VOLUME 1 ISSUE 7 $1.50 MARCH 1985

SUPER 99 MONTHLY

Note that STANDARD KEY section 2 has been changed to better relate to the names of modules.

SOFTWARE

Review: Spy's Demise™

STANDARD: 1A 2EA 4B 5A 6B 7A 9A 11A
Two (2) versions available:
  Cassette for Extended BASIC or Mini Memory.
  Disk for Editor/Assembler or Mini Mini Memory. For Extended BASIC, in Assembly if 32K present.
  Joysticks optional.
Company: CSI Design Group, Inc. (Challenger Software)
Original Producers: Penguin Software
Suggested Retail Price: $19.95
Overall Rating: 96 of 100 (A)

Spy's Demise™ is an excellent game. As there are many games on the market, we place a rigid set of standards in reviewing games. The score of 96 we have assigned Spy's Demise™ indicates the game is among the best available.

While Spy's Demise™ is for the most part an action game, it also includes a cryptogram to solve. This combination of action and intellectual aspects of the game impressed us as the type of game that likely will set the trend for future game software.

Although the documentation is a little sparse, we had no problems in understanding the rules of the game after only a few minutes of play. The lack of instructions does not affect play, but may initially hamper your score. Loading the program is covered thoroughly so that there is no problem in getting started.

Spy's Demise™ is based on maneuvering yourself, as a spy, through the eleven floors of nine buildings to obtain parts of a secret encoded message. The buildings are protected by several guards who patrol the floors vertically while you attempt to cross horizontally. Each guard moves independently, bouncing between top and bottom, so that each floor represents a new challenge. At times, you can cross a floor without stopping. On other occasions, you may find it necessary to back up or turn around repeatedly. You remain in constant motion until you make it across a floor. Upon reaching a floor, a timer starts. The faster you cross the floor, the more points you get. Waiting to spot a temporary pattern among the guards is sometimes wise, but always results in a lower score for that floor. The game pauses when you reach the top of the building so you can copy the clues uncovered by completing each of the floors. You are allowed to be captured by guards

-->

several times before the game ends.

CSI offers a bonus by giving free or discounted software to persons who solve the puzzle. The free software goes to the first two people in a state or country to send in correct answers. This may sound very easy, but we never got past the second building of the game, so figure on sharpening your skills to break the code!

We found the graphics action, sprite coincidence and joystick response to be excellent. The sound effects integrate into the game very well, but may seem slightly monotonous after long sessions (just turn off the sound for awhile).

Give Spy's Demise™ a try and see if you have the patience, reflexes and reasoning ability to break the code!

HARDWARE

Expansion Decisions (Part 2)

STANDARD: 1A 5A

Before proceeding with discussing the Foundation and Morning Star products, we have some additional general comments.

We receive quite a bit of mail comparing the TI-99/4A with other computers. Note that applications dictate hardware! While one user may find that expanding the TI-99/4A will not provide the processing power desired for a particular application, another user may find that the exact same expansion would give unparalleled performance for a different set of applications. Also, buying a new computer may be more expensive in terms of both cash and training than expanding your current system. Making an expansion decision is a personal matter. In some cases, more than one computer may be appropriate. We hope to provide adequate information about the computers based on TI processors to allow you to make a sound decision.

One would think that because Foundation and Morning Star both produce CP/M™ cards that the two cards would probably be similar. However, the differences are very significant. That is not to say that one card is undeniably better than the other. It does mean that for an individual user, the choice is likely to be clear-cut. The fundamental difference is that the Foundation card acts as an independent unit (connected via the RS-232 port) and is thereby considered by the producer to be transportable to another computer (which assumes that either the TI Peripheral Expansion Box or a do-it-yourself substitute power source would also be transported), while the Morning Star card is designed to interact directly with the TI-99/4A to take advantage of many of its features (as with TI cards, access is via DSR routines). While there are many specific differences between the two cards, the difference in the access of the cards is by far the most significant, affecting the method of disk controller operations, the screen display method and many other factors. Product brochures are available from both firms. The address for Morning Star is 4325 SW 109th, Beaverton, OR 97005. Foundation's address is 74 Claire Way, Tiburon, CA 94920. With CP/M™ systems, users can choose from literally thousands of programs. Many sources are listed each month in Computer Shopper™.

