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TOPICS

LA 99^{er} COMPUTER GROUP

VOL 8 NO 2 LOS ANGELES CA FEB 1989

Newsletter

TERRIES CORNER

The following is copied from the B.V.M. (Blessed Virgin Mary) Newsletter, Feb. 1989 which I received from Sister Pat on Feb 2. The "Marion Hall" is probably the name of the hospital. Sister Pat was a parochial grade school teacher and is considerably younger than most of the other sisters confined there due to health problems.

Items in parenthesis are my additions as gleaned from her letters to me.

"Sister Pat Taylor, B.V.M." can be reached at 1850 Carmel Drive #456, Dubuque, IA 52001.

(Signed) Walter Sharritts

Pat in TI Land

After severe asthma sent Patricia Ann Taylor to Marion Hall, she took "introductory computer" at Clark (College in Dubuque). Her final project was a study of drug and food interaction in her own diet, an attempt to reduce medications which are found in foods with diet rather than medication. Pleased with what she had done for herself, Pat felt she could help other patients. She began to pray and to tell her friends why.

A Santa Clara parishioner gave the sisters there his old computer. Quickly they realized the Texas Instruments computer was not compatible with their school computer. To them it was useless if it could not print, but maybe Pat just needed to compute. They sent her the TI computer.

Pat used her enforced leisure to read and learn. Since Texas Instruments stopped making computers and printers, a network of TI users grew. They form "user groups" and publish newsletters to exchange information on adapting hardware and software to their needs. Pat began corresponding. Soon she had a printer and programs. Visitors to Marion Hall see the greeting banners she prints. But that is the least of the story. Here is part of her Christmas letter.

"It has been an incredible year. First, Ray Kazmer in California wrote about me in a computer magazine called "MICROpendium." I had sent a donation for his software. In the TI-99/44 network, most of the software is "shareware"; you send what it is worth to you. I always apologize for sending small amounts as I do not want the authors to think that is my evaluation of its worth when it is simply a lack of money. Without my knowledge, he wrote about what I was doing with the little I had. He assumed that I worked here, since I didn't mention being a patient."

"As a result many programs were donated. A Canadian sent two 100 (unit) disk holders. I received funds from the U.S., Canada and even from one German. I bought supplies and a few commercial programs to make what I had more effective. The closest user group is in Cedar Rapids. They had been very helpful via mail; Jim Green had guided me on the practical aspects of equipment and Gary Bishop had put 32K memory chips in my computer when I sent it. After the article, several (TIers) came to see me and what I had."

"Now we are setting up a second (TI) system in the "Activity Section" downstairs where it will become modified for handicapped use. Ed Edwards donated the unit which he already had connected to a second keyboard that can be set on a wheelchair tray. Walter Sharritts from Florida sent a second disk drive. Gary Bishop is designing a way to lock the necessary keys so stroke victims can use the keyboard with one hand (or a "mouth-stick"). At the Chicago TI Fair money was collected to provide a monitor; the TV screen is not clear enough for sisters with poor sight."

"I wrote the "Center for Computer Assistance to the Disabled" to inquire about locking keys for one hand use. Jack Kishpaugh, the quadriplegic who won awards for (his) modifications, called to say that we really need a back-up this far from a user group. They sent me some consoles to use when we send ours for repair."

"Our system downstairs now has everything except a power unit for the second disk drive and a printer interface."
(Note: This complete second unit is now up and running, thanks to additional donations- including two modified keyboards sent by TI)

"I am teaching several sisters how to use the TI. Some will be very good and can do their own letters. I have guided a few to print labels (using Graphic Labeler) for their Christmas cards. One staff member hopes to learn the TI so she can teach others."

"I have been busy writing TIers all over the world to thank them for programs, ideas and suggestions. An Australian magazine also carried an article about me, and I'm hearing from down under. It is enough to keep someone in good health busy, and my body will not keep pace with my dreams which are becoming a reality unbelievably fast. When I see hope in someone's eyes, that makes it worthwhile."

"I feel like Alice in Wonderland -- or Pat in TI-land. The kindness and generosity of these people is staggering. When TI stopped making computers, they all (TI owners) were determined not to lose their investment, so they began helping each other. Last July, that steaming July, a man in Danville, IL called to ask me if I wanted (TI) cartridges. He no longer needed his. I said yes. That night I was in my pajamas early because of the heat. About 7:30 I answered a knock at my door. There was a big man who said, "Hi! I'm Lonnie." He had driven with his wife and children all that way in all that heat to bring the cartridges and to see my set-up. He gave me some good pointers. If people would work for world peace like TIers work together, we would have it."

"Meanwhile, I continue to make the banners here and color them. I hope all this makes my poor correspondence forgivable."

(Signed) Pat Taylor

LA 99ers Computer group P.O. BOX 67A78 Los Angeles, CA. 90067

FOUR-A/TALK

Random ramblings
about things TI.

by Bill Gaskill

February 1989

DKM BASIC COMPILER

The following information on the DKM Basic Compiler comes from Illinois 99er Marc Levine. I don't usually borrow material from others for this column, but the information is important and it is well presented, so here goes.

First Impressions of XCOM, a Basic/Xbasic Compiler from DKM Enterprises, p.O. Box 501046, Indianapolis IN 46250-1046.

Well, I got it, I've mentioned it before here, this Basic/XB Compiler from "DKM". After some hints I got my wife to get it for me for Xmas. Considering that it's 49.95 this was quite a step on my behalf, getting an "untried" piece of software for a "you got to be the best thing since sliced bread price" in the TI world. The program comes on a "protected disk". I know there are many out there who would not get anything if it's protected. Actually, in this case I can almost live with the protection *** IF **** the loader for the compiled programs were unprotected. In fact, just as there is now a fortran loader and quick-run loader released, it's absurd to not just release a loader into the public domain. As it turns out now, even after compiling your program, you still must use the "PROTECTED" disk to load your program. Totally unacceptable. It also uses either the MINIMEM or Editor/Assembler cart to compile or load the programs. I also found that it would not work with the Gram Kracker Utilities version of the E/A (E/A loaded with XB). XCOM also uses the RAM in the MINIMEM so larger programs can be compiled and run with it over the E/A. I assume, but do not know for sure, that a supercart would also help.

Compilation involves saving your program in merge format. If Basic, there is a utility to allow you to save your programs in merge format using either the minimem or E/A carts with basic selected. To compile you use option 3 of e/a or 1 of minimem. The filename is "XCOM". It asks for a source name and a name for your compiled program. I found no problem using either the Myarc RAM Disk as DSK5 or the CC RAM disk on my second system as DSK3. Worked fine. ONE BIG ANNOYANCE I HAD WAS THE AUTO DEFAULT TO DSK1 FOR A WORK DISK! Need to have an unprotected disk in drive 1 for it to create a work file to use. It deletes it when it's done. I would much prefer the option to select a work drive. I would of course select a RAM disk drive #. The compiled programs are run using a "LOAD" program which much be first loaded using again option 3 of e/a or option 1 of minimem. When loading it obviously loads several utilities. The disk does not have to be in drive 1. I had it in drive 4. It keeps looking for a disk name obviously. Did that several times. Then you load your compiled program and off it runs.

Quick, I must admit. Tried compiling several programs, found that it stumbled on things like "USING" and "IMAGE". It gave compilation errors with those. I tried it with a Basic calendar program I have. It MOVED!!!! Much faster I must admit. Tried it with an old Xbasic game called something like "SPACEPATRL". It ran much faster but seemed to have trouble defining the sprites. My sprites were just large letters. The joystick scan seemed to be much faster. There were very few missed "COINC" that Xbasic is famous for.

The compiled code is D/F 80 and uncompressed. A 22 sector original program wound up as a 94 sector D/F 80 file. If a loader were available to be released into the public domain as it should, I would upload it with before and after files so you could see for yourself.

The program needed to load the compiled code and the compiled code itself should be in program image format and the loader, at least, should be converted to work in XB, possibly by using a "SYSTEX" type approach. The best approach would be where the utilities to run the compiled program and the compiled program itself would be combined in a "Program Image" format capable of being run from Option 5 of E/A or any other program image loader.

I feel XCOM has a lot of potential. It's an approach to the one utility that we are still hurting for. Mr Douglas Martin of DKM should talk to either Barry Traver of Genial Software or Chris Bobbit of Asgard Software. I had previously suggested to Mr Martin that he join Genie. If he has, he's never left a message. I suggested to him that he attend and give a demo at the TI Faire in Chicago. He never did. As I've said before, DKM's distribution capacity are poor even by orphan standards. I feel the marketing capacity of ASGARD software or Genial Software, plus the technical expertise that they could supply/get to aid Mr. Martin, could help in turning XCOM into the next big seller in the TI world.

TRIVIA:

Did you know that...

-the December 1984 issue of Family Computing, a former 99/4A supporter, has pages 145-152 bound in upside down?

-Bill Moseid's Model Masters outfit released Disk Manager 2 on disk for \$22.50 in December 1982 before the program was available in cartridge format?

-Mark Sumner, one of the first of the GENIE sysops when it opened up the TI-SIG, was also one of the early software suppliers for the 99/4A with his Counterpoint Software Company. Counterpoint changed its name to Challenger Software International, which later became CSI Design Group before eventually disappearing from the TI-99 market. This is the firm that released the unheralded WINDOWS 99 program, an assembly language windowing utility that could also be purchased with the source code.

