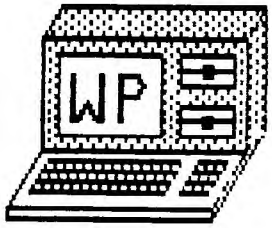
081 8704
West Penn



WEST PENN 99 ER'S

ISSUE #4 APRIL 1987

FOR THE RECORD

by Ed Bittner
Recording Secretary

Pressure always builds at the end of the month ! Checkbook pressure, water pressure, and newsletter editor pressure, (gas pressure). Its March 31, (2 to 4 inches of snow outside) but the warmth of the March meeting of the West Penn 99ers lingers. With little on the agenda, its hard to believe that we filled almost four hours full of stuff.

Scott started with the ammendment on the dissolution of club property which will be voted on next time (be there !). He also indicated that the club will no longer purchase data cases but will continue its diskette sales. With no library report, Scott announced classes in assembler (Gene Kelly) and TI Writer (S. Katzman).

John Willforth briefly discussed the Rave Keyboard with himself, (10 minutes, thats short for John), and offered an explanation of his alpha lock jumper which makes the joystick operation independent of the alpha lock key position. He also talked on a printer spooler buffer which allowed his printer to print while he and his TI did other things (talk ?). The particular system comes from J. Green, in kit form, with a 64K spooler and a Parallel to Serial and vice-versa capability. See John. Several pass-out sheets on relational operators, sprite design, and a members list were made available. John also brought some 30 cent, 15 minute cassette tapes and some Atari joystick replacement centers ($ 1.00). See John.

Other items of interest included a "Diskscriber Marker",($4-6), for writing directly on diskettes, micropendiums for sale, how to re-ink ribbons (WD-40 style) and some bodys' desire to outscore everybody ? The tape got real fuzzy here. Scott informed us of the usefullness he has found in "free" trade magazines, for example he found a $39.00 modem if you already have an RS232 interface. Scott demoed a record keeping program called Record Plus for $5,$10,$15,or $20 depending on what extras you wanted.

How can I say this nicely ! John Willforth prepared for the March meeting. He demonstated a nice sound effects program, a number base converter, an "April Fool" character dropout program (very nice delivery) and an exceptional Fairware program called STAR. The STAR program has about 50 CALL LINKs (assembly subroutines) which greatly enhance XBasic programming. If the April meeting goes half as well it will be well worth the trip. Be There !

Pressuringly,

Scoops Bittner

PS. I will continue to bring the NEWSLETTER library. This library is a collection of newsletters from around the country, exclusively from TI users groups. These newsletters are available to you the club member to borrow, copy, and return at the next meeting. There is LOTS of good information in them. See me at the APRIL meeting. Its easy to borrow them.

MARCH TREASURER'S REPORT

	CASH BALANCE			BANK BALANCE	
3/17	Cash on hand	$ 80.00	3/17	Balance	$ 776.99
	8 lib. disks	16.00		postage	- 63.17
	disk sales	273.10			713.82
	2 data cases	14.00		Clyde's	
	6 memberships	85.00			
	raffle	31.00		loader money	-35.00
	Clyde's checks	35.00			678.82
	micropendium	+13.00			
		547.10	3/18	micropendium	- 9.00
	cost of screws	- 8.00			669.82
		539.10		disk labels	-23.32
	raffle items	-10.00			646.50
		529.10	3/27	DEPOSIT	+480.00
3/27	BANK DEPOSIT	-480.00			
				balance	$1126.50
	cash on hand	49.10			

TOTAL ASSETS $1175.60

****

We also collected $24 in our "Goodie fund". Add that to the $12 left from last time (I bought some supplies) makes $36! To make things more fair and easier to handle, I decided to combine the Pop and Goodie fund -- that way all the refreshments should pay for themselves and our regular accounts will be just for "business".

As you can see, we are prospering in every way - thanks to the generosity and helpfulness of our members. Special thanks again to an extra helpful member - MICKEY - for designing a "Club Transactions Record" form for us to use. I don't know what I'd do without you Mickey -- you sure made the record keeping alot easier!

Till next time

Jan Trayers, Treasurer

```
100 ! CONVERT ANY NUMBER
    FROM TO ANY BASE BETWEEN
    2 AND 36.
110 CALL CLEAR :: A$="012345
6789ABCDEFGHIJKLMNOPQRSTUVWX
YZ"
120 INPUT "NUMBER? ":B$ :: I
NPUT "FROM BASE ":A :: INPU
T "TO BASE ":B :: C=0 :: D=
LEN(B$)
130 FOR F=1 TO D :: C=C+(POS
(A$,SEG$(B$,E,1),1)-1)*A^(D-
E):: NEXT E :: B$=""
140 E=INT(C/B):: B$=SEG$(A$,
C-B*F+1,1)&B$ :: IF F=0 THEN
 150
150 C=F :: GOTO 140
160 PRINT "THE ANSWER IS ";B
$ ;
170 DISPLAY AT(12,1):"ANOTHE
R CONVERSION ?"
180 ACCEPT AT(12,22)BEEP VAL
IDATE("Y","N"):ANS$
190 IF ANS$="Y" THEN 110 ELS
E STOP
200 GOTO 110
```

The above program is SHORTEST, MOSTEST any thing I can think of for a program to convert number of one base to another base.

I regret that I can not find the name of the author, who does certainly deserve the credit. Remove all REM statements to see just how short it is!

JFW of WP99ERS
APRIL 1987

HIGH-SCORING GAMES

GAME	SCORE	COMMENTS	DATE	NAME
BURGERTIME	82600	PATTERN 21	9-04-85	MICKEY SCHMITT
BURGER BUILDER	1000000	PATTERN 99 NEVER RUN OUT OF [illegible]		ELEANOR ZIC
CENTIPEDE	301930		1-08-87	MICKEY SCHMITT
DIG DUG	262460			FRANK ZIC
DIG DUG	216740			ELEANOR ZIC
HUSTLE	WON 52	LOST 27 TIED ONCE		ELEANOR ZIC
JUMPY	131900	PATTERN 21		ELEANOR ZIC
MICRO PINBALL	842000			MIKE SEALY
MIDNITE MASON	21860			FRANK ZIC
MIDNITE MASON	17790			ELEANOR ZIC
MOON PATROL	73150	LEVEL K CHAMPIONSHIP		MIKE SEALY
MUNCHMAN	17160	LEVEL 5	3-14-87	MICKEY SCHMITT
PARSEC	22500	LEVEL 2	3-10-87	MICKEY SCHMITT
TI INVADERS	5376	MEAN ANNIHILATIVE	3-13-87	MICKEY SCHMITT

RECENTLY, I HAVE MY PRIZE "HIGH-SCORE" IN MY ALL-TIME [illegible] GAME, WHICH MANY OF YOU KNOW IS [illegible] AM NOW THE ONLY ONE I [illegible] TO BE. I AM [illegible] WITH [illegible] IN MIND, I [illegible] TO [illegible] TO BE IN THE WEST POINT NEWS, IF [illegible] ANY TO THE [illegible] IN [illegible] JUST LET ME KNOW AT ANY OF THE [illegible] ME IN [illegible] IN THE NEXT NEWS [illegible]. ANY [illegible] THE [illegible] ACCEPTED FOR THIS COLUMN. ANY [illegible] AS LONG AS YOU [illegible] LET'S GET AS MANY [illegible] AS POSSIBLE. REMEMBER, A LITTLE "FRIENDLY" COMPETITION MAY JUST [illegible] SOME [illegible] YING INTEREST AND ENTHUSIASM

