

BITS, BYTES & PIXELS

LIMA AREA 99/4A USER GROUP
VOLUME II NO 6
JUNE 1986



COMMENTARY

We hope that you like our new look. We have felt for a long time that our user group needed a distinctive logo that would positively identify us as the Lima Area User Group. We have included with this issue a copy large enough for you to display in your computer room or area.

(Editor's note Credit for the design and execution of this goes to Paul Sehnert AIA. Paul is our youngest son and resides in Denver. He is a graduate of the University of Cincinnati with a degree in Architecture.)

CHARLIE SAYS:

I just (June 7, 1986) received my first, and last, volume of HOME COMPUTING JOURNAL, the latest incarnation of what was once 99'er HOME COMPUTER MAGAZINE. It consists of 32 pages of text and a disk of programs. The single issue price is \$25!!! Or you can get four issues for the "special" price of only \$60 (normally \$75). This means you get LESS FOR MORE! The last issue of HOME COMPUTER MAGAZINE before they changed the name had 70 pages of text plus program listings. The single issue price together with a disk of software totaled \$9.45

I also received a notice that because of the "remaining value" of my 99'er H.C.M. subscription I would be receiving no more HOME COMPUTING JOURNAL issues unless I sent some money to renew my subscription. I had a 3 year subscription to 99'er that began in June of 1983. The subscription form specifically stated that I was paying for "36 issues" (I still have a copy of the form). To date I have received 6 issues of 99'er (6/83-11/83), 11 issues of HOME COMPUTER MAGAZINE (5 in 1984 and 6 in 1985), and one volume of HOME COMPUTING JOURNAL. That adds up to 18 issues. H.C.J. (still Gary Kaplan, still at Eugene OR) owes me 18 more issues. Just because the price per issue of H.C.J. has been jacked up is not reason enough to terminate my subscription. Paying in advance for a long term subscription is supposed to protect the subscriber against future rate increases. Even when a periodical ceases publication, subscribers get the balance of their subscription from another periodical. I feel I am the victim of fraud. If I lived in Oregon I would probably take my case to court.

Charles Good

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EDITOR'S NOTE: The following article was sent directly to the Lima User Group by the author Dick Altman in response to our request for one of his freeware items. All the described programs are available from the authors. Just send an initialized disk and a POSTAGE PAID self addressed return mailer. Many program authors request a donation (between \$3 and \$20) if after examining the program you decide that you are going to use it. This is known as the "fairware concept". Some authors will not themselves send you their program on you disk unless you include a donation. These donations are noted in Dick's article. All "freeware" and "fairware" programs may freely be given to others. In fact such distribution is encouraged by the program authors. Programs currently in the Lima User Group library are marked XXX at the end of the program description. We have added a few editorial comments to Dick's article and have listed some additional freeware programs we know about at the end of the article.



FREWARE

updated 5/06/86
by DICK ALTMAN

Following is the most complete list I know of existing FREWARE. Please, please drop me a line if you know of others, so that I can continue to spread the word. If you find errors in such things as the addresses please advise me as soon as possible. My address is in item #13 below. Those with an asterisk by its name I have original copies direct from the programmer--if you can't locate them elsewhere.

- 1.* MASSCOPY-Steve Lawless 2514 Maple Ave., Wilmington, Delaware 19808. This is a beautiful disk copier. You can use two drives at once for rapidity. XXX
- 2.* SCREENDUMP-Danny Michaels Route 9, Box 460, Florence, AL. 35630 works with Epson type printers and will give you both verticle or horizontal printouts in double or single size. XXX
3. NEATLIST-by the same Danny Michaels lists multi-statement lines to your printer OR disk and references your program variables to simplify reading. (ED NOTE: Reviewed in B B and P B/85) XXX
- 4.* DM1000-Ottawa 99/4 U.S.P.O. Box 2144, Station D, Ottawa, ONT. K1P5W3. This disk manager rivals CORCOMP'S version, and will make your TI Disk Manager II worthless! (ED NOTE: Reviewed in B B and P 12/85) XXX
- 4A.* DM1000 Source Code available from the Ottawa TIUG on 1 DSSD or 2 SSSD diskettes. The group has purchased this code from the program's author and is currently maintaining/upgrading both. Version 2.2 of the Manager was released at the TI-Faire in Chicago on Nov 2nd. Version 2.3 was released in Jan. 1986, and there are rumors of an even later one!! (ED NOTE: Lima group has source code for version 2.3. Latest version is 3.1) XXX
- 4B.* 2D-GRAPHICS in TI-Forth by Jean Pierre Morin Ottawa U.S., 25 Arnprior, Ontario, Canada K7S 1W7. A very powerful Graphics program with many pre-defined functions and a full implementation of TI-Logo built in. Send a DSSD or 2 SSSD disks for this one.
- 4C. A/L Utility disk by Art Green of the Ottawa TI-99/4A U.S. Contains 5 assembly language utilities including 3 disk utilities, a terminal emulator and a printer set-up for dumping PrintArt files to your printer.

Contributions, if any, for the above 4 packages should be made to the Treasurer of the Ottawa User Group (by arrangement with the authors).

5.* TE3C-Joe Freeman Engineering Dept. of University of Florida is so superior to TI's TERMINAL EMULATOR 2 that there is no comparison. It permits downloading of 20 times as much info from bulletin boards and instantaneously! It'll sure save you phone time on the big boards like COMPUSERVE and THE SOURCE. XXX

6. X_DISASM-Fred Hawkins 1020 North 6th St., Allentown, PA 18102. For those that send him a few bucks, you receive excellent documentation to go with his program on disk.

7.* FASTTERM-Paul Charlton 1110 Pinehurst Court, Charlottesville, VA 22901 is another excellent Terminal Emulator, some say "it's the best one available anywhere". XXX

8.* SUPER DISK DUPLICATOR-Tom Knight.... 7266 Bunion Drive, Jacksonville, FL 32222. You can start and stop from any sector number on your disk. There are claims that it will copy ANY disk runnable on the 99/4A!

9.* TK-WRITER-Tom Knight again (see above). This does everything the TI-WRITER will do-without need of the cartridge-except Show Directory. (ED NOTE: This one isn't as good as BA WRITER or FUNNELWRITER.) XXX

10. SPRITE BUILDER-John Taylor 2170 Estaline Drive, Florence, AL 35630. There must be a lot of good programming going on in Florence, Alabama--or else my information is wrong (see #2 above). If you are in need of help to construct some fantastic sprites, this is the one for you! (ED NOTE: Send two SS disks and recieve 115+ predefined sprites you can merge into your programs.) XXX

11. ASSAULT THE CITY-John Behnke 5755 W. Grace, Chicago, IL 60634. Sorry to say I have no details on either of these two because I'm just not interested in games.

