

# CLEVELAND AREA 99-4A USERS GROUPS NEWSLETTER

JUNE, 1986

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## EDITORIAL COMMENTS

TO NEWSLETTER EDITORS: If you are receiving our newsletter for the first time, we are in the process of updating our mailing lists, deleting some, adding others. We hope you will like what you see and will consider putting our group on your exchange list.

Jim Peterson of TIGERCUB must have been reading my mind because when I picked up the latest batch of newsletters, his hints page offered to anyone who wanted, his up-to-date listing of names and address for the 140 newsletters he exchanges with each month. You could opt to send in a disk, mailer and postage or \$1.50 and he would send the list. I immediately sent out the \$1.50, thinking that I would probably receive a xeroxed list, since I didn't need the list in a ready-to-mail format. In 5 days I received back a diskette with the listing from Mr. Peterson. He should be charging much more than \$1.50 for this service.

This leads into the comment that most people do not realize how many people there are both locally and "out there" who do little things such as this to help keep the TI a viable machine. I am sure that the things I know that 5 or 6 people at Northcoast do without fanfare or remuneration can be multiplied by all the users groups throughout the area. This includes making long distance calls whenever necessary to get sources for hard-to-find items, supplies which are never charged back, innumerable hours of time, gasoline for meetings. (People come to Garfield Heights one Saturday a month for the newsletter from beyond Mentor, Mantua, Lodi, and Elyria with others coming from inbetween those areas). Your \$15 membership goes much further than you think because of the generosity of these people.

One of the frequent topics in the latest bunch of newsletters was the news about Home Computer Magazine and it's successor. Someone from the Westchester, NY group called to get the scoop directly. The "new" magazine will probably be just the "old" magazine with a new name. The same people (namely Gary Kaplan) who published the "old" is publishing the "new". This quarterly journal will cost \$15 per issue and there is NO guarantee it will contain ANY TI

information. Please check it out carefully before you put out any more money. One issue at this price will probably eat up most of the "remaining" subscription most of you might have.

If you notice the newsletter is smaller this month, you are right. Many of the groups around the country close down for July and August and do not publish during those months. We feel we have been bringing you a quality publication and want to continue to do so. In anticipation of the fact that there might not be that much to draw from and also the possibility that our locals will not be able to supply as much during the summer, we have temporarily cut back to 10 pages. We will revert back to 12 pages in a couple of months, or if overwhelmed with good articles to publish, will go back immediately. Again, it is good to report that we have input from the local clubs. Perhaps when you find out how easy it is to get published, you will be encouraged to do more.

Look inside for....Steve Weinkamer has again brought some quickie (his terminology) reviews. With all the FREEMARE we have (about 60 items), would encourage any of you to jot down comments as you run them and let us publish same. We have assembly notes and reviews of 2 commercial software items from Tom Nellis. Marty Sooley has submitted his updated version of 132PRINT. The original required a cr after each line, and also both files had to have the same number of lines. These requirements have been deleted, and you can also choose the number of spaces between columns. This new version is already in our libraries. Les Kee of Chips has a hint on the Supercart and Jim Mekeel some advice on installing disk drives. There is a review of the Genial Traveler, a comparison between BA-Writer and Funlwriter (both in our libraries), how to do graphs in TI-Writer and how to eek more memory out of our machine.

When on vacation, you might think about dropping by a local TI User group. I have the updated listing from Jim Peterson of 140 clubs, and anyone who gets Computer Shopper can find TI groups listed there.

## SOLON EXECUTIVE NOTES JUNE

Our May presentation was given by Len Gammel, who gave the group some interesting tips on saving your eyes while using T.I. Writer. Thanks Len for the discussion and tidbits of general information.

PLEASE NOTE that we are having a special meeting this month. The entire time will be devoted to copying of programs in the newly updated library. We will have four systems on hand to get as much copying done as possible. At the time of this writing, there is still some more duplicating of the master library to be done, and hopefully by meeting time, everything will be up to date. Every effort will be made to have a copy of the catalog available to look at and help make your selections as easy as possible. Be sure to bring a good supply of pre-initialized disks or blank tapes to the meeting. A punch will be made available for those of you who wish to make "flippies" from your S.S. disks. A demonstration of how to make those "flippies" will be given for members who don't know how to do it. Come early (10:30) so you will have plenty of time to check out the catalog and get the programs that you want.

It was decided that there will be NO AUGUST MEETING again this year. With summertime activities and vacations in full swing, the group felt that a month off would be a good idea.

### THE QUICKIE REVIEW CORNER

Once again I had hoped to bring you a review of the SIDEPRINT Multiplan utility, which lets the user print out his spreadsheet sideways on the page. After obtaining the appropriate(?) program, I found out that the version I got did not work on my printer. I wrote a letter to the author, Jim Swedlow, about my problems, and got a reply right back. Jim has updated the SIDEPRINT program to work with Epson/Geaini/Panasonic/and GPSSOTI printers (version 2.1). One of these days I'll write that review!

Some of the members at the last meeting were interested in knowing if there was a resident disk manager available in our library. (By resident, I mean that after loading the program, other non assembly language programs can be used without disturbing the resident program in memory. The computer actually has two programs in memory at one time). I stumbled on just

Ken Gladyszewski gave me a quick call on Monday to say that he found TI keyboards at a Radio Shack store on his side of town. Then today (Tuesday), I got a sale flyer from Radio Shack advertising same for \$3.95. They are the beige ones.

such a program before leaving the meeting last month. It is called "Disk Manager 99", is written by Mike Dodd, and can be used in X-basic, or console basic with MM or E/A. Memory expansion is required.

Loading the DM 99 is done by a call init followed by CALL LOAD("DSK1.XBDM99/0") for X-basic, or CALL LOAD("DSK1.CBDM99/0") for console basic. If you are using the E/A, you must also type CALL LOAD("DSK1.BSCSUP"). Then whenever you wish to perform any of the standard disk manager operations, a call link statement is given, and the DM 99 does it's job. Probably the most valuable feature of this program is it's ability to access a disk catalog or initialize a disk at any time without having to destroy your program in memory. Rates an 8.

SUPER DISK CATALOGER, by Larry Duke and Scott Beeker, is just as the name implies: SUPER! There are alot of disk library catalog programs around, but none with the finesse of this one. There is room to catalog 1251 files with the program. After the program is loaded in X-basic, a menu is displayed that asks you what you want to do, such as add disk, delete disk, display disk, display disk names, display file names, load library, save library, purge memory, print library, and quit. I am really impressed with the lightning speed at which all of these functions operate. I cataloged 43 disks containing 572 file names in about 15 minutes time. Then when the I was finished inserting disks and hit the display files option, the 572 files were sorted in less than 7 seconds!

After asking the program to display file names, they are displayed on the screen in sorted order. A scroll function lets you review each name, and a find option lets you quickly look for any name you wish. Display disk names works the same way as display files. The print option then allows the user to print out the entire library. Filename, sequence in which the disk holding the file was entered, diskname, file type, size, and protection status is displayed in a two column format. SUPER DISK CATALOGER will operate from up to four disk drives if desired. Rates a 10+.