ARMADILLO BYTES
P.O. Box 900921
DALLAS , TX 75218
(214) 328-9257

Richard and Annie Fleetwood have many items New and Used for the T.I. Computer user. Here are just a few:

TI 99/8 w/Hexbus Disk Cont. DSDD 1/2 height, manuals & cables.....$750.
TI 32K cards..... 85.
TI RS232 cards.... 85.
TI Disk Controllers 90.
P-Code card/switch 125.
''''''''no switch 115.
TI PEB/CABLE..... 130.
TI PEB(no cable).. 100.
TI Speech Syn. ... 30.
TI Ext. Disk/PS... 75.
PERCOM(new)..... 140.
PERCOM(used no cab)100.
TI Standalone D.Control ..... 90.
TI Standalone Mem. 90.
TI Video Modulator 10.
SOFTWARE.....
Many new and used XBASIC ... $ 30. TI Writer. $ 20. Multiplan..$ 25. plus many others.

DON'T MISS THE OPPORTUNITY TO GET A PERCOM DISK UNIT COMPLETING THE SYSTEM YOU ALWAYS WANTED TO BUILD !

HARDWARE SIG FORMING NATIONALLY(INTERNATIONALLY).

Mr. TONY (BOB) WAGNOR of MINOT, N. Dakota, if really in hot pursuit of trying to achieve what no one has yet done and that is to form a COMPLETE national hardware S.I.G.. If you are interested, send a letter to Tony, stating what your interests and qualifications are, and what you want to see in the group. (SASE please). You may also call after 5:30 PM Central Time. 701 727-9081.

addr; Tony Wagnor
114-2 Sherwood Cir.
Minot AFB, ND
58704

SOFTWARE

* Those with ˅ ˅interest are also needed to support the hardware.

T. I. Writer (Part 9) Stan Katzman

This time I wish to discuss the "dot" commands. These commands format the text in the text formatter. They are entered in the document, and for the sake of brevity, occupy a line of their own. The commands I want to discuss are for setting margins, right adjust, indenting the beginning of a paragraph and centering text headings. All dot commands and text formatting commands (even those discussed last time) do not show up in the final document when put through the text formatter.

All dot cammands must start with a period and end with a carriage return symbol.

To set the left margin, at the head of your document type .LM 15 followed immediately by a carriage return. To set the right margin type .RM 70 followed by a carriage return. This sets the left margin at 15 and the right margin at 70. Then type .FI carriage return. The .FI (fill command) says to fill the line with as much text as possible between the margins. You must have the .FI command in to have the margin commands effective.

If you want to indent a paragraph, type .IN +5 and this will indent the start of a paragrpah five spaces. The indent command must follow the margin settings.

To center a line of text, type .CE (carriage return) before the line of text to be centered. If you want two lines of text centered type .CE 2 (carriage return).

In order to right adjust your margin type .AD (carriage return). In order to right adjust you must also have the .FI command on also.

Now I realize this might be a bit abstract so I have provided some copy that I used in my work in order to illustrate these commands. At the top of page 2 will see the dot commands at the top. On the screen the carriage return symbols show but they do not show on the printed copy. The centering command works only for the line designated while the margin, and adjust commands work until turned off. (To turn off the right adjust enter a .NF command on the area where you do not want the margin right adjusted.) To change margins just type the appropitate changes on a separate line of the text using the numbers for the margins that you want.

Page 3 shows the final copy after being put through the text formatter.

We had representatives at the recent "FAYEH" in New England, more specifically BOSTON, MA. Scott took the motor HOME, (motor is lower case because it did not play as big a part in their getting there as they had hoped), and will have more to tell you at the meeting. I don't want to steal the thunder of the great PO-BA. He brought back many gifts for all of us, and if you would like to GET YOURS, please come to the APRIL MEETING

SINGLE CHIP 32K MEMORY EXPANSION.....

By Joe Spiegel of the Airport Area Computer Club

Joe is still doing it. He has decoded around the ROM in the console using diodes in order to make the use of the new 32K BYTE (single) Chip, the 62256 He has also designed a single sided board that can be etched by you, in order to build this project.

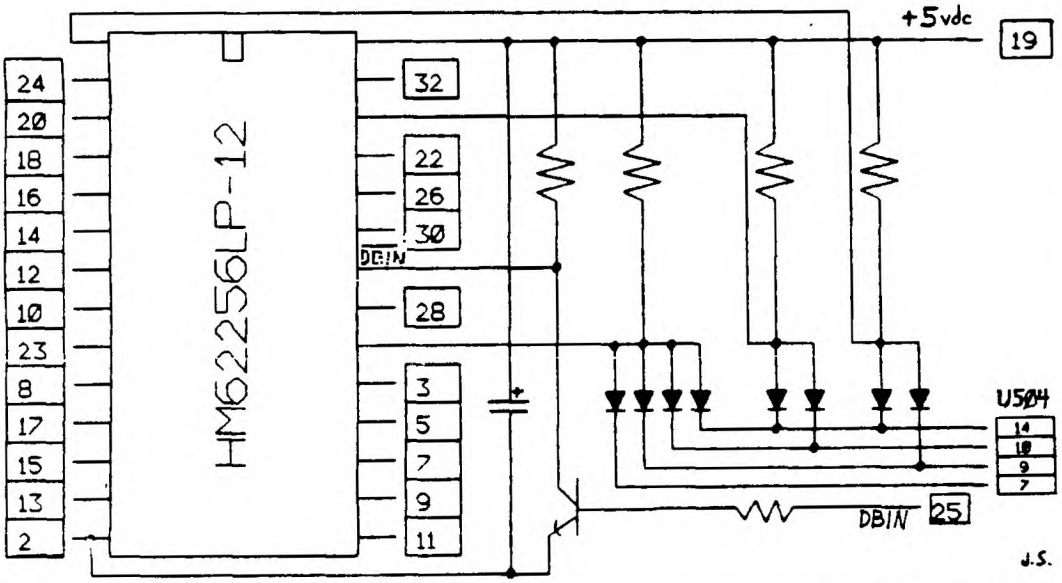
Joe will either send you an etched board for $3.00 (unbelievable), or a complete unit ready to solder (4 wires to the U504 chip in your console), for and get this, $25.00. Hey Joe! Your ruining the neighborhood. You know that for him to do it at these prices, Joe is " doing it for YOU ". He will need your old GROM connector back after you install the unit he builds for you.