12. PILOT 99-Thomas Weithofer 1000 Harbury Drive, Cincinnati, OH 45220. This is called the simplest programming language available for the TI/99/4A, but I haven't seen it yet. Send him two ss/sd disks reusable mailer, and whatever postage it costs you to send the two disks. (ED NOTE: The author, age 22, recently died of cyctic fibrosis. This program is probably no longer available from the above address.) XXX

NEXT PAGE PLEASE

13.† TI-WRITER MANUAL REWRITE-Dick Altman 1053 Shrader St., San Francisco, CA 94117. This cuts the manual down to five pages, plus it contains all the 'control' commands I have been able to find. If you are EVER charged for this, please let me know. XXX

14.† MASTER CATALOG-Mack McCormick HHC, 1rst Inf. Div. APD NY 09137. This is called the best Assembly language disk catalog around. It's super fast and will handle more disks than you have. Something in the neighborhood of 2000 programs. XXX

15, 16, AND 17-Monty Schmidt 121 N. Blair, Madison, WI 53703 has written three FREENARE programs called "COMPACTOR, UNCOMPACTOR, and TECHIE BBS. The BBS is, believe it or not, a bulletin board system. The other two are assembly language programs that will do all sorts of things to your Display/Fixed 80 assembly language programs, as well as conserves disk space.

18. EASYSprite-Tom Freeman 515 Alma Real Drive, Pacific Palisades, CA 90272. It is an extremely fast Extended Basic program so that you can create sprites and have complete cursor control. It is SIMPLE to insert them into that program you are writing.

19. DISASSEMBLER-Marty Kroll 218 Kaplan Ave., Pittsburg, PA 15227. I don't have it, so no comments.

20. CATALOGING LIBRARY-Marty Kroll again (see above). It tracks up to 123 disks with 900 files!

21. FAST FORTH-Tim Curran 4153 Four Pole Road, Huntington, WV 25701 is for those 'FORTH' enthusiasts needing 40 column auto-repeat, editor locator, etc.

22. DISK MANAGER-Todd Kaplan 5802 N. Western, Apt. #3S, Chicago, IL 60639. I am sorry to say I have nothing further on this program yet.

23.† ENV. AND CATALOG PGM-Trio+ Software.... P.O. Box 115, Liscomb, Iowa 50148. An excellent disk cataloging program that allows you to make your own disk envelopes with your own comments about the individual programs on that disk. Be sure to READ the "Hardcopy Instructions" before trying to use it. The envelope for my freeware (Item 13 above) was done with this program.

24. TI-SINGS-Trio+ see #23 for address. With this fine program, believe it or not, your computer can sing.

25. TI-ARTIST HELPER-Trio+ see #23 above for address. This data disk contains several fonts, slides, pictures, instances to be use with the TI-ARTIST produced by ASGARD SOFTWARE in Rockville, MD. Trio+ is also a 'purty good' source of DSDD disks with lifetime guarantees for only 75 cents apiece!

26. THE DIRECTOR-Ron Rutledge 1020 3rd St., Waukee, IA 50363. An Extended Basic program database that allows cataloging disk-based programs.

27. PRBASE-William Warren 2373 Ironton St., Aurora, CO., 80010. An Assembly language database program with full screen editing and fast sorts. (ED NOTE: An excellent general data base with some problems with report printing. See the article in this June issue of B B and P.) XXX

28. HBMPRINT-Bob Lawson 16223 Mill Point Drive, Houston TX 77059. A utility to print Household Budget Management Module files, excellent!

29. DISK FILE CATALOGER-Jim Williams.... 5217 122 PL. SE., Bellevue, WA 67115. A disk cataloger, additional information coming later.

30.† MASS-TRANSFER-Stuart Olson 25322 W. Wayside Place, Lake Villa, IL 60046. An assembly language Terminal Emulator, menu drive, x-modem transfers, capable of multiple x-md transfers all at once. Asking \$10 plus your disk and a reuseable mailer.

31. CHECKBOOK & BUDGET MANAGER-John Taylor, 2170 Estaline Drive, Florence, AL 35630. An extremely efficient program for both checkbook and budget maintenance. Send two disks in a reuseable mailer with postage. XXX

32. SUPERBUG II-Edgar L. Dohmann Route 5, Box 84, Alvin, TX 77511. An excellent enhancement of TI's Superbug, and it includes change-of-output device from your screen; color toggles, added commands, and much more. \$10.00 XXX

33. TEATH-Ken Carruthers 3537 Faberge Way, Sacramento, CA 95826. A Terminal Emulator program written in FORTH language. This is a must for those interested in the FORTH language. \$5.00 plus disk and stamped mailer.

34. PRO 99ER BBS-Mark Hoogendoorne 21 Long St., Burlington, MA 01803. This is a TI BBS with true TE transfer capabilities!

35. # FUNLWRITER-Funnelweb FarmTony & Will McGovern, 215 Grinwell St., Kotara, NSW 2288 AUSTRALIA. Version 3.2 was issued in March 1986. I have tried this one, and it will do everything TI-WRITER will do, plus more! And it uses Extended Basic rather than the TI-WRITER cartridge. Tony & his son Will says "you will end up leaving your TI-WRITER cartridge in the drawer"! This one contains version 2.3 of DM1000, DISKO, and E/A all commingled and interconnected-don't attempt to separate them. (ED NOTE: Version 3.2 is the slickest software program I have seen. It eliminates the need for the DM11 module, the TI-Writer module, and the E/A module. Just leave the XB module plugged in all the time. The authors tell me that they WILL NOT SEND free copies to the United States. Version 3.2 is available from Guy Stephan Romano for \$2.50 on his disk using his postage. Call Romano daily 9-4 Pacific time at 415-753-5581 for more information.) XXX

36. # RMJ MAILING LIST-Joe Muvolini....2982 Whileaway Cir W, Colorado Springs, CO 80917. A handy program that CAN hold up to 900 names and addresses! It runs in Extended Basic.