-Memory Devices of Lilburn, Georgia, an outfit that advertised business software for the 99/4A, changed its name to BizWare in November 1982?

TRIVIA (cont'd):

-Oak Tree Systems, who we all know as the company that produced the ACORN 99 data base manager, ENHANCED DISPLAY PACKAGE and SMASH, the program compactor, also produced a children's educational program named CROSSUMS and a personal finance program named CHECKBOOK?

-the now defunct Popular Computing Magazine ran an article in its July 1984 edition deriding the non-standard 16-bit chip and TI's use of it. The article pointed to the failure of the 99/4A in support of the 8-bit standard that TI chose to ignore?

-99er Phil Barnes, of Mission Viejo, California, wrote the first XB spreadsheet for the 4A? It was originally released in June 1984 as a commercial offering.

-Creative Computing Magazine's March 1984 edition contains an article by editor and long-time computer aficionado David H. Ahl that rivals Joseph Nocera's "Death of a Computer" article for Texas Monthly in content of information regarding the demise of the 99/4A?

-when Computer Shopper first appeared on the scene in 1983 you could buy 12 issues for \$10?

-Extended Software, the Cedar Creek, Ohio firm that gave us TYPWRITER, DIABLO, NAME-IT and a host of other programs, also ventured into the Coleco ADAM computer software market in 1985? What ever happened to them, anyway?

-Plato Courseware consists of over 500 titles, but less than 100 actually made it into 99/4A format?

-Quality 99 Software's Larry Hughes wrote the Super Disk Cataloger program marketed by J and KH Software?

-an outfit named JW Software out of Illinois marketed several games for the 99/4A such as RUN THE RAPIDS, SHUTTLE COMMANDER, SUBMARINE WARRIOR and WILD WOODS that I'll bet most most 99ers never heard of?

-a Texas distribution outfit named the Tronics Sales Corporation used to sell the 99/4A directly to end-users like Amway and Mary Kay Cosmetics does, door-to-door?

-TI used to market a Video Disk Controller System that consisted of the 99/4A computer and special software?

-in April of 1984, a full five months after the "bailout", TI still had 14% of the home computer market?

ORPHANED COMPUTERS:

-Speaking of orphaned computers, whatever happened to the:

ACORN BBC Micro	ADAM
ALTOS 586 PC	APPLE III
APRICOT F1	APRICOT PORTABLE
APRICOT Xi	CANON AS-100 PC
CDI DOT	CENTRON TELETALKER
COLUMBIA VP PORTABLE	COLUMBIA MPC
COMMODORE 16	COMMODORE LCD PORTABLE
COMMODORE PET	COMMODORE PLUS 4
COMMODORE SX-64	COMMODORE VIC-20
CORONA PC	CROMEMCO C-10
DATAMAC 1600	DEC RAINBOW 100 PLUS
DIMENSION 68000 PC	DIRECT 1625 and 1631 PC's
DURANGO POPPY PBS	DYNALOGIC HYPERION
EAGLE 1600 PC	EPSON GENEVA
EPSON QX-10 and 16	ERICSSON PORTABLE
EXECUPORT XL	FUJITSU MICRO 16
HAVAC U-SCI	HITACHI PC
HONEYWELL 6/10 PC	HP 150 TOUCH-SCREEN
HP INTEGRAL	HP VECTRA
IBM PCjr.	IMP PC
ITT XTRA	LISA
MACCHARLIE	MAD-1 PC
MAGIC COMPUTER	MATTEL Intellivision
MORROW MDII	MORROW PIVOT
MTI P.E.C.	MTX 512
MULTITEC MPF-V PC	NABU 1600
NCR DECISION MATE	NCR PC 4 and 6
NEC STARLET	NORTH STAR 8/16
OLIVETTI M20 PC	ONYX 2000
OSBORNE 1	OSBORNE VIXEN
PANASONIC SR. PARTNER	PERSONA BUSINESS PC
PRONTO SERIES 16	QUADRAM DATAVUE 25
ROMAR II	SANYO MBC 550
SEEQUA Chameleon	SILVER FOX
SINCLAIR QL	SINCLAIR ZX80 and ZX81
SKS PC	SPERRY PC
SPERRY PORTABLE	STM PIED PIPER
STM PORTABLE	SUMICOM 330
TANDY TRS-80 MODEL 4D and 4P	TANDY MODEL 1000
TANDY MODEL 1200 AND 1200HD	TANDY 2000
TANDY MODEL 6000	TAVA PC
TELEVIDEO TS 1602/3	TIMEX-SINCLAIR 2068
VICTOR 9000 PC	VISUALL 1050 PC
ZAISAN ES.3	ZORBA PORTABLE

-And what about all of those Japanese MSX computers that were poised to flood the American home computer market in late 1984? Computers like the NATIONAL CF2000, PIONEER PX-7, SONY HIT BIT, TOSHIBA HX-100 and the YAMAHA CX-5

-I guess the big difference between all these computers and the 99/4A is that we are still a viable community. Right on!

PERSONAL AUDITOR:

Last time I told you about the MICROdex99 project I am working on. This time I am announcing Personal Auditor, a personal finance management program for cash, checking and creditcard management. The program provides a host of features including budget versus actual and year to date analysis, month to month comparisons on any of the 60 user-defined budget categories offered, **data can be graphed** and printed, audit trails can be created on isolated accounts and much more. Also included is support for the Triton SEB module's internal clock routine, assembly programs such as screen dumps may be loaded, printer control may be built into reports, screen colors can be changed to any combination of colors supported in the extended basic environment. An appointments calendar allows you to create reminders that may be read each time you boot the program. Personal Auditor even comes with more than 80 pages of illustrated documentation. If you have 32K, XB and a disk drive, and you would like a copy of this program, please send \$20 to;

Bill Gaskill
Box 2642
Grand Junction. Co.
81502

Until next time...

=====

BEGINNING FORTH #9
By Earl Raguse

BIT MAP GRAPHICS WITH TEXT

In the last lesson #8, I said that we would find a way to have text in the bit map graphics mode. If you have the 64SUPPORT Editor loaded, this time we will do that. Since, I think that this is such an important feature, I will explain in detail. In the future, I will go on to do a type of graphics which might be improved by using transcendental functions. Since resident Forth does not have this capability, we must use an extension known as Floating Point Arithmetic, available on the TI Forth System Disk, and which will be the a future lesson subject.

Screens #61 thru 64 are a simple example of the complex things that one could do with Forth. The heart of it all is on Screen #63. Screen #64 is the data for CLINE to label our graph. Screen #62 is the arbitrary data that is plotted on the graph, and Screen #61 is an explanation of the rules for using the word CLINE, which in turn uses itself to display the text on the CRT in the GRAPHICS2 mode.

The word CLINE uses the word SMASH which is defined in Assembly code on the TI System Disk Screen #65, COMPACT LIST. Screens #65 thru #67, are loaded by -64SUPPORT as the basis for making a 64 column screen. These "tiny" characters are only 4 pixels wide, but are the normal 8 pixels high including the space between lines. The CRT screen width is 256

pixels, which divided by 4, is 64 characters wide in tiny characters.

I originally tried to use CLINE by loading the above screens by themselves, but was not successful in making it work, unless the full 64SUPPORT Editor was loaded. I haven't found the connection, but then I haven't really studied it thoroughly yet. In the meantime, its not such a high price to pay to have the full 64 Editor loaded while I study the problem. If I figure it out, you will hear about it.

As Screen #61 states, CLINE expects the address, of the text to display, the number of characters, and the CRT line number to display them on. One does not have the option of tabbing to the right, all text is displayed starting from the left margin; you fix that by including spaces. The word BLOCK, used by TYPTXT, is the magic word here.

BLOCK removes a screen number from the stack, and loads that screen into editing buffer memory, if it is not already there, then puts the address on the stack. This provides an ideal way use a screen to input and store text, for display, to put it into memory, and to provide the address for CLINE. Each line of a screen is 64 characters, thus the nth line can be accessed, if one just adds an offset to the BLOCK address, thusly: BLOCK 64 n * +, where n is the line number. Then put the character count, and the line of the CRT screen, on which CLINE is to display the text, on the stack and execute CLINE. See line 2 of Screen 61 of TYPTXT. When multiple lines are to be displayed, one can use a loop as is done in TYPTXT of Screen 61.

Screen #62 is arbitrary data to be plotted. I chose the technique of LOADING it on the stack for use by PLOT, but it could have been treated the same way as the text using BLOCK. This is not quite as easy as simply LOADING all the data to the stack. The penalty here, if it is one, is that the last number on the screen ends up on the top of the stack. Therefore, my data appears to be in reverse order.

On to Screen #63, YAXIS and XAXIS just draw lines for the Y and X axes, using LINE as we have already discussed. The only decision here is where to put the lines. You must leave room for the scale numbers, titles etc. YSCALE and XSCALE plot a series of short cross lines on these axes for tick marks of the scale.

In drawing the axes and the scales, you must take into account that there are 8 pixels to the character (ie screen line) in the Y axis, so that one does not have full freedom of location of the ticks, if the ticks are to be opposite numbers to be printed by CLINE. In the X axis, the ticks should be on multiples of 4 pixels. in this case I used 20, in order to line up with the numbers, and yet give me a full scale close to 220 pixels. Zero of course is offset to the right to allow room for the Yaxis and numbers. Notice that in YSCALE, that the starting point is 20, instead of the 16 that YAXIS starts with. This offset of 4 is to put the ticks opposite the center of the numbers. I, of course, did not think of all that the first time I tried to set up the graph format.