Hope to see all of you June 14.

Steve Weinkamer,  
President

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!FOR SALE! New TI 300-baud nodes, cable!  
!instruction book-\$59 or best offer !  
!Hayes Smartmodem 300-baud auto answer!!  
!auto dial in box with manual-\$99. !  
!Computer paper, 2500 sheet box, \$20 !  
!Miscellaneous TI cartridges. !  
! Mark McCauley (235-8888) !  
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**EXECUTIVE NOTES: TI-CHIPS**

The May meeting was held on the 17th at the North Royalton Public Library. We had a good turnout including some new members. Welcome!

Copies of other clubs' newsletters are available to all on an honor basis. These are available as a result of the newsletter exchange program the Cleveland Area groups have with the rest of the country. See Russ Shimandle at the meetings if interested.

Russ handed out copies of the member survey. Only 40% of our members feel they know enough about basic. Only 20% know enough about extended basic. So, we will be getting back to the basics more at the meetings. The item most wanted to see more of at the meetings was the library reviews. The language members most wanted to hear about extended basic. Most wanted business related item was Graphics.

Mark demo'd Disk Manager 3/4 and Disk Manager 99. The one is available from your local distributor; the other is fairware. Daryl Saylor gave a demo of PR/Base. This was a very interesting presentation and appears to be a good fairware program. Ed gave a presentation on a fine disk cataloger called Cataloging Library by Marty Kroll.

Thanks to all for their great demos inspite of system hickups that plagued us due to a bad cable.

The June meeting will include a swap and sell session, so bring your unwanted hardware and software. July will be our annual picnic meeting. It will be the same place as last year. Bernie will draw a map.

See you all at the meeting on Saturday June 21 at the North Royalton Public Library at 10:00 a.m. Please try to be prompt.

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**GOLDEN CRESCENT EXECUTIVE NOTES**

Our last meeting was held on Thursday, May 15. The feature presentation was by Bob Barto, with an excellent demonstration of TI-ARTIST. This is one of the best, if not the best of the drawing programs available for the TI. There are about 11 disks of clip art and pictures out at the present time. There should be no problems with backup for this fine program. Thanks Bob. Also thanks to Dick Burger for the meeting place.

**DISK DRIVE INSTALLATION HINTS**

By Jim Mekeel  
Northcoast 99ers

When installing a second or third disk drive, the TI manual says to remove all resistor termination packs in all drives except the last one in the chain. But when this is done, the results are not always good. If you have problems reading and writing to all of the drives, leave the resistor termination packs in all the drives.

Sometimes when you buy another drive, it is missing the resistor termination pack. Do you need to buy a new pack? You can if you wish, and the value of the resistors should be either 150, 220 or 330 OHMS. But if you cannot find one,

Our next meeting will be at Ram Enterprises in Versailles on June 19, a Thursday, at 7:30p.m. See you there! The June meeting will be the last until September. We will not meet in July or August. The September meeting will be on Thursday, September 18, at Ram Enterprises.

Skip Skipworth reports our membership is now at 17. Even if we are low in number, I feel we have a very interested group, who are getting the most from their investment. I feel we will continue to grow as more people become aware of the great strides we have taken the past few months.

There will be a demo of the new TI Flight Program at the next meeting, so be sure to attend and bring a friend.

CHUCK MARENO

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**ASSEMBLY NOTES  
TOM NELLIS**

Last months meeting was not as well attended as meetings in the past. This say my fault because I neglected to put the date of the next meeting in my article. I did receive the Assembly VCR tape from Tom Burke two weeks ago. I haven't had a chance to view the entire tape yet, but I believe that we will learn a great deal from it. The tape is 5 1/2 hours long; also included was a floppy filled with programs and the documentation was already printed. The docs are also on the disk, a nice touch.

At the last meeting we learned about indirect register addressing and how to set up more than one workspace register, how to access it and how to move values and addresses between workspaces. Walt Ryder has us using the Debug source code instead of Tombstone City source. Walt also said that some of the more interesting tricks in assembly can be found in the Debug source code.

Next month we will be covering chapter 7 in Molesworth's book, discuss indirect register addressing again and go to the Movies with Mack McCormick. So bring your popcorn and chairs.

**NEXT MEETING**

\*\*\*\*\* JUNE 14TH \*\*\*\*\*  
\*\*\*\*\* 7:30 PM \*\*\*\*\*

you can use seven 150 OHM, 1/8 watt resistors and place one between each pair of the following pins:

- 1-16
- 2-15
- 3-14
- 4-13
- 5-12
- 6-11
- 7-10

Good luck, and if you have any problems, write to me in C/o the Northcoast 99ers or talk with me at the meeting. I will print replies in the newsletter.

**EXTEND THE USE OF TI-WRITER**

By Allen Burt - England

From Northwest Ohio 99'er News, May, 86

TI-WRITER can be used for much more than just producing letters--a substitute for a typewriter. In the last article I described how to make use of the CONTROL "U" function in the Text Editor mode. This function can be used to extend the application of the system and to produce integrated documents of words and diagrams. For example, it is easy to show a Histogram (Bar Chart) like Figure 1. This uses the CHR(124) obtained by using "FUNCTION" F AND KEY "A" for the verticles and the underline character CHR(95),FUNCTION "-" and KEY "U".

A useful tip when doing this type of exercise is that if you place the CHR(124)'s in the appropriate locations and wish to continue them downwards from the point indicated by the asterisk - just move the cursor down to the next line and press CONTROL "C" and key "5" - this copies the line above onto that line. When you draw diagrams like this, it is better to insert a number of lines in order to have room to move around.