Joe, does your wife know that the family will not see you for the next two years. Send inquiries to the :

OR CALL JOE AT: 412 457-8284

AIRPORT AREA COMPUTER CLUB
% JOE SPIEGEL
P.O. BOX 710
CORAOPOLIS, PA 15108

SINGLE RAM CHIP 32K Expansion



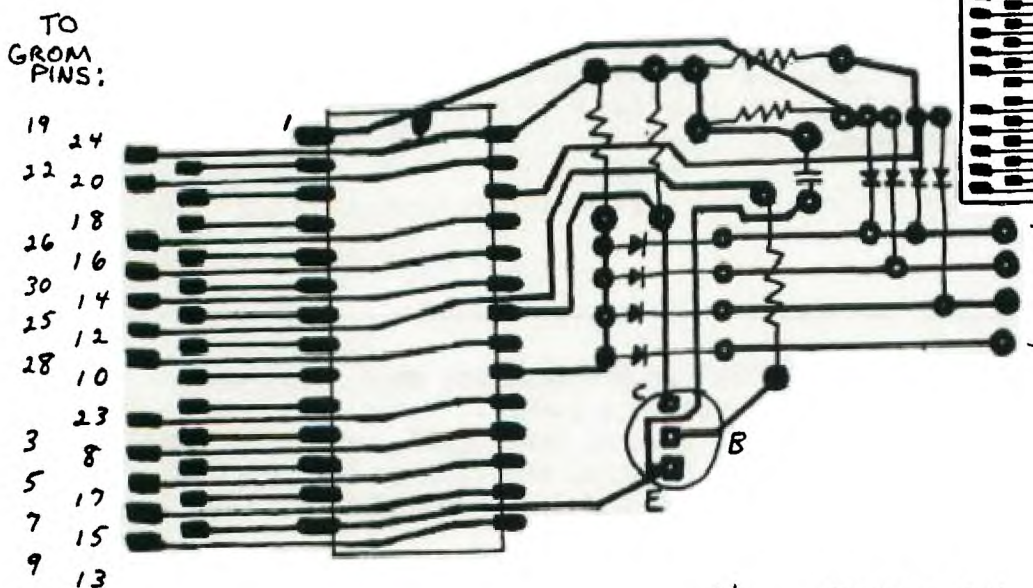
Notes:

All resistors - 1K
All diodes - 1N914 or 1N34
Transistor - 2N2222 or 2N3904
Capacitor - 22 mfd Tantalum

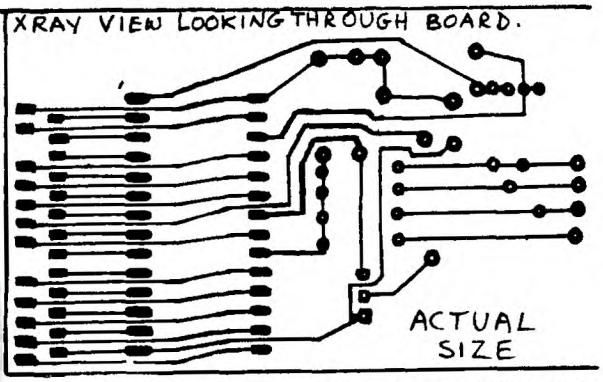
All pin numbers refer to connections on the GROM port except the four lines going to U504 on the motherboard.

The transistor and its base and collector resistors may be omitted if DBIN is obtained from U508, pin 9, on the motherboard.

COMPONENT LAYOUT



XRAY VIEW LOOKING THROUGH BOARD.