37. # BILL'S MIXTURE-Bill Rodriguez....32150 Seneca St., Hayward, CA 94544. An interesting mix of original Catalogers and Sprite-designers, along with one of the best Morse Code practice programs. Including the source codes for one or two of them, there are twelve different programs all written by a non-professional programmer. Send a disk and a re-useable mailer, along with a couple of dollars for the whole disk of interesting programs.

38. # BEAXS-Paolo Bagnaresi....Via J.F. Kennedy 17, 20097 San Donato Milanese, Italy----or LaVerne Searcy....110767 Janacha Blvd., #175, Spring Valley, CA 92077. This is not really FREEMWARE, but doggone close to it. This is the Editor/Assembler on disk! I can't find anything my E/A cartridge can do that this one can't. And this one works excellently with Paolo's version of TI-WRITER described in item #39 below.

39. # BA-WRITER-see both addresses in #38 above. This word processor does everything TI-WRITER can do, and more....Faster, more convenient, everything! The price of these two disks, plus a third disk just for the documentation, is \$18.00 U.S. currency. Never Send cash by mail. Use postal money orders or international money orders obtainable from your bank. There sometimes is difficulty in cashing U.S. money orders overseas, but never in Spring Valley, California.

40. JACKET**E/A-Chris Morgan....As of this date I don't have an address for him, or many particulars on his program. All I know is that it is an Assembly-language program taking 41 sectors on a disk to make excellent envelopes for your disks. The only source I know at this time is that it is in the library of the Houston User Group (HUG), The Librarian, 9122 Hammerly, Houston, TX 77080.

41. # CREATIVE FILING SYSTEM....Mark Beck 166 Delaware Circle, Jacksonville, AR 72076. This is an excellent data-base program, and his user group is using it as a fund-raiser, so be sure to send a monetary contribution, as well as a disk and reuseable mailer.

NOTE**NOTE**The following 'brief' information is all I have at this time. More descriptions will be added to the next 29 later (through #70).

42. MERGE FILE EDITOR-Michael C. Amundson....P.O. Box 533, Bowling Green OH 43402---\$5.

43. TAXMASTER-Howard Arnold....210 Beach Valley Road, Lewisville, NC 27023---\$5. (ED NOTE: This calculates and prints 1985 fed income tax directly onto the fed tax forms. Maybe Howard will write one for 1986 taxes.) XXX

44. CALENDAR PROGRAM-Richard Bailey....???

45. DRAGON STORM-L. E. Benson....P.O. Box 283, Eden NC 27288. DSSM#1; d-\$10. XXX

46. SPREADSHEET-Peter Chalamish....110 Post Ave., Apt 104, New York City, NY 10034. DSSM/#5. (ED NOTE: The author wrote in April that he can't send out any more copies of his program because he no longer owns a TI computer! Does anybody know if this program really exists?)

47. WYCOVE FORTH GRAPHICS-Barry Comer....2 Cleveland Crescent, Dartmouth, Nova Scotia, Canada B3A 2L6. D#1.

48. TRIVIA-Danny Cox....1861 TheElms Ave., Memphis TN 38127. DSSM; d/\$5. XXX

49. GRAPHICS DEMO-Danny Cox....see #48. DSSM;d\$5.

50. # WEATHER FORECASTER and LAWMOWER-Gary Cox....3174 Melbourne, Memphis TN 38127. Besides the two programs at the beginning, this disk contains a third one that is a simple database for storing names, addresses, phone numbers, and up to four lines of comments. His weather predictions are amazingly accurate. The Lawmower game is worth more than \$5.00. Send him also a disk and reuseable mailer. He gives fast replies. XXX

- 51. SEARCH OF XYLOSE-Dave Dalton...920 Hillview Dr., Marion IA 52302.
- 52. RESIDENT DISK MANAGER-Mike Dodd...116 Richards Drive, OliverSprings TN 37840. DSSM
- 53. MPG-Fineline Software...3 Wendy Lane, Marlboro NJ 07746. DSSM/\$4.
- 54. 2 DISKS OF MUSIC-Bill Knecht...815 Yorkshire, Pasadena TX 77503. 2DSSM/\$6 or both. XXX
- 55. UNIVERSAL DISASSEMBLER-Rene LeBlanc...8719 E. San Lucas Dr., Scottsdale AZ 85258. XXX
- 56. FORTH CONFIGURATION-The same Rene LeBlanc. 2DSSM XXX
- 57. FORTH BACKUP-Jim Lewis...1907 Trout Valley Rd., Champaign IL 61821. DSSM.
- 58. DIRECTOR '99'-Robt. Neal...P.O. Box 216R, Romeoville IL 60441. DSSM/\$5;d/\$10. (ED NOTE: An excellent disk program indexer which allows you to add your comments about each program and also allows you to index your modules with comments. Requires 2 disk drives) XXX
- 59. 42 PROGRAMS-Steve Paterson...2351 Ragan Woods, Toledo OH 43614. DSSM/\$2. XXX
- 60. C99 COMPILER-Clint Pulley...38 Townsend Ave., Burlington ONT L7T1Y6 Canada. \$20.
- 61. COMPUTER CRAPS-Ramssoft Enterprises...1501 E. Chapman Ave., Suite 338, Fullerton CA 92631. (ED NOTE: This is a very complete version of Las Vegas style craps with excellent graphics.) XXX
- 62. QUAD AND GAMMAMATCH-Tony Robinson...P.O. Box 76799, Vancouver B.C. Canada V5R 5S7. D61/\$5.
- 63. HONEBREW MODULE SOFTWARE-David R. Romer...213 Earl St., Walbridge OH 43465. \$6.
- 64. TI-SORT-David R. Romer...see above. \$6.
- 65. XBASIC DISK CATALOGER-Ron Rutledge...1020 Third St., Waukee IA 50263. DSSM.
- 66. ASSEMBLY UTILITIES-Silver Wolf Software...P.O Box 4242, Santa Rosa CA 95402. DSSM. (ED NOTE: These handy utilities load into mem expansion and are then CALL LOADED into an XB program as needed.) XXX

