Line 60 is to ensure program ignores action of pressing Sym or Cap Shift. Take it out and see effect. Using this program and ignoring the Shift keys makes it easier to use. In practise this means only check the value held in the E register. In an early Copier the user had to press C to COPY or R to RESTART. Program used was as shown below:

|                |                                        |
|----------------|----------------------------------------|
| KEYS CALL 8E02 | This wasn't derived by "being clever"  |
| LD A,E         | but by running a small demo program    |
| CP 13          | to find out what values each key gave. |
| JP Z,RESTART   | This method IS used in a lot of games  |
| CP 32          | and major problem is that you cannot   |
| JP Z,COPY      | easily see which key has produced the  |
| JR KEYS        | value. Too bad.                        |

Note that normally the Spectrum checks the keyboard 50 times a second. To prevent key presses having any effect during a part of your program, issue a Disable Interrupt command. Only when YOU want keyboard read, do a CALL 8E02 then take action depending on the key pressed. (This method stops you breaking into copiers)

A very simple way to read Keyboard is to check value in 23560 which is the System variable holding value of LASTKey pressed. If using this method, best to load 23560 with a value before going to your check loop as it may hold key value from some time ago. Reading 23560 value is rarely used in modern programs.

MONOPOLY TRANSFER....Method DOES work, but I forgot to mention that game needs "DEPULSING" by 007 DEPULSER first.

INTERFACE 007 NEWS.....A free leaflet is available which updates the uncased versions and makes it easier to "drop" a screen. Do please send a Stamped Addressed Envelope. If preferred, a tape to Update action is available for £2 post free. Overseas please add 30p Europe, £1.30 Elsewhere. SORRY, but the new case will NOT fit other versions.

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