THE PATTERN ABOVE COULD BE USED TO PHOTO ETCH A BOARD

```
1 !#########################
##########################
#########################
##########################
2 !  SHORTCUT METHOD
     OF ENTERING STATEMENTS
     IN EXTENDED BASIC

3 !  WRITTEN BY
     BOB TRAUTMANN
     224 McKINLEY AVE.
     PITTSBURGH, PA 15202
     PHONE (412) 761-9380
4 !#########################
##########################
#########################
##########################
5 CALL CLEAR :: DISPLAY AT(7
,6):"ONE MOMENT PLEASE"
6 DIM CODE$(45),DR(45),DC(45
),LC(45),CT(45)
7 CALL CHAR(96,"FF8080808080
8080FF0000000000000FF000000
000000FFFF01010101010101")
8 CALL CHAR(100,"80808080808
0808000000307 0F1F3F3F3FFFFFF
FFFFFFFFFFCFFFFFFFFFFFFF")
9 CALL CHAR(104,"0000C0E0F0F
8FCFC0101010101010017F7FFFF
FFFFFFFFFFEFEFFFFFFFFFFFF")
10 CALL CHAR(108,"818181818181
8181F1FFFFFFFFFFFF7F7FFFFFFF
FFFFFFEFE3F3F1F0F07030000")
11 CALL CHAR(112,"FFFFFFFFFF
FFFF3FFFFFFFFFFFFFFCFCFCF8
F0E0C0000080808080808080FF")
12 CALL CHAR(116,"0000000000
0000FF01010101010101FF000000
0000000000FFFFFFFFFFFFFFFF")
13 CALL CHAR(34,"00000003070
F1F1F003FFFFFFFFFFFF",36,"8
080B7A2A2A2B2800000745474645
60000006E4464446400",42,"3F3
F7F7F7F7F7F7F")
14 CALL CHAR(45,"00FCFFFFFFF
FFFFF",60,"000000C0E0F0F8F8"
,64,"FCFCFEFEFEFEFEFE",91,"7
F7F7F7F7F7F3F3F",92,"1F1F0F0
703000000")
15 CALL CHAR(93,"FFFFFFFFFFF
F3F00",94,"FEFEFEFEFEFEFCFC"
,121,"FFFFFFFFFFFFC00",122,
"F8F8F0E0C0000000")
16 CALL CHAR(123,"FFFFFFFFFF
FFFFFF")
17 CALL CHAR(125,"707070")
18 CALL SPRITE(#4,34,1,9,65,
#5,35,1,9,73,#6,42,1,17,[illegible],#
7,45,1,9,177,#8,60,1,9,185,#
9,64,1,17,185)
19 CALL SPRITE(#10,91,1,89,6
5,#11,92,1,97,65,#12,93,1,97
,73,#13,94,1,89,185,#14,121,
1,97,177)
20 CALL SPRITE(#15,122,1,97,
185)
21 FOR S=9 TO 11 :: CALL COL
OR(S,2,15):: NEXT S
22 RESTORE 26
23 FOR Y=0 TO 44 :: READ COD
E$(Y),DR(Y),DC(Y),LC(Y),CT(Y
)
24 IF CODE$(Y)="X+X+" THEN C
ODE$(Y)=","
25 NEXT Y
26 DATA ON,153,153,46,155,AN
D,137,169,47,187,THEN,129,15
3,48,176,TO,129,81,49,177,ST
EP,129,89,50,178
27 DATA X+X+,129,97,51,179,;
,129,105,52,180,:,129,113,53
,181,),129,121,54,182,(,129,
129,55,183
28 DATA OPTION,129,137,56,15
8,OPEN,129,145,57,159,X-X-,2
00,1,1,1,PRINT,145,161,59,15
6,X-X-,200,1,1,1
29 DATA CALL,129,161,61,157,
X-X-,200,1,1,1,X-X-,200,1,1,
1,X-X-,200,1,1,1,ELSE,145,89
,97,129
30 DATA ::,153,121,98,130,!,
153,105,99,131,IF,145,105,10
0,132,GO,137,105,101,133,GOT
O,145,113,102,134
31 DATA GOSUB,145,121,103,13
5,RETURN,145,129,104,136,DEF
,137,145,105,137,DIM,145,137
,106,138
32 DATA END,145,145,107,139,
FOR,145,153,108,140,LET,153,
137,109,141,BREAK,153,129,11
0,142,UNBREAK,137,153,111,14
3
33 DATA TRACE,137,161,112,14
4,UNTRACE,137,89,113,145,INP
UT,137,113,114,146,DATA,145,
97,115,147
34 DATA RESTORE,137,121,116,
148,RANDOMIZE,137,137,117,14
9,NEXT,153,113,118,150,READ,
137,97,119,151
35 DATA STOP,153,97,120,152,
DELETE,137,129,121,153,REM,1
53,89,122,154
36 DISPLAY AT(1,6):"'aabbbbbb
bbbbbbbaac" :: DISPLAY AT(2,
6):"def{{{{{{{{{{{{{ghi" :: D
ISPLAY AT(3,6):"dj{{{{{{{{{{
{{{ki"
37 FOR R=4 TO 11 :: DISPLAY
AT(R,6):"l{{{{{{{{{{{{{{{{l"
 :: NEXT R
38 DISPLAY AT(12,6):"dm{{{{{
{{{{{{{{ni" :: DISPLAY AT(1
3,6):"dop{{{{{{{{{{{{{qri" ::
 DISPLAY AT(14,6):"sttbbbbbb
bbbbbttu"
39 DISPLAY AT(16,8):"'aaaaaa
aaaaaac" :: DISPLAY AT(17,8)
:"d1234567890=vi"
40 DISPLAY AT(18,8):"dvQWERT
YUIOP/i" :: DISPLAY AT(19,8)
:"dvASDFGHJKL;&i" :: DISPLAY
 AT(20,8):"dvZXCVBNM,.vvi"
41 DISPLAY AT(21,8):"$%v
    vvi" :: DISPLAY AT(22,8)
:"sttttttttttttu"
42 CALL SPRITE(#16,95,2,170,
170)
43 A$="...ATTENTION...YOU HA
VE ACCESSED THE COMPUTER'S H
IGH SECURITY INTERNAL COMPUT
ER..."
44 GOSUB 142
45 A$="...TO TURN ON THE POW
ER YOU MUST TYPE YOUR SECRET
 SECURITY PASSWORD AND PRESS
 ENTER..."
46 GOSUB 142
47 A$="...NOTICE...IF YOU CA
N'T REMEMBER YOUR SECURITY P
ASSWORD OR HAVE NOT BEEN ASS
IGNED ONE...THEN USE A FRIEN
D'S PASSWORD OR MAKE ONE UP!
"
48 GOSUB 142
49 A$="......TYPE PASSWORD N
OW....."
50 GOSUB 142
51 GOTO 49
52 CALL SPRITE(#17,125,9,177
,165)
53 FOR S=4 TO 15 :: CALL COL
OR(#5,8):: NEXT S
54 CALL CHAR(123,"00000000000
000000")
55 DISPLAY AT(2,6):"def
     ghi" :: DISPLAY AT(3,
6):"dj              ki"
56 FOR R=4 TO 11 :: DISPLAY
AT(R,6):"l                 l"
 :: NEXT R
57 DISPLAY AT(12,6):"dm
        ni" :: DISPLAY AT(1
3,6):"dop           qri"
58 CALL COLOR(12,11,5,13,9,6
,14,16,3):: A$="FOFOFOFOFOFO
FOFO" :: CALL CHAR(120,A$,12
8,A$,136,A$)
59 DISPLAY AT(4,7):"xeexeexe
exeexeexl" :: DISPLAY AT(6,8
):"PRESS ANY KEY  1" :: DISP
LAY AT(9,11):"TO START    1"
60 DISPLAY AT(11,7):"xeexeexe
exeexeexl"
61 CALL KEY(0,K,ST):: IF ST=
0 THEN 61
62 DISPLAY AT(4,7):" HOME CO
MPUTER  1" :: DISPLAY AT(6,8
):"PRESS          1" :: DISP
LAY AT(8,8):"1 FOR RULES
1"
63 DISPLAY AT(9,8):"
      1" :: DISPLAY AT(10,8
):"2 FOR CODES    1" :: DISP
LAY AT(11,7):"
  1"
64 DISPLAY AT(12,8):"3 FOR D
RILL   ni"
65 CALL KEY(0,K,S):: IF K=49
 THEN 66 :: IF K=50 THEN 118
 :: IF K=51 THEN 132 ELSE 65
66 DISPLAY AT(6,8):"RULES FO
R THE  1" :: DISPLAY AT(8,8)
:"SHORTCUT METHOD1" :: DISPL
AY AT(10,8):"OF TYPING IN
1"
67 DISPLAY AT(12,8):"PROGRAM
S IN XBni"
68 A$="...PRESS ANY KEY TO R
ETURN TO MASTER SELECTION LI
ST..."
69 GOSUB 153
70 A$="...THIS SHORTCUT METH
OD OF ENTERING PROGRAMS IN E
XTENDED BASIC WILL SAVE YOU
A LOT OF TIME..."
71 GOSUB 153
72 A$="...YOU CAN ENTER MANY
 OF THE MOST USED STATEMENTS
 OR COMMANDS BY PRESSING ONL
Y ONE KEY..."
73 GOSUB 153
74 A$="SOME OF THE STATEMENT
S ARE....PRINT....INPUT....R
ANDOMIZE....DATA....GOTO....
GOSUB....RESTORE....FOR....N
EXT....IF....THEN..+MORE.."
75 GOSUB 153
76 A$="...FOR EXAMPLE LETS'
SAY THAT YOU WANT TO TYPE IN
 A PROGRAM LINE LIKE THIS...
.....>10 RANDOMIZE......."
77 GOSUB 153
78 GOSUB 163
79 DISPLAY AT(6,8):">10 RAND
OMIZE  1"
80 FOR F=1 TO 20 :: DISPLAY
AT(8,8):"   SHORTCUT    1" :
: DISPLAY AT(10,8):"V V V V
V V V V V1" :: DISPLAY AT(10,8
):" V V V V V V V V 1"
81 DISPLAY AT(10,8):"
      1" :: NEXT F
82 A$="...YOU WOULD FIRST TY
PE THE LINE NUMBER IN THE NO
RMAL WAY..."
83 GOSUB 153
84 DISPLAY AT(12,8):">10
     ni"
85 A$="NOW .... BEFORE YOU T
YPE ANYTHING ELSE .... YOU W
OULD TYPE THE WORD    REMAR
K____ OR THE EXCLAMATION POI
NT____!____"
```

Within the last three years, I've seen the subject of TOKENIZED statements mentioned perhaps three times. No one had done anything until now to develop this "unintentional" feature in the T.I. 99/4A. Bob put a lot of work into this program. Recommended 32K. See note on below chart for entering lines 59 and 60. ENJOY! APRIL WP99