- 67. FILEREADER-Martin A. Smoley...6149 Bryson Dr., Mentor OH 44060. DSSM/\$5; d\$2. (ED NOTE: Reads any kind of non-PROGRAM file to the screen in ASCII) XXX
- 68. SIDEPRINT-Jim Swedlow...7301 Kirby Way, Stanton CA 90680. d-\$10.
- 69. RAPID SCROLL-Jurgen Switalski...218 Lake St., Northville MI 48167. SSM\$3-\$5. (ED NOTE: This takes a D/V 80 text file and scrolls it one pixel at a time up/down and left/right. If only TI-Writer could do this! Text can be scrolled in 40 column or 64 column [that's right, 64 almost unreadable columns] mode.) XXX
- 70. MAIL-CALL-Gary D. Watts...1739 Burning Tree Drive, Vienna VA 22180. DSSM.
- 71.* RETRACK/OB-James Schroeder...2856 N. Holten St., Milwaukee, WI 53212. You can throw away all your other copiers when you get this one. I haven't found a disk yet that it wont copy. The latest version is dated 4/4/86. If you don't send Jim \$10 or so for this one, you'll be sorry!
- 72.* TI99/OPOLY-The Sydney Australia User Group...P.O. Box 149, Pennant Hills 2120, N.S.W. AUSTRALIA. It gives you a chance to play that old favorite 'Monopoly' on your computer. XXX
- 73.* MATH/MAN and MYSTERY/SPELL-Mark Beck...see his address in item #41 above. These are educational type programs for your children. They are not completely original by Mark, but they contain improvements he has made to the original programs that you found in such places as Home Compute, etc. Send him \$5 and disk if you have children in your home. Well worth it!

 ADDITIONAL FREEMWARE PROGRAMS THE B B
 and P EDITORS KNOW ABOUT

- 74. SUPER MAIL LIST (see #59 above for address) ... Very fast compared to others of this type, written in assembly language. \$3-5 donation.
- 75. MENU LOADER (see #59 for address) Displays menu of assembly language programs on a disk runs them with the push of a button. Similar to an XD LOAD program, but designed for programs that need the E/A module. \$3-5 donation.

76. DISK+AID-Donald Thomson... 1461 Beach St. Muskegon MI 49441-1099. Rated A in Micropendium. This unique utility will read from and write to any disk sector or any memory location (RAM, ROM, GROM) in either ASCII or HEX and print the results on the screen or a printer. Plain English translations of what is on the early sectors of a disk are also provided. An examination copy and PARTIAL on disk documentation will be given to user groups upon request and mailer for free distribution. The most recent version plus COMPLETE printed documentation is available to individuals direct from the author for \$20. XXX

77. MEMORY MANIPULATOR A reduced version of #76 from the same address. This version doesn't access disk sectors. Examination copy with PARTIAL documentation given to user groups for free distribution. Latest version with COMPLETE printed documentation available from author for \$10. XXX

78. CREDIT CARD DATA BASE See #76 for address. Free to distribute examination copy given to user groups upon request and mailer. Latest version and COMPLETE documentation from author for \$10. XXX

79. MS-ADVENTURES See #10 for author and address. Three linked all text adventures that are very similar to Scott Adams adventures in the way they operate and in their high quality. My kids love them. These adventures come with SOLUTIONS that actually work. Yes, these complex adventures actually can be finished. If you give up, the solution tells you how. If you like the Scott Adams adventures, these are at least as good. XXX

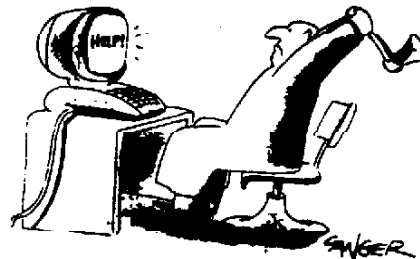
80. PUBLIC DOMAIN GAMES, MUSIC, EDUCATION. See #10 above for author and address. XXX

81. DAYS OF EDEN and DOORS OF EDEN- Chaeirs... Box 27547 Albuquerque NM 87125. These adventure games are based on the bible and require the ADVENTURE module. You must solve the first game to begin the second. Since these games try to teach some principals of the Christianity, they are not "fiction" in the same sense as other adventure games. If you answer incorrectly you aren't killed as in a normal adventure. You go to hell instead! My 7 year old son went to hell numerous times as he attempted to solve the first game and he got quite upset about this. He had trouble distinguishing fiction from reality. Perhaps these games should only be played by adults. Send \$2 and receive the games by return mail on your choice of disk or tape. XXX

82. BACKUP- Michael A. Ballmann... 217 NW 43rd St. Apartment #3. Oakland FL 33309. This is a track copier that will backup almost any disk except Advanced Diagnostics by Millers Graphics. Two disk drives, the E/A module, and a TI disk controller card are needed. XXX

 The Lima TI User Group has received extensive "For Sale" listings of hardware and software from two commercial dealers. THE ADVENTURE STORE offers a wide variety of adventure games for the TI994a, some of which we have not seen in other catalogues. The ADVENTURE STORE is at P.O. Box 320. Roscoe IL 61073. No phone number is given.

 COMPETITION COMPUTER PRODUCTS 2629 W. National Ave., Milwaukee WI 53204 has a very large list of hardware and software. Their prices seem somewhat high, but if you need a particular item, they may very well have it in stock. They list Peripheral Expansion Box systems with disk drives, etc. Those TI expansion boxes are hard to find these days. Call them at 800-662-9253



At our May meeting the Lima Area User Group saw a demonstration of PRBASE, one of the best data base programs available for the TI99/4A. The review of PR-BASE below is reprinted from the April 1986 issue of Micropendium. Additional information about PR-BASF is found elsewhere in this issue of B B & P.

PRBASE

This database comes in handy

By JOE NUVOLINI

This month we're going to take a look at Bill Warren's new database program, PRBASE.

Bill is secretary of the Rocky Mountain 99ers and lives in Aurora, Colorado. PRBASE is being distributed under the Freeware concept, and Bill is asking only \$10 for the program, an exceptional buy.

PRBASE is a disk-based fast access database management system written in assembly language. The program currently loads from the Editor/Assembler, the Utilities option of TI-Writer or from Extended BASIC.

The first thing you do upon receiving the program is to print the PRBASE:DOC file. There is a short file called HOW2PRINT that tells you how to do it, but it is printed using option 4 of the Editor/Assembler. Make sure you have plenty of time, because it takes a while to print but is an excellent product. Now read it!

Once that is done, you are ready to start. Load the file called CREATE. Now you can design an input screen using a maximum of 255 characters divided into a maximum of 32 fields. Note that if you set off the actual input areas of the screen with brackets, everything you input will be upper case regardless of the alpha lock position. If you set them off with braces, you can enter either upper or lower case.