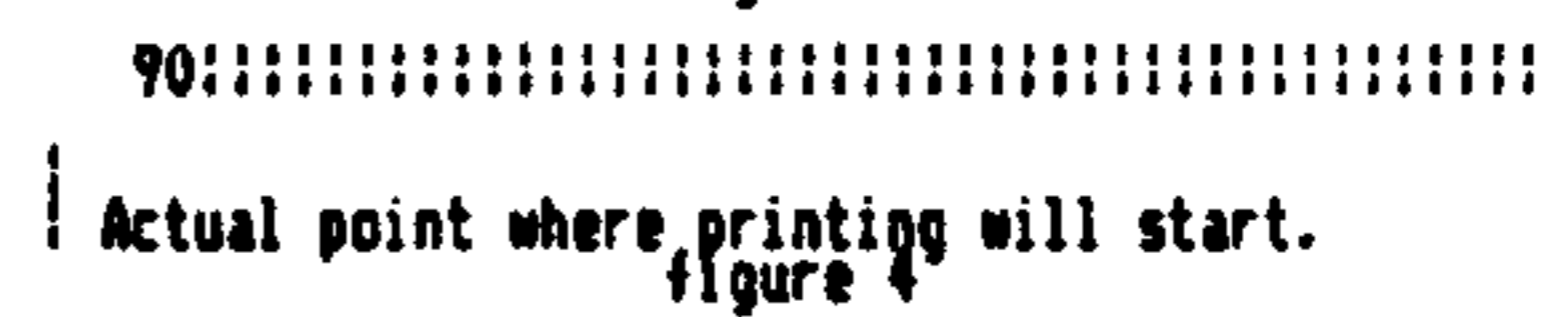
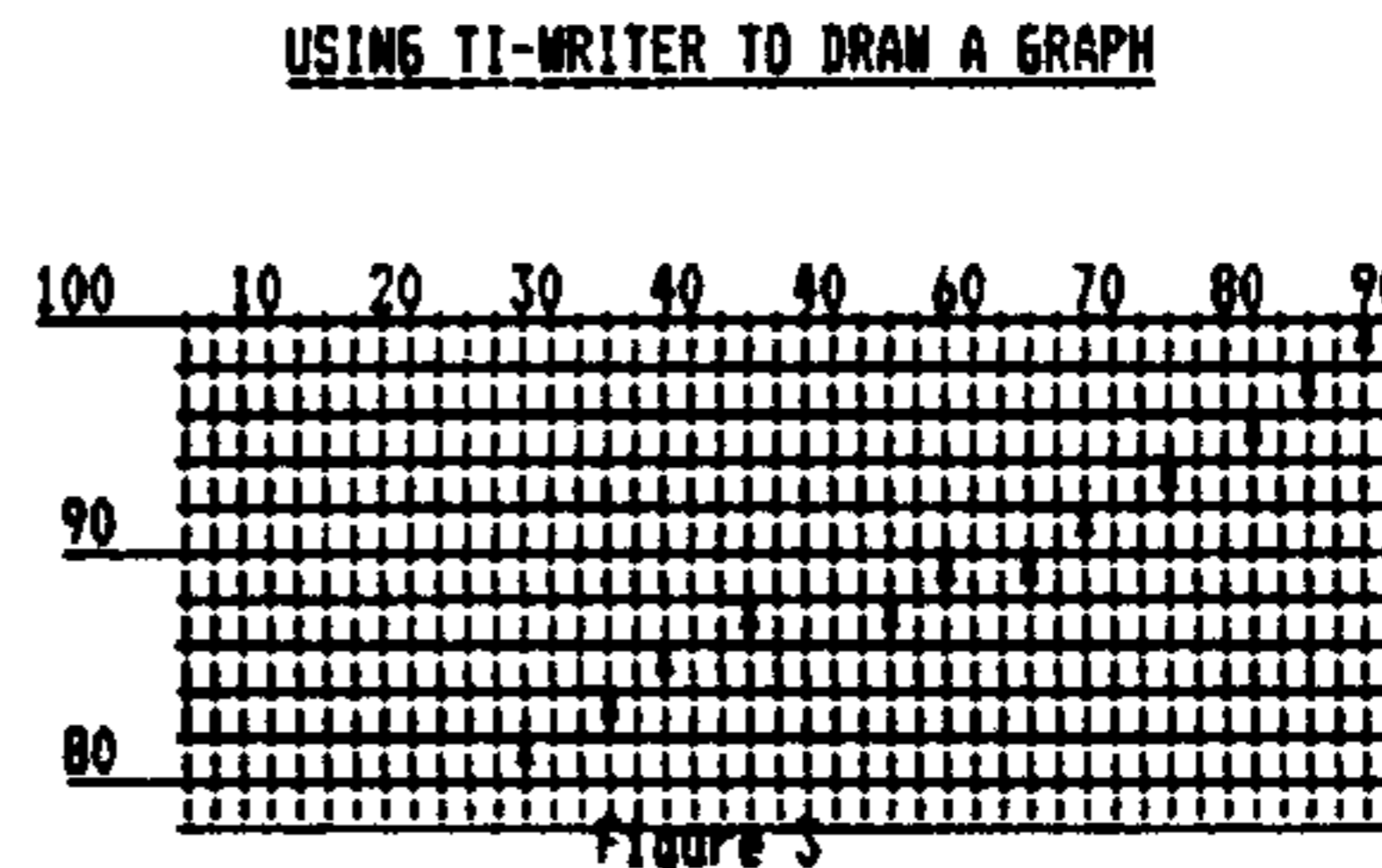
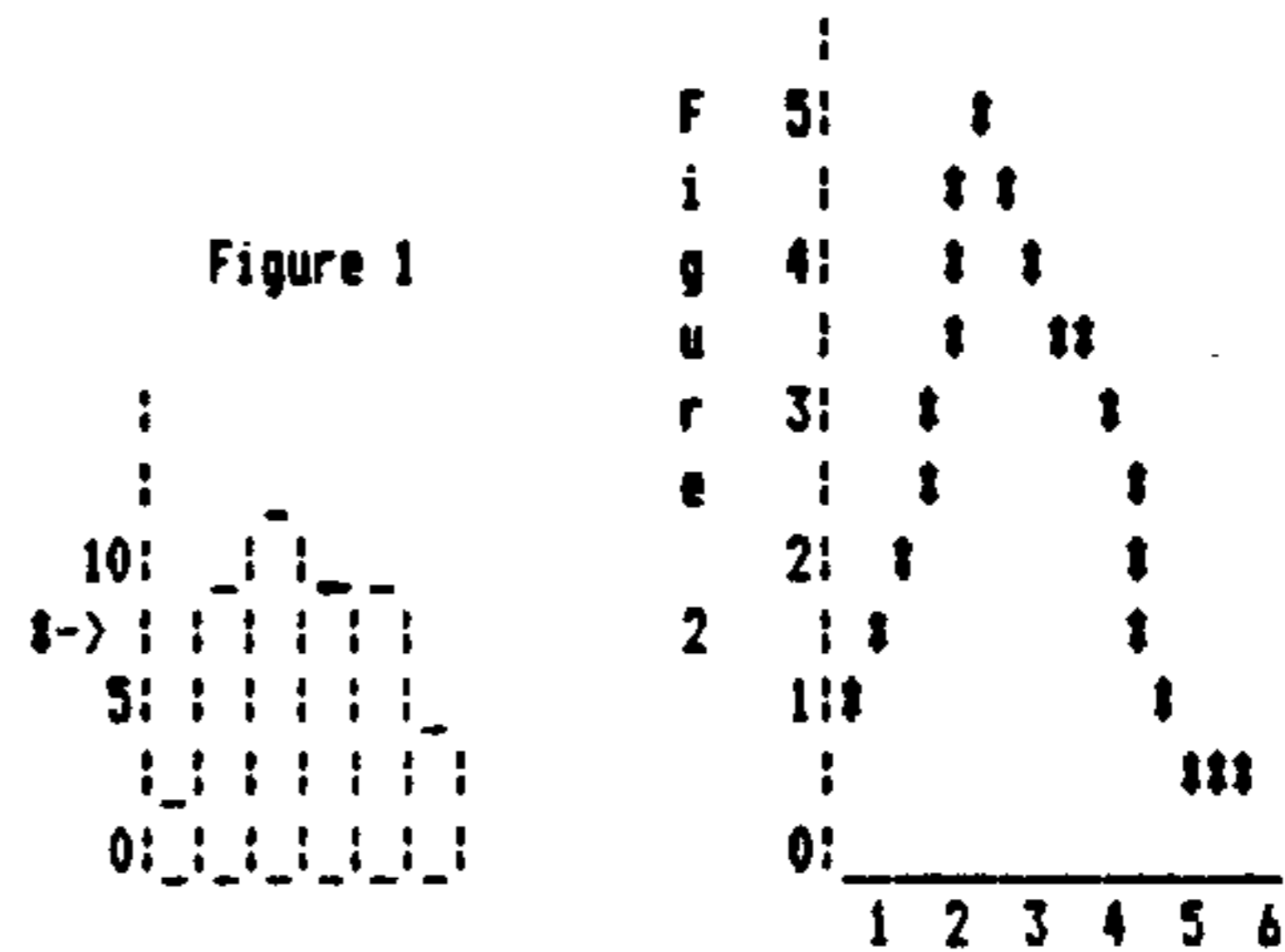
If you want to include a simple graph within your script, try doing this as shown in Figure 2 below. A more sophisticated graph can be achieved using the above techniques. In the example I found the "COPY" command very useful because having once obtained the required width - I only had to "copy" down the required number of lines using (CONTROL & KEY "5"). Remember that when you place a special set of codes at the start of the line, the space they occupy will not be recognized by the printer. That is, the printed line will commence at the location of the first special code. This can place the numbers used in the graph in the wrong place. You have to enter your special codes at the point you wish the following characters to print. Thus, what you see on the screen is not necessarily what you will get on the printout.