SHORTCUT CODES

.	ON	8	OPTION	G	GOSUB	Q	UNTRACE
/	AND	9	OPEN	H	RETURN	R	INPUT
0	THEN	;	PRINT	I	DEF	S	DATA
1	TO	=	CALL	J	DIM	T	RESTORE
2	STEP	A	ELSE	K	END	U	RANDOMIZE
3	,	B	::	L	FOR	V	NEXT
4	;	C	!	M	LET	W	READ
5	:	D	IF	N	BREAK	X	STOP
6	)	E	GO	O	UNBREAK	Y	DELETE
7	(	F	GOTO	P	TRACE	Z	REM

NOTE: The funny looking characters in line 59 and 60, must be entered "e" = CONTROL & "H", and "o" = CONTROL & ",", (Blanks will appear on screen)

```
86 GOSUB 153
87 DISPLAY AT(12,12):"!
    ni"
88 A$="...IF YOU TRY TO USE
THE SHORTCUT METHOD WITHOUT
USING   !    YOU WILL RECE
IVE AN ERROR MESSAGE... "
89 GOSUB 153
90 A$="...NOW HERE COMES THE
 SHORTCUT CODE...."
91 GOSUB 153
92 A$="...YOU SHOULD PRESS A
ND HOLD THE  CTRL  KEY AND
 AT THE SAME TIME PRESS THE
  U   KEY..."
93 GOSUB 153
94 FOR F=1 TO 30 :: CALL SPR
ITE(#1,119,9,161,74,#2,119,9
,161,81,#3,119,9,137,137):: 
FOR D=1 TO 50 :: NEXT D :: C
ALL DELSPRITE(#1,#2,#3):: NE
XT F
95 A$="...THE CURSER WILL AD
VANCE BUT NOTHING WILL BE PR
INTED ON THE SCREEN..."
96 GOSUB 153
97 A$="...WHEN YOU ARE FINIS
HED WITH THE LINE ... DON'T
 FORGET TO PRESS ENTER..."
98 GOSUB 153
99 GOSUB 163
100 DISPLAY AT(4,8):">10 RAN
DOMIZE  1" :: DISPLAY AT(6,8
):"   SHORTCUT    1" :: DISP
LAY AT(10,8):">10 !
 1"
101 DISPLAY AT(12,8):">
      ni"
102 A$="...DON'T WORRY ... T
HE WORD   RANDOMIZE   HAS
BEEN ENTERED INTO THE COMPUT
ER'S MEMORY..."
103 GOSUB 153
104 A$="...YOU CAN CHECK THI
S IF YOU TYPE   LIST    OR
 IF YOU TYPE THE LINE NUMBER
 AND   FCTN  E   OR   FC
TN  X  "
105 GOSUB 153
106 DISPLAY AT(12,9):"LIST
      ni"
107 A$="... AND PRESS ENTER
..."
108 GOSUB 153
109 GOSUB 163
110 DISPLAY AT(4,6):"1    SH
ORTCUT    1" :: DISPLAY AT(8
,8):">10 !          1" :: DI
SPLAY AT(10,8):">LIST
    1"
111 DISPLAY AT(12,8):"10 ! R
ANDOMIZEni"
112 A$="PRESTO... THERE IS Y
OUR PROGRAM LINE... JUST AS
 IF YOU HAD TYPED    R  A
 N  D  O  M  I  Z  E
"
113 GOSUB 153
114 A$="...BEFORE YOU CAN RU
N YOUR PROGRAM YOU MUST GO B
ACK AND EDIT THE LINE TO REM
OVE THE WORD  REMARK  OR T
HE EXCLAMATION POINT  !  "
115 GOSUB 153
116 DISPLAY AT(12,8):"10 RAN
DOMIZE  ni"
117 FOR D=1 TO 3000 :: NEXT
D :: GOSUB 163 :: GOTO 62
118 GOSUB 163
119 DISPLAY AT(4,8):"HOME CO
MPUTER  1"
120 DISPLAY AT(6,8):"CODES F
OR THE  1" :: DISPLAY AT(8,8
):"SHORTCUT METHOD1" :: DISP
LAY AT(10,8):"OF TYPING IN
 1"
121 DISPLAY AT(12,8):"PROGRA
MS IN XBni"
122 FOR D=1 TO 2000 :: NEXT
D :: GOSUB 163
123 FOR Y=0 TO 44
124 IF CODE$(Y)="X-X-" THEN
130
125 DISPLAY AT(6,8):"CTRL AN
D ";CHR$(Y+46);"     1"
126 DISPLAY AT(8,8):"IS THE
SAME AS 1"
127 FOR Z=1 TO LEN(CODE$(Y))
:: CALL HCHAR(10,Z+9,ASC(SEG
$(CODE$(Y),Z,1))):: NEXT Z
128 GOSUB 166
129 GOSUB 163
130 NEXT Y
131 GOTO 123
132 GOSUB 163
133 DISPLAY AT(4,8):"SHORTCU
T DRILL 1"
134 RANDOMIZE
135 Y=INT(RND*44)
136 IF CODE$(Y)="X-X-" THEN
134
137 FOR Z=1 TO LEN(CODE$(Y))
:: CALL HCHAR(6,Z+9,ASC(SEG$
(CODE$(Y),Z,1))):: NEXT Z
138 DISPLAY AT(8,8):"CAN BE
ENTERED 1" :: DISPLAY AT(10,
8):"BY PRESSING    1" :: DIS
PLAY AT(12,8):"CTRL AND ????
 ni"
139 GOSUB 180
140 DISPLAY AT(6,8):"
      1" :: GOTO 134
141 END
142 A$=RPT$(" ",28)&A$&" "
143 FOR L=1 TO LEN(A$)
144 DISPLAY AT(24,1):SEG$(A$
,L,28)
145 FOR D=1 TO 10 :: NEXT D
146 CALL KEY(0,K,S)
147 IF S<>0 THEN 150
148 NEXT L
149 RETURN
150 DISPLAY AT(24,1):RPT$("
",28)
151 IF K=13 THEN 52
152 CALL KEY(0,K,S):: IF K=1
3 THEN 52 ELSE GOTO 152
153 A$=RPT$(" ",28)&A$&" "
154 FOR L=1 TO LEN(A$)
155 DISPLAY AT(24,1):SEG$(A$
,L,28)
156 FOR D=1 TO 10 :: NEXT D
157 CALL KEY(0,K,S)
158 IF S<>0 THEN 161
159 NEXT L
160 RETURN
161 DISPLAY AT(24,1):RPT$("
",28)
162 GOTO 62
163 DISPLAY AT(4,8):"
      1" :: DISPLAY AT(6,8
):"          1" :: DISP
LAY AT(8,8):"
1"
164 DISPLAY AT(10,8):"
      1" :: DISPLAY AT(12
,8):"          ni"
165 RETURN
166 A$="...PRESS ENTER FOR A
 NEW CODE AND IT'S MEANING .
..OR ANY OTHER KEY TO RETURN
 TO MASTER SELECTION LIST...
"
167 A$=RPT$(" ",28)&A$&" "
168 FOR L=1 TO LEN(A$)
169 CALL DELSPRITE(#1,#2,#3)
170 DISPLAY AT(24,1):SEG$(A$
,L,28)
171 CALL SPRITE(#1,119,9,161
,74,#2,119,9,161,81,#3,119,9
,DR(Y),DC(Y))
172 CALL KEY(0,K,S)
173 IF S<>0 THEN 176
174 NEXT L
175 GOTO 166
176 DISPLAY AT(24,1):RPT$("
",28):: CALL DELSPRITE(#1,#2
,#3)
177 GOSUB 163
178 IF K=13 THEN RETURN
179 GOTO 62
180 A$="...PRESS THE LETTER
OR NUMBER KEY THAT COMPLETES
 THE ABOVE STATEMENT... OR P
RESS ENTER TO RETURN TO THE
MASTER SELECTION LIST..."
181 A$=RPT$(" ",28)&A$&" "
182 FOR L=1 TO LEN(A$):: DIS
PLAY AT(24,1):SEG$(A$,L,28)
183 FOR D=1 TO 10 :: NEXT D
184 CALL KEY(0,K,S):: IF S<>
0 THEN GOSUB 188
185 NEXT L
186 GOTO 180
187 RETURN
188 DISPLAY AT(24,1):RPT$("
",28):: IF K=Y+46 OR K=LC(Y)
OR K=CT(Y)THEN 192
189 IF K=13 THEN 62
190 FOR F=3 TO 1 STEP -1 ::
CALL SOUND(-30,F*110,0):: NE
XT F
191 A$="...THAT IS NOT RIGHT
...TRY AGAIN..." :: GOTO 181
192 DISPLAY AT(4,8):"YOU ARE
 RIGHT  1" :: DISPLAY AT(12,
17):" "&CHR$(Y+46)&"   ni"
193 FOR F=1 TO 6 :: CALL SOU
ND(-1,F*200,0):: NEXT F
194 FOR Q=1 TO 15
195 CALL SPRITE(#1,119,9,161
,74,#2,119,9,161,81,#3,119,9
,DR(Y),DC(Y))
196 FOR D=1 TO 50 :: NEXT D
:: CALL DELSPRITE(#1,#2,#3):
: NEXT Q
197 GOTO 132
198 RETURN
```

