

NATGUG

NEWS

Volume 7 Issue 8

February 1986

OFFICIAL JOURNAL OF THE

National TRS-80

& Genie Users

Group.

INFORMATION ON THE GROUP

Membership of the Group is by subscription to the Newsletter, which is published monthly. Membership details are obtainable from the Group Secretary. Membership of the Group is open to anyone with an interest in the TRS-80 range of microcomputers, and compatible systems such as the Video Genie.

Details of the Group accounts, and the constitution of the Group, are obtainable from the Secretary.

Members requiring assistance with problems related to the TRS-80/Video Genie may call the Secretary. An attempt will be made to put them in touch with a member who can help with the problem.

Workshops are arranged from time to time in various parts of the country.

Sub-groups exist in many areas. A list is provided in the Newsletter from time to time.

The Group maintains two software libraries (Models I and II) which are free to members. Library lists are obtainable from the Secretary.

For confidentiality reasons, the membership list is not generally available, but members may ask the Secretary for a list of members in their area, and mailshots to all members may be arranged.

Back numbers of the Newsletter are available from the Secretary.

Please send all contributions for the Newsletter to the Editor.

Chairman and Newsletter
Editor:-

Leon Heller,
65 Flanders Mansions,
Flanders Road,
London W4 1NF
Tel: 01-994 7976

Secretary and Newsletter
Publisher:-

Brian Pain,
24 Oxford Street,
Stony Stratford,
Bucks. MK11 1JU.
Tel: (0908) 564271

CONTENTS

2. Information on the Group
4. Editorial
4. Members' letters
7. Wordstar and Epson printers - II
12. DIR patch to Pencil 2.0
14. Converting Scripsit files to Wordstar and vice-versa
17. Montezuma's Mendisk and reboots
18. Subscription reduction

EDITORIAL

Please note my change of address (on page 2). After about 10 years in Newport Pagnell I've returned to "the great wen"; Samuel Johnson's name for London. A wen is a nasty skin lesion, by the way.

Please come to the Swindon workshop, if you can. Since the AGMs of both NATGUG and QUANTA are due, we are holding a joint workshop for the two groups, as we did a year ago. With about 200 members, NATGUG is still quite viable, although I am once again rather short of contributions, which accounts for the reduced size of the newsletter.

I mentioned some time ago that I had interfaced a Motorola MC145156 PLL frequency synthesiser chip to my Model I. The chip is now controlled by a Z8 single-chip processor, with an RS-232 interface to the Model II or QL. Although the output frequency of the synthesiser is extremely stable, according to a frequency counter, the lock detect signal is pulsing low, which means that the loop is not perfectly locked, which is rather puzzling. I remember someone telling me that the MC145156 had a bug in it, but Motorola deny this. Has anyone else got any experience of this device? The problem might be due to noise from the processor or pre-scaler affecting the phase-detector, so I'll see if using separate power-supplies cures the problem.

Leon Heller

MEMBERS' LETTERS

Firstly, may I wish you all a brisht new year and one twice as Prosperous than the last.

Now, may I give the correct meaning for "OGGY OGGY OGGY", the title of Dave Washford's contributions to this magazine. The saying originated in Cornwall. There is a device known as a Taty Ogey, which was a full meal wrapped up in a pastry, these are now termed as Cornish Pasties. When the Husband was at work down the mine, the wife would send the Taty Ogey's down the mine shaft and then call at the tops of there voices OGGY OGGY OGGY, so as to tell there men-folk that it is time for there meal.

I think that dear old Brian must have lost the NATGUG stamp, as all of my NATGUG's come with 'Independent QL Users Group' stamped on them. This, as you could imagine has caused me some dispute, as people are now saying that I am a secret QL User (Although I am now coming over to using the Motorola 68000 processor).

Since I have emigrated up north, there are only a select people who know my new address. It is as follows:

14 RoseDale, M.S.G. Campus, Teesside Airport
Darlington, Co. Durham. DL2 1RQ

Mind I am only hear up to the start of July.

I am also eligible to Subscribe to the British Computer Society (BCS) which entitles me to many things, one of which is "COMPUTING" the magazine. In the December (5th) copy of this magazine there was an article written by one Ivor Tiefenbrun. The following quote are taken from that article:

If everyone agrees with you, you know you're definitely wrong.

There are three reasons for buying a computer:
To bankrupt your company out of total malice;
Because you're so drunk that you're Paralytic and incapable
at the time you buy one; or
That you actually want one. No one needs a computer.

If you take the engineering industry as a fairly straight honest industry and put that at zero with nothing above it, then doctors are probably about 20 levels down, used car salesmen 30 levels, hi-fi people are 40 or 50 levels and computing people must be about 300 to 400 levels down.

Back home at Xmas I was confronted by one Mister E.C. Kilpatrick saying that his PENCIL will not read his Model III directory. (This turned out to be a problem with the operating system rather than PENCIL). However, the coding in PENCIL will only take a directory on standard Model I and III disc's. If the format wavers from the TRSDOS standard at all then PENCIL will not be able to read it !!.