TI-WRITER can be used to draw graphs as Figure 3 illustrates. The horizontal lines are achieved by setting the printer into an underline mode (CHR(27);CHR(45);CHR(I)). The line spacing is set to 7/72" (CHR(27);"A"CHR(7) - This approximates to 1/10". If a CARRIAGE RETURN is placed at the point where the line should finish, the printer will draw a line to that point. The verticle lines are drawn by using CHR(124) - Function "A". As the printer normally prints at 10 characters to the inch, this will produce a grid of roughly 1/10" squares.

- There are 2 points to watch using this procedure:
1. If you do not want the underlining to start at the beginning of the printer line, the underline code must be placed at the start of each line and cancelled at the end of each line before the carriage return. There is another means of achieving this and that is to set the left hand margin to the required position (on GEMINI printers this is CHR(27);"M"CHR(N) - n being the column to start printing. THIS CAN ONLY BE DONE USING THE PRINTER CODES, NOT BY SETTING TI-WRITER'S TABS.
  2. The second point is that many printers do not align the

characters in a bidirectional mode. YOU ARE ADVISED IN THE TI-WRITER MANUAL THAT FOR TABULATION, IT IS ADVISABLE TO SET THE PRINTER TO A UNI-DIRECTIONAL PRINTING MODE.

Figure 4 illustrates how a line will appear on the 4A screen.



**EXECUTIVE NOTES - NORTHCOAST**

Although the attendance at the May 17 meeting was down slightly, we had an enthusiastic group. Installation of the new quiet PEB fan was completed to the delighted ears of the crowd and Ron says that he has several more fans that he will sell for \$11.00 each.

The demonstration of MICRO Pinball and Monopoly were very interesting, both in the nature of the games being played, and the colorful screen displays. The raffle of the two games was well received, and we also did well with the donations for library supplies (I would like to thank everyone for their support).

At the June 21 meeting Business Graffs 99 and the game Entrapment will be demonstrated and raffled off. I would ask you all to try and attend the meetings if possible. There were approximately 30 people at this meeting which was not bad considering the day was absolutely beautiful and most of our lawns needed to be mowed. The people who put an extra effort into setting up the meetings love to see vast quantities of smiling faces in the audience.

Thanks Marty

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## GENIAL TRAVELER

Have you ever wished that the TI had a magazine on disk just like the "big boys". We do, and it only costs \$5 per issue instead of the \$12-\$15 you see at the magazine stands. It is called the Genial Traveler and is published by Barry Traver, who is noted throughout the TI world for some of his innovative programming. He is also a sysop on COMPUSERVE.

ALL of you in the assembly S16 should be aware of this publication as most of it is directed to the serious programmer. Two issues have been published and 2 "bonus" disks have been sent with apologies for his being unable at this time to meet a regular publication date.

It should be noted that Mr. Traver is publishing this diskazine much in the same way that the people in Toledo are putting out the RAMdisk. It is not his livelihood and this is a project done because he wants to inform others about the many capabilities of our machine. So, irregular publication dates should in no way be compared to the commercial Home Computer Magazine with which we are all familiar.

You can obtain a 6-issue subscription for \$30. Each issue consists of a "flippy" with both sides packed with tutorials, general information and programs. The first bonus disk contained the programs, Master Catalog, TK-Writer and Fast-Term, which came with the first issue the latter part of December. The second issue came in March, and the

second bonus disk came the end of April which contained FUNLWRITER and DM1000, V.3.1. Many of you have already benefited from this bonus disk as these programs were immediately made available to the various librarians.

For you assembly language people, all the assembly programs contain the source code. The first issue had a tutorial by Mack McCormick on the RS232, the RAW program and routines in XBALT (combining Extended Basic and Assembly). For those of us who don't understand assembly, there were a couple of games, a resident cataloging program, the doubleprint program used constantly in the newsletter, and a program to print sideways, and more.

The second issue brought lists of books on all phases of the TI and magazines available (there are more than you think), an article by Jim Peterson on the Power of Relational Expressions, tips on using speech by Ron Albright, more XBALT routines, POKEC AND POKEV utilities, a utility to modify a TI FORTH disk so that it can be loaded in from either XB or A/L, 2 programs using the TEII with Music, and more.

