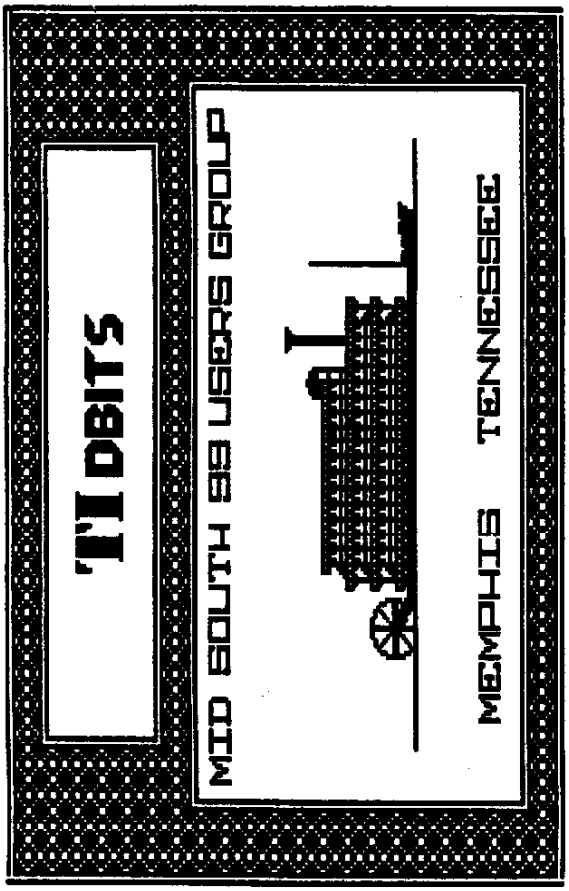

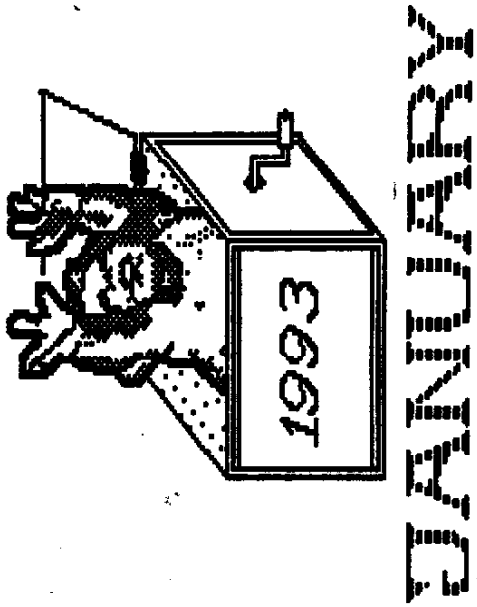

Mid-South 99 Users Group
P. O. Box 38822
Germantown, Tn. 38183-0822

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Newsletter of the MID-SOUTH 99 USERS GROUP-Vol 11, #1-JAN 1993

TIDBITS

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Marshal Ellis	Editor-Technical Interface	901-327-2506
Beery Miller	9640 NEWS BBS Sysop	901-368-0112

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PRESIDENT'S BIT

by Gary W. Cox

The last meeting went very well with about 35 people attending for the Christmas party, thanks to everyone who attended and brought deserts!

The elections were held at the last meeting with the results being:

Richard Hiller as vice-president,
Richard Mann as secretary,
Mac Swope as treasurer,
Gary Cox as president.

We have recieved information on the TI Fest West to be held this year in Utah. The event will take place at the Howard Johnson Hotel in Salt Lake City February 12 - 14th 1993. For more infotmation call the Salt Flats BBS at (801) 394-0054 or write TI Fest West, 1396 Lincoln Avenue, Apt. B, Ogden, Utah 84404.

C ya at this months meeting. , ,

GenPROG Re-released

by Beery Miller
9640 News

from the pages of the Louisville "Bytemonger", Nov. 1992

This package contains:
1) GENASM macro assembler. Runs in MDOS mode. Ideal for developing code for 99/4A and MDOS aplications. Great for C99 programmers.
2)GENLINK linker. Runs in MDOS mode. Full support for code libraries. Ideal for developing applications.
3) GENLIB librarian. Runs in MDOS mode. Allows easy interactive maintanence of code libraries for the linker.
4) Libraries for 99/4A and MDOS programmers, with commonly used routines.
5) GENMAKE make utility. Runs in MDOS mode. Allow an author to easily keep track of file dependencies in programs and large documents. Great for programmers and people who are writing the great American novel. When run, it will update all files which need to be and (optionaly) ignore all files which are already up to date.
6)MDOS programming environment documentation, with programming examples for all MDOS library functions, programming tricks for MDOS.
(Video/Math/Keyboard/Taskheader information will be mailed upon MDOS's completion)
All utilities can be invoked from a batch file, for complete development automation.
The suggesed retail price is $75 (including shipping) for

the entire package, which is available from 9618 NEWS and includes the subsequent followup documentation.

AVAILABLE NOW ONLY FROM; 9648 NEWS
Beery Miller
P. O. Box 752465
Memphis, Tn. 38175

In an effort to help those folks that have their checks cashed byt order undelivered from JP Software, you must enclose a copy of your cancelled check (front and back) and $15.00 (to cover cost of shipping and manual) and you will recieve the latest version.

Also, in an effort to help those that already purchased GenPROG and have the incomplete docs, arrangements will be made at the appropriate time when the documentation is complete to resolve this matter. Nobody will be forgotten.

QuikAccess

by Bill Gaskill
December 1992

Have you ever wished for an easy way to keep track of all the hardware and software you've purchased for your computer over the years? Well don't despair, because you can create such a system in TI-Writer or any of its clones without much work. Then, using the Extended Basic program that follows this article, you'll be able to access the data in your inventory without ever loading it. Here's how.