The word LABL puts Screen #64 on the CRT ready for the axes to be superimposed. I didn't think that way the first time, I always learn the hard way. If one prints the axes first, as seems natural, LABL just wipes them clean. It is not fundamental that LABL will wipe out

the axes if they were printed first, but it just turns out to be easier to have the number of characters to print in the LABL loop constant at 64, therefore all lines, including lines 2 thru 12 of screen 64 are printed 64 wide to match the Xaxis scale as shown, thus printing blanks over everything to the right of the numbers on lines 2 thru 12. Please don't let the coincidence, of the 64 screen number matching the 64 characters per screen line, and 64 characters to print on a line confuse you.

The most complex word is SCALE, which converts the numbers on the data screen to fit on the axes and scales as designed. First we must take into account that 0 0 is at the top left. That is done by subtracting 104 from the number then using the ABSolute value. Why 104 instead of the 100 for the top of the Y axis? Remember the 4 offset to make the ticks opposite the numbers on the Y scale?

Since the Y axis 10 scale ticks are on multiples of 8 pixels, we are required to scrunch the number in the ratio of 8/10 with our scaling operator */ , then add an offset of 16 to account for the two lines at the top of the screen used for titles. The X axis is a little easier, here we just scale by multiplying by 2 (ie 20 pixels are 10 counts) and adding 16 because the zero axis is shifted to the right to leave room of the Y axis numbers.

All the above is relatively simple, if it were required that the program examine the data and set up a set of X and Y scales to best fit the data, it would be at least twice as complex, and several screens like 64 might have to be available for selection. I suppose it is possible to compute arbitrary scale numbers, put them in memory somewhere, like PAD, then print them to the screen with CLINE, but I don't want to think about that until it becomes necessary.

The word POINT just provides a starting place for LINE. Note that after scaling the numbers, it 2DUPs them to save them for the next LINE word, before plotting (DOT) the point.

The word PLOT first 2SWAPs to get two new numbers on top of the stack, SCALEs them, 2ROVERs them to save them for the next execution of LINE, then draws the line.

The word MSG, is I hope, obvious. GRAF is the word that does it all, it sets up the graphics mode with SPLIT, draws the graph basis with AXES, then loads the data to the stack, plots the first point, then executes a loop to plot all the remaining points, with lines drawn between. When through, it waits with PAK for you to press a key to display MSG.

That about uses up the space allowed, so I will continue next time with more graphics.

C U next time, May the FORTH be with U.

SCR #61

```

0 ( CLINE INSTRUCTIONS EGR 10/88) FORGET IT ; IT ; GRAPHICS2
1 : TYPTXT 61 BLOCK 15 5 DO DUP 64 I * + 60 I 3 - CLINE LOOP
2       61 BLOCK 64 15 * + 60 16 CLINE ;
3     TYPTXT KEY DROP TEXT 63 LOAD ;S
4
5     CLINE is the word in 64SUPPORT that does these tiny
6     characters.  If 64SUPPORT is loaded, and the rules
7     for CLINE are followed, it can be used to print
8     text and labels on graphic displays.  CLINE expects
9     on the stack, a memory address where the text is
10    located, the number of characters to print, and
11    the line number of the CRT to print it on, as will
12    demonstrated, the CLINE syntax is as follows.
13
14                Addr Cnt Line# CLINE
15                PRESS ANY KEY

```

SCR #62

```

0 \ CLINE GRAPHICS DEMO - DATA   EGR 10/88
1   110  70
2   100  30
3    90   5
4    80  20
5    70  40
6    60  40
7    50  50
8    40  70
9    30  60
10   20  20
11   10  10
12    0   1
13
14
15

```

SCR #63

```

0 ( CLINE GRAPHING DEMO E RAGUSE 10/88 ) 33 CLOAD 2ROVER
1   CLS 8 12 AT ." PATIENCE. GRAPHICS LOADING"
2   : YAXIS 16 16 16 100 LINE ;
3   : XAXIS 16 100 240 100 LINE ;
4   : YSCALE 100 20 DO 15 I 17 I LINE 8 +LOOP ;
5   : XSCALE 240 16 DO I 99 I 101 LINE 20 +LOOP ;
6   : LABL 64 BLOCK 16 0 DO DUP 64 I * + 64 I CLINE LOOP ;
7   : AXES LABL YAXIS XAXIS YSCALE XSCALE ;
8   : SCALE 104 - ABS 8 10 */ 16 + SWAP 2 * 16 + SWAP ;
9   : POINT SCALE 2DUP DOT ;
10  : PLOT 2SWAP SCALE 2ROVER LINE ;
11  : MSG TEXT ." TO DO IT AGAIN ENTER <GRAF> ELSE DIR " CR ;
12  : GRAF SPLIT AXES 62 LOAD POINT
13       11 0 DO PLOT LOOP PAK MSG ;
14  CLS 7 12 AT ." FOR A CLINE GRAPHING DEMO " PAK GRAF
15

```

SCR 64

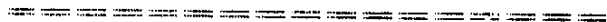
0
1
2 100
3 90
4 80
5 70
6 60
7 50
8 40
9 30
10 20
11 10
12 0

A DEMONSTRATION OF CLINE GRAPHICS
for printing tiny char on graphic projects

13 0 10 20 30 40 50 60 70 80 90 100 110
14 THE RISE AND FALL OF T I FORTH POPULARITY
15 PRESS ANY KEY



SNOW? BBBBBBBBBBBB!



by Steve Mehr, UG Member

My article this month will be written to fill available space.
WISH ME LUCK!

* WHAT YOU MAY HAVE MISSED * at last months meeting was a look at a typewriter (grin) and at one of Asgard's latest gems, Typewriter. For those interested in enhancing your word processing needs without the bother of an editor/formatter type system, Typewriter may just fit the bill. During a recent conversation with Bill Gaskill, we discussed the problems he encountered while using Typewriter. Apparently an older version of the Horizon ROS was the culprit and now the program functions flawlessly. Thanks Bill.

Rodger Merritt gave us a glimpse of some Form Shop utilities he has been working overtime on, hopefully to be released in San Diego this month. This latest Comprodine package will allow you to incorporate Character Set & Graphic Design (CSGD) graphics into Form Shop, TI-Writer, My Word, etc. Some of the features will include a full screen graphic conversion for some monster size graphics, and a 1:1 (one to one) conversion which will allow you to place graphics anywhere on your page, even right next to text! Since these utilities were created with Form Shop in mind, using these utilities with Form Shop will help you obtain the full value in enhancing your creativity.

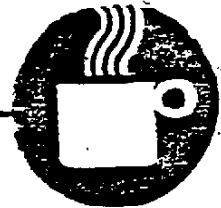
* WHAT YOU MAY MISS * at the next meeting will be a demonstration of Archiver. What does it do? How does it work? Is it for me? Also we will see how you can configure Telco to fit your own system. Be there!

P.S. Any takers on writing this column?

Did you know that...?

by Chick De Marti

Jan. 1988



Some insight on INPUT

The next few items were found in an article entitled "Your INPUT ing Me On" by Frank F. De Candia, of the North Jersey TI User Group. I thought you might find them interesting. I did.

- * When using CALL KEY instead of INPUT, the routine:

```
100 CALL SOUND(200,1397,1)
110 CALL KEY(0,K,S)
```

gives the same INPUT accepting beep. Or customize it with your own favorite frequency:

```
100 CALL SOUND(200,freq.,1)
```

- * You can also use the above to change the INPUT accepting beep sound.

```
100 CALL SOUND(200,freq.1)
110 INPUT "Custom Beep":VAR$
```

A reminder: freq. range is 110 to 44733 or -1 to -9 (for noises).

- * The "INPUT BAD" beep is:

```
100 CALL SOUND(200,200,1)
```

- * If you don't want any beep:

```
100 CALL SOUND(300,9000,30)
110 INPUT "Where's the beep?":VAR$
```

- * and finally... "Did you know you could use a variable to change your INPUT prompt?" Try this:

```
1> 100 AS="I'M A PARROT."
110 INPUT A$
120 PRINT
130 GOTO 110
```

Now change:

```
2> 110 INPUT A$ - A W K ! ":A$
```

(I tried the above routine (1 & 2) and they didn't work...till I made these changes:

```
Exam 1> 110 INPUT A$:A$
Exam 2> 110 INPUT A$ - A W K ! ":A$
```

- #1 WHAT'S ON THIS DISK? WHERE IS THE PROGRAM I NEED?

The problem was solved by using a program that prints out a directory in condensed print. The program I use also prints an additional heading that is taped to the disk. When any programs have been added, it is a simple matter to remove the taped-on directory and replace it with an updated one.

from MADELINE ESTHER

(Try "TINY LABELER" by George Steffen that is in our library... CDM").

- #2 DISK COPY FOILED BY BAD SECTORS?

Use the DM1000 File Copy utility bit map mode. Set up to copy all the files on the disk. When it gets to the bad sector, it will stop and at the top right hand corner of the screen will be listed the number of files and the number of sectors left to copy. THEN, the trick is to find another disk that has those last files and copy the one that was causing the problem and any others left. This happened at the EXPO.