So I then set to, to write some code that will read the directory of mostly any format. This code taking the evening of Christmas day and up to the afternoon of Boxing day, before I was satisfied with it.

I have written this up in an article which should also be in this issue, as Leon is running short on articles again folks. No-matter how insignificant you think a piece of information is, it could be what someone was looking for so please do keep sending them.

One more point. I am still on the look out for an OMICRON memory mapper board. If you have one you don't want, then could you get in touch with me. Please note that it is only the mapper board that I am interested in and not the board that enables you to operate a 8" disc from the Tandy.

Peter J Knass

The French TUG, the Association des Utilisateurs de TRS 80, has proposed to its members a widening of the subjects of its interest. On the paper announcing the elections, they propose Amstrad, Commodore, PC compatibles as machines to be covered, and sections specialising in communications, servers . . Tandy whetted our lips with a promise of a hard disk on loan to the group some time ago. It was due to be used for an on-line link in the group. You can guess what happened, the Tandy executive concerned was moved on.

Tandy Europe has split recently; Tandy France is now operational. They have kicked out ACT, and also Matra, who caused a lot of pain; at one moment my local Tandy shop (well, 50 miles away) had to send back almost every Model 4 they received. They still haven't caught up on the backlog of spare parts orders. I'm waiting for a keyboard, to give my Model 4 a separate one. I got so fed up waiting that I ended up pulling the existing one out and building it a separate housing. It works fine, though the cable lengthening is a bit of a kludge. The cable is captive and I had to lengthen it (instead of replace it) to avoid any problems with the Tandy repair shop afterwards.

6

We've been on the edge of the recent snow that caused havoc locally. Still, we were near enough to be without mains current for 36 hours. I cannot say that that didn't worry me; what I can say now is that short blackouts don't worry me. Twice today the lights have gone out momentarily, and I've just gone on typing away, thanks to some batteries I've linked into the Model 4's underskirts.

I do not recommend the mod to the faint of heart. You need to supply around +12V @ 4A, +5V @ 4A and -12V @ 0.1A. I ended up feeding the drives off a separate (fourth) supply, to avoid the 'pull' on the video image when the drives start up. Of course I've lost all protection, in the event of problems. I run mine with the battery chargers on, to avoid having to get simply enormous batteries (10 hours @ 8A, plus a large margin for error...). The problem is to get the charge at the right level to keep the small batteries charged without cooking them. And I had my FDC chip go phut, probably due to my ministrations, but cause unknown. Still, I am well in pocket if you compare all that to an uninterruptible supply, some £600.

There is one small problem - the video is not perfectly stable. Straight verticals have a curve in them, and the curve moves slowly up and down. The same effect takes place with text, but so slowly that you have to look for it to see it. Anyone know what it could be?

The last French group magazine has:

- 2 programs in Basic under NewDos, one for mapping the files on a disk, the other for reading a complete sector or track (this last has a routine in assembler tool).
- a report on a Mod I clone called the 'Guépard', sold with NewDos & CP/M, integral battery backup, 1.5Mb drive capacity and several more goodies, all for a very reasonable price, around £1200.
- an explanation of the Mod I ROM floating point routines.
- an article about programming the User Keys in Electric Pencil of another Mod I clone which used to be sold in kit form.
- an article on expanding the Mod I memory to 60K and switching out the ROM.
- an article on the High Resolution Card, sold here by Micro-Influx, containing 64K extra memory. It comes with an extended Basic and provides an easy means apparently of defining a new set of characters compatible with Teletext, Prestel for you, Minitel for us. The 64k can be used as a Memdisk.

Teletel is a vague relation of Prestel, using the same standards, I believe, for graphics and modem speed. Most people access it from a small terminal which the Post Office supplies free. The catch is that it replaces the telephone directory: you have the country's telephone directory on line, updated weekly. You only get the terminal free when you are due for it, otherwise it costs about £6 a month on the telephone bill. The whole thing is run by the Post Office, but they make place for information providers in the same way as Prestel. For the moment, though, there are many fewer bulletin boards here, or even message services, the equivalent of Telecom Gold. We have access though to PSS. The setting up of all the information providers' file servers has spread a good amount of business the way of local programmers. There are said to be a million terminals in use already, and they are only just getting geared up to full production (against 65,000 linked to Prestel).

Anyone who would like more news on one of the articles has only to contact me.

John NEGUS, 19 010 33 75 38 61 25. Bessas, 07150 Vallon Pont d'Arc, France.

WORDSTAR and EPSON PRINTERS:-II

This is the final article on the above subject. It is provided for those who have need of sub/superscript and/or a continuous Elite. This second arrangement of the Epson printer codes has to have its own WSMWGS.OVR file. If both sets are kept on the same disk then the second set has to be given different names. However, the third Wordstar file - WSOVLV1.OVR - can be shared by both sets of files PROVIDING one of the main Wordstar files has its usual name of WS.COM.

