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	SYSOPS	
Meeting; 09 Dec '88 Fri	> TURNER – MILLS <	Meeting; 10 Dec '88 Sat
Oregon #2 Fire Station	\\\\\\\\\\\\//////////	Unity Church Secor Road
Time 7:00 Pm.		Time: 12:30 Pm.

THE NEWSLETTER STAFF

Roger & Judy Feinauer   Earl Hoffsis   Pat Hunsinger

LOCAL CONTRIBUTIONS BY;

Ju Symington
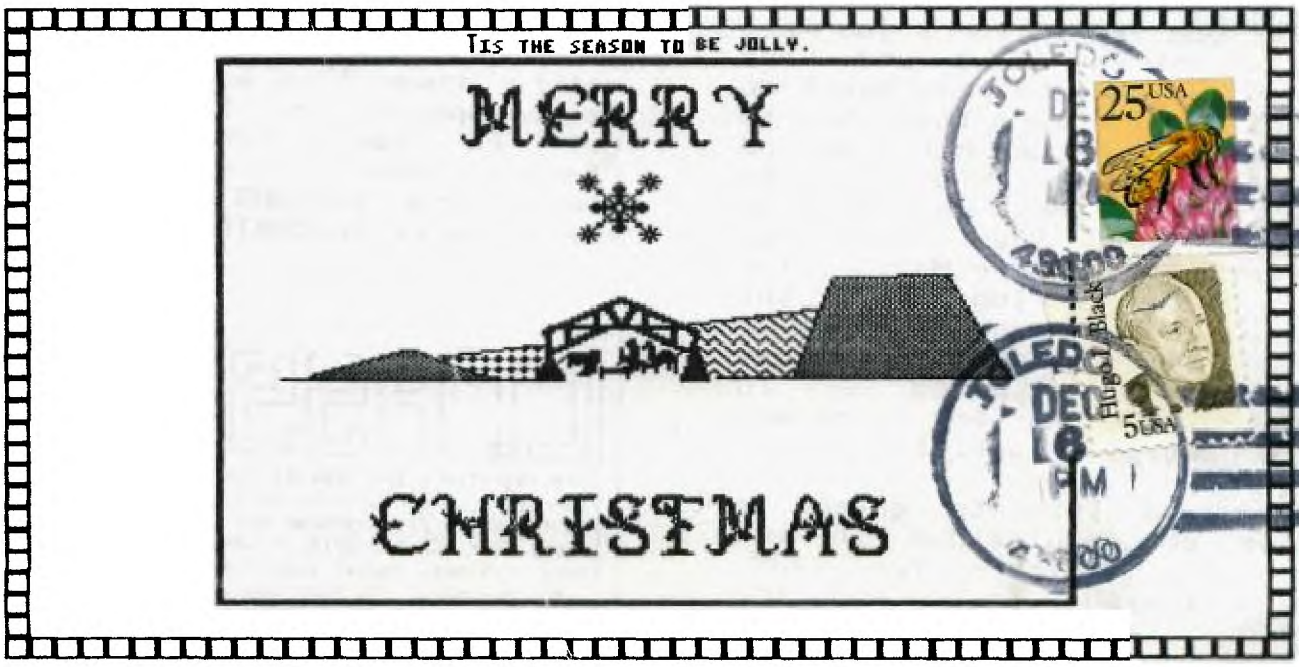
'TIS THE SEASON TO BE JOLLY.

MERRY ✻ CHRISTMAS

PRESIDENT'S CORNER

by DON TURNER

Greetings to all the members of **NEW HORIZONS**. This month I would like to see all attend this months meeting. Be sure to attend or you could miss something that would benifit you. We will be meeting at **UNITY CHURCH on Executive Pkwy at 12:30 on December 10th.**

I would like to open up with HAPPY HOLIDAYS to all of our membership and hope the New Year will be the best for all. For the past several years we have had an annual Christmas party. This year will not be different. Everyone please be sure to attend to make this year's party a great one. As in the past, please bring a "finger food" for the table.