You can lay out the input screen any way you like and even add graphic borders if you choose. One note of caution here: If in the create mode you press FCTN 3, ERASE, while working on your input screen, it erases the entire screen, not just the line you are on. The mailing labels and reports formats are also generated here and can be up to 10 lines long. The files generated by PRBASE are Display Variable/80 and are compatible with TI-Writer and the Editor/Assembler. Save the input screen, label and report formats, once designed, on the disk that will contain

Review

Report Card

Performance A+
Ease of Use..... B
Documentation A+
Value..... A
Final Grade..... A

Cost: \$10

Manufacturer: William M. Warren,
2373 Ironton St., Aurora CO 80010

Requirements: Console, monitor or
TV, memory expansion, disk system,
Extended BASIC, TI-Writer or Edit-
or/Assembler, printer optional

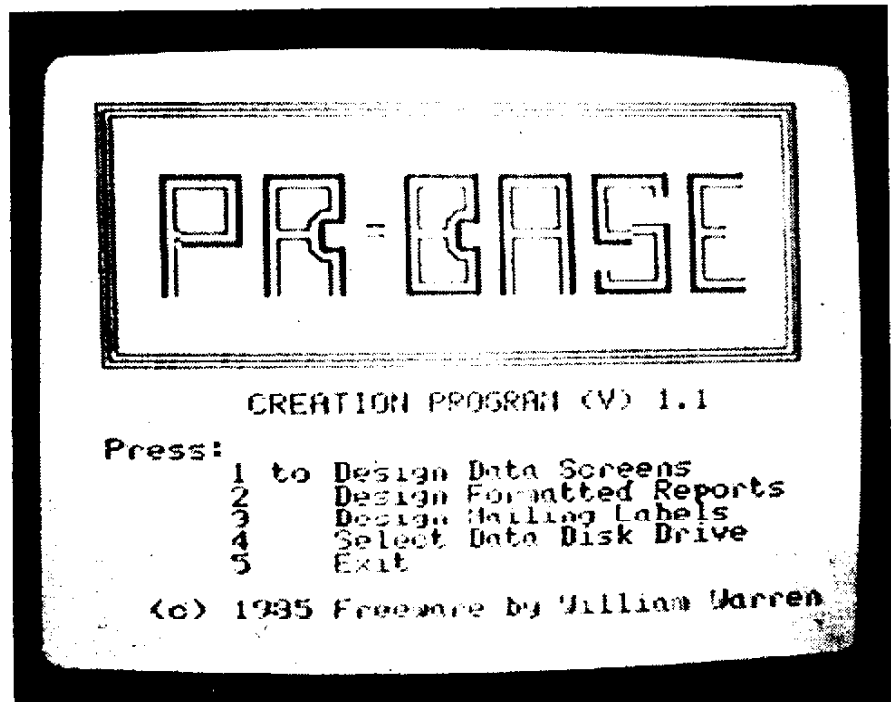
your data. The first nine sectors of your data disk will contain the information you design with the CREATE file. The remaining sectors are reserved to store your data, one input screen per sector or 350 entries. Bill is planning to increase that number for those

with double-sided capacity.

Now you're ready to use the PR-BASE program itself. Load it and enter your datafile name and, voila, your input screen is displayed. Note that when you first access your data disk the program will build an index on the first field in your input screen. Therefore, you should place your most significant piece of data at this location. You can change the index field by selecting I, moving the cursor to the desired field and pressing FCTN 6, PROC'D. You must do this if you plan to sort S on the field.

Once indexed, the contents can be viewed by entering V and holding down the space bar. The contents will display across the bottom of the screen.

Now, let's look at the other functions available in this mode. When you press H you get a help screen that tells you what happens when you press the other keys. If you want to add records, press A, and the program will display



PRBASE—

the first empty record, starting with the currently displayed record. It's always good, therefore, to first press N (screen number) and enter 1 to return to the first screen before selecting A. Now input your data and it will be saved to your data disk after you complete each screen.

If you want to go back and edit a screen you have already finished you must first find it, so let's look at the three search options. The first is global search, G. Here you can input a string up to 19 characters long and the program will search for the string in all the fields on all the screens. It takes about 90 seconds to search the entire disk. On all the searches, pressing FCTN 6 after finding the first occurrence will continue the search. If you press FCTN 7 the current record displayed will be printed to the currently selected output device using the last selected report format. Pressing FCTN 8 will print all of the occurrences of the string selected. The F search will find a string but will search only one field in all the screens, obviously faster. The last is the U or use index search. This search will find any record on the disk in less than one second. You must use a string that is in the current index field.

Now that you have found your record you can edit it by pressing E and moving the cursor over the field you want to edit with the ENTER key or the FCTN arrow keys. Enter D if you want to delete a record. The program will ask you if you are sure before deleting the record displayed. The L command will print your mailing labels, while R will give you a menu of your report formats to select from. The labels currently print one across but will be changed to offer other options in a future version. The O command allows you to re-select your data output drive number and your output device, i.e., PIO/1, etc. The P command will print the current screen to the output device selected in 40 or 80 column format. The B command will allow you to "boot up" another data disk without reloading the PRBASE program. Q stands for quit, and after you select it, you will be asked if you are sure. Answer Y and you are gone.

The C command needs some explanation. It will make a copy of your data disk if you want one. It must be copied by a program like Masscopy. The TI Disk Manager will not do it. It will tell you that the disk is not formatted. If you put Masscopy on your PRBASE disk, you should put MASSCOPY, MC3 and MCINST on it, renaming the MASSCOPY file COPY. The C command may be done away with in a future version and the copy program loaded from the Extended BASIC loader instead. I, for one, like this option better.

So much for the action commands. When you use the PRBASE program, the following are also available:

- FCTN X Scroll to next screen
- FCTN E Scroll to previous screen
- FCTN D Next alphabetical screen
- FCTN S Previous alphabetical screen