Set up a table in the TI-Writer editor like the one shown below, paying VERY, VERY close attention to the column positioning of the ITEM, NUMBER, DATE, RETAIL, PAID and VENDOR fields. The numbers in the very first row of the first table shown below are included only for this illustration, as a column guide during setup. You should not include them in the file that you eventually save to disk.

The underline characters after ADVENTURE HINT BOOK must be part of the file because the Extended Basic program uses them as an end-of-file marker. All entries you make in the file MUST also be in between the dashes at the top of the file and the underline characters at the end of the file just as the five records are in the illustration. In other words, the underlines must always occupy the last record in the file.

When you are done setting the file up in your TI-Writer editor, set the tabs so you'll be able to move quickly from field-to-field during data entry. Each tab would of course be set to the left-most character in the field. For example, the tab for NUMBER would be set at column 36, the tab for DATE would be set at column 45 and so on.

```
0123456789/123456789/123456789/123456789/123456789/123456789/123456789/123456789
ITEM                          NUMBER   DATE  RETAIL PAID   VENDOR
----------------------------- -------- ----- ------ ------ ----------
A-MAZE-ING                    PHM 3030 06/92  39.95   4.95 TEXCOMP
ABC'S OF ASSEMBLY LANGUAGE             07/84  10.95   0.00 TEXCOMP
```



```
AC CIRCUIT ANALYSIS           PHT 6044 03/92   3.95   3.95 TM DIRECT
AC CIRCUIT ANALYSIS           PHT 6044 03/92   3.95   3.95 TM DIRECT
ADVENTURE HINT BOOK                    02/92    .95    .95 TEXCOMP
_____________________________ ________ _____ ______ ______ __________
```

When you are done with the file setup it should look like the one shown below.

```
ITEM                          NUMBER   DATE  RETAIL PAID   VENDOR
----------------------------- -------- ----- ------ ------ ----------
_____________________________ ________ _____ ______ ______ __________
```

If it does, then save the file to a disk in DSK1 using INVENTORY as the file name. Make sure to use the SF function so the tab stops are saved with the file. That way you'll still have them for the next time you enter data.

When you do begin data entry, make sure to put zeros in the RETAIL and PAID fields where you don't have a RETAIL price or an amount that you PAID for the item. If you leave any entry blank in RETAIL or PAID the Extended Basic program will error out and fail to produce the desired results.

Sorting data in your INVENTORY file will have to be done with TI-Sort or J. Peter Hoddie's Sort Experiment, or your favorite sort utility. Modifying and deleting records is of course done quickly and easily right in the TI-Writer editor.

The Extended Basic program, which I have named QuikAccess, will let you total and display the RETAIL costs and purchase (PAID) costs in the entire file. You can also selectively search for and print records from the file using Product Name (ITEM data in other words), purchase DATE or VENDOR name fields. Likewise, you may print the entire contents of the file by selecting Product Name search, and then pressing <ENTER> at the "Enter data to find" prompt without typing in any data to look for.

All three search options (menu choices 3,4 and 5) include a "Purchase total" at the end of the printout. If you don't have a printer you can erase the printer name in the Set up Printer option and QuikAccess will print everything to the screen.

Lastly, the default Esc and Page Eject codes under Set up Printer are the codes for Epson and Epson compatible printers. If they don't work for you, then simply substitute the ones that do for your brand of printer.