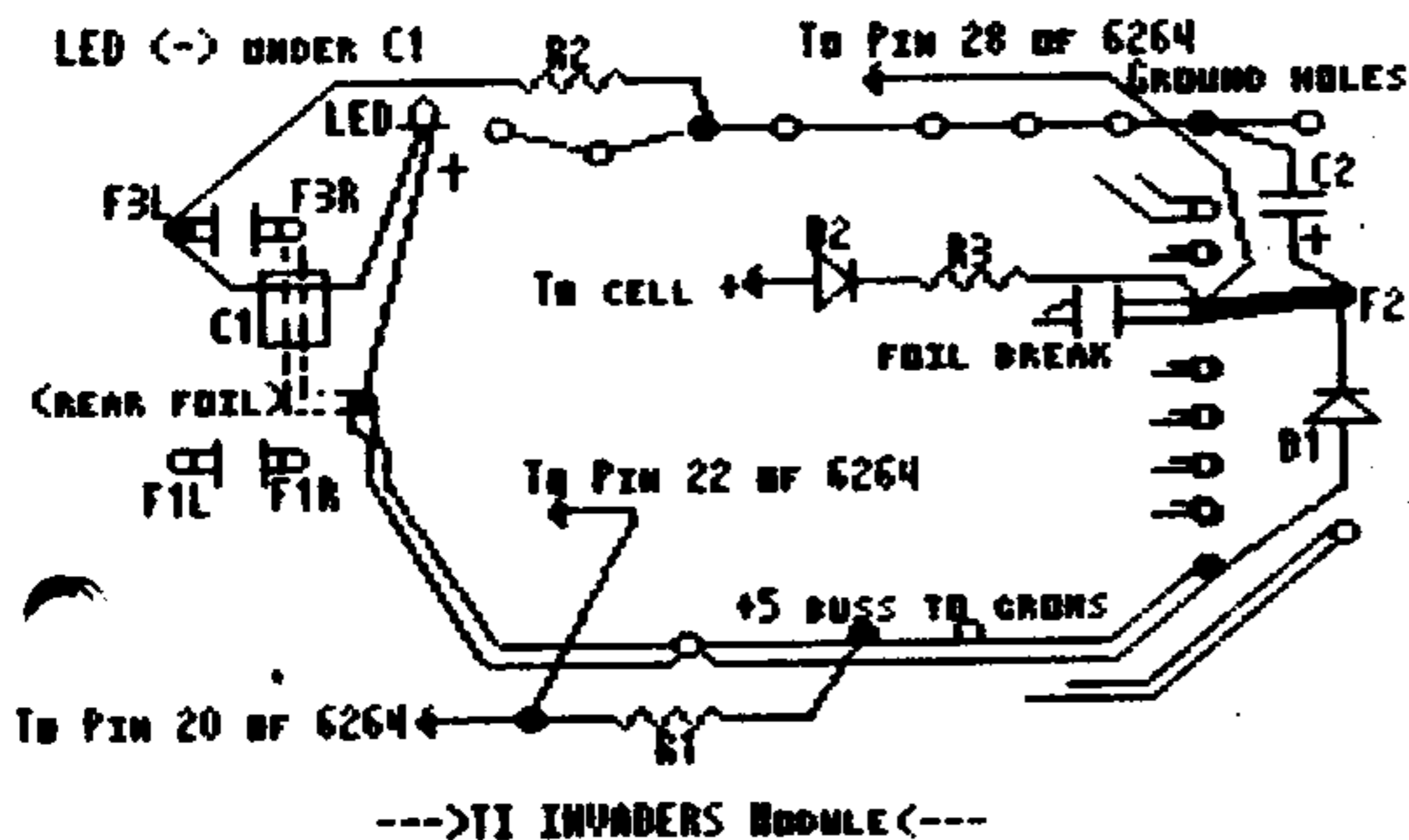
The address is Genial Traveler, 835 Green Valley Drive, Philadelphia, PA 19128. Hint. You will receive it faster if you send a money order rather than a personal check. This holds true for most items ordered through the mail.

DEANNA

## SUPERCART HINT

By Les Kee, TI-Chips

In modifying a TI INVADERS module for my "Super Cart" (developed by Ron Gries), I made the choices indicated in the drawing. The parts installation seemed easier this way. I mounted the LED with the dome at the back edge of the card. Then with careful measurement, drilled a 1/8 inch hole in the module case so the LED could be seen with the case closed. The drawing is NOT complete and is meant only to be an assist in parts layout and in easing construction. If you have any questions, call me at 238-6938.



## DUNGEONS AND DRAGONS CHARACTER GENERATOR

By Dave Talan

For all of you D&D and TI enthusiasts, I have developed a program that you may have been looking for which will develop characters with your TI-99/4A computer. It will randomly select your abilities until you wish to develop a character. Then it figures out your abilities based on your roles. Furthermore, it takes into consideration racial adjustments and other important factors in developing a character. Enter your name, race, and alignment and the computer figures the rest! Morale, hit points, saving throws, and gold are all randomly selected at a snap! After you are through developing a character, you have the option to dump it out to the printer or save it to disk to be viewed with TI Writer for future use. Another added feature is a resident screen dump. With this, you have the option to screen dump anything on the screen at any time!

The program comes with complete documentation and requires Extended Basic, a Disk Drive, 32K Memory Expansion (Printer optional) and is being offered under the "FAIRWARE" concept. I'm asking \$5 for the program if you send me a disk, mailer, and return postage or you can send me \$7 and I'll supply the disk, mailer, and postage. Please note, without return postage, I will not send you your disk back. Many authors state they end up paying all the postage, and to me that doesn't seem fair. After all, it is Fairware. Dave Talan, 19831 Saranac Drive, Fairview Park, OH 44126

THE FOLLOWING IS CONDENSED FROM AN ARTICLE BY TOM FREEMAN IN THE LA TOPICS, APRIL, 1986

### BA-WRITER and FUNLWRITER, A COMPARISON

#### FUNLWRITER

FUNLWRITER was written by Tony and Mill McGovern of the Hunter Valley User Group in Australia. It runs ONLY OUT OF EXTENDED BASIC. A seven-page file called FUNNELDOC can be printed by the formatter.

The LOAD program allows you to change the printer defaults for the Editor and Formatter, as well as adding up to 5 options for "LOAD AND RUN" or "RUN PROGRAM FILE" (= UTILITY OPTION of TI-WRITER). Two of the options are predefined: FORTH and DPK (DISKO). There is a CALL COLOR statement which can be edited to change the colors achieved by CTRL 3 in the Editor.

The disk comes with editor, formatter and assembler files, as well as DM1000 (MGR1), CHARA1, E/A utilities (EAU) and DPK. The formatter and editor files have been modified to run only with this disk and have been renamed EDITA3 and FORMA3. When choosing the formatter, at the end of a document you are able to print another document without reloading. Another nice feature in both the Editor and Formatter files, is that the last filename used will appear as a default to start the other. If none was used, DSK2 appears as the default.

The editor has a disk cataloger that runs with the SD command. This program is very fast and is paged. This means you can page backwards or forwards to review the files. Fractured files are marked and by pressing "=", all program files that are meant to run in Basic, or with Option #5 of the E/A are marked. At the end, you do go back to your text for editing and have to re-enter SD to get the catalog again.

Choosing option #3 (UTILITY) from the first menu will give you a new 9-item menu. One is the Editor (E/A version) and 2 the Assembler. The Editor is the same as the TI-Writer editor, but the default mode has been set to FIXED; the tabs are set to those used by the E/A, and SaveFile will NOT save the tabs in the last record. This means you can't by mistake reformat an entire file of source code to one grand paragraph!

Item 3 is DM1000 (if MGR1 is in drive1) and 4-8 are the ones you set up in the LOAD program. The parameters needed are poorly documented. It seems the variable K required refers to the same number as would be used in the next menu if item 9 is chosen, with an 8 added if a prompt is required to put in another disk. I could not always get this to work.