- CTRL X Rapid scroll screen 1-350

- CTRL E Rapid scroll screen 350-1

- CTRL D First alphabetical screen

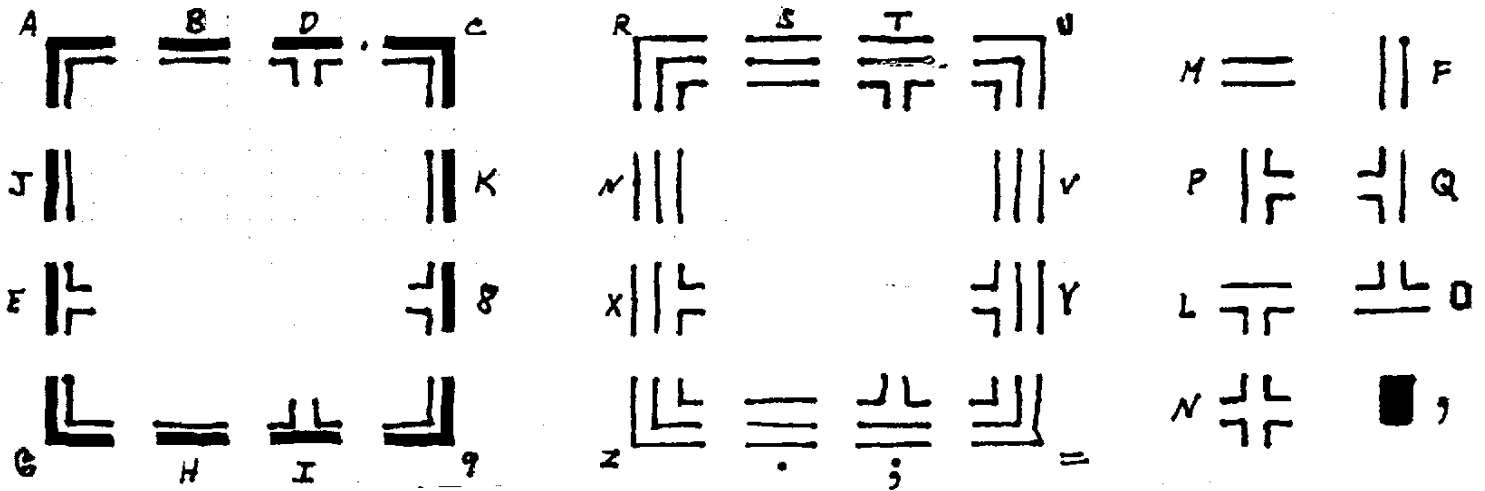
I've told you all of the good things, now there are a few negatives. The problems listed here are really only inconveniences. They include the lack of two-by labels, the lack of a skip over perf when printing long lists and the fact that setting up the reports and mailing labels is a bit tedious and confusing. I have had several calls on this and am apparently the only one that I know in our group who has been successful in getting them all to work. The skip over perf can be overcome by printing only 50 names at a time. Some of these things will be corrected in future versions while others will not.

This may seem a bit longwinded, but, believe me, I have only touched the surface. The possibilities available for locating data and formatting reports are enormous. Whether you use it for keeping track of club information, as we are doing in our users' group, or just for your own personal mailing list, you will find this program an excellent buy at \$10.

This one is a winner. Between Dave Vaughan (BITMAC), Tom Frerichs and Mike Holmes (4A/Talk) and Bill Warren (PRBASE), the Rocky Mountain 99ers have a wealth of programming talent. It is unlikely that three such fine programs have come out of any other single club in America.

PRBASE reference chart for "CREATE" subprogram
by VIC SCHAFFNER

Press <CTRL> and your letter choice to make graphic character shown.



Press <FCTN> key
and this key to get this operator:

- E ----- UP CURSOR
- S ----- LEFT CURSOR
- D ----- RIGHT CURSOR
- X ----- DOWN CURSOR
- 1 ----- Delete character under cursor
- 2 ----- Insert space under cursor
- 3 ---DANGER---- Erase complete screen
- 4 ----- Halt output to PIO or RS232
- 6 ----- PROCEED after screen design is finished
- 9 ---DANGER---- Return to CREATE title screen. NO SCREEN IS SAVED

<ENTER> ----- Moves cursor to beginning of next line.

[] ----- All data entered between these is displayed as UPPER CASE

{ } ----- Data entered between these is displayed in UPPER and LOWER case.

SCREEN While at "CREATE TITLE SCREEN" press
COLOR ----- "F" to select foreground color, and
CHOICE "B" to select background color.

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MUSICAL EDUCATION
KALEIDOSCOPES AND DISPLAYS

For descriptions of these send a dollar for my catalog!

The April Micropendium had a rather slow routine to count the number of words in a D/V text file. I think the following will be much faster. It ignores any lines beginning with a period (TI-Writer formatter commands), otherwise counts each cluster of characters followed by a space, plus the last cluster on the line.

```
10 !WORDCOUNT by Jim Peterson
100 DISPLAY AT(12,1)ERASE AL
L:"INPUT FILENAME? DSK" : A
CCEPT AT(12,20):F$ : OPEN #
1:"DSK"&F$,INPUT
110 A=1 : LINPUT #1M$ : I
F ASC(M$)=46 THEN 130
```

```
120 X=POS(M$," ",A):: IF X#0
THEN 130 : IF X=A THEN A=X
+1 : GOTO 120 ELSE F=1 : C
=C+1 : A=X+1 : GOTO 120
130 C=C+F : F=0 : IF EOF(1
)<>1 THEN 110 : CLOSE #1 :
DISPLAY AT(12,1)ERASE ALL:"
APPROXIMATELY "&STR$(C)&" WO
RDS"
```