(from Curt Finny)

- #9 SINGLE SHEET FEEDING

Whenever I want to use single sheet feed, to keep the "paper-out" from stopping the printing before reaching the bottom of the page. I will remove the tractor feed roller but will leave the fanfold paper inserted just far enough to disable the paper-out but not enough in to contact the roller. This will allow the single sheet to feed on through

(Single Sheet Cont.)

to the bottom of the page. A word of caution though, don't print a file that is longer than one page or you'll be printing on the roller without paper. This works well with the three-across labels made with the labelmaker program.
(from Randy Hale)

~~~~~

**TI GOING OUT OF BUSINESS?**

The Chicago Times lists these...  
New Products.....

- 1 . **PRESS** by Charles Earl (responsible for TELLU) A word processor called a "clone of IBMs WordPerfect".
- 2 . Asgard will be coming out with two sequels to the great game **LEGENDS**
- 3 . **MacFlix** allows Geneve & 4A users to use graphics that are created on (and for) the Macintosh.
- 4 . **BATCH IT** (also from Asgard) allows the 4A and the 9640 to make Batch files.
- 5 . **TRIAD** ... a combination of a Terminal Emulator, a Disk-Manager and a 40 Col text editor. All residing in memory at the same time...ready to access (like a RAM disk).  
NOTE: TRIAD will also load E/AS type programs ( FastTerm, Archiver 3.02, Birdwell's Disk Utilities, etc.).
- 6 . **HYPER COPY** (per Mike Dodd) copies a double-sided 40 track disk in under a minute, make multiple copies of a program (great for Librarians), and you can copy from a RAM-disk with HYPER-COPY.

~~~~~

FINDING THE START WORD E/A

This comes from S.F.T.I. User Group by Herbert Schlesinger
(Source unknown)

When then name of an E/A program is not known one way to find the START word is as follows:

Using the E/A environment, load the program into memory. Go back to the TI Color Bar Screen and enter E/A Basic. Then type in and run the following program:

```

10 FOR I=16128 TO 16383
20 CALL PEEK(I,A)
30 PRINT CHR$(A);
40 NEXT I
RUN

```

Among the words, symbols and garbage you should find the word which will start the E/A program.

~~~~~

From the Boards...

MAIL TO: ALL  
MAIL FROM: LARRY

LEGENDS 1.1 has a bug in it. The error is in line 1200 of LGDN/MON. The line reads:

```
1200 OK=K :: DISPLAY AT(21,1)etc.
```

The bug is in the OK=K. There is no variable K. Change it to read:

```
1200 OK=F :: DISPLAY AT(21,1)etc.
```

Well, I'm out of coffee. See you next month Chick

**WORDPLAYS \*\*\*\*\***

**WORDPLAYS \*\*\*\*\***

There are all kinds of little jobs required to keep a club going...no pay, but lots of rewards. One such job ( sometimes I feel I should be paying for the opportunity ). is reading the exchanged newsletters. From the January issue of WORDPLAY, I found this fun program written by Michael W. Ecker. After typing it in, and playing with it awhile, I decided to write it in xbasic, so I could put it on an automatic Load program for my grandson. And while I was at it, I eliminated the scrolling screens. Thanx Mike for a great idea.

--> Chick <--

```

10 MSG$="====THE NUMBER GA
ME===="
20 ! *-Original prog. by-*
30 !   MICHAEL W. ECKER
40 !   SCRANNTON,PA
50 !   *-enhanced by-*
60 !   Chick De Marti
70 !
80 CALL SCREEN(13)
90 RESTORE
100 DISPLAY AT(2,2)ERASE ALL
:MSG$
110 DISPLAY AT(12,3):"Please
think of a whole":TAB(5);"n
umber from 1 to 63"
120 DISPLAY AT(24,1):"[press
<ANY> key when ready]"
130 CALL KEY(3,Y,Z):: IF Z=0
THEN 130
140 S=0 :: CALL WIPE
150 IMAGE ## ## ## ##
160 FOR J=1 TO 6 :: T=1
170 FOR K=1 TO 8
180 READ A,B,C,D
190 DISPLAY AT(2*K+4,7):USIN
G 150:A,B,C,D
200 NEXT K
210 DISPLAY AT(22,2)BEEP:"Do
es your number appear on th
e screen (Y/N)"
220 CALL KEY(3,Y,Z):: IF Y=8
9 THEN S=S+2^(J-1)ELSE IF Z<
1 THEN 220
230 NEXT J
240 DISPLAY AT(12,3)ERASE AL
L:MSG$
250 DISPLAY AT(17,2):"Okay,
concentrate very hard now. I
am reading your mind!"
260 R=INT(RND*4)+1
270 FOR TIME=1 TO R+3
280 CALL SOUND(500,131,3,131
,3,-4,5):: CALL SOUND(500,11
0,3,110,3,3,-4,4)
290 NEXT TIME
300 DISPLAY AT(17,1):"": "":"
"

```

```

310 DISPLAY AT(12,3):MSG$: :
:" Your number is ... ":S
320 DISPLAY AT(22,2):"Do you
wish to play again":TAB(10)
;"(Y/N) Y"
330 ACCEPT AT(23,16)SIZE(-1)
:Y$ :: IF Y$="Y" OR Y$="y" T
HEN 90 ELSE CALL CLEAR :: EN
D
340 DATA 1,3,5,7,9,11,13,15,
17,19,21,23,25,27,29,31,33,3
5,37
350 DATA 39,41,43,45,47,49,5
1,53,55,57,59,61,63
360 DATA 2,3,6,7,10,11,14,15
,18,19,22,23,26,27,30,31,34,
35,38
370 DATA 39,42,43,46,47,50,5
1,54,55,58,59,62,63
380 DATA 4,5,6,7,12,13,14,15
,20,21,22,23,28,29,30,31,36,
37,38
390 DATA 39,44,45,46,47,52,5
3,54,55,60,61,62,63
400 DATA 8,9,10,11,12,13,14,
15,24,25,26,27,28,29,30,31,4
0,41
410 DATA 42,43,44,45,46,47,5
6,57,58,59,60,61,62,63
420 DATA 16,17,18,19,20,21,2
2,23,24,25,26,27,28,29,30,31
,48,49
430 DATA 50,51,52,53,54,55,5
6,57,58,59,60,61,62,63
440 DATA 32,33,34,35,36,37,3
8,39,40,41,42,43,44,45,46,47
,48,49
450 DATA 50,51,52,53,54,55,5
6,57,58,59,60,61,62,63
460 END
470 SUB WIPE
480 FOR I=4 TO 24 :: DISPLAY
AT(I,1):"" :: NEXT I
490 SUBEND

```

```

1 REM SAVE DSK1.KIDSTORIES
10 MSG$=" <* FUN STORIES
 *>
    by Chick De Mar
ti"
20 LINE=8
25 CALL SCREEN(4)
30 GOSUB 720
40 GOOD$(1)="JASON"
50 GOOD$(2)="GRANDPA"
60 GOOD$(3)="GRANDMA"
70 GOOD$(4)="SUPERMAN"
80 FOR I=5 TO 6
90 PRINT "Enter the name of
a friend"
100 INPUT "relative, or GOOD
GUY.      ":GOOD$(I)
110 NEXT I
120 WHEN$(1)="ONE DAY"
130 WHEN$(2)="YESTEDAY"
140 WHEN$(3)="ONCE. WHEN I W
AS A KID,"
150 WHEN$(4)="WOULD YOU BELI
EVE"
160 WHEN$(5)="WELL ANYWAY, A
T MIDNIGHT"
170 WHEN$(6)="ONCE UPON A TI
ME"
180 GOSUB 720
190 BAD$(1)="FRANKINSTIEN"
200 BAD$(2)="THE KID NEXT DO
OR"
210 BAD$(3)="THE MARSIANS"
220 BAD$(4)="BILLY THE BULLY
"
230 FOR I=5 TO 6
240 PRINT "Enter the name o
f someone"
250 INPUT "you don't like (B
AD GUY)      ":BAD$(I)
260 NEXT I
270 AJTV$(1)="WHO IS SEXY,"
280 AJTV$(2)="ACTING SILLY,"
"
290 AJTV$(3)="TRYING TO BE M
EAN,"
300 AJTV$(4)="ACTING FOOLISH
,"
310 AJTV$(5)="WEARING P.J.s.
.."
320 AJTV$(6)="PEEKING AROUND
THE CORNER,"
330 GOSUB 720
340 ACTION$(1)="THROW UP"
350 ACTION$(2)="MILK A COW"
360 ACTION$(3)="ORDER A PIZZ
A"

```