The next topic is the type of monitor required by the Foundation 80 Column Card. There is little wonder why this is a confusing matter for so many users. We posed the specific question of monitor requirements to the firm and received a brochure that did not adequately address the matter. As no mention of color is made in the brochure, we assume that a high quality monochrome monitor, capable of displaying at least 480x175 pixels would be appropriate (this assumes a minimum character size of 6x7 pixels for 80 columns and 25 rows).

As for the Foundation 128K card, we have heard no reports of problems.
-->

If you are willing to rely on rumors, you may want to wait to find out about the capabilities and reliability of over-32K cards that may (?!) be available in coming months (some very interesting claims are circulating).

Certainly, no two users will have the same needs. As there are many products available, just be sure that you don't confuse your priorities. Getting your purchases out of sequence could leave you with a budget that tells you that the item you need the most is still five months away!

EXTENDED BASIC

28 Column Program Lister

STANDARD: 1A 2XB TW(o) EA(o) 3B 4B 5A 5A 6B 7A 9A 10A

Programs are easiest to key in and compare when working from a listing that uses the 28 column format as appears on the screen. The programs listed below provide a method of printing a 28 column listing much more efficiently than re-keying the entire program. To use the programs, follow these steps (take care throughout the instructions to not duplicate any disk file names!):

1. Key in the following program:

```
1 DISPLAY AT(5,1)ERASE ALL:"
LINE NUMBER FILE NAME":"DSK1
." :: ACCEPT AT(6,6)BEEP SIZ
E(10):A$ :: OPEN #1:"DSK1."&
A$,DISPLAY ,VARIABLE 80
2 CALL PEEK(-31952,A,B,C,D):
: A=A*256+B-65536 :: C=C*256
+D-65536 :: FOR I=C-3 TO A S
TEP -4 :: Y=Y+1 :: CALL PEEK
(I,E,F):: Z=E*256+F :: IF Y>
3 THEN PRINT #1:STR$(Z)
3 NEXT I :: CLOSE #1 :: END
:: !@P-
```

SAVE the program in MERGE format.

2. Load the program to be listed into memory using OLD.

3. List the program to disk using LIST "DSK1.XXXXXXXXXX" .

4. MERGE in the program from step 1. RUN the program (it ends before your program starts).

5. Load the program below using OLD.

6. RUN the 28 Column Lister program. Answer the prompts:

   Line Number File Name: Created in step 4 above.
   List File Name: Created in step 3 above.
   Output: Select the name of your printer (PIO, RS232, etc.) or the name of a disk file.
   Option: See next paragraph.

Disk output will be available to be printed from one of three formats, all of which are VAR/80 files:

1. EDITOR gives a listing just as it appears on the screen. It can be printed from the editors in TI-Writer or Editor/Assembler or from your own Extended BASIC program.

2. FORMATTER yields a listing for printing from the TI-Writer Formatter. As some characters cause problems from Formatter, this option uses transliterate to change 5 characters and inserts corresponding transliterate commands before the listing. Carriage returns are placed at the end of each line to avoid the possibility of Reformatting from using <CTRL> <2> in Edit mode of Editor. Do not use Fill and Adjust with this file.

3. SPECIAL also creates a listing for printing from Formatter. Changes of characters are similar to the FORMATTER option, but commands for transliteration are omitted. The SPECIAL option also changes all blanks (ASCII 32) to carets (ASCII 94), to be recognized when printed as forced spaces, making Fill and Adjust available. No carriage returns are inserted.

-->

There exist a few uncommon situations that could generate errors:

1. The program to be listed must not use lines 1, 2, or 3. RES or REDO can be used to eliminate this problem. RES is not otherwise required.

2. Consecutive characters that are the same as the next line number may crash the program or spoil the output file (if the characters begin a record in the list file).