Have you tried those black write-protect tabs, made of a material similar to electrical tape? They do not become dog-eared from bumping against the drive slot, and do not leave the disk sticky when you remove them.

```
100 !TIGERCUB GRAPHPRINT by
Jim Peterson
110 !Will output to printer
a line graph of 31 items of
data, as for instance the
temperature for each day of
a month
120 !Values must be positive
integers within a range of
75 from minimum to maximum
130 M$=RPT$(" ",65):: DIM T
$(31),D$(75):: MN=10000
140 DISPLAY AT(12,1)ERASE AL
L:"Input data - maximum 31":
"items. Enter to finish"
150 FOR X=1 TO 31 : DISPLAY
AT(14,1):X;TAB(4);CHR$(1)::
ACCEPT AT(14,4)VALIDATE(DIG
IT)SIZE(-5)BEEP:T$(X):: IF T
$(X)=CHR$(1)THEN X=X-1 : GO
TO 170
160 T=VAL(T$(X)): MX=MAX(MX
,T):: MN=MIN(MN,T):: NEXT X
170 RN=MX-MN : IF RN>75 THE
N PRINT "EXCEEDS MAXIMUM RAN
GE OF 75" : STOP
180 IF MX>75 THEN AD=MX-75
190 OPEN #1:"PIO",VARIABLE 1
32 : PRINT #1:CHR$(15);CHR$(
27);CHR$(51);CHR$(12):: PRI
NT #1:RPT$(" ",132)
200 DISPLAY AT(12,1)ERASE AL
L:"Wait, please...": :.....
.this takes time"
210 LN=LEN(STR$(MX)): FOR J
=1 TO 75 : J$=STR$(76+AD-J)
220 IF J>66+AD THEN J$=J$&"
"
230 IF J/2=INT(J/2)THEN D$(J
)=RPT$(" ",LN)&SEG$(M$,1,132
```

```
PAGE 10
-LM)ELSE D$(J)=J$&SEG$(M$,1,
132-LM)
240 NEXT J : PRINT #1:RPT$(
" ",LN)&SEG$(M$,1,132-LM)
250 J=1 : T=VAL(T$(J))-AD :
T=76-T : D$(T)=SEG$(D$(T)
,1,J#4+4)&CHR$(239)&SEG$(D$(
T),J#4+6,255):: J=J+1
260 T2=T : T=VAL(T$(J))-AD
: T=76-T : FOR N=T2 TO T S
TEP (T2-T)+ABS(T)=T2):: D$(N
)=SEG$(D$(N),1,J#4+2)&CHR$(2
53+(T<T2))&SEG$(D$(N),J#4+4,
255):: NEXT N
270 J=J+1 : D$(T)=SEG$(D$(T
),1,J#4)&CHR$(239)&SEG$(D$(T
),J#4+2,255):: IF J<=X THEN
280
280 FOR J=1 TO 75 : PRINT #
1:D$(J):: NEXT J : PRINT #1
290 T=0 : FOR J=1 TO 31 :
PRINT #1:TAB(T);STR$(J);: T
=T+4 : NEXT J
```

When you are analyzing an Extended Basic program, or modifying it, it is often easier to work with single-statement lines. This program will break all multi-statement lines into single-statement lines, except when they are followed by IF or ELSE. When you are finished modifying, a Compactor or Smash program can be used to compact it again.

```
100 !DECOMPACTER by Jim Peter
son
110 DISPLAY AT(3,5)ERASE ALL
:"TIGERCUB DECOMPACTER": : "
Program must first be -": : "
RES 100,100": : "SAVE DSK(fil
ename),MERGE"
120 DISPLAY AT(12,1):"INPUT
FILENAME?": "DSK" : ACCEPT A
T(13,4):IF#
130 DISPLAY AT(12,1)ERASE AL
L:"OUTPUT FILENAME?": "DSK" :
ACCEPT AT(13,4):OF#
140 OPEN #1:"DSK"&F$,INPUT
,VARIABLE 163 : OPEN #2:"DS
K"&OF$,OUTPUT,VARIABLE 163 :
LN=100
150 LINPUT #1:M$ : P=POS(M$
,CHR$(130),3):: IF P# THEN
PRINT #2:M$ : GOTO 270
160 A$=SEG$(M$,1,P-1): IF P
OS(A$,CHR$(129),1)<> OR POS
(A$,CHR$(132),1)<> THEN PRI
```

```

NT #2:M# :: GOTO 27#
17# PRINT #2:A#&CHR$(#)
18# AN=LN+1 :: GOSUB 28#
19# M#=SEG$(M#,P+1,25#)
20# P#POS(M#,CHR$(13#),1)
21# IF P=# THEN PRINT #2:LN#
&M# :: GOTO 27#
22# A#=#SEG$(M#,1,P-1)
23# IF POS(A#,CHR$(12#),1)<>#
OR POS(A#,CHR$(13#),1)<>#
THEN PRINT #2:LN#&M# :: GOTO
27#
24# PRINT #2:LN#&A#&CHR$(#)
25# AN=AN+1 :: GOSUB 28#
26# GOTO 19#
27# LN=LN+1# :: IF EOF(1)<>#
1 THEN 15# ELSE CLOSE #1 ::
CLOSE #2 :: END
28# LN#=#CHR$(INT(AN/25#))&CH
R$(AN-25#*INT(AN/25#)):: RET
URN

```

I still think of the TI as a HOME computer, and I still think that the home computer is an invaluable educational tool - but I guess not many folks agree with me. I had thought of writing full disks of a progressive series of lessons on one subject, but my present two full disks of math education have sold a combined total of 7 copies in 7 months, so that would obviously be a waste of time.

```

I had written this next
program for that purpose and
I guess it's no use wasting
it, so -
18# CALL CLEAR :: CALL TITLE
(5,"TAKE AWAY"):by Jim Peter
son
11# DISPLAY AT(3,1#):"COPYKI
GHT":TAB(1#):"TIGERCUB SOFTW
ARE":TAB(1#):"FOR FREE":TAB(
12#):"DISTRIBUTION":TAB(11#):
"SALE PROHIBITED"
12# CALL PEEK(-28672,A#):: I
F A#=# THEN 15#
13# DATA FINE,NO,GOOD,UHGH,R
IGHT,TRY AGAIN,YES,THAT IS N
OT RIGHT
14# FOR J=1 TO 4 :: READ RIG
HT$(J),WRONG$(J):: NEXT J
15# FOR D=1 TO 100# :: NEXT
D :: CALL DELSPRITE(ALL)
16# CALL CLEAR :: CALL CHAR(
95,"FFFF"):: CALL MAGNIFY(2)