This was the name given to the main file for the first arrangement and so my second set of files are named 'WS2.COM' and 'WSMSG2.OVR'. As before, DDT is used to make the necessary changes. However, before we can start, we must make copies of the main Wordstar files. This should be done via spare capacity on a third disk. Here they can be renamed before being copied alongside the files for the first arrangement. In the case of WSMMSG2.OVR, it is essential that this be copied from that already altered for the first arrangement. Otherwise, the following instructions will not make much sense.

Your PRINT MENU for the second arrangement will appear as follows:

< < < P R I N T M E N U > > >

```

Begin and end for! Use once for C & H !-Epson Printer codes-!
  B, D, S and Y  : C Printing pause      : V Subscript on      :
  B Bold D Double : H Overprint char     : T Superscript on   :
  S Underscore    : A Emphasised on      : Q Sub/super off    :
  Y Underline     : N Emphasised off     : PROGRAM WS.COM     :
  R Elite on      : W Italics on         : has Enlarged and   :
No off available : E Italics off         : Condensed type     :
-----

```

One thing I discovered in experimenting with these various arrangements is that some of the former Wordstar commands (as opposed to the USER patches) can be very sensitive as to the purpose for which they are used. They may perform alright within the text but, in some cases, appear to leave a residual code which later combines with another code (?CR or LF?) to give an unexpected effect. The odd double-printing to which I drew your attention in my original article was such an effect. It is for this reason that locations used for one purpose in the first arrangement have not necessarily been used for the same purpose in the second arrangement. However, I don't propose to investigate these time-consuming mysteries any further.

By illustration: this is what you can get from this arrangement.

TEST EXAMPLE:

Italics can emphasise special items.
 Signals identified by S_i: etc, and a
 formula such as $P = I^2R$ can be found in electronics.

Use DDT to make the following alterations to WS2.COM

LOCATION ADDRESS	WORDSTAR COMMAND	WORDSTAR USE	SUBSTITUTED CODE	ADAPTED FOR
0. 03F8	NONE	FILENAME	32 for 53	'2' for 'S'
1. 06B5	^PA TEST UPPER CASE :	CHARALTR CASE : test lower case	02 1B 45	EMPHASISED ON
2. 06BA	^PN	CHARSTND	02 1B 46	EMPHASISED OFF
3. 06BF	^PT TEST UPPER CASE :	SAME USE CASE : test lower case	03 1B 53 00	SUPERSCRIPT ON
4. 06C4	^PV	SAME USE	03 1B 53 01	SUBSCRIPT ON
5. 06C9	^PQ	USR1:	02 1B 54	SUPER/SUB OFF
6. 06CE	^PW TEST UPPER CASE :	USR2: CASE : test lower case	02 1B 34	ITALICS ON
7. 06D3	^PE	USR3:	02 1B 35	ITALICS OFF
8. 06D8	^PR TEST UPPER CASE :	USR4: CASE : test lower case	02 1B 4D	ELITE ON
9. 06DD	^PY TEST UPPER CASE :	RIBBON CASE : test lower case	03 1B 2D 31	UNDERLINE ON
10. 06E2	^PY	RIBOFF	03 1B 2D 30	UNDERLINE OFF

I have settled for a permanent Elite because, if used, it is likely to be for the whole job. Unlike underlining, emphasising, italicising, etc, it is not a style one would intersperse for special effect.

Because there is no off for Elite, this print-out is still in elite type. One advantage of this is that it gives us the chance of seeing the effect of re-running the above Test Example with elite on.

TEST EXAMPLE:

Italics can be used to emphasise special items.
Signals identified by S_i; etc, and a
formula such as $P = I^2R$ can be found in electronics.

As you can see, all commands work except for Emphasised. Having already discovered this, I compensated for its loss by trying out the still remaining Wordstar commands. So, for the re-run, I changed the following - ^Bformula^B and ^Delectronics^D. The result shows that some 'emphasising' of text is still possible.

The next step is to alter the PRINT MENU (on WSMSG2.OVR) as follows:

ALTER PRESENT VALUES WHERE NEW VALUES ARE DIFFERENT

(NOTE: These changes apply to the version of WSMSG6.OVR which was previously changed in line with my first article on the subject. PRESENT values are, therefore, either the unchanged originals or the values resulting from the first set of changes).

PRINT MENU: LINE 1 (Changes start:16CA and end:16DB)

BYTE Nos:	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
-----------	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

PRESENT	16C0	20	65	6E	64	20	66	6F	72	7C	20	20	20	4F	6E	6C	79
CHANGES	16C0													55	73	65	20
ASCII										:				U	s	c	a

PRESENT	16D0	20	6F	6E	63	65	20	6E	61	63	68	20	20	20	7C	AD	C5
CHANGES	16D0	63	65	20	66	6F	72	20	43	20	26	20	48				
ASCII		c	e		f	a	r		C		&		H		:		

PRINT MENU: LINE 2 (Changes start:171A and end:173C)

BYTE Nos:	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
-----------	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