```

370 ACTION$(4)="LAUGH AND AC
T SILLY"
380 ACTION$(5)="CHASING THE
GIRLS"
390 ACTION$(6)="TICKLE MY NO
SES"
400 AD$(1)="WISH I WAS HOME
INSTEAD"
410 AD$(2)="WANT TO SEE THAT
AGAIN!"
420 AD$(3)="HUNGRY FOR BANAN
AS..."
430 AD$(4)="FORGET I WAS A H
UMAN!!!"
440 AD$(5)="HIDE UNDER A BLA
NKET..."
450 AD$(6)="LAUGH MY HEAD OF
!!!"
460 REM ---story segment---
470 RANDOMIZE
480 MSG$=" <* STORY TIM
E *>"
490 LINE=3
500 ! GOSUB 680
510 PRINT "Press <Q> to quit
- or just <ANY> key to play
again"
520 CALL KEY(0,K,S)
530 IF (K=81)+(K=113)THEN 69
0
540 IF S=0 THEN 520
550 GOSUB 720
560 R=INT(RND*6)+1
570 R1=INT(RND*6)+1
580 R2=INT(RND*6)+1
590 PRINT :WHEN$(R):GOOD$(R1
):".":AJTV$(R2)
600 R1=INT(RND*6)+1
610 R2=INT(RND*6)+1
620 PRINT : "SAW ":BAD$(R1):A
CTION$(R2)
630 R=INT(RND*6)+1
640 PRINT : "WHICH MADE ME":A
D$(R)
650 PRINT : : : : :
660 GOTO 510
670 STOP
680 REM ---end routine---
690 MSG$=" HAVE A NICE DA
Y"
700 GOSUB 720
710 END
720 CALL CLEAR
730 PRINT MSG$
740 FOR ROLL=1 TO LINE
750 PRINT
760 NEXT ROLL
770 RETURN

```

## TI-BASE TUTORIAL PART 3

by Bill Gaskill

**MODIFY STRUCTURE;** This directive allows you to alter the record structure of a file. If records exist in the file and the alterations made are to the width or type of the fields in the record all existing data will be wiped out. If you are only changing the names of the fields any existing data is retained. When using this directive you need only type in;

### MODIFY STRUCTURE

if an active file exists in the current slot. You may then make any desired changes to your file and press F8 to save them or F9 to abort the change attempt. If you do alter the field structure and then press F8 you are warned that all data will be lost. You must then press Y to confirm that this is what you wish to do.

**MOVE;** The MOVE directive has a default value of 1. This means that if you use only MOVE and not MOVE # where the pound sign is a value (a number) the file being USED will increment to the next record. If you type in MOVE 10 then the increment will go from the currently active record to the record 10 physical positions ahead. If a minus sign is placed in front of the number specified the increment is backwards in the file rather than forwards.

```
MOVE
MOVE 10
MOVE -10
```

**PACK;** Records that have been marked for deletion are removed from the file by using the PACK directive. The correct syntax is simply PACK typed in at the dot prompt when a file is active.

**PRINT;** See the DISPLAY directive for PRINT detail. There is virtually no difference in the way these two directives are used. The only difference is in the output medium that they send data to. PRINT obviously is used to send output to the printer.

**QUIT;** As you might suspect, the QUIT directive terminates TI-Base and returns your computer to the opening screen. If any files are open when the QUIT directive is issued they are automatically closed before QUIT is executed.

**READ;** The READ directive is basically the same as the ACCEPT AT command in Extended Basic. It allows you to accept input from anywhere on the screen by specifying the row number, column number and the name of the LOCAL variable that is to hold the data. See the WRITE directive for an example of how READ is used.

**RECALL;** This directive unmarks records previously marked for deletion.

The correct syntax for RECALL is:

```
RECALL #
```

where the pound sign is the number of the record to be unmarked or RECALLED.

**RECOVER:** The RECOVER directive is designed to reclaim lost data in files that have a damaged index. This is another hallmark of a professional data manager on par with many MS-DOS data management applications. To employ the RECOVER feature you must first activate the file to recover an index on. Once the file is ready you simply type in the word RECOVER at the dot prompt. That's it!

**REPLACE:** This directive provides the TI-Base user with a means of "inserting" values into defined variables and inserting new information into existing data base records. The example on page 4-6 in the TI-Base manual shows how a value can be REPLACed in a defined variable:

REPLACE A WITH SQR(3\*\*2)

The command file below illustrates how one can REPLACE string data in a file. In this example the REPLACE is a global one, meaning that all records meeting the criteria specified are affected. If you only wanted to REPLACE a string in one specific record it's easier to just EDIT the record.

```
1 USE TI/INDEX
2 SORT ON SUBJECT
3 WHILE .NOT.(EOF)
4     FIND "3-D ANIMATION"
5     REPLACE SUBJECT WITH,
6     "THIS IS A TEST RECORD"
7 ENDWHILE
8 RETURN
```

In this example command file there is a variation in the order of operation that is worth noting. Usually when you conduct a search of a data base the FIND directive is used outside of a WHILE NOT loop to "plant the seed" for the search, meaning that it tells the command file what to look for. Then, when the first occurrence of whatever you are looking for is found, an AND FIELD=CRITERIA directive takes over for all remaining records. When the REPLACE directive is used an actual re-write of data occurs (which you can see when the W appears at the extreme right end of the status bar). This means that a relinking of the record pointer occurs for each record that is affected. Because of this, the FIND criteria must be "re-charged" each time because the record pointers are different after a REPLACement occurs. Including the FIND "3-D ANIMATION" within the WHILE NOT loop does this.

**RETURN:** This directive ends the operation of a command file and sends it back one level. If there is no command file below it, the dot prompt is returned. The word "level" means the last command file used in the case of nested command files. For single command file usage the RETURN will be to the keyboard (the dot prompt).

**SAVE:** SAVE is not a command for users of TI-Base to be concerned with as it will not perform any useful function on data. It is a program code access directive.

**SCROLL:** An example of the SCROLL directive can be seen in line 19 of the second sample command file under the FIND directive. The directive;



places a blank line between each record that is DISPLAYed on the screen. It does so by moving everything on the screen between rows 1-17 upwards one line. If the directive numbers were reversed (17,1) the scrolling would move downwards instead of upwards. This is a very neat tool in formatting your screen displayed output for data or information placed on the screen via the WRITE directive.

**SELECT:** Changes the current slot. Five "slots" are available which means that up to five files may be active at one time. The SELECT directive may be used both from the dot prompt and from within a command file.

**SET:** Alters SETUP file parameters. For example, SET DATDISK=1 will set the data disk drive from whatever it was to DSK1.

**SORT:** This directive initiates the rebuilding of the index file for an active data base. It provides single level, ascending (A-Z) sorts. Correct syntax is SORT ON FIELDNAME.

SORT ON SUBJECT

**SORT OFF:** Directive to restore a data base to the order in which records were originally entered. Command is simply SORT OFF. The data base in the current slot is the only one affected.

**TOP:** Sets record counter to REC #0. Used from the dot prompt or from within a command file. Correct syntax is simply:

TOP

**USE:** Activates a data file. Can be employed from the dot prompt or from within a command file. Syntax is:

USE TI/INDEX or  
USE DSK#.TI/INDEX

**WAIT:** The WAIT directive is used throughout the tutorial files to pause processing so that you have time to read what is displayed on screen. You may specify any number of seconds after the WAIT directive to delay the execution of the next statement.

WAIT 999

**WHILE:** This directive is similar to the FOR in a FOR NEXT loop except that it is not dependent upon a set number of increments in the cycle, and it does not require the use of an IF to test for some condition. As long as the processing specified between WHILE and ENDWHILE remains true, the loop set up by WHILE will continue. For example;

```
1 USE TI/INDEX
2 SORT ON SOURCE
3 FIND "MICROPENDIUM"
4 WHILE (.NOT.(EOF));
5 .AND.(SOURCE="MICROPENDIUM")
6     DISPLAY
7     MOVE
8 ENDWHILE
9 RETURN
```

**WRITE:** The WRITE directive is the same as DISPLAY AT in Extended Basic in that it allows you to place a text statement or some other value anywhere on the screen. The statement or value must be enclosed within quotation marks. For example:

```
1 LOCAL CHOICE N 1 0
2 WRITE 2,7,"Main Menu"
3 WRITE 3,2,"1-Add New Records"
4 WRITE 4,2,"2-Edit Records"
5 WRITE 5,2,"3-Display File"
6 WRITE 6,2,"4-Find Records"
7 WRITE 7,2,"5-Print File"
8 WRITE 11,2,"Your Choice:"
9 READ 11,14,CHOICE
```

#### CHANGING THE SETUP FILE:

The default contents of the SETUP file may be altered through the command file editor. Dual disk drive users should type in SET DATDISK=1 before editing SETUP since the MODIFY COMMAND directive looks to the data disk for any command file.

While editing the defaults you can also add commands to auto-load specific data files, initialize local variables and the like. If you were using TI-Base to manage a checking account for example, you would want to have the beginning balance read into dynamic memory each time you booted the program and the checking file. So you might have something like;