NOTES FROM OTHER NEWSLETTERS.....

LA 99ers, Chuck De Marti...From the GENiel TRAVelER, Barry Traver announces a fix for a minor bug in ARCHIVER. The fix is to change line 635 to:

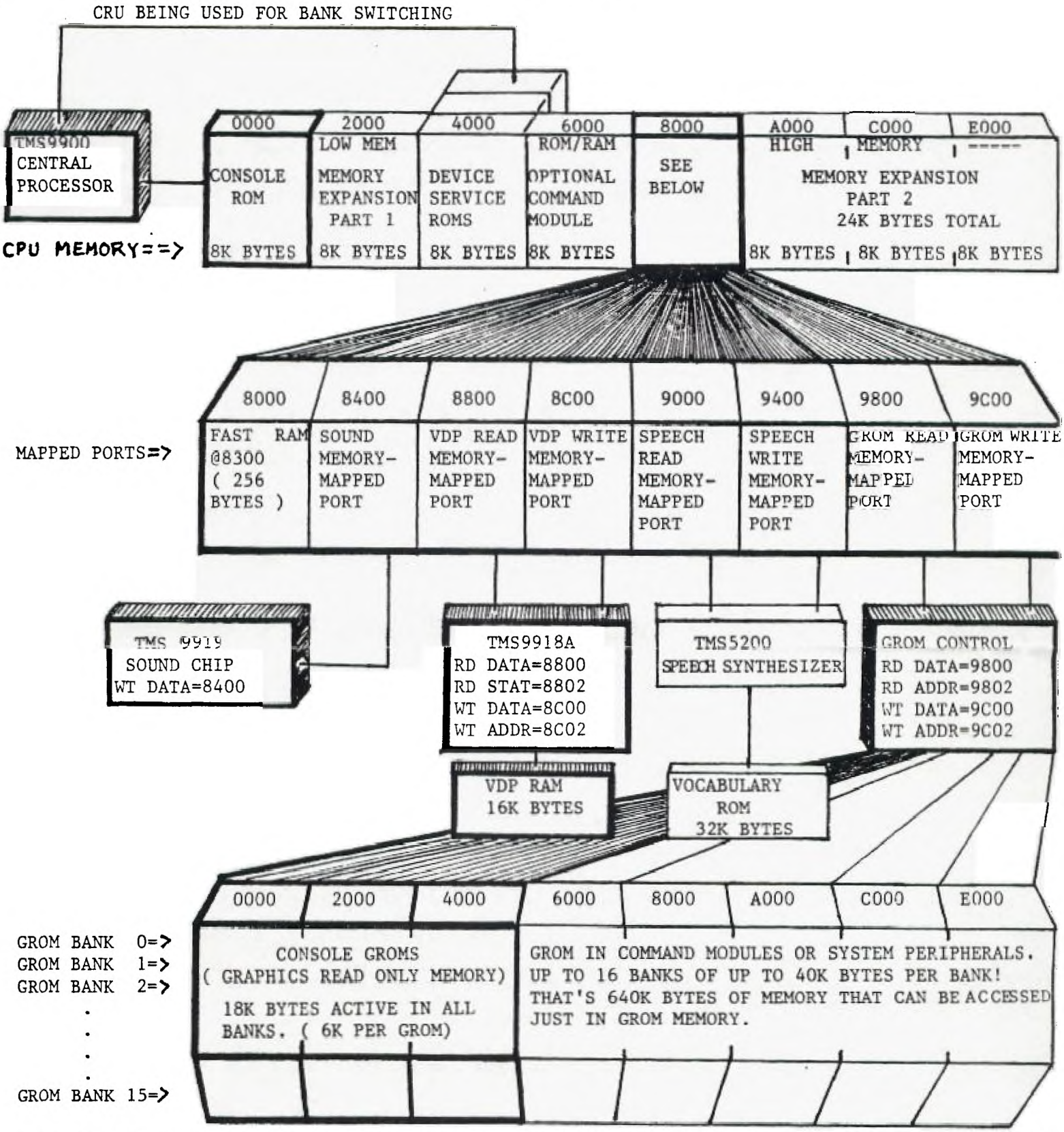
635 KK=(Z-1)*(100*INT((KK-1)/50)+1)+2-Z

There was no specific description of the bug, except that it yielded some very "interesting numbers".

Here's one that has stung Jan and I with DM1000, version 3.5 (at least). If you format a disk double density with a CORCOMP controller, and pass the diskette to someone with a MYARC disk controller, they will get an error message, saying that the diskette is not initialized or "blank". The CORCOMP controller will put 16 sectors per track in the header, even though it correctly formats the diskette, and the disk is perfectly OK for the CORCOMP.

Mike Dodd of the LA 99ers, has a fix. With a disk editor, edit the first sector of MGR1, at byte 216 (v. 3.5), you should see (in HEX) 10 00 02 D0 00 5A. Now change the 10 to a 12 and write the sector back. USE A BACKUP FOR THIS FIX ! Another fix for the same problem comes from Jack and BJ Mathis of the SW 99ers. If you have the Source Code, find SCT CNT in MGRPART1, and change >1000 to >1200.