PRESENT	1710									7C	20	20	20	20	74	69
CHANGES	1710												43	20	50	72
ASCII										:		C		P	r	i

PRESENT	1720	6D	65	20	66	6F	72	20	48	20	20	20	20	7C	20	41
CHANGES	1720	74	69	6E	67	20	70	61	75	73	65					56
ASCII		t	i	n	g		p	a	u	s	e				:	V

PRESENT	1730	20	45	6E	6C	61	72	67	65	64	20	6F	6E	20	20	20
CHANGES	1730	20	53	75	62	73	63	72	69	70	74	20	6F	6E		
ASCII			S	u	b	s	c	r	i	p	t			a	n	

PRINT MENU: LINE 3 (Changes start:177F and end:178E)

BYTE Nos:	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
-----------	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

PRESENT	1770													7C	20	4E
CHANGES	1770															54
ASCII																T

PRESENT	1780	20	45	6E	6C	61	72	67	65	64	20	6F	66	66	20	20
CHANGES	1780	20	53	75	70	65	72	73	63	72	69	70	74	20	6F	6E
ASCII			S	u	p	e	r	s	c	r	i	p	t		a	n

PRINT MENU: LINE 4 (Changes start:17BA and end:17DE)

BYTE Nos:	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
-----------	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

PRESENT	17B0									7C	20	51	20	43	6F	6E
CHANGES	17B0											41		45	6D	70
ASCII										:		A		E	m	p

PRESENT	17C0	65	6E	73	65	6D	20	6F	6E	61	20	20	20	20	7C	20
CHANGES	17C0	61	73	69	73	65	64	20	6F	6E						51
ASCII		a	s	i	s	e	d		a	n					:	Q

PRESENT	17D0	20	50	72	69	6E	74	69	6E	67	20	70	61	75	73	65
CHANGES	17D0	20	53	75	62	2F	53	75	70	65	72	20	6F	66	66	20
ASCII			S	u	b	/	S	u	p	e	r		a	f	f	

PRINT MENU: LINE 5 (Changes start:180A and end:182B)
 BYTE Nos: 00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F

```

PRESENT 1800          7C 20 57 20 43 6F 6E 64
CHANGES 1800          4E 45 6D 70 68
                N     E m p h
  
```

```

PRESENT 1810 65 6E 73 65 6D 20 6F 66 66 20 20 20 20 7C A0 A0
CHANGES 1810 61 73 69 73 65 64 20 6F 66 66
ASCII    a s i s e d o f f ;
  
```

```

PRESENT 1820 D0 D2 CF C7 D2 C1 CD A0 A0 D7 D3 B2 AE C3 CF CD
CHANGES 1820          A0 D7 D3
ASCII    W S
  
```

PRINT MENU: LINE 6 (Changes start:1849 and end:1881)
 BYTE Nos: 00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F

```

PRESENT 1840 20 20 20 20 20 20 0E 20 20 56 20 53 75 62 73 63
CHANGES 1840          52 20 45 6C 69 74 65
ASCII    R     E l i t e
  
```

```

PRESENT 1850 73 69 73 65 20 6F 6E 20 7C 20 47 20 50 68 61 6E
CHANGES 1850 20 6F 6E 20 20 20 20 20 7C 20 57
ASCII    o n ; W
  
```

```

PRESENT 1870 E1 F3 A0 F3 F5 E2 AF F3 F5 F0 E5 F2 F3 E3 F2 E9
CHANGES 1870 E8 E1 F3 A0 C5 EE EC E1 F2 E7 E5 E4 A0 E1 EE E4
ASCII    h a s E n l a r g e d a n d
  
```

```

PRESENT 1880 F0 F4 A0 7C 53 70 61 63 65 20 42 61 72 20 72 65
CHANGES 1880 A0 A0
ASCII    ;
  
```

PRINT MENU: LINE 7 (Changes start:1897 and end:18C9)
 BYTE Nos: 00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F

```

PRESENT 1890 74 75 72 6E 73 20 0E 20 20 54 20 45 6D 70 68 61
CHANGES 1890          4E 6F 20 6F 66 66 20 61 76
ASCII    N o o f f a v
  
```

```

PRESENT 18A0 73 69 73 65 20 6F 66 66 7C 20 56 20 49 74 61 6C
CHANGES 18A0 61 69 6C 61 62 6C 65 20 45
ASCII    a i l a b l e ; E
  
```

```

PRESENT 18C0 A0 E1 EE E4 A0 C5 EC E9 F4 E5 A0 F4 F9 F0 E5 A0
CHANGES 18C0 C3 EF EE E4 E5 EE F3 E5 E4
ASCII    C o n d e n s e d
  
```

Refer to my last article if you need help to save and test these changes.

I am not suggesting that these two arrangements are the only or the best ones available. They meet my needs and, now you know how I arrived at them, you can experiment for yourself!

Don Smith, 82, Oldridge Road, Balham, LONDON, SW12 8QA

POSTSCRIPT

11

Further to my recent articles on the above, I should let members know of my experience when using the superscript code since the articles were written.