Item #9 lets you load almost any run program file, or load and run type program for which you would normally use the E/A module. First you must choose the environment (i.e., TI-Writer with text mode enabled, or GPL, or one similar to that used by #5 of E/A, or Load and Run). These are not well documented. This is another problem in that non-autoload Load and Run programs cannot overwrite the FUNLWRITER loader at the high end of high memory around

>FF00, and a program file can't overwrite this area unless it is the last of the series. In this case the program can't return to FUNLWRITER.

An interesting feature of this menu is #5 SWITCH. When you press 5, Item #2 toggles back and forth between FORMATTER and ASSEMBLER and, although you don't see it, the editor (item #1) also toggles between the TI-WRITER version, and the E/A version.

#### BA-WRITER

This was written by Paolo Bagnaresi of Milan, Italy and is meant as a substitute only for the TI-WRITER.

It can be loaded from TI-Writer, Extended Basic, Editor/Assembler, Or mini-memory. The editor and formatter files have been extensively modified, but are still named EDITA1 and FORMA1, so they will still load from options 1 & 2 of TI-Writer. Programs named LOAD, BA-WRITER, and MINI-BA-WR will load the setup program from XB, E/A(#5), and M/M respectively. LOAD is mostly a hidden assembly language program. As MINI-BA-WR is normal display/fixed 80 object code, it will also load from basic with the CORCOMP or MYARC disk controllers.

A feature of all the loaders, as well as the cross references from editor to formatter and vice versa, is the ability to RETAIN in memory the number of the disk drive that the first program was in. This information is read from VDP ram for the TI and CORCOMP controllers, and from the DSR ram in the disk controller itself in the case of MYARC. Since the information is read from the disk controller, it will NOT work with a RAMdisk without modification.

Additional files included on the disk are:

- 1) FORMATDOC, PRACTICE, PRACTICE1 from the original TI-Writer disk.
- 2) V-READY-0 is a file for the formatter that reads 4 additional files from DSK2 (can be changed) that provide simple but complete documentation.
- 3) MY-INSTALL is another version of the loader (for TI-Writer #3 or E/A #5) that provides another choice, CONFIGURATION. You can change the default colors, printer names and utility filename for option #3 for use right away or permanently modified. A direct sector access is used so a true sector copy of the disk must be present. This is checked, so that another disk will not be damaged. With the TI or CORCOMP disk controllers, either a regular file-by-file backup can be made (only the files through MY-INSTALL need to be copied) or a sector copy can be used. The MYARC controller is again non-standard as it begins copying files in sector 32 instead of 34. Therefore, a sector copier MUST be used, or else the original disk should have ANY 3-sector file added to it and the name changed to "A" or some such that will precede "BA-WRITER" in the alphabetical list.
- 4) W-DEUTSCH (ESPANOL, FRANCAIS, ITALIANO, SWEDISH) and CHARA2 for international character sets.
- 5) W-FOUNDS-A, W-FOUNDS-B files are meant to enable the use of a RAMdisk for the editor and formatter files. I was unable to get these to work.

6) W:INITZ is a disk initializing program to obviate the need for another disk manager. You will lose whatever else you have in memory and 18 tracks cannot be obtained with a MYARC controller.

If you exit the editor to the main menu, you can go directly back to the editor with all your text intact. If you have forgotten to save a file, all will not be lost (the RecoverEdit feature of TIM is not reliable). In addition, SD will give a disk catalog such superior to the TIM module. It is faster and allows a "redo" instead of having to return to command mode to enter SD again.

In the formatter, if you have previously saved a file in the editor, it appears as the default for loading with the formatter (with the reverse being true going back to Editor). The CATALOG function is also available from any input line in the formatter. At the end of a printing job, you get the message "END OF JOB" and return to the top of

the formatter without having to reload it.

#### NOTES ON RAMDISK USAGE

As noted, FUNLWRITER only loads from drive 1, and BA-WRITER only from floppy disks. Some may wish for the increased speed of loading from a RAMdisk. My GRAN KRACKER has let me do this, and I have gotten used to lightning! Using DISKASSEMBLER, however, I have determined the various routines in all the files of BA-WRITER that accomplish the assigning of a drive #, and have modified the code to load everything from drive #4 (my RAMdisk) only. The changes are made with a sector editor. They are easier in FUNLWRITER, as one needs only search for occurrences of DSK1. If there is sufficient interest in this, I can send the instructions in an SASE, or perhaps publish them in a future issue of the newsletter.

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#### COMPUTER WAR By Thorn Emi

#### REVIEW

Just before TI pulled out of the home computer market they contracted with Thorn ENI to develop some games for the 99/4A. A company by the name of Arcade Hardware is now distributing some of these games in the U.S.. They can be found on page 11 of the Summer 1986 Tenex catalog.

Computer War is probably one of the most difficult games to master because of it's speed. It is based on the movie "War Games". You are in NORAD and the U.S. is being attacked by enemy missiles. A map of the U.S. is shown on the screen and the incoming missiles are heading for us. Your task is to destroy these missiles before they reach their targets. This is easier said than done.

To engage the missiles you position your cross-hair over the missile on the map and press the fire button. This immediately changes the screen. If you are dead center a small dot will appear on your long range radar. You now are a fighter jet pilot and must shoot down the missile. Once you pull back on the joystick mountains will appear on the upper portion of the screen. By looking at the radar and the terrain you should be able to spot the missile. Use the cross-hair on the screen to shot down the missile. This is easier said than done. Once the missile is shot down you are returned to the map screen and continue shooting down all the missiles on the screen in the same manner.

After all the missiles are destroyed you then have to crack the computer code to advance to the next level "DEFCON 4". This is not easy.

This game is difficult to master because of its speed. It is almost impossible to shot down the missiles unless you have a good joystick and there is a time limit on cracking the code.

I rate this game 8 1/2 of 10 just because of its speed.

TOM NELLIS

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#### MICRO PINBALL II BY SOFTWARE SPECIALTIES, INC.

#### A REVIEW

If you attended last months meeting of the Northcoast Group, you probably didn't pay such attention to the demo of this game. I watched this program out of the corner of my eye while I was talking to someone. When they announced last chance for the raffle I purchased \$2 worth of tickets and my number was the first called.

Since having first choice I took Micro Pinball II, for my kids, well Dad hasn't let the kids near it because I'm always playing it.

I must say that this game really acts like a pinball machine. All the sounds, lights and bumpers are there; the only thing lacking is a tilt light. You can accumulate bonus points and have them 2X, 3X, 4X, 5X or even a freeball. The flippers are controlled by the 'I' and '=' keys or if you have 2 joysticks the fire buttons. You can score points by hitting the round bumpers, side bumpers, hitting the bumper that closes the side gates and about 10 other ways. If your score is one of the top ten you can even enter your initials on the screen. These are saved so that your top score is always there.