3. A screen line cannot consist of all blanks or all carets. Such lines will not be printed.

4. ASCII characters 91, 92, 93, 123 and 125 require additional transliterate commands in order to be printed through FORMATTER.

```
100 ! 28 COLUMN LISTER
    ADAPTED FROM PROGRAMS
    BY NIRAJ N. SHAH AND
       JIM PETERSON
    MODIFICATIONS BY
       SUPER 99 MONTHLY
110 DISPLAY AT(1,3)ERASE ALL
:"28 COLUMN PROGRAM LISTER":
 :"ENTER THE LINE NUMBER":"
     FILE NAME":"DSK1." :: A
CCEPT AT(5,6)BEEP SIZE(10):D
$
120 DISPLAY AT(7,1):"ENTER T
HE LIST FILE NAME:":"DSK1."
:: ACCEPT AT(8,6)BEEP SIZE(1
0):B$ :: DISPLAY AT(10,1):"E
NTER OUTPUT DEVICE:" :: ACCE
PT AT(11,1)BEEP:C$
130 OPEN #1:"DSK1."&B$,DISPL
AY ,VARIABLE 80,INPUT :: OPE
N #2:C$ :: OPEN #3:"DSK1."&D
$,DISPLAY ,VARIABLE 80
140 LINPUT #3:LN$ :: IF SEG$
(C$,1,3)="DSK" THEN CALL FOR
MAT(Z$)
150 LINPUT #3:LN$
160 LINPUT #1:A2$
180 IF SEG$(A2$,1,LEN(LN$))<
>LN$ THEN A1$=A1$&A2$ :: GOT
O 160
190 CALL MAKE_28(A1$,Z$)
200 A1$=A2$ :: IF EOF(3)=0 T
HEN 150
210 IF EOF(1)=0 THEN LINPUT
#1:A2$ :: A1$=A1$&A2$ :: GOT
O 210
220 CALL MAKE_28(A1$,Z$)
230 CLOSE #1 :: CLOSE #2 ::
CLOSE #3 :: END
1000 SUB FORMAT(Z$)
1010 DISPLAY AT(13,1):"ENTER
 E FOR EDITOR": :"      F FO
R FORMATTER": :"      S FOR
SPECIAL (F WITH":"        NO
 CR, CARET IN":"        PLAC
E OF BLANK, TL'S"
1020 DISPLAY AT(20,9):"BUT N
O .TL COMMANDS)":"  F"
1030 ACCEPT AT(21,3)VALIDATE
("EFS")SIZE(-1)BEEP:Z$ :: IF
 Z$<>"F" THEN SUBEXIT
1040 R$=CHR$(13):: PRINT #2:
R$:".TL 91:38"&R$:".TL 93:42
"&R$:".TL 123:64"&R$:".TL 12
5:94"&R$:".TL 92:46"&R$
1050 SUBEND
2000 SUB MAKE_28(A1$,Z$)
2010 FOR I=1 TO INT(LEN(A1$)
/28)+1
2020 M$=SEG$(A1$,I*28-27,28)
2030 IF (Z$="F")+(Z$="S")THE
N CALL IT(M$,Z$)
2040 IF (LEN(M$)<>0)*(SEG$(M
$,1,28)<>RPT$("^",28))*(SEG$
(M$,1,28)<>RPT$(" ",28))THEN
 PRINT #2:M$
2050 NEXT I
2060 SUBEND
3000 SUB IT(M$,Z$)
3010 FOR J=1 TO LEN(M$)
3020 IF Z$="F" THEN Q=POS("&
*@^.",SEG$(M$,J,1),1)ELSE Q=
POS("&*@^. ",SEG$(M$,J,1),1)
3030 IF Q<>0 THEN M$=SEG$(M$
,1,J-1)&SEG$("[]{}\^",Q,1)&S
EG$(M$,J+1,LEN(M$))
3040 NEXT J
3050 IF Z$="S" THEN M$=M$&RP
T$("^",80-LEN(M$))ELSE M$=M$
&CHR$(13)
3060 SUBEND
```

We release any claims to the list programs to non-profit user groups. This article and all other programs and articles in this publication remain, of course, copyrighted material that is not available for re-print.

-->

Manipulating Dates

STANDARD: 1A 2MP 4B 5A 6B 7A 9A 10A

In addition to having a specific application, the spreadsheet covered in this article uses many different functions, including LOOKUP, MID, IF, VALUE and INT. If you've had difficulties with any of these functions, give this spreadsheet a try.

The spreadsheet is based on manipulating a date in the form MO/DA/YR. The specific application is for a receivable aging, very similar to the one we did in Extended BASIC several months ago.