I have been engaged on a Local History project in which I had to give fairly frequent references to sources of information. I used the version of Wordstar described in my final article. I soon discovered that successive superscript commands resulted in alternate super/sub scripts and a change of type style on the following pages. (such as that shown in my first article).

Being reluctant to be beaten on this issue I have experimented further with various possibilities. The one which works perfectly is to repeat a null superscript command either immediately after the operative one or at the end of the paragraph. The position has to be chosen bearing in mind that the null command will create two blank spaces and so these should be positioned where they will be least noticed. Even if only a single superscript command is used on a page, it is essential to send a null one before the page end. In this way, the unwanted change in type style on the following page is avoided.

I have not had time to check whether this same solution will serve for any of the other commands which misbehave.

By a null command I mean the following:

"One view^T(1)^Q is that....."^T ^Q

This prints thus:

"One view'' is that....."

As can be seen I have left two spaces between the on/off null command. If I remember correctly, one of my many failures involved either using one space only or none at all between the on/off command hence my settling for two and success!!

Don Smith, 82, Oldridge Road, Balham, LONDON, SW12 6QA

FOR SALE

Newsprint, set up on an LDOS data disk for the Mod III/4. £30.

Superscript. £80.

Both 'as new', unusable on my French keyboard.

John NEGUS, 19 010 33 75 38 61 25. Bessas, 07150 Vallon Pont d'Arc, France.

DIR PATCH TO PENCIL 2.0z.

=====

Yet another Patch to Pencil by Peter Knass.

Whilst I was back home for xmas, I was confronted by one Mister E.C. Kilpatrick saying that his PENCIL will not read his Model III directory. (This was a problem with his operating system rather than with his PENCIL). However, the coding in PENCIL will only take a directory on standard Model I and III disc's. If the format wavers from the TRSDOS standard at all then PENCIL will not be able to read it !!. So I then set to, to write some code that will read the directory of mostly any format. This code taking the evening of Christmas day and up to the afternoon of Boxing day, before I was satisfied with it.

The routine for the DIR command is in the PENCIL overlay PENCIL01/SYS at memory address 6AB7. On entry to this routine the DE register pair are pointing to the character after the R of the DIR command. It will also be noted that the command buffer ends with a 00 byte value.

The routine I devised uses the DOS-CALL function of NEWDOS/80 to perform the function. A DOS-CALL facility is also available in most of the other dos's (With the notable exception of TRSDOS). The code had to accept all the standard DIR parameters.

This is the coding:

```
:NEWDIR/ZEN
:New DIR codeins for Electric PENCIL 2.0z
:Will handle all of the PENCIL DIR commands
: But will work under all PDRIVE setins for NEWDOS
:
:This is a NEWDOS/80 specific programme but can simply,
: be altered for other dos's
:
: Peter J Knass 1984
:
```

```
ORG 06AB7H ; Origin for PENCIL patch
```

```
EXEC: EXEC EXEC ; Set Entry point
```

```
Start: ; Scan through the code for *
LD A,(DE) ; Read Buffer character
CP '*' ; Is it all files ?
JR NZ,Drive ; No => Skip this code
LD A,13 ; Yes => Set to Carriage Return
LD (CMD+5),A ; Place before /PCL
LD A,'*' ; Reset chr to *
```

```
Drive: ; Set drive # if 0 1 2 or 3
CP '4' ; Is it a drive Number ?
JR C,Next
CP '0' ; No => Ignore it and
JR C,Next ; Move on to next chr
LD (CMD+4),A ; Yes => Set Drive number
```

```
DoIt: ; Take the Directory
LD HL,CMD ; Point to the DOS command
CALL 4419H ; DOS-CALL => Execute it
JP NZ,69D6H ; Error => Report it and return
```

```
6AB7 1A
6AB8 FE2A
6AB9 2007
6ABC 3E0D
6ABE 32F66A
6AC1 3E2A
```

```
6AC3 FE34
6AC5 3824
6AC7 FE30
6AC9 3820
6ACB 32F56A
```

```
6ACE 21F16A
6AD1 0D1944
6AD4 02D669
```



```

6AD7 21F56A      LD    HL,CMD+4      ; No => Point to Command
6ADA 3630        LD    (HL),'0'    ; Reset defaults:
6ADC 23          INC    HL        ; Drive to 0
6ADD 3620        LD    (HL),' '    ; only /PCL files
6ADF CD0B53      CALL 530BH       ; Clear out keyboard buffer

Wait:           ; Wait for a key
6AE2 3A7F38      LD    A,(387FH)   ; Look at keyboard
6AE5 B7          OR     A          ; Is a key pressed ?
6AE6 28FA        JR     Z,Wait     ; No => Wait until one is
6AE8 C30162      JP     6201H      ; Yes => Return to the menu

Next:           ; Get the next character from the keyboard buffer
6AEB B7          OR     A          ; am I at end of buffer ?
6AEC 28E0        JR     Z,DoIt     ; Yes => Then execute it
6AEE 13          INC    DE        ; No => Move on to next chr
6AEF 18C6        JR     Start     ; Do it all again

; This is the DOS command
6AF1 44495220 CMD: DB    'DIR '    ; Dos function
6AF5 30          DB    '0'        ; Drive number (+4)
6AF6 20          DB    ' '        ; for /PCL files only
; or 13 for all files
6AF7 2F50434C    DB    '/PCL'     ; /PCL files only
6AFB 0D          DB    13         ; End of command

END             ; End of programme