```
CLEAR LOCAL
LOCAL BEGBAL N 9 2 C
REPLACE BEGBAL WITH 1234.56
USE CHECKS88
```

in your SETUP file. In this example the value 1234.56 is used to represent a beginning balance amount.

#### EDITING A COMMAND FILE:

To create or edit a command file the MODIFY COMMAND directive is used along with the name of the command file. Note that all file names used in TI-Base are limited to 8 characters since the program attaches a slash (/) and a letter extension to them for type of file identification. Once the command file is named the first 21 lines of it appear on screen. To edit the file you proceed just like you would if you were in a text editor. The arrow keys are active in all four directions. Fctn 2 provides a true text editor-like insert mode that pushes things ahead of the cursor, Fctn 3 erases an entire line and Fctn 4 inserts a blank line. Fctn 7 displays a pop-up menu listing all of the editing commands. Fctn 8 writes the command file to disk and Fctn 9 exits the command file editor without saving the current command file on the screen.

An important TI-base convention to remember is that no command can exceed 40 characters on one line. Anything beyond that limit is simply lost. Any command can exceed 40 characters by including a semi-colon at the end of the last word on the previous line. This tells the editor to continue interpretation to the next line.

For all practical purposes a command file is limited to about 1 1/2 screens of text. When the editor becomes full you will get a message that tells you "dynamic memory" cannot be found. This means that you must eliminate something from the file or it will not be saved. Of course you can nest multiple command files to perform any functions that won't fit into a single file.

#### **DEBUGGING A COMMAND FILE:**

As with any programming effort, syntax is critical in creating command files. If you don't follow the rules in creating your command files you will discover that TI-Base will not deliver the information you want. The best advice I can give you is to read the manual and this information carefully, then experiment. Always leave TALK ON when writing command files. This will allow you to see what's going on when the file is being executed. Positions 9-11 on the status bar will tell you what line number is the offending command if an error message occurs during execution. Command file lines are counted starting with the number 1 at the top of the screen. Only one command is permitted per screen line so you shouldn't have any difficulty counting downward to identify the line number you want to edit. If nothing seems to work after you have exhausted all of your resources, go back and re-read the instructions. The program operates as advertised. If it don't work, the fault almost certainly lies in improper syntax or faulty logic in the command file.

#### **LITERALS:**

The term literals, at least when used with TI-Base, refers to constants. Things like the value of PI, 3.14159 etc. Literals may only be used in place of a variable on the right side of any equation. An example is given on page 3-8 of the manual.

#### **LOADING ENVIRONMENTS:**

Although TI-Base supports any of the possible loaders available on the 99/4A (Editor/Assembler, Mini Memory, Extended Basic) the most desirable is Mini-Memory. The reason for this is the added memory that the MM module provides. TI-Base takes advantage of the 4K Mini-Memory has available when looking for that Dynamic Ram mentioned earlier. Page 5-1 of the TI-Base manual lists the exact amount of ram provided by each module.

Besides the loaders mentioned above, you may also use FunnelWeb V4.10 and probably most of the earlier FW versions also. The correct V4.10 sequence is to load the E/A option, then the LOADERS options then the LOAD and RUN option. It is a <ENTER>, 2, 3 and then 4 keypress sequence. The <ENTER> key gets you past the opening screen, 2 selects Editor/Assembler, 3 selects the LOADERS and 4 selects LOAD and RUN.

#### **NUMBER CRUNCHING:**

One of the facets of data management that sets TI-Base apart from the crowd is its ability to manipulate numeric values. How this is done receives sparse coverage in the manual, but none-the-less is adequate if you keep in mind the use of LOCALs and the REPLACE directive. In order to do something with numbers you must first declare their use right up front. This is done with the LOCAL directive and the appropriate parameters following it such as name, length, decimal places etc.

Once a local is defined it can have a value assigned to it either directly as in the example for BEGBAL in the SETUP file illustration above, or it can be done through a command file prompt as we have seen in previous examples. The sample command file below illustrates the use of BEGBAL when read from within the SETUP file and it also illustrates how math functions may be performed in TI-Base. The file named CHECKS88 listed above is used. The command file reads the records in the CHECKS88 file, adds up the paidouts and deposits and then adds BEGBAL to total deposits and subtracts the paidouts. The resultant "balance" is then displayed on the screen.