As far as entertainment value goes, this game has to be up there with the best. I rate it 8 of 10.

TOM NELLIS

```

100 ! **** 132PRINT-3 **** By: Martin A. Sooley **** For EPSON Printer ****
105 ! **** NorthCoast 99'ers UG ****
110 ! PROGRAM TO READ TWO FILES OF COMBINED DATA LENGTH EQUALING LESS THEN 132
115 ! AND COMBINE THEM INTO ONE PRINTOUT. *** USES EXTENDED BASIC ***
117 CARRIAGERETURNS=CHR$(13)! CHR$(13) = "CR"
120 LINE_FEEDS=CHR$(10)! CHR$(10) = "LF"
140 CALL CLEAR :: CALL SCREEN(6)
150 PRINT " Printer setting is:" : " PIO, VARIABLE 132": : :
160 PRINT " Enter File One (All Caps)": " Example: DSK1.FILE_NAME1": :
170 INPUT " :D1$ :: PRINT : :
180 PRINT " Enter File Two (All Caps)": " Example: DSK1.FILE_NAME2": :
190 INPUT " :D2$
195 PRINT : : :: PRINT " Checking Line Lengths": : :
197 LINE_END1,LINE_END2,EXTRA=-1
199 OPEN #1:D1$,INPUT
200 LINPUT #1:FIRST$ :: IF EOF(1)THEN CLOSE #1 :: GOTO 214
205 IF LEN(FIRST$)>LINE_END1 THEN LINE_END1=LEN(FIRST$)
207 GOTO 200
214 OPEN #2:D2$,INPUT
215 LINPUT #2:SECOND$ :: IF EOF(2)THEN CLOSE #2 :: GOTO 222
220 IF LEN(SECOND$)>LINE_END2 THEN LINE_END2=LEN(SECOND$)
221 GOTO 215
222 EXTRA=132-(LINE_END1+LINE_END2):: IF EXTRA<0 THEN 224 ELSE 225
224 CALL CLEAR :: CALL SCREEN(7):: DISPLAY AT(12,1):" Files together": "
are too longe !" :: FOR I=1 TO 600 :: NEXT I :: GOTO 600
225 CALL CLEAR :: PRINT " You have ";EXTRA;" spaces": " for use between colum
ns": : " Enter Column Spacing": :
227 PRINT " From -1 to ";EXTRA;:: INPUT SPACE :: SPACE=SPACE+1
240 PRINT : : :: INPUT " IS YOUR PAPER 15in. Y/N ":WIDTH15$ :: PRINT : :
250 INPUT " IS THE PRINTER READY Y/N ":Y$ :: PRINT : : : : :
260 IF Y$="N" OR Y$="n" THEN 140 ELSE 300
300 PRINT " HOLD >R to Quit printing": : : : : : OPEN #9:"PIO",VARIABLE 132
320 IF WIDTH15$="N" OR WIDTH15$="n" THEN PRINT #9:CHR$(15);! CONDENSED PRINT ON
350 OPEN #1:D1$,INPUT :: OPEN #2:D2$,INPUT
490 IF EOF(1)THEN FIRST$=" " :: GOTO 500 ELSE LINPUT #1:FIRST$ ! READ A STRING F
ROM FILE ONE
500 LINELENGTH=LEN(FIRST$)! FIND LINE LENGTH
502 IF LINELENGTH<2 THEN FIRST$=" "&FIRST$ :: LINELENGTH=LEN(FIRST$)
505 IF SEG$(FIRST$,LINELENGTH,1)=CARRIAGERETURNS$ OR SEG$(FIRST$,LINELENGTH,1)=LI
NE_FEEDS$ THEN 510 ELSE 520
510 FIRST$=SEG$(FIRST$,1,LINELENGTH-1)! CHOP OFF "CR" or "LF"
520 IF EOF(2)THEN SECOND$=CARRIAGERETURNS$ :: GOTO 525 ELSE LINPUT #2:SECOND$ ! R
EAD A STRING FROM FILE TWO
525 LINELENGTH=LEN(SECOND$)! FIND LINE LENGTH
527 IF LINELENGTH<2 THEN SECOND$=" "&SECOND$ :: LINELENGTH=LEN(SECOND$)
530 IF SEG$(SECOND$,LINELENGTH,1)=CARRIAGERETURNS$ OR SEG$(SECOND$,LINELENGTH,1)=
LINE_FEEDS$ THEN 535 ELSE 540
535 SECOND$=SEG$(SECOND$,1,LINELENGTH-1)! CHOP OFF "CR" or "LF"
540 SECOND$=SECOND$&CARRIAGERETURNS$
560 PRINT #9:FIRST$;TAB(LINE_END1+SPACE);SECOND$
575 CALL KEY(0,KEY,S):: IF KEY=81 OR KEY=113 THEN 590
580 IF EOF(1)AND EOF(2)THEN 585 ELSE GOTO 490
585 PRINT #9:CHR$(18);! CONDENSED PRINT OFF
590 CLOSE #1 :: CLOSE #2 :: CLOSE #9
600 CALL CLEAR :: PRINT " ENTER N for More Copys": " M for New Files": "
B to Quit Program": " F to Force Print": : : :
610 INPUT " Enter your choice: ":D0$ :: CALL SCREEN(6)
620 IF D0$="N" OR D0$="n" THEN 225
630 IF D0$="M" OR D0$="m" THEN 140
640 IF D0$="B" OR D0$="b" THEN STOP
650 IF D0$="F" OR D0$="f" THEN SPACE=0 :: GOTO 240
660 GOTO 610

```

"132PRINT-3" was designed mainly to read Two(2) Column-Type files and print them side by side on either 8 1/2" paper in condensed form or on 15 1/2" paper in standard form. By Column-type I am referring to "Part Lists", "Catalog Lists", or "Spread Sheet" type material. This is the new improved model which can utilize programs that are listed to disk using LIST "DSK1.NAME". It is not necessary to add "CR" to the listed program manually, and lines of ZERO length will be tolerated by the program. It will allow for one file to be much longer than the other, and you choose the amount of space between files.

Instructions for program use are as follows.

- (1) Using TIWRITER Text Editor create the first column type file up to 79 columns in width.
- (2) Do not save it but print it to disk.  
EXAMPLE: FCTN-9, F <ENTER>, PF <ENTER>,  
At PF, enter device name type: DSK1.FILEONE
- (3) Now back to TI-WRITER and create the second or right hand file for the printout.  
NOTE: Subtract the length of the longest line in FILEONE from 132 and the balance is the amount left for the width of the second file. [ 132 - 79 = 53 ]
- (4) After entering the second file follow steps one and two to save it using another name such as FILETWO etc.
- (5) To complete the process run the program 132 PRINT and follow the prompts as you go.

**IMPORTANT:**

If the printout looks bad because of extra lines and spaces that shouldn't be there, the first thing to try is using less space between the columns if you are at the maximum limit or try more space if you are near the minimum limit for the column space entry. Quit the print, enter (Y)es for another print and then enter one less or one more when you get to the spacing prompt screen.