```

For those of you how do not feel confident enough to modify your PENCIL from that, then hear is the NEWDOS ZAP to PENCIL01/SYS. Note: I have zaped out the old PENCIL codins so as to keep things tide, but you only need the underlined code:

```

DRU 00 096D CD0B 53D1 0113 0021 526F EDB0 C90D mS!Ro
0 10 2101 8290 6AED 63DD E5E5 ED73 396E DD21 !Jcs9n!
0H 20 2B6E DD22 336E CD6B 6DCD 4D6D CD2C 44C2 +n"3nkmMm,D
30 D76D D101 1400 2179 6FED B0C9 1AFE 2A20 m!yo*
DRS 40 073E 0D32 F66A 3E2A FE34 3024 FE30 3820 >2J)*40$08
444 50 32F5 6A21 F16A CD19 44C2 D669 21F5 6A36 2J!JDi!J6
1BCH60 3023 3620 CD0B 533A 7F38 B728 FAC3 0162 0#6 S:8<b
70 B728 E013 18C6 4449 5220 3020 2F50 434C (DIR 0 /PCL
80 0D00 0000 0000 0000 0000 0000 0000 0000
90 0000 0000 0001 8210 6800 0000 0000 0000 k
A0 0000 0000 0000 0000 0000 0000 0000 0000
B0 0000 0000 0000 0000 0000 0000 0000 0000
FRS C0 0000 0000 0000 0000 0000 0000 0000 0000
9 D0 0000 0000 0000 0000 0000 0000 0000 0000
9H E0 0000 0000 0000 0000 0000 0000 0000 0000
F0 0000 0000 0000 0000 0000 0000 0000 0000

```

Peter Knasss,

12, Seymour Road, CHIPPENHAM, Wiltshire. SN15 3NH.

CONVERTING SCRIPSIT FILES TO WORDSTAR AND VICE-VERSA

I quite often copy Scripsit files to CP/M for editing and printing with Wordstar. I don't recommend the conversion programs in a recent issue of 80-Micro. To copy from S to W, I delete all format lines and block markers, save the file in Ascii, and copy over with Hypercross using the Ascii option. Since I use Geoff Smith's Scripsit-Plus, I also have to make sure that printer control codes are removed. It's best to replace each function code by a single character which is not otherwise used in the file; that can then be globally replaced by the appropriate Wordstar control code after the file has been copied over. Paragraph codes (@C) are replaced by line codes (@X) before copying, and page codes (@V) by .pa. When the copied file is examined with Wordstar, only the beginning of each paragraph is visible. The rest is recovered by reformatting the paragraph with CTRL-B. If you want to reformat all the paragraphs automatically, use CTRL-Q-Q-B. Then go away for tea while Wordstar does it.

I've only recently solved the problem of copying the other way. If Hypercross is used with the Ascii option, the result is a hard carriage return (Scripsit @X) at the end of every line; they have to be taken out by hand before the paragraph can be reformatted. Moreover the paragraph-ends look the same as the line ends. Wordstar control codes come out looking like square brackets and can't be distinguished from each other.

I therefore decided to use Hypercross's image-format copy routine and to write my own filter, which runs under NEWDOS80 (it should also run under DOSPLUS and MULTIDOS, but not under TRSDOS 1.3). It gets rid of Wordstar line feeds and 'soft' carriage returns, preserves 'hard' carriage returns, converts the control codes which I want to keep into characters that I can recognize, and deletes the other control codes. The source code is appended hereto in case it is useful (it'll make Laurie's hair stand on end, but it works). The protocol characters into which the Wordstar control codes are converted can of course be changed.

After using the filter on a file, load the result under Scripsit, save it back in ASCII, and load it again. That resets the 8th bit of the last byte of each word, which Wordstar messes up. (You shouldn't try to do this by the apparently obvious method of resetting the 8th bit in the filter program, since you may convert soft carriage returns to hard ones, and you're back to square 1. It would be OK if the soft carriage return was checked for right at the beginning of the routine. As I use EDTASM, I couldn't face the retyping.) If the Scripsit video width settings are the same as the Wordstar margins were, the copied file should look the same as the original.

Incidentally the filter removes tabs, which shouldn't be found in a Wordstar document-mode file anyway (the document-mode tab is a string of spaces).

Christopher Currie

Tandy News

1 Did you know that Tandy are dissolving their partnership with ACT after only 6 months as trade has been poor.

The engineering side is to be taken over by Tandy and the sales by ACT.