If you want to avoid keying in this program check with your club's librarian. I sent the actual program along with this article and the listing. If you have to key it in, omit the carets (the ^ symbols) when doing the keying. They only exist in this listing to show how many spaces exist between words.

```
 1 !QuikAccess
 10 IMAGE #####.##
 11 CALL SCREEN(5):: FOR C=2 TO 14 :: CALL COLOR(C,16,5)
```

```
    : : NEXT C
12$ A=2 :: LN=1 :: EC=27 :: PE=12 :: PR$="PIO" :: CALL
    CHAR(126,"FFFF")
13$ ON WARNING NEXT :: ON BR EAK NEXT :: ON ERROR 48$ 14$
    DISPLAY AT(1,1$)ERASE AL L:"QuikAccess": :RPT$("^",28
    )
15$ DISPLAY AT(4,1):"1 - Ret ail price total": :"2 - Purc
    hase price total"
16$ DISPLAY AT(8,1):"3 - Pro duct name search": :"4 - Pur
    chase date search"
17$ DISPLAY AT(12,1):"5 - Ve ndor name search": :"Fctn 7-
    Set up printer": :RPT$("^" ,28): :RPT$("^",28)
18$ CALL KEY($,K,S):: IF K=1 THEN 27$ ELSE IF K=15 THEN
    END ELSE IF K<49 OR K>53 THEN 18$
19$ OPEN #1:"DSK1.INVENTORY",INPUT ,DISPLAY ,VARIABLE 2$$
    IF PR$="" THEN 21$ ELSE OPEN #A:PR$,OUTPUT
21$ ON K-48 GOTO 22$,23$,24$ ,25$,26$,27$
22$ X=52 :: Y=6 :: GOSUB 3$$ :: DISPLAY AT(17,1):"Total
    retail^^^^$" :: DISPLAY AT(17,18):USING 1$$:D :: CLOSE
    # 1 :: GOTO 47$
23$ X=59 :: Y=6 :: GOSUB 3$$ :: DISPLAY AT(17,1):"Total
    purchases $" :: DISPLAY AT(17,18):USING 1$$:D :: CLOSE
    # 1 :: GOTO 47$
24$ C$="" :: X=6 :: Y=3$ :: GOSUB 36$ :: CLOSE #1 :: GOTO
    47$
A5$ C$="" :: X=46 :: Y=5 :: GOSUB 36$ :: CLOSE #1 :: GOTO
    47$
26$ C$="" :: X=66 :: Y=11 :: GOSUB 36$ ::CLOSE #1 :: GOTO
    47$
27$ DISPLAY AT(2$,1):"Esc Code:";EC;"Page Eject:";PE: :P
    R$ :: ACCEPT AT(2$,11)SIZE(- 2)VALIDATE(NUMERIC):EC
28$ ACCEPT AT(2$,26)SIZE(-2) VALIDATE(NUMERIC):PE :: ACCE
    PT AT(22,1)SIZE(-2$):PR$
29$ IF PR$="" THEN A=$ :: GO TO 14$ ELSE GOTO 14$
3$$ C,D,R=$
31$ LINPUT #1:A$ ::B$=SEG$( A$,X,Y):: IF SEG$(B$,1,1)="P "
    OR SEG$(B$,1,1)="-" OR SEG $(B$,1,1)="_" THEN 33$
32$ C=VAL(B$):: D=D+C :: R=R +1 :: DISPLAY AT(22,1):"Reco
    rd:";R
33$ CALL KEY($,K,S):: IF K=1 5 THEN 35$
34$ IF SEG$(B$,1,1)="_" THEN 35$ ELSE 31$
35$ RETURN
36$ DISPLAY AT(22,1):"Enter data to find:" :: ACCEPT AT(
    24,1):C$ :: DISPLAY AT(17,5) :"Press Fctn 9 to abort"
37$ DISPLAY AT(22,1):"Correc t? (Y/N)" :: CALL KEY($,K,S)
    :: IF K=89 THEN 38$ ELSE IF K=78 THEN 36$ ELSE IF K=15
    THEN 48$ ELSE 37$
38$ GOSUB 49$
39$ LINPUT #1:A$ :: B$=SEG$( A$,X,Y)::IF SEG$(A$,6,1)="_ "
    THEN 44$
4$$ IF SEG$(A$,59,1)="P" OR SEG$(A$,59,1)="-" OR SEG$(A$
    ,59,1)="_" THEN 43$
41$ IF C$=SEG$(B$,1,LEN(C$)) THEN PRINT #A:A$ :: D$=SEG$
    (A$,59,6):: C=VAL(D$):: D=D+ C :: LN=LN+1
42$ IF LN>58 THEN PRINT #A:C HR$(EC)&CHR$(PE):: LN=1 ::
    GOSUB 49$
43$ CALL KEY($,K,S):: IF K=1 5 THEN 45$
44$ IF SEG$(A$,5,1)="_" THEN 45$ ELSE 39$
```



```
45$ PRINT #A:"^^^^^Purchase total is $";D :: IF A>$ THEN
    CLOSE #A
46$ RETURN
47$ DISPLAY AT(24,1):" PRESS <ENTER> TO CONTINUE." ::CALL
    KEY($,K,S):: IF K<>13 THEN 47$ :: GOTO 14 $
48$ RUN
49$ PRINT #A:"^^^^^ITEM^^^^^ ^^^^^^^^^^^^^^^^^^^^^NUMBER
    ^^^DATE^^RETAIL^^PAID^^^VENDOR
5$$ PRINT #A:"^^^^^--------- --------------------^------
    --^------^------^------^----- -^----------" :: RETURN
```

ITEM	NUMBER	DATE	PRICE	PAID	FROM
1$" COLOR MONITOR	PHA 41$$	$3/89	139.95	139.95	TRITON
A-MAZE-ING	PHM 3$3$	$6/92	$.$$	$.$$	TEXCOMP
ABC'S OF ASSEMBLY LANGUAGE		$7/84	1$.95	$.$$	TEXCOMP
AC CIRCUIT ANALYSIS	PHT 6$44	$3/92	3.95	3.95	TM DIRECT
AC CIRCUIT ANALYSIS	PHT 6$44	$3/92	3.95	3.95	TM DIRECT
ADDITION AND SUBTRACTION 1	PHM 3$27	$1/92	1.$$	1.$$	JIM WOOD
ADDITION AND SUBTRACTION 1	PHM 3$27	$1/92	1.95	1.95	TEXCOMP
ADDITION AND SUBTRACTION 2	PHM 3$28	$1/92	1.$$	1.$$	JIM WOOD
ADDITION AND SUBTRACTION 2	PHM 3$28	$1/92	1.95	1.95	TEXCOMP
ADVENTURE HINT BOOK		$2/92	.95	.95	TEXCOMP
ADVENTURE MODULE W/PIRATE ADV	PHM 3$41	$2/92	.95	.95	TEXCOMP
ADVENTURE SERIES ON DISK		$2/92	12.95	12.95	TEXCOMP
ADVENTURE MODULE W/PIRATE ADV	PHM 3$41	$2/92	13.$$	13.$$	TEXCOMP
ALIEN ADDITION	PHM 3115	$6/92	19.95	19.95	TM DIRECT
ALPINER	PHM 3$56	12/91	1.99	1.99	TEXCOMP
ANTEATER	RON$2$25	$6/92	.$$	.$$	TEXCOMP
ANTEATER	RON$2$25	$8/92	8.75	8.75	LL CONNER
AXIOM GP1$$-TI PRINTER	$$2$4$68	$7/84	278.$$	278.$$	TEXCOMP
BASIC TIPS BY AMLIST BOOK		$7/84	14.95	14.95	TEXCOMP
BASKETBALL STATISTICIAN	PHD 5$23	12/9$	4.95	4.95	TEXCOMP
BEGINNER'S BASIC TUTOR	PHD 5$67	$7/89	2.99	2.99	TRITON
BEST OF 99ER BOOK		$7/84	16.95	14.95	TEXCOMP
BLASTO	PHM 3$32	$6/92	1$.$$	1$.$$	JIM LESHER
BOXER	TRI-2$$7	12/92	19.95	16.5$	TM DIRECT
BRIDGE BIDDING I	PHT 6$26	$3/92	3.95	3.95	TM DIRECT
BRIDGE BIDDING II	PHD 5$39	$3/92	2.95	2.95	TM DIRECT
BRIDGE BIDDING III	PHD 5$41	$3/92	2.95	2.95	TM DIRECT
BURGER BUILDER	TRI-BAAY	$7/92	19.95	16.$$	TM DIRECT
BURGERTIME	PHM 3233	$6/92	15.95	12.$$	JIM LESHER
CAR WARS	PHM 3$54	12/91	2.49	2.49	TM DIRECT
CAR WARS	PHM 3$54	$7/92	2.$$	2.$$	TM DIRECT
CASH MANAGEMENT	PHD 5$29	$2/88	3.99	3.99	TRITON
CHAMPIONSHIP BASEBALL	PHM 3148	$3/92	3.95	3.95	TM DIRECT
CHICKEN COOP	TRI-BAAH	$6/92	14.95	17.95	BRAATZ
CHISOLM TRAIL	PHM 311$	$7/92	3.$$	3.$$	TM DIRECT
COMPUTER WAR	TRI-BAAK	$5/92	9.95	9.95	JOY ELEC
CONNECT FOUR	PHM 311$	$6/92	6.95	6.95	TM DIRECT
CONSOLE WRITER V2.1	TRI-BBCA	12/89	24.$$	24.$$	LL CONNER
CREATING ARCADE GAMES		$7/89	2.95	2.95	TRITON
DECIMALS	PHM 3$96	$6/92	14.95	14.95	TM DIRECT
DEFENDER	RX85$6	12/91	1.99	1.99	TEXCOMP
DEMOLITION DIVISION	PHM 3116	$6/92	17.95	17.95	TM DIRECT