```

```

:: RANDOMIZE :: CALL SCREEN(
14):: FOR SET=5 TO 8 :: CALL
COLOR(SET,16,1):: NEXT SET
17# CALL CHAR(12#,"E7#0#42#0#1
8#0#7E#0#0#E7#0#42#0#99#423CE7#0#4
2#0#99#423CE7#0#42#0#3C#42#0#")
)
18# CALL CHAR(124,"#E#0#0#4#1#
0#7#0#0#7#0#0#2#0#0#0#E#1#0#0#")
19# DISPLAY AT(3,1#):"TAKE A
WAY" :: CALL CHAMELEON
20# CALL COLOR(14,2,2):: CAL
L HCHAR(4,4,143,2):: CALL HC
HAR(5,4,143,2):: CALL SPRITE
(#25,12#,11,25,25)
21# T=T+1 :: N=1-(T>5)+(T>15
):: G=1#-(T>5)#0#-(T>15)#81#
:: M=#-(T>5)#1#-(T>15)#9#
22# X=INT(6#RND+M):: Y=INT(6
#RND+H):: IF Y>X THEN T=X :
: X=Y :: Y=T
23# IF X=X2 OR Y=Y2 THEN 22#
:: X2=X :: Y2=Y :: Z=X-Y
24# GOSUB 25# :: GOTO 21#
25# GOSUB 26# :: GOSUB 28# :
: GOSUB 31# :: FOR D=1 TO 2#
# :: NEXT D :: CALL DELSPRIT
E(ALL):: DISPLAY AT(18,1)::
CALL CHAMELEON :: CALL SPRIT
E(#25,12#,11,25,25):: RETURN
26# FOR J=1 TO LEN(STR$(X)):
: : A(J)=VAL(SEG$(STR$(X),J
,1)):: NEXT J :: FOR J=1 TO
LEN(STR$(Y)): : B(J)=VAL(SEG$(
STR$(Y),J,1)):: NEXT J
27# FOR J=1 TO LEN(STR$(Z)):
: C(J)=VAL(SEG$(STR$(Z),J,1
)):: NEXT J :: W=LEN(STR$(Z))
-LEN(STR$(X)): RETURN
28# R=96 :: CC=96 :: FOR J=1
TO N :: CALL SPRITE(#J,48+A
(J),11,R,CC):: CC=CC+16 :: N
EXT J
29# R=116 :: CC=96 :: FOR J=
1 TO N :: CALL SPRITE(#4+J,4
8+B(J),11,R,CC):: CC=CC+16 :
: NEXT J
30# CALL HCHAR(10,12,95,N#3)
:: CC=CC-16 :: RETURN
31# R=14# :: FOR J=LEN(STR$(
Z))TO 1 STEP -1 :: IF LEN(ST
R$(X))=1 THEN M=CC :: GOTO 3
3#
32# FOR M=CC TO CC+8 :: CALL
LOCATE(#J-M,96,M,#J+4-M,116
,M):: NEXT M
33# IF A(J-M)>B(J-M)THEN 36
# :: CALL SPRITE(#28,49,16,9
6,M-9)
34# IF F3=1 THEN 36# :: F1=1

```

```

: A(J-M-1)=A(J-M-1)-1 :: I
F A(J-M-1)<# THEN A(J-M-1)=9
: : F2=1 :: A(J-M-2)=A(J-M-2
)-1
35# CALL SPRITE(#22,48+A(J-M
-1),16,8#,M-24):: IF F2=1 TH
EN CALL SPRITE(#21,48+A(J-M-
2),16,8#,M-4#)
36# CALL SPRITE(#27,45,16,11
6,M-12)
37# CALL SPRITE(#2#,63,11,R,
M)
38# CALL KEY(3,K,ST):: IF ST
<1 OR K<48 OR K>57 THEN CALL
PATTERN(#2#,32):: CALL PATT
ERN(#2#,63):: GOTO 38#
39# CALL DELSPRITE(#2#,#2B):
: CALL SPRITE(#12+J,K,11,R,M
)
40# IF K-48<>C(J)THEN GOSUB
45# :: CALL DELSPRITE(#12+J)
: : F3=1 :: GOTO 33#
41# CALL DELSPRITE(#27):: IF
F1=1 THEN 42# ELSE IF F2=1
THEN 43# ELSE 44#
42# F1=# :: CALL DELSPRITE(#
J-M-1):: FOR P=8# TO 96 :: C
ALL LOCATE(#22,P,M-24):: NEX
T P :: CALL SPRITE(#J-M-1,48
+A(J-M-1),16,96,M-24):: CALL
DELSPRITE(#22):: GOTO 44#
43# F2=# :: CALL DELSPRITE(#
J-1-M):: FOR P=8# TO 96 :: C
ALL LOCATE(#21,P,M-24):: NEX
T P :: CALL SPRITE(#J-1-M,48
+A(J-1-M),16,96,M-24):: CALL
DELSPRITE(#21)
44# CC=CC-16 :: NEXT J :: 6#
SUB 48# :: F3=# :: RETURN
45# DATA 123,124,125,123,124
,125,123,12#
46# IF A#=# THEN 47# :: CALL
SAY(WRONG$(INT(RND#4+1)))
47# RESTORE 45# :: FOR JJ=1
TO 8 :: READ P :: CALL PATTE
RN(#25,P):: XX=2^25# :: NEXT
JJ :: RETURN
48# DATA 121,122,121,122,121
,122
49# IF A#=# THEN 50# :: CALL
SAY(RIGHT$(INT(4#RND+1)))
50# RESTORE 48# :: FOR JJ=1
TO 6 :: READ P :: CALL PATTE
RN(#25,P):: XX=2^25# :: NEXT
JJ :: RETURN
51# SUB CHAMELEON
52# M#="18#0#66#5AC342DB667E1#
81#0#99#5AC3A5E78142BD240866#
B1429924#0#7E5AC3A53C2418#0#FF
DB5AFF7EFF#0#99#81#0#66#6#1#0"

```

```

53# RANDOMIZE :: CALL CHAR(1
28,SEG$(M#,INT(43#RND+1)#2-1
,16)):: X=INT(14#RND+3)
54# Y=INT(14#RND+3):: IF Y=X
THEN 54# :: CALL COLOR(13,X
,Y)
55# CALL HCHAR(1,2,128,3#)::
CALL HCHAR(24,2,128,3#):: C
ALL VCHAR(1,31,128,96):: SUB
END
56# SUB TITLE(S,T#)
57# CALL SCREEN(S):: L=LEN(T
#):: CALL MAGNIFY(2)
58# FOR J=1 TO L :: CALL SPR
ITE(#J,ASC(SEG$(T#,J,1)),J+1
-(J+1=S)+(J+1=S+13)+(J+14)#1
3,J*(17#L),1#+J*(2#L/1))::
NEXT J
59# SUBEND

```

When you give your printer instructions, it remembers them until you turn it off. That is why you may find that your letter to Aunt Sally is being printed in double width underlined italics. The solution is found in another gobbledegook paragraph in the Gemini manual - "when (ESC "E") is sent to the printer, the conditions of the printer are initialized."

In plain English, OPEN #1:"PIQ" :: PRINT #1:CHR\$(27);"E" in your program or CTRL U, FCTN R, CTRL U, SHIFT 2 at the beginning of your TI-Writer text will cancel out any special orders the printer is still remembering and return it to its default conditions.

Here's a bright idea by Scott King in the AVTI US newsletter. When you load a program in order to modify it, put a reminder of its filename in the first line, such as 1 ! SAVE DSK1.NAME . Then, when you are ready to save it, just list line 1, FCTN 8, use the space bar to erase the ! , and Enter.

MEMORY FULL!
Jim Peterson