```
1 CLEAR
2 LOCAL PO N 9 2
3 LOCAL DE N 9 2
4 LOCAL BAL N 9 2
5 LOCAL MESSAGE C 12
6 REPLACE MESSAGE WITH "BALANCE IS $"
7 WHILE (.NOT.(EOF))
8     REPLACE PO WITH PO+PAIDOUT
9     REPLACE DE WITH DE-DEPOSIT
10    MOVE
11 ENDWHILE
12    REPLACE BAL WITH (BEGBAL+DE)-PO
13    DISPLAY MESSAGE BAL
16 CLOSE
17 RETURN
```

#### PROGRAM NOTES:

TI-Base V1.02 contains a couple of confusing error messages and minor hangups that you should be aware of. In the error message category you will find when you try to create a new file with a file name longer than eight (8) characters the program will accept the name but will tell you that the file already exists, even when it doesn't, when you are done defining the file and then press F8 to save it. Needless to say, the file is not saved. So don't use more than eight characters for file names of any type, including command files.

If you inadvertently enter a DISPLAY ALL directive without first having activated a file the program will lock up and you must turn your console off to escape.

Although the documentation doesn't tell you so, you must issue the command SORT OFF before doing a global delete.

When performing a PRINT instruction TI-Base maintains an internal counter of the number of lines used per page and it retains the amount in dynamic memory until an EJECT command is issued. So you should always issue an EJECT before beginning to print a second set of data or the page breaks will occur in odd places on your paper.

Some things you cannot do with TI-Base are:

- 1 PRINT to disk or print the contents of a command file.
- 2 Embed printer control codes anywhere in the program.
- 3 Sort by more than one field at a time.
- 4 Create multiple index files.

### LA99/4A LIBRARY CORNER

Disks \$2.00 each not programs. Many programs takes more than one disk. If you have a SSSD drive be sure you get all the disks needed to run the program usally both A and B disk if the program is over 360 sectors (if available). That comes to \$2.00 each other wise get the DSSD disk. It pays to have a DSSD drive. And dont't forget to include postage if you want it mailed \$0.25 for each disk.

0000 LA99/4A DISKS LIBRARY CATALOG JAN. 89 : \$1.00 either DSSD(699) or 0000A(343) and 0000B(349) Special offering.

### NEW ADDS FOR FEB. LA99/4A LIBRARY

The Library Committee wish to give thanks to those who donated disks to our Library this month :Danny Nelson, Chick DeMarti, Ken Billiand.

MacFlix allows you to convert MacPaint pictures created by the Macintosh to either MY-ART or TI-Arist formats for the 994/A or 9640. It allows you to view, invert or print out (8X10) MacPaint pictures on Epsoms or Prowriter printers. MacFlix can be obtained from our Marketplace for \$12.00 plus tax. The disks below are the MacPaint pictures that are in our Library.

8112 MACPRINT #1 5 "G" rated pictures COUNTER ATTACK, DONOLD DUCK, EARTH, EARTH STAR, HOLIDAY SSSD(302)

8113 MACPRINT #2 2 "G" rated pictures MISC3 (several pictures) and SCROOGE. SSSD(297).

8114 MACPRINT #3 2 Pictures "G" rated. GIRL2, INGRID2. SSSD(226)

8115 MACPRINT #4 8 "G" rated pictures. EXCHANGE, EXPIRED, EXPOSED, FAIRSIDE, FERRARI, HONOR, IN-LOVE, JESSIE. SSSD(342)

8116 MACPRINT #5 7 "G" rated pictures. BIKINE 1, 2, 3, 4, 5, CRYING, DRIVING. SSSD(358)

8117 MACPRINT #6 5 "G" rated pictures. KAMAKABE, KIRK, TURNER, CARTER, MICKEY. SSSD(335)

8118 MACPRINT #7 3 "G" rated files over 100 different small pictures. SSSD(335).

8119 MACPRINT #8 5 files of "G" rated pictures over 120 different small pictures. SSSD(305)

8120 MAXPRINT #9 5 "R" rated pictures. AILEEN, ANATOMY, BABE, BEDNUDE, BLAKHAIR. SSSD(356)

8121 MAXPAINT #10 4 "R" rated pictures GRAPES, INGRID, MADONNOD, ORGY. SSSD(344)

8122 MAXPAINT #11 5 "R" rated pictures. RRATED 15, 16, 17, 8, and 9. SSSD(355)

8123 MAXPAINT #12 5 "R" rated pictures CORMIC, COVER, DEBBIE, SLAVE, TOPLESS. SSSD(317)

## NEW ADDS FEB. LA99/4A LIBRARY

8124 MAXPAINT #13 6 "R" rated pictures. DENISE, DOMINATE, DOMINIO, DONNA, KERSTAN. SSSD(351)

8125 MAXPAINT #14 4 "R" rated pictures. DRUSSILL1, ELLY1, EXPECTNT, INGRID3. SSSD(347)

8126 MAXPAINT #15 5 "R" rated pictures. BABYRUTH, BEDNUDE, IRENE, IRENE1, JUDY. SSSD(358)

8127 MAXPAINT #16 4 "R" rated pictures... BIBONES, CHARIE, COSMIC, COVER. SSSD(350)

4543 KID-STUFF By Chick DeMarti 7 different stuff for the young. ADD, ALP/SOUP, DEVASTATOR, HANGMAN, KIDSTORY, SPELL, NUMBER GAME. SSSD(185)

6053 CALENDAR 89 Fairware by Ken Gilliland : Girly type 1989 calendar a different girl for each month of the year. Also a disk labeler. DSDD(1366) for DSSD system 6053A(656) and 6053B(624), for SSSD system 6053C(349), 6053D(309), 6053E(269) and 6053F(357)

## LA99 MARKET PLACE

TI-BASE V2.0 Improved version new manual and disks.

TI-ARTIST V2.0.6 Now you can use a mouse.

PICTURE TRANSFER By Paul Charlton for MYARC 9640. View 5 different types files, create side shows, combine images, convert formats.

HYPERCOPY By Mike Dodd A fast disk copier for the 9640.

BROWSE By J. peter Huddle A utility program you can print, view, combine and browse test files on floppies, RAM or hard disk for both 994/A and 9640.

DISKASSEMBLER By Tom Freeman for the 9640.



**LA99 USERS GROUP MARKETPLACE**

February 1989

| #  | NAME                                                                                                                            | DISTRIBUTOR         | SALE  | TAX  | USA  | CAN. | OVERSEAS |
|----|---------------------------------------------------------------------------------------------------------------------------------|---------------------|-------|------|------|------|----------|
| 19 | ADVANCE DIAGNOSTICS                                                                                                             | Millers Graphics    | 18.50 | 1.20 | 1.10 | 1.21 | 3.07     |
|    | By Craig Miller- All of the commands to change, edit, check, copy, read, write or check the speed of a disk.                    |                     |       |      |      |      |          |
| 57 | ASSEMBLY DIGEST                                                                                                                 | LA99 Users Groups   | 2.50  | .16  | .70  | .77  | 1.79     |
|    | By Chick DeMarti- A collection of articles, tutorials and Programs from Newsletters, magazines and books about E/A.             |                     |       |      |      |      |          |
| 11 | BROWSE                                                                                                                          | Genial Computerware | 9.00  | .59  | .70  | .77  | 1.79     |
|    | By Peter Hoddie- A utility to manage text files. Print, view, combine and browse files and catalog. TI-99/4A or 9640.           |                     |       |      |      |      |          |
| 20 | DISASSEMBLER                                                                                                                    | Millers Graphic     | 18.50 | 1.20 | 1.30 | 1.43 | 3.07     |
|    | By Craig Miller- Disassemble assembly language object code. A learning tool to investigate and modify codes to suit your need.  |                     |       |      |      |      |          |
| 33 | DISPLAY MASTER                                                                                                                  | Inscrobot Inc.      | 12.00 | .78  | .90  | .99  | 2.43     |
|    | By Christ Faherty- Slide shows, demos, displays in sequential manner TI-Artist pictures. Provide captions.                      |                     |       |      |      |      |          |
| 23 | EXPLORER                                                                                                                        | Millers Graphics    | 20.00 | 1.30 | 1.70 | 1.87 | 3.73     |
|    | By Craig Miller- Converts your 4A into a programmer's instrument. Extended Basic, Basic or Assembly Language under control.     |                     |       |      |      |      |          |
| 09 | FIRST BASE                                                                                                                      | Genial Computerware | 41.00 | 2.66 | 2.65 | 3.33 | 6.71     |
|    | By Warren Agree- A data base program create, browse, query, sort, update, defines, has macro and print custom design reports.   |                     |       |      |      |      |          |
| 13 | FONT PACK #1                                                                                                                    | Genial Computerware | 9.00  | .59  | .70  | .77  | 1.79     |
|    | By Peter Hoddie- Fonts Upper or lower case, numbers and different sizes. Used with TI-Artist, GRAPHX, CSGD, FontWriter II.      |                     |       |      |      |      |          |
| 14 | FONT PACK #2                                                                                                                    | Genial Computerware | 9.00  | .59  | .70  | .77  | 1.79     |
|    | By Peter Hodie- 19 more fonts in TI-Artist format as above fonts. Both fonts #1 and Fonts #2 comes with a manual.               |                     |       |      |      |      |          |
| 34 | FONT WRITER II                                                                                                                  | Asguard Software    | 19.00 | 1.24 | 1.50 | 1.65 | 3.73     |
|    | By Peter Hoddie- A utility to extend the usefulness of TI-Artist. Create fonts fonts in various sizes.                          |                     |       |      |      |      |          |
| 43 | FORTH BEGINNERS                                                                                                                 | LA99 Users Group    | 2.50  | .16  | .70  | .77  | 1.79     |
|    | By Chick DeMarti- An introduction annual Forth lecture to help you in understand how to program in this language.               |                     |       |      |      |      |          |
| 44 | FORTH NOTES #1                                                                                                                  | LA99 Users Group    | 2.50  | .16  | .70  | .77  | 1.79     |
|    | By Chick DeMarti- A 10 page booklet of notations, comments, and hints from Newsletters around the country. Vol. 1 NO. 1         |                     |       |      |      |      |          |
| 45 | FORTH NOTES #2                                                                                                                  | LA99 Users group    | 2.50  | .16  | .70  | .77  | 1.79     |
|    | By Chick DeMarti- A 13 page booklet of more notations, comments and hints from Newsletters around the country. Vol. 1 NO. 2     |                     |       |      |      |      |          |
| 46 | FORTH NOTES #3                                                                                                                  | LA99 Users Group    | 2.50  | .16  | .70  | .77  | 1.79     |
|    | By Chick DeMarti- A 19 page booklet of more notations, comments and hints from Newsletters around the country. Vol. 1 NO. 3     |                     |       |      |      |      |          |
| 47 | FORTH NOTES #4                                                                                                                  | LA99 Users Group    | 2.50  | .16  | .70  | .77  | 1.79     |
|    | By Chick DeMarti- A 20 page booklet of more notations, comments and hints from Newsletters around the country. Vol. 1 NO. 4     |                     |       |      |      |      |          |
| 48 | FORTH NOTES #5                                                                                                                  | LA99 Users Group    | 2.50  | .16  | .70  | .77  | 1.79     |
|    | By Chick DeMarti- A 20 page booklet of more notations, comments and hints from Newsletters around the country. Vol. 1 NO. 5     |                     |       |      |      |      |          |
| 49 | FORTH NOTES #6                                                                                                                  | LA99 Users Group    | 2.50  | .16  | .70  | .77  | 1.79     |
|    | By Chick DeMarti- A 20 page booklet of more notations, comments and hints from Newsletters around the country. Vol. 1 NO. 6     |                     |       |      |      |      |          |
| 50 | FORTH NOTES [#1-#6]                                                                                                             | LA99 Users Group    | 10.00 | .65  | 2.30 | 2.53 | 5.80     |
|    | By Chick DeMarti- A complete package of Forth notes Vol. 1 NO. 1, 2, 3, 4, 5 and 6. At a special price.                         |                     |       |      |      |      |          |
| 21 | GRAM UTILITY I                                                                                                                  | Millers Graphics    | 10.00 | .65  | .50  | .55  | 1.15     |
|    | By Danny Michael- A summary to the Gram Kracker annual. Help explain the commands so you can better program the device.         |                     |       |      |      |      |          |
| 06 | GRAM PACKER                                                                                                                     | Genial Computerware | 9.00  | .59  | .70  | .77  | 1.79     |
|    | By Peter Hoddie- Use with GRAM devices. Create custom menu of programs and cartridges. Writer, Tera, DM1000, PR, Artist, other  |                     |       |      |      |      |          |
| 54 | GRAM KRACKER FACTS                                                                                                              | LA99 Users Group    | 5.00  | .33  | 1.10 | 1.21 | 3.07     |
|    | By Mike Bodd- A 32 page booklet of articles and modification for the GRAM KRACKER from Tom Freeman, Craig Miller, Walt Howe.    |                     |       |      |      |      |          |
| 15 | GPL ASSEMBLER V2.1                                                                                                              | Ryte Data           | 15.00 | .98  | .70  | .77  | 1.79     |
|    | By Michael Weiland- Assembling of GPL programs. Reads DIS/VAR 80 files created by editor programs for EDITI programs.           |                     |       |      |      |      |          |
| 17 | GPL LINKER                                                                                                                      | Ryte Data           | 15.00 | .98  | .70  | .77  | 1.79     |
|    | By Monty Schaidt- Designed to be use with the GPL ASSEMBLER. It allows you to load and run up to four GPL programs in RAM.      |                     |       |      |      |      |          |