DEMONSTRATION	PHM 3001	07/89	4.95	4.95	TRITON
DESKTOP PUBLISHER	TRI-BAAR	12/92	59.95	49.00	TM DIRECT
DONKEY KONG	RX8512	05/92	11.95	11.95	JOY ELEC
DRAGON MIX	PHM 3117	06/92	16.95	16.95	BRAATZ
DUMPIT		02/92	4.95	4.95	TEXCOMP
EDITOR/ASSEMBLER	PHM 3055	09/88	14.95	14.95	TRITON
EPSON EX-800 PRINTER		02/87	435.00	435.00	MIDWEST
EPYX XJ 500 JOYSTICK		07/89	14.50	14.50	TEXCOMP
EQUATIONS	PHM 3100	07/89	4.95	4.95	TEXCOMP
EZ-KEYS	TEN73603	07/88	14.95	14.95	TENEX
FAMILY ENTERTAINER	PHL 7002	08/92	89.95	20.00	LL CONNER
FATHOM	PHM 3222	05/92	15.95	15.95	JOY ELEC
HOW TO FEEL AT HOME WITH A HOM		07/89	3.95	3.95	TRITON
FINANCE MANAGEMENT	PHD 5022	02/88	3.99	3.99	TRITON
FINANCIAL ANALYSIS ON TI COMPU	TEN32845	07/87	12.95	12.95	TENEX
FLOPPY DISKS (200 EA)		07/91	26.00	26.00	TEXCOMP
FROG JUMP	SF 31176	06/92	12.00	12.00	BRAATZ
GRAPHING PACKAGE	PHD 5013	03/92	3.92	3.92	TM DIRECT
GREAT WORD RACE	TRI-BDAL	12/92	22.50	19.50	TM DIRECT
HEN PECKED	ROM03025	08/92	8.75	8.75	LL CONNER
HOME FINANCIAL DECISIONS	PHM 3006	12/91	2.49	2.49	TM DIRECT
HOME FINANCIAL DECISIONS	PHM 3006	07/92	2.00	2.00	TM DIRECT
HONEY HUNT	PHM 3156	03/92	2.95	2.95	TM DIRECT
HOPPER	PHM 3229	06/92	10.00	10.00	JIM LESHER
HORIZON RAMDISK		03/87	210.00	210.00	HORIZON
HOUSEHOLD INVENTORY		12/90	4.95	4.95	TEXCOMP
HUNT THE WUMPUS	PHM 3023	12/91	1.99	1.99	TEXCOMP
HUSTLE	PHM 3034	03/92	6.95	6.95	TM DIRECT
I'M HIDING	PHM 3155	03/92	2.95	2.95	TM DIRECT
INTEGERS	PHM 3094	07/89	9.95	9.95	TEXCOMP
INVENTORY MANAGEMENT	PHD 5024	02/88	3.99	3.99	TRITON
INVOICE MANAGEMENT	PHD 5027	02/88	3.99	3.99	TRITON
JAWBREAKER II	PHM 3194	07/91	5.95	5.95	TEXCOMP
JOYSTICK ADAPTER		07/89	4.95	4.95	TEXCOMP
JUNGLE HUNT	RX8528	05/92	8.95	8.95	JOY ELEC
LAWS OF ARITHMETIC	PHM 3099	07/89	4.95	4.95	TEXCOMP
LEASE/PURCHASE DECISIONS	PHD 5038	03/92	2.49	2.49	TM DIRECT
LEASE/PURCHASE DECISIONS	PHT 6038	08/92	10.00	10.00	LL CONNER
M*A*S*H	PHM 3158	07/92	3.00	3.00	TM DIRECT
MAILING LIST	PHD 5001	02/88	3.99	3.99	TRITON
MANCALA	TRI-2002	07/92	16.00	16.00	TM DIRECT
MARKET SIMULATION	PHD 5018	03/92	2.49	2.49	TM DIRECT
MATH ROUTINE LIBRARY	PHD 5006	07/89	2.95	2.95	TRITON
MEASUREMENT FORMULAS	PHM 3101	07/89	4.95	4.95	TEXCOMP
METEOR BELT	PHM 3152	03/92	2.95	2.95	TM DIRECT
MG GAMES	TRI-BHGY	02/88	19.95	19.95	TRITON
MICRO PINBALL	TRI-BADE	12/92	19.95	16.50	TM DIRECT
MICROSOFT MULTIPLAN	PHM 3113	09/88	7.45	7.45	TRITON
MICROSOFT MULTIPLAN	PHM 3113	12/91	4.95	4.95	TEXCOMP
MICROSURGEON	PHM 3220	06/92	10.00	10.00	JIM LESHER
MIDNIGHT MASON	TRI-BADF	12/92	19.95	16.50	TM DIRECT
** MIND CHALLENGERS	PHM 3025	05/92	24.95	14.95	JOY ELEC
MINI MEMORY	PHM 3058	07/84	99.95	74.95	TEXCOMP
MOON PATROL	RX8531	05/92	44.95	11.95	JOY ELEC
MOONMINE	PHM 3131	06/92	39.95	14.95	TM DIRECT
MUNCHMAN	PHM 3057	07/92	39.95	2.00	TM DIRECT
MUNCHMOBILE	PHM 3146	07/91	19.95	5.95	TEXCOMP
MUSIC SKILLS TRAINER	PHD 5009	07/89	29.95	2.99	TRITON