Though there are several obstacles in setting up a spreadsheet for working with agings, the primary problem is that some years have a leap day. There is a leap day every four years except once every hundred years, such as the years 1900 and 2000. The calendar we use begins with the year 1582. Therefore, all calculations we will use will relate to the year 1582 and take into account all leap days. Our spreadsheet will work only with dates in the 1900's, but a few modifications would allow working with any year after 1582.

Here is the accounts receivable aging report that we will show how to build in this article:

Today's Date: 03/25/85

Invoice #	Date	Customer Name	Amount	0-30	31-60	61-90	Over 90
12	08/14/84	ABC Company	$124.00				$124.00
21	02/28/85	XYZ Company	$175.00	$175.00			
5	03/01/84	LMN Company	$147.00				$147.00
19	01/05/85	RMM Company	$26.00			$26.00	
20	02/21/85	SSS Company	$377.00		$377.00		

Note that the data on the left portion of the report is keyed in, while the spreadsheet completely calculates the aging column in which an invoice is to appear. Setting up this type of report in a spreadsheet permits flexibility in formatting the report. The finished report can then be loaded into TI-Writer for minor formatting changes that are either difficult from the spreadsheet or are not of a recurring nature. In building the spreadsheet, we cover the input for the first invoice only. Using COPY DOWN will establish the remainder of the invoice area (change the data).

```
                1                       2                       3
 1
 2 "Today's Date:"               "03/25/85"
 3
 4 "Invoice #"                   "Date"                  "Customer Name"
 5 "---------"                   "----"                  "-------------"
 6 "12"                          "08/14/84"              "ABC Company"
*****************************************************************************
            4                       5                       6                       7
 1
 2
 3
 4 "Amount"          "0-30"                  "31-60"                 "61-90"
 5 "------"          "----"                  "-----"                 "-----"
 6 124               IF(RC[+13]<31,R         IF(AND(RC[+12]<         IF(AND(RC[+11]>
                     C[-1]," ")              61,RC[+12]>30),         60,RC[+11]<91),
                                             RC[-2]," ")             RC[-3]," ")
*****************************************************************************
                                                                              -->
```

	8	9	10	11
1		"YY"	"MM"	"DD"
2		VALUE(MID(RC[-7],7,2))+1900	VALUE(MID(RC[-8],1,2))	VALUE(MID(RC[-9],4,2))
3				
4	"Over 90"			
5	"-------"			
6	IF(RC[+10]>90,RC[-4]," ")	VALUE(MID(RC[-7],7,2))+1900	VALUE(MID(RC[-8],1,2))	VALUE(MID(RC[-9],4,2))

	12	13	14	15
1	"ce"	"ko"	"vr"	"adder"
2	RC[-3]-1583	INT(RC[-1]/100)	INT(RC[-2]/4)	LOOKUP(RC[-5],R1:247C19:R1:247C20)
3				
4				
5				
6	RC[-3]-1583	INT(RC[-1]/100)	INT(RC[-2]/4)	LOOKUP(RC[-5],R1:247C19:R1:247C20)

	16	17	18
1	"leap"	"days"	"days away"
2	IF(AND(RC[-7]/4=INT(RC[-7]/4),RC[-7]/100<>INT(RC[-7]/100),RC[-6]>2),1,0)	RC[-1]+RC[-2]+((RC[-5]+RC[-4]-RC[-3])*365)+((RC[-3]-RC[-4])*366)+RC[-6]	R2C17-RC[-1]
3			
4			
5			
6	IF(AND(RC[-7]/4=INT(RC[-7]/4),RC[-7]/100<>INT(RC[-7]/100),RC[-6]>2),1,0)	RC[-1]+RC[-2]+((RC[-5]+RC[-4]-RC[-3])*365)+((RC[-3]-RC[-4])*366)+RC[-6]	R2C17-RC[-1]

	19	20
1	"LOOKUP"	
2	1	0
3	2	31
4	3	59
5	4	90
6	5	120
7	6	151
8	7	181
9	8	212
10	9	243
11	10	273
12	11	304
13	12	334

Of course, several of the columns must be widened using FORMAT WIDTH. Also, the columns using monetary amounts should be formatted by using FORMAT CELLS. A company name can be added at the top using INSERT ROW, but there are Absolute References in Column 18 that would require a change to match the new Row that is currently R2C17. A company name can also be added by using the instructions on page 86 of the manual to print a file that can be used in TI-Writer, which would also permit other modifications from TI-Writer.