| 16 | GPL OPCODES                                                                                                                     | Ryte Data           | 15.00 | .98  | .90  | .99  | 2.43     |
|    | By H.Martin- Provides an overview of the TI-99/4A System and its internal operating system including the GPL interpreter        |                     |       |      |      |      |          |
| 42 | GPL SET (12,16,17)                                                                                                              | Ryte Data           | 40.00 | 2.65 | 1.70 | 1.87 | 3.73     |
|    | The complete set of GPL-Assembler, Linker, Opcodes at a special price.                                                          |                     |       |      |      |      |          |
| 59 | GPL INTERN BOOK                                                                                                                 | VTH                 | 10.09 | .68  | .90  | .99  | 2.43     |
|    | A soft cover book on the interworking of the 994/A GPL.                                                                         |                     |       |      |      |      |          |
| 05 | GRAPHICS EXPANDER                                                                                                               | Genial Computerware | 9.00  | .59  | .70  | .77  | 1.79     |
|    | By Peter Hoddie- Enlarge, reduce, rotate 90 degrees(vertical banners), upside down,convert fonts TI-Artist, CSGD, FontWriter II |                     |       |      |      |      |          |
| 52 | HANDY REFERENCE                                                                                                                 | LA99 Users Group    | 2.50  | .16  | .70  | .77  | 1.79     |
|    | By Chick DeMarti- A 20 page guide booklet for the 99/4A from various Newsletters and other sources.                             |                     |       |      |      |      |          |
| 61 | HARDWARE REPRINT                                                                                                                | Chicago Users Group | 6.50  | .42  | 2.65 | 3.33 | 6.71     |
|    | members- A 150 page book of hardware articles from others TI/99 Users Groups Newsletters. An excellent work by Chicago U.G.     |                     |       |      |      |      |          |

| * * Topics - LA 99ERS * *                                                                                                         |                      |       |      |      |           |
|-----------------------------------------------------------------------------------------------------------------------------------|----------------------|-------|------|------|-----------|
| 04 HYPERCOPY                                                                                                                      | GENIAL COMPUTERWARE  | 16.50 | 1.07 | .70  | .77 1.79  |
| By Mike Dodd- Fast disk copier. Copies SSSD in 33 sec. DSSD in 59 sec. Makes multiple copies with skew. For 9640                  |                      |       |      |      |           |
| 38 JOY PAINT 99                                                                                                                   | Great Lakes Software | 30.00 | 1.95 | 1.10 | 1.21 3.07 |
| Create your own signs, charts, diagrams, advertisements or any graphic by using a Joystick. Circles, ovals, lines, boxes etc      |                      |       |      |      |           |
| 51 LOGO DIGEST                                                                                                                    | LA99 Users Group     | 2.50  | .16  | .70  | .77 1.79  |
| By Chick DeMarti- A 20 page booklet about TI-Logo II from various Newsletters around the country.                                 |                      |       |      |      |           |
| 22 MG GAMES                                                                                                                       | Millers Graphics     | 18.50 | 1.20 | .50  | .55 1.15  |
| By Craig Miller- A disk full of games in assembly language.                                                                       |                      |       |      |      |           |
| 01 MAXFLIX                                                                                                                        | Genial Computerware  | 12.00 | .78  | .70  | .77 1.79  |
| By Peter Hoddie- View, print and save MacPaint graphics created by 'Macintosh' computer on your 99/4A computer.                   |                      |       |      |      |           |
| 55 NEWLETTER BEST                                                                                                                 | LA99 Users Group     | 2.50  | .16  | .90  | .99 2.43  |
| By George Hutton- A 28 page booklet of the best articles and programs from Newsletters around the world. 1985 issue.              |                      |       |      |      |           |
| 56 NEWLETTERS + DISK                                                                                                              | LA99 users Group     | 5.00  | .33  | 1.10 | 1.21 3.07 |
| by George Hutton A 28 page booklet plus a disk of the articles and programs from Newsletters around the world. 1985 issue.        |                      |       |      |      |           |
| 24 NIGHT MISSION                                                                                                                  | Millers Graphics     | 18.50 | 1.20 | 1.70 | 1.87 3.73 |
| Craig Miller- A 90 page book plus diskette. Tricks and methods in programming and playing a multiple screen game.                 |                      |       |      |      |           |
| 26 ORPHAN CHRONICLES                                                                                                              | Millers Graphics     | 9.25  | .65  | 2.30 | 2.53 5.80 |
| By Ronald Albright, Jr., M.D.- A 175 page book historical abstract of the history of the Texas Instruments 99/4A Home Computer.   |                      |       |      |      |           |
| 39 ORPHAN SURVIVAL BOOK                                                                                                           | Genial Computerware  | 18.00 | .98  | 2.65 | 3.33 7.62 |
| By Ronald Albright, Jr., M.D.- A 212 page booklet containing: Helpful Receipt, Advice and other NOSTRUMS for TI 99/4A and Geneve. |                      |       |      |      |           |
| 12 PC-TRANSFER                                                                                                                    | Genial Computerware  | 21.00 | 1.37 | .70  | .77 1.79  |
| By Mike Dodd- Moves text files between a TI-99/4A or NYRAC 9640 and an MS-DOS machine using a CorComp or NYRAC controller.        |                      |       |      |      |           |
| 60 PERSONAL AUDITOR                                                                                                               | PRK DataBasic        | 15.00 | .98  | 1.50 | 1.65 3.73 |
| By William Gaskill- 120 page booklet plus disk for a home accounting system. Collect, save, capture, report on your finances      |                      |       |      |      |           |
| 40 PICTURE IT                                                                                                                     | Rogers Merritt Inc.  | 10.00 | .65  | .70  | .77 1.79  |
| By Roger Merritt- Converts, displays, view, print, or create a banner. Converts, display instances. Disk A-Z of Fonts             |                      |       |      |      |           |
| 02 PICTURE TRANSFER                                                                                                               | Genial Computerware  | 26.00 | 1.69 | .70  | .77 1.79  |
| By Paul Charlton- View five different types of graphics, create slide shows, combine images, convert between formats. for 9640    |                      |       |      |      |           |
| 27 TPA APPRETTICE                                                                                                                 | McCann Software      | 26.00 | 1.72 | 1.30 | 1.43 3.07 |
| By Mike McCann- The TPA produces excellent cards, ads, announcements, etc. 26 page booklet with 2 disks (fonts and programs)      |                      |       |      |      |           |
| 28 TPA FONTS #1                                                                                                                   | McCann Software      | 9.95  | .62  | .70  | .77 1.70  |
| By Mike McCann- Disk of fonts plus 10 page booklet displaying different fonts in this package.                                    |                      |       |      |      |           |
| 29 TPA FONTS #2                                                                                                                   | McCann Software      | 9.95  | .62  | .70  | .77 1.70  |
| By Mike McCann- Disk of more fonts. More complete instruction TPA toolbox manual.                                                 |                      |       |      |      |           |
| 30 TPA TOOLBOX                                                                                                                    | McCann Software      | 19.50 | 1.24 | .90  | .99 2.43  |
| By Mike McCann- A 20 page booklet and two disks package. Provides access to various programs in the TPA system.                   |                      |       |      |      |           |
| 10 REMIND ME!                                                                                                                     | Genial Computerware  | 12.00 | .78  | .70  | .77 1.79  |
| By John Johnson- A graphic calendar with notes on any date. Helps you manage your monthly schedule. Manual + disk.                |                      |       |      |      |           |
| 25 SPRITE PROGRAM BOOK                                                                                                            | Millers Graphics     | 6.25  | .41  | 1.50 | 1.65 3.73 |
| By Craig Miller- A 72 page book for TI-99/4 and TI-994A. A smart programming guide for sprites to help you understand sprites     |                      |       |      |      |           |
| 36 STRING MASTER                                                                                                                  | ByteMaster Computer  | 16.00 | 1.04 | 1.50 | 1.65 3.73 |
| A 19 page booklet of Assembly Language routines accessible from Extended Basic and handling macro.                                |                      |       |      |      |           |
| 18 SUPER CLOCK SUPPORT                                                                                                            | Ryte Data            | 13.50 | .88  | .70  | .77 1.79  |
| By Monte Schmidt- a 16 page manual + disk designed to make use of your CorComp 9900 Clock or Triple-Tech card.                    |                      |       |      |      |           |
| 58 SUPER EXTENDED BASIC                                                                                                           | Triton               | 50.00 | 3.25 | 2.65 | 3.08 8.53 |
| A complete manual and Cartridge for the TI-99 computer. A greatly improved program over TI Extended Basic Cartridge.              |                      |       |      |      |           |
| 31 TI ARTIST                                                                                                                      | Inscrebot Inc.       | 15.00 | .98  | .90  | .99 2.43  |
| By Chris Faherty- 20 page manual + disk V2.01-6 Create high quality graphic with ease display, save or print. Joystick or key.    |                      |       |      |      |           |
| 32 TI ARTIST EXTRA                                                                                                                | Inscrebot Inc.       | 6.00  | .39  | .70  | .77 1.79  |
| By Dave Rose- A floppy diskette with Characters Fonts, Conversion Program, Input Device DSR'S, Pictures and Instances.            |                      |       |      |      |           |
| 35 TI BASE V2.0                                                                                                                   | Inscrebote Inc.      | 20.00 | 1.30 | 1.30 | 1.43 3.07 |
| A complete manual and two disks data base program with tutoring, Language, custom report, math and host of others features.       |                      |       |      |      |           |
| 03 TRIAD                                                                                                                          | Genial Computerware  | 16.50 | 1.07 | .70  | .77 1.79  |
| Wayne Stith- A Terminal Emulator (300,1200,2400), Configuration, Disk Manger and 40 column test editor. TI-99/4A or 9640.         |                      |       |      |      |           |
| 41 TECHNICAL DRIVE BOOK                                                                                                           | Ryte Data            | 14.50 | .94  | 2.65 | 3.33 6.71 |
| A complete book of information about the drive used in the 99/4A system                                                           |                      |       |      |      |           |
| 53 UTILITY PROGRAMS                                                                                                               | LA99 USERS GROUP     | 8.00  | .52  | 1.30 | 1.43 3.07 |
| By Tom Freeman- A 37 page booklet and disk. Quad Col, print sideways, variable col, call load, checksum, disk/tape, etc.          |                      |       |      |      |           |
| 08 XB-BUG                                                                                                                         | Genial Computerware  | 12.00 | .78  | .70  | .77 1.79  |
| By Peter Hoddie- A debugging tool for Extended Basic programmer. View and modify variable value, search, display TI99/9640        |                      |       |      |      |           |
| 07 XBASHER                                                                                                                        | Genial Computerware  | 9.00  | .59  | .70  | .77 1.79  |
| By Mike Dodd- Reduces the size of Extended Basic programs. Shorten variable and names, removes REM and !. TI-99/4A or 9640.       |                      |       |      |      |           |