MYSTERY MELODY	PHD 5010	03/92	14.95	2.49	TM DIRECT
NUMBER MAGIC	PHM 3004	07/89	19.95	4.95	TEXCOMP
NUMERATION II	PHM 3051	03/89	39.95	9.95	TRITON
OLDIES BUT GOODIES II	PHD 5017	03/92	24.95	2.49	TM DIRECT
OTHELLO	PHM 3067	12/91	39.95	1.99	TEXCOMP
PARSEC	PHM 3112	07/87	39.95	2.49	TRITON
PARSEC	PHM 3112	07/92	39.95	2.00	TM DIRECT
PC KEYS 2.0		03/87	23.99	23.99	TECHNI-GR
PERCENTS	PHM 3097	06/92	39.95	14.95	TM DIRECT
PERIPHERAL EXPANSION SYSTEM	PHP 1200	06/89	249.95	265.00	COMPETITI
PERSONAL FINANCIAL AIDS	PHD 5003	03/92	19.95	2.49	TM DIRECT
PERSONAL REAL ESTATE	PHM 3022	12/91	69.95	1.99	TEXCOMP
PERSONAL REAL ESTATE	PHM 3022	12/91	69.95	2.49	TM DIRECT
PERSONAL REAL ESTATE	PHM 3022	07/92	69.95	2.00	TM DIRECT
PERSONAL RECORD KEEPING	PHM 3013	12/91	49.95	2.49	TM DIRECT
PERSONAL RECORD KEEPING	PHM 3013	07/92	49.95	2.00	TM DIRECT
PERSONAL REPORT GENERATOR	PHM 3044	07/84	49.95	10.95	TEXCOMP
PERSONAL REPORT GENERATOR	PHM 3044	12/91	49.95	1.99	TEXCOMP
PICNIC PARANOIA	RX8517	12/91	44.95	1.99	TEXCOMP
POPEYE	TRI-GAAY	06/92	19.95	15.00	JIM LESHER
PRE-SCAN IT	TEN73622	07/88	10.95	10.95	TENEX
PRESS	TRI-BHJC	10/88	59.95	00.00	TRITON
PRINCESS AND THE FROG	ROM01025	08/92	39.95	8.75	LL CONNER
PRO TYPER	TRI-BABG	12/92	19.95	16.50	TM DIRECT
PROGRAMMING AIDS I	PHD 5004	07/89	14.95	2.95	TRITON
PROGRAMMING AIDS II	PHD 5112	06/92	19.95	10.00	JIM LESHER
PROGRAMMING AIDS III	PHD 5112	06/92	19.95	10.00	JIM LESHER
PROGRAMMING IN TI BASIC	TEN21819	07/87	8.95	8.95	TENEX
PROTECTOR II	RX8516	12/91	44.95	1.99	TEXCOMP
Q*BERT	TRI-GAAZ	06/92	19.95	26.00	BRAATZ
QMAZE	TRI-BAAZ	07/92	19.95	16.00	TM DIRECT
RABBIT TRAIL	FW 1004	08/92	34.95	10.00	LL CONNER
READING FLIGHT	PHM 3082	07/89	39.95	9.95	TEXCOMP
READING RALLY	PHM 3048	07/89	54.95	9.95	TEXCOMP
READING ROUNDUP	PHM 3047	07/89	54.95	9.95	TEXCOMP
RED BARON FLIGHT SIMULATOR	TRI-BADH	12/92	27.95	21.50	TM DIRECT
ROTOR RAIDERS	ROM06025	08/92	39.95	8.75	LL CONNER
RS-232 CARD	PHP 1220	07/91	174.95	60.00	TEXCOMP
RS-232 Y CABLE	PHA 2620	12/90	0.00	10.95	TEXCOMP
SATURDAY NIGHT BINGO	PHD 5025	03/92	29.95	3.95	TM DIRECT
SCHOLASTIC SPELLING-LEVEL 3	PHM 3059	06/92	59.95	14.95	BRAATZ
SCHOLASTIC SPELLING-LEVEL 4	PHM 3060	06/92	59.95	14.95	BRAATZ
SCHOLASTIC SPELLING-LEVEL 5	PHM 3061	06/92	59.95	14.95	BRAATZ
SCHOLASTIC SPELLING-LEVEL 6	PHM 3062	06/92	59.95	14.95	BRAATZ
SECURITIES ANALYSIS	PHM 3012	12/91	54.95	14.95	TM DIRECT
SHAMUS	RX8518	05/92	44.95	14.95	JOY ELEC
SLYMOIDS	PHM 3197	06/92	39.95	10.00	JIM LESHER
SOFTWARE VARIETY VALUE PACK	PHV 1002	06/92	54.95	20.00	LL CONNER
SORGAN II	TRI-BDAU	12/92	19.95	16.50	TM DIRECT
SOUNDTRACK TROLLEY	PHM 3157	03/92	49.95	2.95	TM DIRECT
SPACE BANDITS	PHM 3149	03/92	49.95	2.95	TM DIRECT
SPACE JOURNEY	SF 31191	03/92	39.95	9.95	TM DIRECT
SPACE PATROL	TRI-2002	07/92	19.95	16.00	TM DIRECT
SPEAK AND MATH	PHT 6031	06/92	24.95	10.00	JIM LESHER
SPEAK AND MATH	PHD 5031	07/89	29.95	2.99	TRITON
SPEAK AND SPELL	PHD 5030	03/92	29.95	4.95	TM DIRECT
STAR RUNNER	TRI-BAAP	07/92	19.95	16.00	TM DIRECT
STAR TRAP	TRI-BDAR	07/92	19.95	16.00	TM DIRECT