-->

TI-WRITER

Update on Accessing Files From Extended BASIC

STANDARD: 1A 2TW XB 4B 5A 6B 7A 9A

Well, we made a mistake -- we believed a reference manual! Page 157 of the TI-Writer manual clearly states that TI-Writer can only create files in DIS/VAR 80 format and that such files cannot be used from BASIC or Extended BASIC. The TI-Writer DIS/VAR 80 format is difficult to work with in either form of BASIC. However, page 77 of the TI-Writer manual completely contradicts the contention on page 157 that TI-Writer can only create the DIS/VAR 80 file format. By using a PrintF command, a disk file name can be preceded by "F" and a space to produce a DIS/FIX 80 file that can be used very reliably from Extended BASIC. In Extended BASIC, designate the file as RELATIVE and use LINPUT with a REC (record) designation as we described in our previous article (January 1985). As we disclosed last month, TI-Writer will also accept the DIS/FIX 80 format using the LoadF command. The Editor/ Assembler is therefore not required at all and control characters can be passed to Extended BASIC. We certainly learned something -- if you don't like one part of a manual, read another section!

Modes

STANDARD: 1A 2TW 3B 4B 5A 6B 7A 9A 10A

TI-Writer has five modes -- EDIT, COMMAND, FIXED, WORD WRAP and SPECIAL CHARACTER. Actually, the last three are modes within the EDIT mode. As EDIT vs. COMMAND mode is fairly straight-forward, we will concentrate on the three modes within EDIT mode.

You can always determine which of the three modes you are in. Upon entering the EDITOR, the mode is WORD WRAP, as denoted by a solid cursor. In FIXED mode, the cursor is a hollow rectangle. While in SPECIAL CHARACTER mode, the cursor is an underscore.

To enter WORD WRAP mode, press <CTRL> <O>. For FIXED mode, key <FCTN> <O>. SPECIAL CHARACTER mode is not shown on the TI-Writer overlay (the plastic thing that tells what the top row of keys is for). To enter SPECIAL CHARACTER mode, press <CTRL> <U>.

One primary point to emphasize is that modes are not permanent and do not carry over into FORMATTER. You may change modes at any time while in EDIT.

The default mode in EDIT is WORD WRAP. It is advisable that beginners remain in WORD WRAP through their first few sessions, especially if the manual's examples were not keyed in. WORD WRAP is probably the most natural mode. In WORD WRAP, text that exceeds the 80 column width of the windowed screen is automatically moved to the next line, retaining words as a whole unit. WORD WRAP is primarily for text in paragraph form. It is important to note that in WORD WRAP the line is split into two lines for inserting characters. This is sometimes useful, but often is not. When finished inserting, the text is reformatted up to the next paragraph. Normally, text modifications in WORD WRAP mode require being reformatted.

FIXED mode is only slightly more difficult than WORD WRAP. FIXED mode is primarily for columnar and tabular documents. While in TI-Writer's FIXED mode, pressing <FCTN> <2> to insert a character does not result in the split line that WORD WRAP generates. It is therefore often useful to switch between FIXED and WORD WRAP, depending on how you would like to insert. In FIXED mode, inserting will eliminate the last character on the line, which is sometimes desirable. In FIXED mode, words are not wrapped to the next line and reformatting is not in effect. In fact, being in FIXED mode will ensure that text is not reformatted (which could really mess

-->

up a nice table).

Perhaps the most useful and least used mode is SPECIAL CHARACTER mode. The manual does not cover SPECIAL CHARACTER mode very well. At this time you should go to your console and enter the TI-Writer EDITOR. You will understand much better if you see what we are about to discuss. Press <CTRL> <U>. The cursor should be an underscore. Now press <SHIFT> and some other characters. Wow! That's some strange looking stuff on the screen! Refer to page 146 of the TI-Writer manual. This will tell the purpose of each of the SPECIAL CHARACTER keys. Next, pull out your printer manual. If you use an Epson printer or TI Impact printer, the codes on page 146 should match those of your printer exactly. Some of the codes will not apply to other printers. While in SPECIAL CHARACTER mode, press <SHIFT> <N>. When your printer encounters that symbol in your text, it will begin printing in Shift Out (Expanded) style. Pressing <SHIFT> <O> will set Shift In (condensed or compressed print). Almost any printer command can be given. Return to WORD WRAP mode, then key the following sequence:

<CTRL> <U>
<FCTN> <R>
<CTRL> <U>
<SHIFT> <G>

In BASIC, that sequence would be written as CHR$(27)&"G". ASCII 27 is the Escape code, as shown on page 146. The Escape prepares the printer for most printer mode commands. The sequence shown above sets many printers to Double-strike mode. Many of you are probably a step ahead of us at this point. The SPECIAL CHARACTER mode ** ELIMINATES THE NEED FOR MOST TRANSLITERATE COMMANDS ** ! You will likely still find transliterate useful for restoring the characters used by FORMATTER, such as the ampersand, and for combining keystrokes where space on a line is at a premium (Our example above used two character positions, whereas a transliterate command could have used one. Sometimes, especially while using Fill and Adjust, the extra character from not using transliterate may cause a problem.). It is also very important to note that if you like printing directly from EDITOR, the SPECIAL CHARACTER commands will work properly, while a transliterate will print just as it had appeared on the screen, with the command ignored. Additionally, if your printer does not recognize some of the characters from ASCII 0 to 31, you may be able to use those characters to transliterate, again freeing up more of the standard ASCII set, 32 to 127 (this does work on the model of Gemini we use).

We hope this discussion of modes will assist you in unlocking the power of TI-Writer.

COMMUNICATIONS

Bulletin Boards

STANDARD: 1A 2TE 3A 5A (o) 9A 13A

If you've never tried telecommunications and bulletin boards, you are missing a real treat! If you live in an urban or suburban area, the chances are very good that there is a board within a local phone call of your home.

Most bulletin boards are free. The boards feature private messages (mail) and public messages (bulletins) that can be accessed from your home. Though most topics deal with computers, you may find anything from when to plant your spring garden to politics! Using a bulletin board is especially advantageous if you use your phone a lot, are seldom home, work odd hours or are otherwise not available for phone conversations. If you have a printer, you can also print messages. You can even obtain free programs from many boards.

If you run a BBS, send us the complete details of your board so we can tell about a few boards monthly.

-->

Beginning With Equates

By beginning your source files with the equates listed below, you may save a lot of time. Adjust the list to match your most commonly used applications, but keep a copy of this version for our future references to it.

```
*********************************
*       MEMORY MAPPED DEVICES   *
*********************************
CPURAM EQU  >8300          CPU HIGH SPEED RAM
DISINT EQU  >83C2          DISABLE INTERRUPT ADDRESS
*                          8=ALL 4=SPRITE AUTOMOTION 2=SOUND 1=QUIT
EXINT  EQU  >83C4          ADDRESS OF EXTERNAL INTERRUPT ROUTINE
SNDPNT EQU  >83CC          POINTER TO SOUND LIST
STRTSD EQU  >83CE          START BYTE FOR SOUND
SVVDP1 EQU  >83D4          SAVE VDP R1
SCNTIM EQU  >83D6          SCREEN TIME OUT COUNTER
RAMFLG EQU  >83FD          VDP RAM FLAG FOR SOUND
VDPRD  EQU  >8800          VDP READ DATA
VDPWD  EQU  >8C00          VDP WRITE DATA
VDPWA  EQU  >8C02          VDP READ/WRITE ADDRESS
SCAN   EQU  >000E          ADDRESS OF KSCAN ROUTINE
SIT    EQU  >0000          SCREEN IMAGE TABLE
SAL    EQU  >0300          SPRITE ATTRIBUTE LIST
CT     EQU  >0380          COLOR TABLE
SDL    EQU  >0400          SPRITE DESCRIPTOR LIST
SVT    EQU  >0780          SPRITE VELOCITY TABLE
PDT    EQU  >0800          PATTERN DESCRIPTOR TABLE
*********************************
*       CPU RAM EQUATES         *
*********************************
MYWS   EQU  >8300          MY WORKSPACE
KEYBRD EQU  CPURAM+>74     KEYBOARD TO SCAN
KEY    EQU  CPURAM+>75     KEY RETURNED
JOYY   EQU  CPURAM+>76     JOYSTICK Y
JOYX   EQU  CPURAM+>77     JOYSTICK X
TIMER  EQU  CPURAM+>79     TIMER BYTE
STATUS EQU  CPURAM+>7C     STATUS BYTE
MOTION EQU  CPURAM+>7A     MOTION BYTE
INTWS  EQU  CPURAM+>C0     INTERRUPT WORKSPACE
GPLWS  EQU  CPURAM+>E0     GPL WORKSPACE
*********************************
*       REGISTER EQUATES        *
*********************************
VDPADD EQU  0              R0   ***
RCOUNT EQU  2              R3   *
WCOUNT EQU  2              R3   * FOR VDP
RLOC   EQU  1              R4   *
WLOC   EQU  1              R4   ***
*********************************
*       WORKSPACE EQUATES       *
*********************************
R0LB   EQU  MYWS+1         R0   ***
R1LB   EQU  MYWS+3         R1   *
R2LB   EQU  MYWS+5         R2   *
R3LB   EQU  MYWS+7         R3   *
R4LB   EQU  MYWS+9         R4   *
R5LB   EQU  MYWS+11        R5   * LEAST
R6LB   EQU  MYWS+13        R6   * SIGNIFICANT
R7LB   EQU  MYWS+15        R7   * BYTES OF
R8LB   EQU  MYWS+17        R8   * REGISTERS
R9LB   EQU  MYWS+19        R9   *
R10LB  EQU  MYWS+21        R10  *
R11LB  EQU  MYWS+23        R11  *
R12LB  EQU  MYWS+25        R12  *
R13LB  EQU  MYWS+27        R13  *
R14LB  EQU  MYWS+29        R14  *
R15LB  EQU  MYWS+31        R15  ***
```