TI-99/4A MEMORY ARCHITECTURE
EDITED BY JOHN F. WILLFORTH



NOTE: THE HEAVY LINES INDICATE FEATURES INCLUDED WITHIN THE CONSOLE. I HOPE THAT THIS MAP WILL BE OF SOME USE IN CLEARING UP THE MEMORY SCHEME THAT WAS DEVELOPED BY TI TO MAKE MAXIMUM USE OF THE "**GROM**", AND THE ADDRESSING LIMITATIONS OF THE CPU (32K WORDS). FROM THIS DIAGRAM YOU CAN SEE, HOWEVER, THAT THE TI-99/4A HAS HAD THE POTENTIAL SINCE IT'S INCEPTION, TO BE A GREAT COMPUTING MACHINE.

GETTING ON LINE:
AN INTRODUCTION TO TELECOMMUNICATIONS
Part Two
A Guide to Buying Modems and How to Hook Them Up
By Fred and Amy Mackey

The world we live in today is an electronic universe where information and messages streak around the world, or just across town, at the speed of light. In this world you can search for a job, play games, meet friends, consult an encyclopedia, all without ever leaving your house. Entering this electronic universe is a possibility for anyone owning a personal computer. The only additional hardware and software you need for most machines is a printed circuit board called a "serial card", a modem, and a telecommunications software package. This month we will look at modems, on our journey into the world of telecommunications.

When buying a modem, there are five basic features you should look for, which are as follows:

1. Direct Connect which means it plugs directly into a modular telephone jack, eliminating all outside noise. The other option is an accoustic modem, the only advantage to it being that it can be used with any phone, whether or not a modular jack is available. (*Note - If your home does not have a modular jack, you can purchase an adapter to make the conversion for about $5.)

2. 300 Baud - This is how fast the modem will send and receive data. A 1200 baud modem is 4 times quicker than a 300 baud modem, but it costs about twice as much. (*Note - Although you can receive information 4 times faster, Compuserve and most databases charge extra to send information at this speed.)

3. Auto Originate - This feature causes the modem to dial the number you have entered from the computer keyboard, as opposed to you dialing the phone yourself. (*Note - The real advantage to this is that the modem will also have the ability to keep trying the number if it is busy, which frees you up from dialing over and over.)

4. Auto Answer - This feature is necessary if you want to have the ablity to receive calls via your computer. (*Note- If you ever want to set up your own BBS, then this feature is a must.)

5. Full Duplex - This is the ability to send and receive signals at the same time. Simply put, the database computer is contantly asking your computer if it is ready, and your machine is constantly responding 'yes'. Without full duplex, there would be a line turnaround delay between each question and answer. (*Note - Full Duplex can be compared to having a conversation on a telephone, as opposed to Half Duplex which can be compared to having a converation on a CB Radio.)

Any modem can be used with any communicating computer. However, serial cards (and software packages) are designed for specific computers. To hook up the modem, you need to have a serial card. The job of the serial card, simply put is to take the internal language of your computer, which is spoken in 8 bit "words" and send the "words" out of the computer to the modem one bit at a time , instead of 8 at a time. ("Serial" for transmitting bits invdividually in a series, and "parallel" for transmitting bits in a parallel - 8 at a time.) So, the serial card takes the specific language of your computer, and makes it common language for any brand of modem to receive. (*Note - If you own a serial printer, as opposed to a parallel printer, you already have a serial card in your machine. With software, you might be able to unplug your printer and plug in a modem.)

There will be a "port" or plug on the serial card, and a port on the modem. Now, just because you bought a modem, that doesn't mean it comes with a cable to connect it to the serial card in your computer. The two are hooked together by plugging in a flat 25-wire "ribbon cable" to each port, which must be purchased seperately. Most modems and serial cards have female ports and require ribbon cable with male plugs on either end. But there is always exceptions to the rules, so make sure you get a cable wth the right sex for your equipment. The plugs are called RS-232 connectors. An alternative for the Apple II, IBM/PC or any other S-100 bus computer is a "modem-on-a-card", which is a serial card with a built in modem that lets you plug your phone directly into your computer. The price range is around $350-$400, and as of this writing is not avaiable for the TI computer.

NEXT MONTH: Software Packages and How To Use Them

FUTURE ARTICLES: Databases and Bulletin Board Systems
How to Start Your Own BBS

GETTING THE MOST FROM YOUR CASSETTE SYSTEM
BY MICKEY SCHMITT
NUMBER 11
UNDERSTANDING CASSETTE ERROR CODES AND MESSAGES
PART III

****

GENERAL AREAS TO CHECK WHEN CASSETTE ERROR CODES AND MESSAGES OCCUR

****

1. MAKE SURE THAT YOUR CASSETTE RECORDER IS CONNECTED TO YOUR COMPUTER CONSOLE CORRECTLY. THE CASSETTE RECORDER INTERFACE CABLE MUST BE CONNECTED TO THE 9-PIN PLUG AT THE REAR OF THE COMPUTER CONSOLE - DON'T CONFUSE THIS PLUG WITH THE 9-PIN JOYSTICK PORT ON THE SIDE OF THE CONSOLE - THEY ARE NOT INTERCHANGABLE! WHILE YOU ARE AT IT - MAKE SURE THAT THE COLOR-CODED WIRES WHICH PLUG INTO THE CASSETTE RECORDER ARE ATTACHED CORRECTLY AS WELL. THE CASSETTE RECORDER WILL NOT OPERATE PROPERLY IF THE COLOR-CODED WIRES ARE REVERSED! THEY MUST BE "BLACK" TO THE RECORDER'S REMOTE JACK - "WHITE" TO THE RECORDER'S EARHONE JACK - AND "RED" TO THE RECORDER'S MICROPHONE JACK.

2. IF YOU ARE USING D/C CURRENT - INSTEAD OF A/C CURRENT - MAKE SURE THAT YOUR BATTERIES ARE FRESH! WEAK BATTERIES WILL CAUSE YOUR DATA TO BE DISTORTED!

3. MAKE SURE THAT YOUR CASSETTE RECORDER'S VOLUME CONTROL AND TONE SETTINGS ARE ADJUSTED PROPERLY. GENERALLY SPEAKING - A VOLUME CONTROL OF "8" AND A TONE SETTING OF "9" ARE RECOMMENDED.

4. MAKE SURE THAT YOUR CASSETTE TAPE HEAD IS CLEAN. IF YOU CAN'T REMEMBER THE LAST TIME THAT YOU CLEANED IT - THEN IT'S BEEN TOO LONG!

5. MAKE SURE THAT YOU ARE USING A "HIGH-QUALITY" CASSETTE TAPE. A CASSETTE TAPE OF "POOR-QUALITY" YIELDS "POOR-PERFORMANCE" - HEADACHES - AND TOTAL FRUSTRATION!

6. MAKE SURE THAT YOUR CASSETTE TAPE IS NOT ANY LONGER THAN A C-60 CASSETTE. (WHICH IS 30 MINUTES PER SIDE). LONGER TAPES ARE THINNER AND PROVIDE LESS FIDELITY.