STRIKE THREE!	TRI-BADJ	07/92	19.95	16.00	TM DIRECT
SUPER DEMON ATTACK	PHM 3219	12/91	39.95	1.99	TEXCOMP
SUPER EXTENDED BASIC	TRI-BDAK	07/87	59.95	59.95	TRITON
SUPER SKETCH		02/92	59.95	15.00	TEXCOMP
TAX/INVESTMENT RECORD KEEPING	PHM 3016	07/92	69.95	2.00	TM DIRECT
TAX/INVESTMENT RECORD KEEPING	PHM 3016	12/91	69.95	1.99	TEXCOMP
TEACH YOURSELF BASIC	PHD 5007	07/89	34.95	2.99	TRITON
TEACH YOURSELF EXTENDED BASIC	PHD 5019	07/89	24.95	2.99	TRITON
TERMINAL EMULATOR II	PHM 3035	12/91	49.95	1.99	TEXCOMP
TERRY'S TURTLE ADVENTURE	PHM 3154	03/92	49.95	2.95	TM DIRECT
THE ATTACK	PHM 3031	07/92	39.95	2.00	TM DIRECT
THE ATTACK	PHM 3031	12/91	39.95	2.49	TM DIRECT
THE ATTACK	PHM 3031	12/91	39.95	1.99	TEXCOMP
TI ARCADE GAME SERIES	PHL 7009	08/92	119.85	20.00	LL CONNER
TI COUNT ACCOUNTS PAYABLE	PHD 5004	07/91	99.95	14.99	TEXCOMP
TI COUNT ACCOUNTS RECEIVABLE	PHD 5004	07/91	99.95	14.99	TEXCOMP
TI COUNT GENERAL LEDGER	PHD 5002	07/91	99.95	14.99	TEXCOMP
TI COUNT INVENTORY	PHD 5006	07/91	99.95	14.99	TEXCOMP
TI COUNT MAIL LIST	PHD 5007	07/91	99.95	14.99	TEXCOMP
TI COUNT PAYROLL	PHD 5005	07/91	99.95	14.99	TEXCOMP
TI INVADERS	PHM 3053	07/92	39.95	2.00	TM DIRECT
TI LOGO II	PHM 3109	07/89	129.95	7.95	TRITON
TI MINI-WRITER	PHT 6103	07/84	19.95	19.95	TEXCOMP
TI WRITER	PHM 3111	03/89	99.95	12.95	TRITON
TI-99 PROGRAMS BY STEVE DAVIS		12/90	3.00	1.95	TEXCOMP
TI-99/4A GAMES		07/89	3.00	2.99	TRITON
TI-TOAD	TRI-BADG	12/92	19.95	16.50	TM DIRECT
TOMBSTONE CITY: 21ST CENTURY	PHM 3052	07/92	39.95	2.00	TM DIRECT
TOMBSTONE CITY: 21ST CENTURY	PHM 3052	12/91	39.95	2.49	TM DIRECT
TOTAL FILER	TEN65311	07/88	19.95	19.95	TENEX
TRIS	ASG-E01a	07/92	24.95	16.00	TM DIRECT
TRIVIA DATA BASE		07/89	3.00	4.95	TRITON
TUNNELS OF DOOM	PHM 3042	12/90	59.95	9.95	TEXCOMP
UNIVERSAL MONITOR CABLE	TRI-QACA	04/87	14.95	14.95	TRITON
VIDEO GAMES 1	PHM 3018	06/92	29.95	17.95	TM DIRECT
VIDEO GRAPHS	PHM 3005	03/92	19.95	9.95	TM DIRECT
VON GRAPHS		12/89	19.95	10.00	LL CONNER
WEIGHT CONTROL AND NUTRITION	PHM 3021	06/92	59.95	14.95	TM DIRECT
WORD RADAR	PHM 3185	06/92	39.95	17.95	TM DIRECT
YUCAN BUSINESS MANAGER		12/90	3.00	7.95	TEXCOMP
ZERO ZAP	PHM 3036	06/92	29.95	17.95	TM DIRECT
ZERO ZAP	PHM 3036	07/92	29.95	12.00	TM DIRECT

RELISTING PROGRAMS

---------- by Jim Peterson
from the Milwaukee Area User Group, October, 1992

At the last meeting, our editor asked me about ways to convert listed programs to 28-column width, and to convert listed programs to runable programs. A couple of days later, I had a phone call from a user asking about the same thing. And, I have recieved a few newsletters with reprints of an article describing a method of listing to the printer in 28-column format.