I would like to thank my officers for the past year on the splendid job they did. We had a good year and I hope the up coming year will be better. Thank you Earl for a job well done, thank you Russ and Lida for the job and time spent on the club and a warm thank you to Jo Symington for her time and efforts as well. I'd like to also include Chris and John for the time they spent with our library and to Burr Mallory for his splendid job on the newsletter exchange. Finally I would like to thank all of those who participated in demonstrations and for those who wrote newsletter articles.

I would like to extend a robust congratulations to the new club officers for 1989. Many well wishes to you and the club.

With the new year membership dues are due. See Earl at the meeting and he can take care of you on the matter. Club dues are still $15.00 for the year. Thats quite a bargain. In closing, I would like to see everyone support our new officers, Mark Maisonneuve (president), Jo Symington (Vice President), Earl Hoffsis (Treasurer), Marilyn Schafstall (Secretary), John and Chris Dewy (Libriarian), Roger Feinauer (Editor) and Burr Mallory (Newsletter Exchange). Finally many many thanks to everyone involved with our club. **MERRY CHRISTMAS and HAPPY NEW YEAR!!**

MICROPENDIUM is available each month at the club sales desk. These are in limited quantities so be sure to get yours while they last. **MICROPENDIUM** has some of latest news and software concerning the **TI-99/4A** and the **GENEVE 9640.** Also it has reviews on software/hardware and much much more.

Anyone who has borrowed from the lending library and the exchange newsletters should return them this month so that we can update our library and get it ready for November. Please return the exchange newsletters to **BURR MALLORY** and the software to **CHRIS DEWY.**

THE NEW HORIZONS AND OH-MI-TI CLUBS
Roger Feinauer

EDITOR

FROM THE MEMORY OF
ROGER FEINAUER's
MYARC GENEVE 9640
PHONE 1-517-263-6144

THE GENEVER
by Roger Feinauer

First, let me say to one and all I wish each and everyone a very Merry Christmas, and a very happy New Year. Hope each the very best in the coming year.

I would like to extended a welcome to the officers of New Horizons for the New Year. And to our new president.
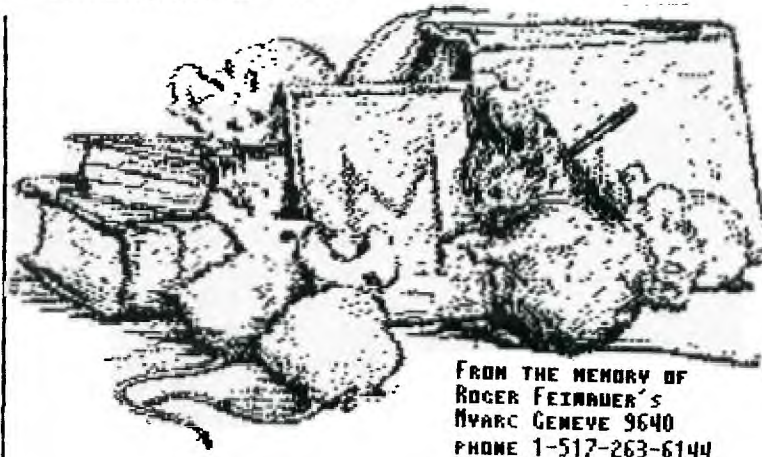
Mark Maisonneuve
1046 Wall
Maumee Ohio 43537
Phone   1-419-893-9314

This month there are a number of items. The first is that OH-MI-TI will be doing their own newsletter. At their November meeting they decided to do their own. With this I and everyone else wish them the best, and hope in the future we stay in contact with each other.

December's meeting we have our Christmas get together. We are asking each member to bring a dish of some kind of finger food or salad of some type. The club will supply the cold cuts,and soft drinks and or coffee. So, don't forget to bring the family this month to the New Horizons meeting.

Elsewhere I have included a copy of the club program, that is as far as we got on it. If you have been working on some additions for this please bring them to the December meeting.

In closing, don't forget dues are to be payed starting this month, which are only $15.00 a year. This covers the whole

A number of new programs and hardware are know availble for the Geneve but,"alas they work from GPL". Very few run from Mdos at this time. This brings me to the big Question when is Myarc going to release Advance Basic for Mdos . At this time only those persons willing to spend the time to write in machine language has any access to the Dos side of the machine. Which is a shame, true we can use Extended basic and even Super Extended Basic from the Gpl side of the machine. But if you want to do any bit map type of graphics, a person has to use call loads or special assemble routines made by the editor assembler. Another thing in Gpl you are still restricted to a 1 by 4 bit limit. This is why you get that smooged look in TI-ARTIST when you over lap two different colors. My point is this, Myarc needs to give access to Mdos programing to the average computer user.