99 POTPOURRI

News, Corrections, Updates, Editorials, Kudos, and Come-what-may

CORRECTIONS:

January: In Solitaire Checkers, we found that the program can crash due to invalid input. Here is the fix:

```
3120 IF (ABS(F-T)=14)+(ABS(F
-T)=18)THEN 3130 ELSE 3230
3130 IF (F1>8)+(T1>8)+(F2>9)
+(*((T+F)/2)=0)+(*(F)=0)+*(T
=1)THEN 3230
3140 REM OMIT LINE
```

In the Speech Test Program on page 6, the values were stated backward:

```
2090 CALL PEEK(-28672,A):: I
F (A=96)+(A=127)THEN FLAG=1
ELSE FLAG=0
```

NEW SOFTWARE

Miller's Graphics has released a program called "Advanced Diagnostics". We had an opportunity to work with the program briefly and it seems to be a very useful utility program. It very quickly (!) checks all of RAM and/or your disk drive(s). "Diags" allows reading and writing to any portion of a diskette! For CorComp Disk Controller users, the CorComp Disk Manager can be added to the disk for a really powerful utility disk. Price is $19.95 plus $1.50 handling from Millers Graphics, 1475 W. Cypress Ave., San Dimas, CA 91773.

For users of the SuperSketch Pad, Amerisoft has released a program called "Sketch Mate" that allows storing screens to disk or printing to the printer. S.R.P. about $39.95.

FREEWARE

We have some great news on Freeware. Freeware is software that can be obtained without paying in advance. You pay after you try the program! Send disk(s), mailer, labels and everything that costs money! We also include unusual hardware offers in this section, though the items are not free!

Danny Michael, Rt. 9, Box 460, Florence, AL 35630, has two programs. Each require a SS/SD diskette or one SS/DD for both. "Dump" is a very pro quality Assembly (!) language screen dump program. It will print your Editor/Assembler BASIC, Extended BASIC or Mini Memory BASIC screen to your serial or parallel Epson/Gemini style printer. Screens can be printed normal, inverse, rotated and double size. Tab available. Links to BASIC. Fantastic program! "Neatlist" is an Assembly utility for Extended BASIC that (you guessed it) prints a listing that is neat -- multiple statement lines are printed on separate lines. It also creates a variable directory that is useful in de-bugging and setting up pre-scans.

John E. Taylor, 2170 Estaline Drive, Florence, AL 35630 has a very good Assembly language "Sprite Builder" that will do everything including talk to you! Overlays, output, build MERGEable file, etc. If you use sprites, send for this one!