Why list in 28-column format? Because that is the way a program appears on the screen. It is much easier to key in a program accurately when it is published in 28-column format, because you can edit your work by checking the position of characters in relation to the line above - especially when the program contains long stretches of blanks, or long hex codes.

About that method currently being reprinted - it doesn't work. At least it doesn't work properly with Extended Basic programs. The idea is that you open the printer and send it ASCII codes 27 8 28, which sets the right margin at 28. You can get the same result by OPEN #1:"PIO", VARIABLE 28.

The problem is that Extended Basic lines can be keyed in to 140 characters long, and can be forced considerably longer. When you LIST a program to disk, it is saved in DV/80 format. Any line longer than 80 characters is broken is broken into seperate 80 character records. When you break those records into 28-character segments, you have program lines stopping in the middle and then continuing on the next line. They can still be keyed in correctly, if you realize what has happened, but the listing will not be in screen format, which is the whole purpose of using 28 columns.

Besides, you probably don't want to output to the printer. You want to output to disk, so you can incorporate the listing into a text articcae, as I am about to do.

So, what to do? If you have the Triton Super Extended Basic module, it is as easy as pie. Just -

LIST "DSK1.LISTING":28:1-32766. It will do a perfect job but the listing will be in DV/28 format, which will not load into Funnelweb. So I will now write a little program, save it, list it with my Super Extended Basic, and then load my little program to convert the DV/28 file into a DV/80 file which I will insert right here -

```
100 DISPLAY AT(10,1)ERASE ALL
L:"Input file? DSK":"":"Outp
ut file? DSK" :: ACCEPT AT(1
0,16):IN$ :: ACCEPT AT(12,17
):OUT$
110 OPEN #1:"DSK"&IN$,VARIAB
LE 28 INPUT :: OPEN #2:"DSK"
&OUT$,OUTPUT
120 LINPUT #1:N$ :: PRINT #2
:N$ :: IF EOF(1)<>1 THEN 120
ELSE CLOSE #1 :: CLOSE #2
```

But you don't have the Triton module? Well, several years

ago I wrote a 28 column converter which will do the job perfectly. It will also optionally replace and transliterate those characters that get messed up when you print a program listing through the Formatter. It will even recognize unprintable blank characters which have been keyed in with the CTRL key and print their key letter underlined. That program was published in Tips From the Tigercub #18 with an update in #21. It is available on my TI-PD disk #1015 and I will put it on the Spirit of 99 BBS again.

That program does require that the listing have standard line number spacing, numbered by tens from 100. If you are starting with a listing which is not in that format, this one will do the job but not as easily, because you have to first insert a carriage return at the end of each program line. To do that, load the listing onto the Funnelweb Editor, press CTRL 9 to get the hollow cursor and CTRL U to get the underline cursor, go to the end of each program line with the arrow keys and press M.

```
100 DISPLAY AT(3,6)ERASE ALL
:"PROGRAM RELISTER";"";" Wi
ll reformat a LISTed XBas
ic program from any lineleng
th to any other length."
110 DISPLAY AT(8,1):" Each
program line (not file li
ne) must end in a carriag
e return."
120 DISPLAY AT(12,1):"Input
filename?":"DSK" :: ACCEPT A
T(13,4):IF$ :: DISPLAY AT(15
,1):"Output filename?":"DSK"
:: ACCEPT AT(16,4):OF$
130 DISPLAY AT(18,1):"Presen
t line length?" :: ACCEPT AT
(18,22)SIZE(2)VALIDATE(DIGIT
):A
140 DISPLAY AT(20,1):"Reform
at to what length?" :: ACCEP
T AT(20,26)SIZE(2)VALIDATE(D
IGIT):X :: IF X=A THEN 130
150 OPEN #1:"DSK"&IF$,INPUT
:: OPEN #2:"DSK"&OF$,OUTPUT
:: IF X<A THEN 230
160 IF EOF(1)THEN 270 :: LIN
PUT #1:M$ :: L=LEN(M$) :: IF
POS(M$,CHR$(13),1)=0 THEN 18
0
170 IF P+L<X+1 THEN PRINT #2
:M$ :: P=0 :: GOTO 160 ELSE
PRINT #2:SEG$(M$,1,X-P)&CHR$
(13):SEG$(M$,X-P+1,255):: P=
0 :: GOTO 160
180 IF L<A THEN M$=M$&RPT$("
",A-L):: L=A
190 IF P=0 THEN PRINT #2M$:
:: P=L :: GOTO 160
200 IF P+L<X THEN PRINT #2:M
```



```
$;::P=P+L :: GOTO 160
210 IF P+L=X THEN PRINT #2:M
$&CHR$(13)::P=0 :: GOTO 160
220 PRINT #2:SEG$(M$,1,X-P)&
CHR$(13)::SEG$(M$,X-P+1,255)
:: P=LEN(SEG$(M$,X-P+1,255))
::GOTO 160
230 IF EOF(1) THEN 270:: LIN
PUT #1:M$
240 L=LEN(M$):: IF L+P>X THE
N PRINT #2:SEG$(M$,1,X-P)&CH
R$(13):: M$=SEG$(M$,X-P+1,25
5):: P=0 :: GOTO 240
250 IF M$=CHR$(13)THEN 230
260 IF POS(M$,CHR$(13),1)<>0
THEN PRINT #2:M$ :: P=0 ::
GOTO 230 ELSE PRINT #2:M$;::
P=LEN(M$):: GOTO 230
270 CLOSE #1:: CLOSE #2
```

That one is also on TI-PD 1015.