While i'm at it, what is truely needed in Mdos is an Editor for text. Even if it supported only 40 charactor display like the TI-WRITER editor it would do fine. Just so there were a program that would do this out of Mdos. Instead of having to go to GPL to do batch files then after saving go back to Mdos to try them out. Sure you can use COPY CON but if you are making any kind of long batch file it could be real trying for a person who is running everything from disk drives.

This month I received another version of Mdos. At this time I can't tell you what version it is except it is a lot latter then 1.08 which I wrote about last month. I'm running two Horizon Ram-disks . Drive #6 which is a Phoenix which is actualy two drives in one. They are switched back and forth with a program called Ramdos. One drive uses the old 8-bit adressing , this drive at this time has 90k. ram, which can be expanded to 256 k. ram. The other part of the card has the 16-bit addressing, and at this point in time has 554k. ram which can be expanded to 800k. ram . The Geneve can support two of these type of ramdisks . one at 1400 cru address, and the other at 1600 cru address. For more then 2 meg of disk storage. My other ramdisk is set at cru 1600 and is drive #7 this is an old 8-bit 180k. ram Ramdisk. I could of set it up with the config program so the system would of seen it as a 16-bit ram disk but I left it at 8-bit because I want to see how powerful batch files were with my new Mdos. Here is a sample with a batch file that goes from drive #6 to drive #7 in doing so has to switch from 16-bit drive to 8-bit drive load Myart, then upon leaving Myart switch back from 8-bit to 16-bit reset the drive number back to drive #6, and load a batch file called Menu.

```
ECHO OFF 'turn off screen

RAMDOS    'switch 16 to 8-bit

G:        'switch to drive g

MYART     'load myart

RAMDOS    'switch   back   to
16-bit

F:        'set to dive f

MENU      'load menu
```

As you see Mdos can be very powerful with the use of batch files and utility programs. The only problem at this time is there isn't very many utility programs out. I think one very usefull utility would be one that could be loaded from a batch file to let you change printer settings so you could change the printout in progress or better yet read some kind of format codes inbeded in the text or maybe let you write a batch file that would say ok make the first line of text enlarged and the next three lines place the margin 40 columns to the right,and center, you get the picture, anything would be better then what we have know.

Lastly some some important things remember I wrote last month about two types of GPLs ? One loads with the basic interpreter and the other loads with an 80 column loader menu. Well some software won't run without the basic interpreter, one of these programs I have found that runs but you loose the support of the mouse is TI-ARTIST if you use GPL v1.03 without basic interpreter. I have a version with Basic in it GPL v1.01 seems to let everything work normal again. Now I know that GPL v1.01 with the menu will load TI-ARTIST OK so someting more has been removed in this version. So just rename the version GPL v1.01 with Basic to BGPL. This way they can be on the same disk so you can use one or the other. If you use the GPL with basic load it from the drive prompt.

```
F:BGPL   XB
```

This would the GPL with Basic then load Extended Basic and give you the old TI load Menu 1.FOR TI BASIC 2.EXTENDED BASIC well till next time happy computing.

"C'mon, Dad! Mom gave Robotman to me!"

GETTING TO KNOW
by Jo Symington

Chris Dewey- Chris is the son of John Dewey together they run the club library. They are responsible for all the library property. Each month Chris and, his dad display all of the club disks and modules for the members to borrow.

Chris is a jr. at Emmanuel Baptist School. his favorite classes are Bible, Spanish, and Math. He is taking Computer Classes and next year, will be taking Advance computer. He uses his knowledge of computers for home work.

His hobbies include computer, model car making. His favorite computer game is "Wheel of Fortune".

Chris enjoys coming to the club meetings to see the Demo's, especially the games. He hopes to be a ticket Agent for the Air lines when he finishes school.

Last Month
by Jo Symington

Dues payable at next meeting for the year of 1989 $15.00 ...