Mike Conway, 911 Dover Drive, South Bend, IN 46614, has just completed a Multiplan™ spreadsheet for figuring U.S. income tax. Includes spreadsheets for Form 1040, Schedules A, B, D, W, Tax Rate Schedule, and Sales Tax Table. May be adaptable for 1985 (next year).

Frank Cross, Rt. 1, Box 354, Waco, TX 76710 has 2 32-column TI Thermal printers and many other items for sale.

We are going to bend the rules a little and state that we have a Gemini 15-X PC for sale. Make us an offer.

We devoted more space to Freeware than we anticipated due to the very high quality we saw!

-->

MORE SOFTWARE

Quality 99 Software has several very useful programs available, including their famous "Draw 'N Plot", which uses bit-map mode and dumps to printer or disk. Also, "Disk Manager III" is available if you want access to a disk manager from Extended BASIC or if you bought a used disk system and didn't get the manager. For a catalog, the address is 1884 Columbia Rd. #500, Washington, DC 20009 or phone (202) 667-3574.

Most of you have now heard the reports that Myarc is readying to produce the 99/8, the computer TI backed out of producing. Our sources indicate that plans are progressing on schedule and there may be a prototype to display at the Summer C.E.S. You may recall that we indicated back in November that Myarc was a company to watch for new products!

Looking for some good prices on hardware and software? Try Derric Electronics, P.O. Box 594, Northford, CT 06472. Phone (203) 248-7227.

COMING IN APRIL

Language software review.
More on Multiplan™.
FORTH article.
Assembly article.
Much more!

As always, we invite readers to write and let us know their favorite topics.

For any orders you place with a non-profit organization, please remember to send an extra amount as a donation. Newsletters, etc. are often priced at below cost! Plus, someone is devoting their personal time to fill your order!

Kelowna Home Computer Users Group, Box 793, Westbank B.C., Canada V0H 2A0 is forming a WESTERN CANADIAN USERS GROUP ASSOCIATION. If you are interested in participating, contact Mr. Dale Stach at the Kelowna address.

Congratulations to Mr. Ed York on being re-elected President of CIN-DAY User Group, Cincinnati and Dayton, OH.

If you are in a joking mood, key in this program, ask someone who knows little about computers a silly question and then press any key while they aren't looking! (for TEII and speech)

```
100 OPEN #1:"SPEECH",OUTPUT
110 CALL KEY(5,K,S)
120 IF S<1 THEN 110
130 PRINT #1:"OHOHOHOHOHOHOH
OH"
```

"COMPANION", the assembly language word processor from INTELPRO, will soon be available in French. The anticipated release date is April 15. The address is 5825 Baillargeon St., Brossard, Quebec, Canada J4Z 1T1

Sorry for the long delay in getting this issue out. We've been in the process of changing a lot of procedures to accomodate our rapidly expanding circulation.

-->

Super 99 Monthly is published monthly by Bytemaster Computer Services, 171 Mustang Street, Sulphur, LA 70663. Subscription rate in U.S. and possessions is $12.00 per year; all other countries $16.00 U.S. funds for surface mail. All correspondence received will be considered unconditionally assigned for publication and copyright and subject to editing and comments by the editors of Super 99 Monthly. Each contribution to this issue and the issue as a whole Copyright 1984 by Bytemaster Computer Services.

STANDARD KEY

1	Computer	A	TI-99/4A
2	Cartridge	XB	Extended BASIC
		EA	Editor/Assembler
		TW	TI-Writer
		MP	Multiplan (TM)
		TE	Terminal Emulator II
3	RS-232	B	TI
4	Disk Drive	B	TEAC 55B
5	Expansion Box	A	TI
6	Disk Controller	B	CorComp
7	32K Card	A	TI
9	Monitor or TV	A	TV & RF Modulator
10	Printer	A	Gemini 15-X PC
13	Modem	A	Volksmodem (TM)

Volksmodem is a registered trademark of Anchor Automation, Inc.

Bytemaster Computer Services
171 Mustang Street
Sulphur, LA 70663

Bulk Rate
U.S. Postage
PAID
Sulphur, LA 70663
Permit No. 141

08/85

[redacted]

S

MARCH
SUPER 99 MONTHLY