2 Tandy apparently have several new interesting products to be released after Christmas.

Mike Gibbons

021-747 2260

```

; wstosc. Wordstar to
; Scripsit-Plus. Model III.
00100 vdcls equ 01c9h; ROM
; clear-screen routine
0110 vdline equ 021bh;
; display message
0120 kbline equ 0040h; get
; line from keyboard
0125 vdchar equ 0033h;
; display a char.
0130 close equ 4428h; dos
; file close
0140 extrt equ 441ch; dos
; extract filespec
0150 open equ 4420h; dos
; file open
0160 jp2dos equ 402dh; jump
; to dos
0170 outbyt equ 001bh;
; write byte to disk
0180 inwit equ 0013h; read
; byte from disk
0190 errmes equ 4409h; dos
; error mess. display
1000 org 8000h
1010 start call vdcls;
; clear screen
1020 ld hl,msg1; prompt
; for filespec
1030 call vdline; display
; it
1040 ld hl,txt1; buffer
1050 ld b,lfh; max. length
1060 call kbline; get the
; file spec
1070 jr c,start; loop if
; break pressed
1080 ld hl,txt1; point to
; it again
1090 ld de,fcbl; point to
; fcb
1100 call extrt; filespec
; to fcb
1110 jr nz,start; again if
; wrong
1120 loop2 ld a,0dh;
; carr.ret.
1130 call vdchar; skip
; line
1140 ld hl,msg2; output
; filespec
1150 call vdline; display
; prompt
1160 ld hl,txt2; buffer
1170 ld b,lfh; max length
1180 call kbline; get the
; line
1190 jr c,loop2; loop if
; break
1200 ld de,fcbl; 2nd fcb
1210 ld hl,txt2; point agn.

```

```

1220 call extrt; extract
; it
1230 jr nz,loop2; go back
; if error
1240 ld hl,buffer; buffer
; for output file
1250 ld b,0; lrl=256
1260 call open; open it
1265 jp nz,error; display
; error if any
1270 ld de,fcbl; input fcb
1280 ld hl,buffer; buffer
; for input
1290 ld b,0; lrl=256
1300 call open; open it
1305 jp nz,error; display
; error if any
1310 copy call read; read
; byte
1325 jr nz,err1; test for
; close
1330 cp 01ah; is it ctrl-
; z?
1340 jr z,finish; close if
; so
1343 bkspc cp 08h;
; backspace
1344 jr nz,tcomp; go on if
; not
1345 ld a,92; backslash
1346 call write; output
1347 jr copy; goback for
; next
1350 tcomp cp 't'-64; ctrl-
; t
1351 jr nz,nxt1
1352 bkl ld a,'!'; replace
; with '
1353 call write; output it
1354 jr copy; go back for
; next byte
1355 nxt1 cp 't'+64; 8th
; bit set
1356 jr z,bkl; replace if
; ctrl-t
1357 scomp cp 's'-64; ctrl-
; s
1358 jr nz,nxt2
1359 bk2 ld a,5fh; uline
; char. ( )
1360 call write; output
1361 jr copy; see line 1354
1362 nxt2 cp 's'+64; 8th
; bit
1363 jr z,bk2
1364 dcomp cp 'd'-64; ctrl-
; d
1365 jr nz,nxt3
1366 bk3 ld a,7ch; vert.
; bar char. (|)
1367 call write

```

```

1368 jr copy
1369 next3 cp 'd'+64; 8th
      bit
1370 jr z,bk3
1371 bcomp cp 'b'-64; ctrl-
      b
1372 jr nz,next4
1373 bk4 ld a,7eh; tilde
      (~)
1374 call write
1375 jr copy
1376 next4 cp 'b'+64; 8th
      bit
1377 jr z,bk4
1378 carret cp 8dh; soft
      carr.ret.
1379 jr nz,leap
1380 call read; get next
      char.
1381 cp 0ah; shd. be
      linefeed
1382 jr copy; strip & go
      back
1383 leap cp 0dh; true
      carr.ret., ie para.
1384 jr nz,next5
1385 call write; output it
1386 call read; get next-
      line feed
1387 jr copy; ignore it &
      go back
1388 next5 cp 20h; control
      code?
1389 call c,read; get next
      if it is
1390 call write; output
      that instead
1391 jr copy; go back
1400 finish ld de,fcbl;
      input file
1410 call close; close
      input file
1420 jr nz,error; disp.
      error
1430 ld de,fcbl; output fcb

1440 call close; close
      output file
1450 jr nz,error; disp
      error
1460 jp jp2dos; return
      to dos
1465 err1 cp 1ch; eof?
1466 jr z,finish; finish
      if so
1470 error jp errmes;
      display & ret to dos
1500 read ld de,fcbl; input
      file fcb
1510 call inwit; get
      byte
      for 1st filename
1520 jr nz,err1; test for
      close
1530 ret
1540 write ld de,fcbl; 2nd
      file fcb
1550 call outbyt; push
      it out
1560 jr nz,error; display
      error if any
1570 ret
4000 msg1 defm 'enter input
      filespec:'
4010 defb 0dh
4020 msg2 defm 'enter output
      filespec:'
4030 defb 0dh
4040 txt1 defs 20h; buff.
4050 buff1 defs 100h; file
      buffer
4060 fcb1 defs 20h; fcb
      storage
4070 txt2 defs 20h; buff.
      for 2nd filespec
4080 buff2 defs 100h; 2nd
      file buffer
4090 fcb2 defs 20h; output
      file fcb
4100 end start

```

Miscellaneous Notes for the Computer User

1 When in doubt check everything twice even if you think you have done so already !

2 When ANY fault develops with the Model 1 the edge connector to the interface is always responsible, even if you cleaned it yesterday !