Cristmas Party-next meeting Members their families are invited to come. The club furnishes the soda and coffee and meat tray. Members can bring whatever treat they want to put on the table. Come early to sign up for the attendance drawing.

Last months Demo was Macflix By Roger Feinauer. So till December 10 see you, Jo.

CLUB PROGRAM

```
100 CALL CLEAR :: DISPLAY
AT(3,10):"MAIN MENU"
110                     DISPLAY
AT(5,10):"---------"
120 DISPLAY AT(8,8):"1> LIST
"
130 DISPLAY AT(10,8):"2> ADD
TITLE"
140 DISPLAY    AT(12,8):"3>
EDIT"
150    DISPLAY    AT(14,8):"4>
DELETE FILE"
160    DISPLAY    AT(16,8):"5>
EXIT"
170 DISPLAY AT(20,5):"INPUT
NUMBER ?"
175 ON WARNING NEXT
180 ACCEPT AT(20,20):A
190 IF A<1 OR A>6 THEN 170
200 IF A=1 THEN 500
210 IF A=2 THEN 1000
220 IF A=3 THEN 1500
230 IF A=4 THEN 2000
240 IF A=5 THEN 2500
```

WINDOW
by Roger Feinauer

```
80 ! THIS PROGRAM IS A SAMPLE
OF WHAT CAN BE DONE WITH A
SUB ROUTINE.
85 ! TO CREATE A WINDOW ANY
WERE ON THE SCREEN USING
ANYCHARACTER YOU WISH.   WITH
XB
90 ! ROGER FEINAUER NOV 23
1988
95 ! PLEASE USE FREELY IN ANY
PROGRAM YOU MIGHT LIKE TO TRY
IT
99 ! CLEAR SCREEN DEFINE CHAR
100 CALL CLEAR :: CALL
SCREEN(8):: FOR I=1 TO 14 ::
CALL COLOR(I,2,16):: NEXT I
105 A$="FFFFFFFFFFFFFFFF" ::
CALL CHAR(90,A$)
108 ! RB=ROW BEGINNING RE=
ROW ENDING   COL=STARTING
COLUMN CHAR=CHARACTER ASCII #
REP=#OF TIMES TO REPEAT.
110 RB=6 :: RE=20 :: COL=17
:: CHAR=90 :: REP=11
120                     CALL
WINDOW(RB,RE,COL,CHAR,REP)
125 FOR T=1 TO 6000 :: NEXT T
130                     SUB
WINDOW(RB,RE,COL,CHAR,REP)
140 FOR A=RB TO RE
150                     CALL
HCHAR(A,COL,CHAR,REP):: NEXT
A
160 SUBEND
```

First Short Evening Hardware Project for your Geneve

(How to add 32k more zero wait state memory)

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This document must be not be altered in any way, and must
be distributed in its entirety.

Credit to TINET-Delphi must be placed in descriptions of this
file on BBS and network services.

What this modification gains you:

1) 32k more of zero wait state memory, this allows many programs
   which run from MDOS mode to execute more quickly.

2) satisfaction of abusing your computer with a soldering pencil
   and living to tell the tale

3) something to tell your friends

DISCLAIMER: all information in this document is provided as-is, with
   no warranties. If you choose to use this information, you do
   so at your own risk, any violation of warranty terms on your
   hardware is your own liability. Don't not have fun doing it.

First you will need some parts, an adventurous frame of mind, about twelve
dollars, and some equipment.

Equipment: 1 Soldering pencil (not a solder gun!)
              1 roll of fine (20 awg) rosin core solder <not acid solder>
              1 foot of fine (30 awg) wire wrap wire
              1 something to strip the wire wrap wire with
              2 32k x 8 Static rams (28 pins)
                (one 32k ram is sufficient, if you get the other one
                  from its socket on the Geneve)
              1 pair needle nose pliers
              1 broad blade flat screwdriver (for IC removal)

Step 1:   remove Geneve from PE box

Step 2:   remove clamshell from geneve, using flat screwdriver
              this is done fairly easily if you place the screwdriver in the
              indentation at the lower left corner of the card and pry,
              the repeat the process in the indentation on the lower right
              corner of the card. If you have difficulty with this step, give up,
              since you'll probably ruin something else while you're at it!
              place card on table with the chips on top, and the connectors
              for the keyboard, etc. on your right. (this orientation is used
              in subsequent steps, until I tell you otherwise.)