NOTE: This page was made from two (2) separate files using 132PRINT-3

\*\*\*\* GOOD LUCK \*\*\*\* MS \*\*\*\*



NEED MEMORY? ... SAVE SCREENS  
 by Bill Harms  
 FROM LA TOPICS, MARCH, 1986

If you're an Extended Basic programmer and need more RAM so you can add routines to your program, here's a bit of a solution. Enter the text of the screens in TI-Writer, then read them into an array from disk. Just use the DISPLAY AT to ask for the part of the array you need to display, not to actually contain the text in the double quotes.

The Extended Basic Module has 24,488 bytes of program space available, and 11,840 bytes of stack and 8,000 bytes for an assembly language program. The 24,488 is the only place an Extended Basic program can be, and is where a numeric array is kept. The 11,840 bytes is where a string array or string variables are kept. If your program has lots of stack bytes still available after the program has done it's best to load arrays, etc. while running, then you could use that stack space for a string array containing the lines used for your program's screen displays.

The text for a screen is usually in a: 1) DATA statement, 2) PRINT statement or 3) a DISPLAY AT statement; all of which are taking up the program space.

One could type the screens into TI-Writer with Left Margin of 1 and Right Margin of 28 very quickly. Kind of nice with it's full screen editor and you would see the screen almost as it would appear in the running of the program. Not quite because TI-Writer gets 40 characters on a line on the screen at once while most Extended Basic implementations only get 28. Then Print File the lines to disk with with a C (so as not to save control characters inadvertently). You could have a different file for every screen (24 lines max.) or one file for all screen lines and commonly used screen line displays to total perhaps 300 lines. Also print the file to your printer with line numbers because you'll need to reference them in the program.

In your program you could input this Display Variable 80 file created by TI-Writer near the beginning---into a String Array! When you need to display at screen or a few lines, just ask for the appropriate element (row/line) from the array in the PRINT or DISPLAY AT statement.

Here is a file of screen lines I created to use in a program:

```

Line #
01      FAS-Tran Functions
02
03      1 Changes/File Utilities
04      -Customize Category Lables
05      -Correct Trans. File
06      -Combine/Copy-Convert File
07
08      2 Input Transactions
09
10      3 Reports Category Totals
11      -Trans. Rpt (no subtotals)
12      -Category Totals Report
  
```

```

13      -Save Category Totals
14      -Batch Update YEAR file
15
16      4 Sort Trans. get reports
17      -incl/excl. totals
18      -save sorted transactions
19
20      5 Update Print YEAR info
21
22      6 Get Instructions
23
24      7 Return to Prior Menu
25PRESS ANY KEY TO CONTINUE
  
```

Here's a demo of a program to use the above file (A MENU) basically.

```

100 OPTION BASE 1
110 DIM DISPLAYS$(300)
120 OPEN #1:"DSK2.SCREEN2".INPUT,DISPLAY,VARIABLE 80
130 FOR A=1 TO 25 ! could be 300 or whatever
140 LINPUT #1:DISPLAYS$(A)
150 NEXT A
160 CLOSE #1
170 !
180 ! end of screens load
190 ! proceed with prog until you need to display something
200 CALL CLEAR
210 FOR A=1 TO 5
220 DISPLAY AT(A+1,1):display$(a)
230 NEXT A
240 FOR A=1 TO 500
250 ! delay loop to hold message on screen for awhile
260 NEXT A
270 ! this would display lines 1 thru 5 only
280 !
290 DISPLAY AT(16,1):DISPLAYS$(25)
300 !This would display only the 25th element of the array
310 ! on line 16 of the screen
  
```

The 25 lines read in by this program to the string array in Stack Space ate up 1185 bytes. Reading in only the first 10 lines ate up 855 bytes. The full 25 lines had a total of 440 characters. The lines with no characters took up about 5 bytes. The top 24 lines of a menu were a total of 414 characters or 17.25 per line. For the 17 lines with characters on them the average length was 24.35.

Arrays work superfast in this technique and don't slow down displays. The loading of the screens does take a while as it's from disk. In the above program, it takes 4 seconds to read all 25 records (lines) and then display ALL 24 (not just 5).

One needs to add a small loop - as in the demo program lines 100-160 to load the array from a disk file. This is if you read all the screens lines at once. A character of text in the program takes up a byte of memory space as it does in the array, but the string array has overhead bytes needed. For an array of 100 elements (one dimensional) about 1,000 bytes (of the stack space and you) is needed

even if only one character is put into each element (1 or 28 or 100, or other). Numeric arrays carve off the bytes they need in Program Space as soon as you DIMension the array. It doesn't matter how big the number, if any, that is put into the array element. If you had 5,000 bytes of Stack Space free, you could load the string array of screen lines - 28 char. each (full 28) with 142 lines. This is about 6 full screens. (5000-1000 overhead=4000 divided by 28char./line/142).

Normally a line is not fully 28 char. long so you'd get more lines. The blanks at the end of the lines read from the D/V80 file aren't loaded into the array, thus no bytes used. The empty lines in the D/V80 file take up only 5 bytes of array space.

For the above sample screen lines, the bytes were growing at a rate of 1.2 per character added, since there are lines shorter than 28 and some (as one would normally expect) blank lines. This means that 5,000 of Stack Space free could expect to hold 12 fairly full screens of info.

One could write a short program to create files of

Internal Variable or Fixed 28 type, which would read the screens a bit faster and even allow Random Access to various screen lines in the file. One could reuse the String Array in various parts of the program with Input from disk of more screens.

This all may have been known to you, but it did again show me there seems to be no end to the ways one can eek out a few more bytes of program space. In a program I wrote, the numeric array was DIM'ed at (16,100) to hold a Spreadsheet of values (16 rows and 100 columns). It left program space of only 11,200 bytes, but all the 11,840 bytes of Stack Space was almost totally unused.

By the way, there are assembly language programs to save and recall a screen. They run fast, but I only know how to use them by doing a file read for every screen individually, which meant a disk drive process for each screen, thereby causing a greater delay before the screen is displayable. These programs were in the may issue of MICROpendium.

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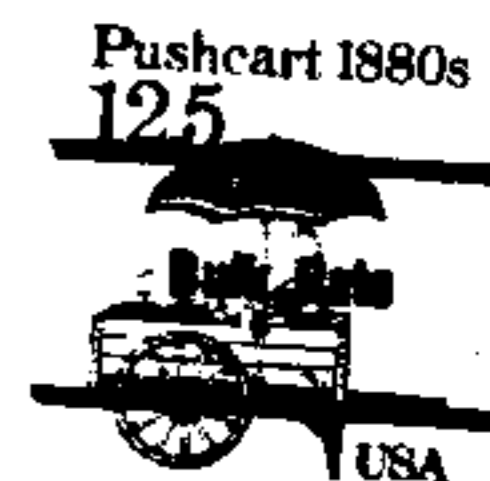
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