7. MAKE SURE THAT YOUR CASSETTE TAPE IS IN GOOD CONDITION - THAT THE TAPE HAS NOT BEEN DAMAGED OR ACCIDENTLY ERASED. IF IN DOUBT - TRY ANOTHER TAPE!

8. MAKE SURE THAT YOU HAVE PUT THE CASSETTE TAPE IN CORRECTLY - THAT IT IS THE CORRECT CASSETTE TAPE AND THAT IT HAS BEEN PLACED IN THE CASSETTE RECORDER WITH THE CORRECT SIDE FACING UP. ALSO, MAKE SURE THAT THE CASSETTE TAPE HAS BEEN POSITIONED AT THE BEGINNING OF THE DESIRED PROGRAM.

9. MAKE SURE THAT YOUR CASSETTE TAPE WAS RECORDED WITH YOUR CASSETTE RECORDER OR AN IDENTICAL MODEL. IF THE CASSETTE TAPE WAS ORIGINALLY RECORDED USING A "DIFFERENT" TYPE OF CASSETTE RECORDER - IT IS POSSIBLE THAT THE PROGRAM WILL NOT LOAD PROPERLY. WHEN THIS OCCURS - YOU HAVE NO CHOICE BUT TO... EITHER OBTAIN ANOTHER COPY OF THE PROGRAM - USING YOUR CASSETTE RECORDER TO "SAVE" THE PROGRAM - OR "LOAD" THE PROGRAM AGAIN - THIS TIME USING THE CASSETTE RECORDER THAT HAD ORIGINALLY "SAVED" THE PROGRAM.

****

NEXT MONTH'S TOPIC WILL BE UNDERSTANDING - CREATING - AND USING - CASSETTE FILES. THIS TOPIC SHOULD PROVE TO BE QUITE INTERESTING - AS I WILL BE LEARNING QUITE ALOT OF "NEW" MATERIAL MYSELF - SINCE THIS IS AN AREA THAT I HAVE NOT HAD VERY MUCH EXPERIENCE WITH IN THE PAST.

IF YOU NEED ANY HELP UNDERSTANDING THE CASSETTE ERROR CODES AND MESSAGES OR ARE EXPERIENCING CASSETTE ERRORS - JUST GIVE ME A CALL (412-335-0163) AND I'LL TRY TO HELP.

I'm running out of space, because here I am on page 9, and I've got so much more to give you. Well since some of it can't really wait until next month, I will duplicate some of it and bring it to the next meeting. Please come to the April meeting. We have some really good software, a printer stand, and much more to give or raffle off, whatever the GREAT PO-BA decides.

NOT JUST ANOTHER PRETTY FACE..... The information that you see below is for the T.I. community at large. About two months ago we had a very interesting demonstration of The RAVE 99 Keyboard by one of our members, Willis Richardson. I really had a renewed interest in getting one of the RAVE units, especially when my oldest daughter expressed to me how well she was taking to typing in school. The T.I. console I felt would not be the best keyboard for a novice to practice on at home. BUT, the same old thing that always seems to haunt the back of your mind when you are about to buy something NEW, " MAYBE IF I WAIT THERE WILL BE SOMETHING BETTER COME OUT", kept me from actually making the purchase. I hate to say it, but in this case it may be true. I have not yet put the interface into use, but the ad shown below certainly does indicate some additional features which may convince you to take the step. Note the price also.
*****THERE WILL BE ONE AT THE APRIL MEETING FOR YOU TO VIEW.*****

KBM 99
KEYBOARD INTERFACE
FOR THE TI994A

In simple language this device will allow you to use any IBM or compatable keyboard on your TI!

Features:
***Full size keyboard layout (not narrow like the TI)**

***Separate Numeric/Cursor keypad**
***Joystick operation even with Alpha Lock on!**
***Many FCTN Key operations require only one key press**
***Fifty pre-programmed commands and functions such as:**

"OLD DSK1."	"SAVE DSK1."	"LIST "	"RUN(cr)"
"(proceed)"	"(back)"	"PRINT "	"INPUT "
"ACCEPT AT("	"DISPLAY AT("	"CALL CLEAR"	"CALL KEY("
"CALL PEEK("	"CALL SPRITE(#"	"SIZE(cr)"	"RUN "DSK1."
"CALL LOAD("	"CALL INIT "	"TRACE"	"UNTRACE"

and many many more...

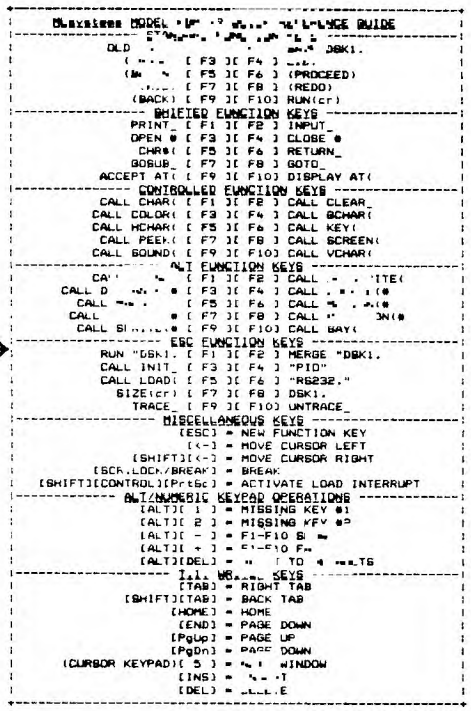
*** Keyboard activated screen dump via the Prt Sc key. (Printer and Software required for Screen Dump)**
*** Easy hook up to old console.(Do it in 15 minues or less)**

The MLsystems model KBM/99 comes with everything you need (excluding keyboard which you can pick up for $30-$90).Any IBM PC/XT Compatable Keyboard will work.

The price is very reasonable $80.00

write:

MLsystems, P.O. BOX 268 VALLEY FALLS, RI, 02864



THE
NEXT WEST PENN 99'ERS
M E E T I N G .....
APRIL 21st...
WILL BE HELD AT THE
UNITED PRESBYTERIAN
CHURCH OF THE COVENANT
ON THE CORNER OF OAK
AND 4TH STREETS IN
IRWIN, PA.
TIME OF THE MEETING IS
7:00 P.M., PRECEEDED
AT 6:45 BY SOME OF THE
LIBRARY FUNCTIONS.
S.I.G.S THIS MONTH:
T.I. WRITER....8:30
STAN KATZMAN
ASSEMBLY 8:30
GENE KELLY or
CLYDE COLLEDGE
HARDWARE.....8:30
JOHN WILLFORTH
MISC.....8:30
WHOEVER
YES WE DO HAVE THE
GREATEST COMPUTER
CLUB REFRESHMENT
IN THE " W O R L D "
(thanks to JAN)
NEED DIRECTIONS OR
MORE INFO? CALL:
412- 271-6283 SCOTT

The WEST PENN 99'ERS

% John F. Willforth
R.D.#1 Box 73A
Jeannette, PA
15644

APRIL 1987 ISSUE

EDMONTON 99'ers
P.O. BOX 11983 EDMONTON
ALBERTA, CANADA, T 5J3L1