Step 3:   remove the old 32k Static ram from its socket by prying gently
               underneath the edges of the chip with the screwdriver.

               (if your 32k ram is not socketed, I guess you will have trouble
                with this step...you figure out what you want to do about it!)

               removal works best if you pry a little on one end, then pry a
               little on the other end, keep switching ends until the chip is free.
               (this chip is the 3rd IC up from the large square chip,
                  the 1st is a 40 pin chip, the 2nd is a 28pin eprom, and the 3rd
                  (28 pin) chip is the one you need to remove)
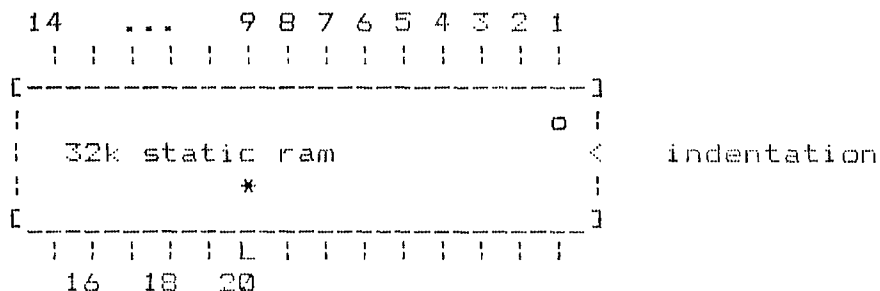   note that the indentation on one end of this chip is to your
               right, away from the bank of 16 rams.
               (note: there are two types of indentations used by various IC
                manufacturers, one is a dimple right beside pin #1, the other
                is a notch in the edge of the IC beside pin #1)

Step 4:   bend the leads of the new 32k rams to a straight position
               (they were probably flared out a bit on new chips)
               this is easily accomplished by placing the pins against
               a smooth flat surface and gently twisting the chip towards the
               ends of the pins.

Step 5:   place one of the 32k rams directly on top of the other, the pins
               of the top chip should press against the pins of the lower chip,
               holding it in place on top. Make sure that the indentation on the
               edge of the lower chip is at the same end as the indentation
               on the upper chip. (so that pin #1 matchs on both chips)

Step 6:   bend up pin #20 on the upper chip, so that it points out at a right
               angle to the other pins, and does not touch pin 20 of the lower
               chip. Top view:

```
        14    ...    9 8 7 6 5 4 3 2 1
         | | | | | | | | | | | | | | |
      [---------------------------------]
      |                             o  |
      |   32k static ram           <      indentation
      |               *               |
      [---------------------------------]
       | | | | | | L | | | | | | | |
        16   18   20
                  * bend this pin up at right angle to other pins
```

Step 7:   with caution and a hot soldering pencil, solder pins
               1 to 19 of the upper chip onto pins 1 to 19 of the lower
               chip (this should be pretty easy since you succeeded in step 5)
               also, solder pins 21-28 of the upper chip to 21-28 on the
               lower chip. pin 20 should remain unsoldered.

Step 8:   cut about 8" of wire wrap wire from the roll. strip about
                 1/10" of insulation from each end of this wire (ie: not much)

Step 9:   apply a little solder to pin #20 of the upper chip, enough to
                 cover it with a thin layer.

Step 10:   apply a little solder to one end of the wrap wire.

Step 11:   apply heat to pin #20 of the upper chip, touch the end of the wrap
                 wire with solder on it to the pin, and remove heat while holding
                 wire steady. The wire should now be firmly connected to pin
                 #20 of the upper chip.

Step 12:   place the lower chip into the socket from which you removed
                 the old 32k ram. Be sure that the indentation is to your right,
                 and the pin #20 and wire is pointing down towards you. Make sure
                 that all pins go into the socket, and that none of them get bent
                 under the chip.