3 When it doesn't work look it up in the manual - when this doesn't work throw away the manual and do it how you think it should be done !

This was printed on a Ibico Daisywheel type printer costing £99. It is slow at 12cps but the quality is as good as an expensive daisywheel printer - ideal for letters. The mechanism is made in Switzerland and the electronics are made in Japan. I bought mine from a firm called "Typewriter Centres" who have several branches in Birmingham & the West Midlands.

Mike Gibbons

021-747 2260

MONTEZUMAS MEMDISK AND REBOOTS

One of the little problems with Montezuma CP/M 2.2 is that a reboot wipes clean the contents of the memory disk, replacing what was there with E5's. Worse - with some word processors if your file is on drive M: and it becomes too long for the 64k allowance the system may lock up on you. The only way to unlock it is with a reboot. Problem.

Here is a solution which I've never actually used for real, but should do the trick. Firstly, you will need to make a copy of your system disk. Normally at power-on, the Memdisk is full of junk, and needs wiping. Someone who is a better person than I could write a patch which looks at the Memdisk, decides whether there is anything worth salvaging, and acts appropriately. This patch merely nobbles the code which wipes the disk.

Having made a copy, you will need a Disk Zap program such as Superzap to zap the disk. Now find this sector. It should be Track 1 Sector 0BH, but it might be different on different disk configurations. There are 4 bytes which need to be changed to 00, and these are underlined.

	Current-Track 0001	Current-Sector 000B	Current-Block 0000
0000	84 <u>36</u> <u>3C</u> 3E	8F D3 84 7E	36 C3 BE 20 1E 3E EF D3
0010	84 CD BA EA	29 3E FF D3	84 CD BA EA 3E 0D 32 3F
0020	EB 21 DC <u>F5</u>	22 15 F7 3E	8F D3 84 21 C2 EA 3A 34
0030	EA B7 C4 08	ED 0E 00 C3	00 D4 <u>36</u> <u>E5</u> 23 CB 7C C0
0040	18 F8 1A C7	16 54 52 53	2D 38 30 20 4D 6F 64 65
0050	6C 20 34 20	36 34 6B 20	43 50 2F 4D 20 76 65 72
0060	73 20 32 2E	32 20 28 63	29 20 28 70 29 20 31 39
0070	38 32 20 44	69 67 69 74	61 6C 20 52 65 73 65 61

Current-Drive

A

```

|.6<>...~6.. .>...|
|....)>.....>.2?|
|!.."..>...!...:4|
|.....6.£.!!|
|.....TRS-80 Mode|
|1 4 64k CP/M ver|
|s 2.2 (c) (p) 19|
|82 Digital Resea|

```

Having changed these 4 bytes, save the changes. You have now created a new system disk which will not wipe the MemDisk on rebooting. Next time your system crashes with a vital piece of data on drive M: then reboot using this disk and voila.

Don't use this disk regularly - normally you do need to wipe the MemDisk. Incidentally, if you are reading this with a locked-up system with priceless data on the M: drive and haven't yet made an altered system disk then you're in trouble.

FOR SALE OR EXCHANGE.

GENIE micro computer (16k sound, Hi & Lo speeds)
EXPANDER EG3014 (16k RAM disk & Parallel printer interface)
ACULAR stringy floppy+ floppy tapes
12" GREEN screen monitor (Tandy)

Books:

MICROSOFT BASIC & OTHER MYSTERIES by J. Farroux
TRS-80 Assembly language programming W. BARDEN
Users manual for level 1 (Radio Shack)
Level II Basic reference manual (Radio Shack)
Modifications to the Genie
Service manual for Genie.
NATGUG news letters covering 4 years (min 6 copies)
Micro 80, 8 copies (Australian)

Some software (all cassette)

May split , exchange or £250 the lot .

**** WANTED ****

Omnicon mappers 1 & 2, RS 232 inteface for Genie & Mouse
Disk mysteries (Penington), disk programs & LDOS Newsletter.

R. Bains,
452 Leagrave Road,
Luton,
Beds. LU3 1RH.

SUBSCRIPTION REDUCTION

The NATGUG subscription has been reduced to £5.00 for six months,
or £10.00 per annum.

ZBASIC UPGRADES.

Vernon Blackmoore rang to suggest that if 5 purchasers got
together then a discount could be negotiated. Ring him on
0742-584685.