Step 13:   run the free end of the wire through one of the small holes at the
                 connector facing you (if the small holes are all filled with solder,
                 just run the wire though the notch at the left end of the connector)

Step 14:   flip the board over, so that the chips are against the table.
                 flip the board left-to-right, so that the large connector
                 at the bottom edge is still closest to you, and the keyboard
                 and video connectors are to your left. (this is important for
                 the diagrams which follow)

Step 15:   locate the pin marked with an X in this diagram:
                 (it's directly over the large square chip on the other side of
                  board)
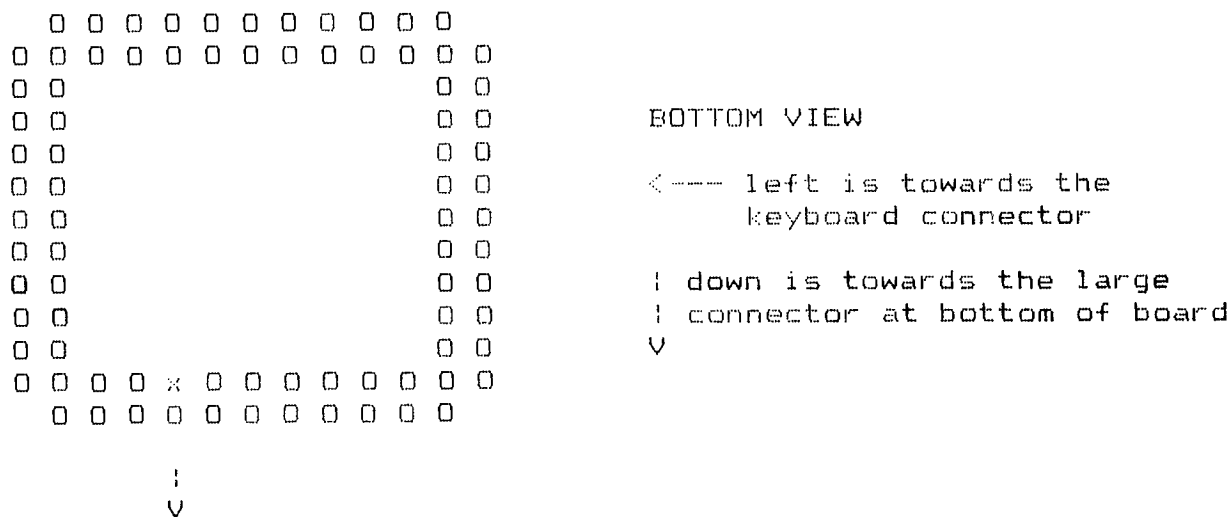
```
      0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0                   0 0          BOTTOM VIEW
  0 0                   0 0
  0 0                   0 0          <---- left is towards the
  0 0                   0 0                keyboard connector
  0 0                   0 0
  0 0                   0 0          | down is towards the large
  0 0                   0 0          | connector at bottom of board
  0 0                   0 0          V
  0 0 0 0 x 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0


        |
        V


      "X" marks the spot
```

Step 16:   solder the remaining end of the wrap wire to the spot
                 marked with an "x" in the above diagram --- make sure that
                 solder doesn't bridge over to adjacent pins or circuit traces.

Step 17:   PRAY

Step 18:   place the Geneve board upside down in the top half of the
clamshell case, with the alignment pins on the case
going through the holes near the top edge of the Geneve board
(make sure that the LED is near it's hole in the case)

Step 19:   with the Geneve still upside down in the top half of the case,
hinge the lower part of the base into the upper edge of the top
half of the case, then snap the lower edge of the case
together.

Step 20:   re-install Geneve into the PE box

Step 21:   PRAY

Step 22:   turn on Geneve...PRAY

Step 23:   assuming you booted, try "CHKDSK" to see that the
memory on your computer is now "589824" (for those of you
fortunate enough to NOT OWN a 512k expansion card)

or "1114112" for those of you misfortunate enough to own the
512k expansion card.

Step 24:   Have fun.

Step 25:   many programs will now run faster because of the increase in
zero wait state memory available.

complaints about the grammar and syntax of this document MAY NOT be
sent to user TI994A on delphi.

complaints about incorrect or misleading information in this document SHOULD
be send to user TI994A on Delphi (that's me, Paul Charlton.) This sort
of message should be placed in the public message base in the TINET group
on Delphi, thanks.

     punchily yours,
     Paul Charlton.
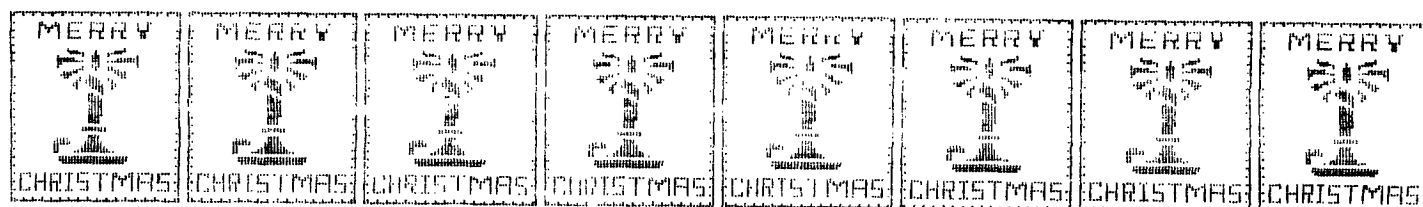
Using "PRINT USING"
with your printer
By Richard Roberts
TI3552

One of the more obscure statements available with TI Extended BASIC is one called PRINT USING. Even more obscure is the fact that this statement can be used to format variables and constants that will be dumped to your printer. The Extended BASIC manual, on page 150, shows several examples of how PRINT USING can be used to format data for screen display, but nary a word of how to do the same with open files. It can be done, and is much more powerful than you may realize.

Any discussion of PRINT USING will require an understanding of the IMAGE statement, so if you are not familiar with it, you better brush up on it first. The PRINT USING statement uses IMAGE in one of two ways, either with a string expression, or a line number reference. I prefer the latter, as it allows for more flexibility, but since these different methods are explained in the manual, I will limit this to a few simple examples that are not shown in the manual.

```
100 TCOST=19.55
110 IMAGE ##.##
120 OPEN #1:"PIO"
130 PRINT #1,USING 110:TCOST
```

Running this sample program will effectively show how the PRINT USING statement will work with an open file. Of course, there are many other variations of IMAGE that can be used, so experiment with them and watch how it performs when line 130 dumps it to the printer. Shown below are a few more examples for use with an open file.

```
110 IMAGE "##.##     ##.##"
130 PRINT #1,USING 110:COST1,COST2
```

This IMAGE statement will allow you to print two (or more) variables at a pre-determined spot on the same line. The length of the string expression in the IMAGE statement can be as long as you wish, up to the limit of an Extended BASIC line.

```
110 IMAGE "######### ##.##"
130 PRINT #1,USING 110:"TOTAL COST",
TCOST
```

This version shows how you can format the printed line for string data as well as numerical data. A string variable could be used in place of the string constant, as below.

```
105 A$="TOTAL COST"
110 IMAGE "#########   ##.##"
130 PRINT #1,USING 110:A$,TCOST
```

It is also possible to place the IMAGE statement inside the PRINT USING statement, as shown below. First, delete line 110.

```
130 PRINT #1,USING "##.##":TCOST
        or
130 PRINT #1,USING "######### ##.##
"
:A$,TCOST
```

A few other points to remember include the fact that IMAGE and PRINT USING can be used to round off calculated variables. A single string expression such as " #####.##" will round off and decimal align numbers as small as number at any designated location. This function could save many hours of algorithm development for accomplishing the same thing. So, in the long run, the PRINT USING statement is one that any programmer should be very familiar with, and use as much as possible.

RICHARD ROBERTS IS PRESIDENT OF THE DALLAS TI99/4A USERS GROUP.
SOFTMAIL WELCOMES TUTORIALS OR OTHER ITEMS OF INTEREST THAT USERS MAY WISH TO SHARE WITH OTHERS. THROUGH EFFORTS SUCH AS RICHARDS WE MAY WELL ALL BE ABLE TO ENJOY AND BENEFIT FROM OUR ORPHAN AS LONG AS THOSE POOR SOULS LEFT HANGING WITH BANANA 9000 JUNIOR! MAYBE EVEN LONGER!