Now, about coverting listings to programs, without having to key them in - well let's save that for next month. END

TIny TIp

Mark Schafer

from the Bluegrass 99: BYTEMONGER newsletter, Oct., 1992

I am going to use this forum to present one little programming tip. This one is inspired by a Jim Peterson article in which he presented the following program for figuring first class postage given the weight:

```
100  INPUT "OUNCES? ":A :: PRINT .23* (INT(A)- (INT(A) <>
A))+.06 :: GOTO 100
```

Short as this is. I can still make it shorter. Sometimes I wonder if I'm the only one who knows mathematics. By optimizing his formula, it becomes:

```
100 INPUT "OUNCES? ":A :: PRINT .06-.23* INT(-A) :: GOTO
100
```

There! I like that better. What I like best about my formula is that it mentions the variable (A) only once, so if you were using a 10 character variable name, it doesn't bother you so much to type it once instead of three times.

While I am on the subject, let me give you a more complete list of estimating formulas. These are formulas that can take any number and convert it to a nearby integer. I'll use X as the variable being estimated.

1) INT(X) obviously just truncates to the next lower integer. It's important to know this always makes a non-integer go down; for example, INT(-4.1)=-5.

2) INT(X+.5) estimates a number to the nearest integer. As is common practice, a number ending in .5 gets rounded up.

3) -INT(-X) estimates upward to the next higher integer. This is the formula I used above. It takes advantage of the fact that the INT of a negative non-integer has a higher absolute value than the original number (further away from zero) as illustrated in formula 1. So this formula turns 4.1 into 5 and leaves 4 as it is.

4) -INT(.5-X) is like formula number 2 except it rounds a number ending in .5 downward instead of upward. So 4.5 becomes 4 while 4.5ØØ1 becomes 5. This is just in case you'd rather that the number not go up unless it's genuinely closer to the higher number.

If you want to estimate to something other than integers, you can move the decimal point first (by multiplying or dividing by a power of ten) and then put it back when done. For example, INT(X*1Ø+.5)/1Ø estimates to the nearest tenth. Leave out the +.5 and will truncate to the neareast tenth, and so on. This tip may not be all that tiny, but perhaps future installments will live up to the name.

COMPRESS IT ANYWAY

---------- Mark Schafer

from the Bluegrass 99: BYTEMONGER newsletter, Nov., 1992

It's been a long time since there has been an Extended BASIC program in Bytemonger. Lately I've been known for my assembly language programming, but this program has to do with assembly language.

This program takes object code and compresses it while still allowing it to be loaded by the same loaders as before. It will work on all object code created by an assembler.

Wait a minute, you might say, XB cannot load compressed object code. Compress It Anyway. What if it is already compressed? Compress It Anyway.

Technically, this program doesn't really compress. It eliminates the waste in object code to make it shorter. Compress It Anyway sounds better than Optimize It Anyway, and besides, I like the abbreviations (C. I. A.).

There are four forms of waste in assembly language objec code. The names I give to them are: excessive load address tags, line numbers, checksums, and not packing. Two of these come in two forms, you might say there are six. Let me discuss each one.

To understand excessive load address tags you must know that object code is made up of tags, most of which are followed by one or more parameters, which are either ASCII or hex. The tags are listed in page 14 of the E/A quick reference card. Tags 9 and A are the load address tags. They are used excessively in two different ways. 9 or A is used at the beginning of each record in the body of the code. I figured out that the loader doesn't need to be reminded what the load

address is all the time. So CIA gets rid of them unless deemed necessary. Also, sometimes they are used in succession. That's like telling the loader, "Load code here; no, on second thought, load code here." CIA removes all but the last one when they're used successively.

At the end of every line in object code is a four-character line number that is not needed, so CIA gets rid of that to make room for more tags.

Near the end of every line is either a checksum tag (tag 7) or a checksum ignore tag (tag 8). The loader doesn't have to check the sum, so CIA removes these tags which make room for another tag.

The most puzzling is the fact that the assembler does not put as many tags as will fit in each record. There's room in every record for one more tag. CIA checks this. I call this process "packing." The other form of this waste is the fact that the assembler starts a new record when it reaches the end of the code before doing the tags that come at the end. This is not necesary, so CIA continues on the same record.

As it turns out, compressed object code doesn't have line numbers or check-sums, so CIA can't do as well on them as it does on uncompressed object code. They still benefit from the other two processes.

The most effective among all these processes will be due to packing. The least effective is line numbers. Without line numbers, there are four blank spaces at the end of almost every record. That's not enough room for another tag since they're usually five characters long, so you might as well put a line number there. The first record, however, only has two spaces, so leaving out the line nubmer save you one tag on the first record. Big deal. I was hoping it would make a bigger difference thaan that. The chance of it saving you a record are about one chance in 16. The chances of saving a sector: one chance in 48.

That's one of the reasons why this program makes some of the process optional. You don't have to eliminate the line numbers if you don't want to.

Now let's talk about running it. It will ask you for the names of the input and output files, like so many other programs do. You must include the device name (DSK1, DSK2, etc), so this gives you flexibility in file processing.

It will then give you a list of the optional processes and ask you which ones you DON'T want to use. If excessive load address tags is the only one it lists, then that means that the input file is compressed. Type the letter in front of the name to NOT use that process. I did this originally just in case there was a loader that didn't like you eliminating everything, but so far, I haven't found one. You can just hit return to use all of them. You can also hit "Q" to go back to the file questions.

Packing is not an optional process because it would be so much trouble. Since it works, there should be no problem with that. So if you specify all the processes (in other words, don't do any of them), it will still reduce the object code because of the packing.

The program will bomb out if the input file is not D/F 8Ø file (cheap program). If it is a D/F 8Ø file but doesn't look like object code, it will tell you so and give you the option to

continue anyway. I do this because so often I've wanted to say to a program, "Do it anyway!" And since this program has the word "anyway" in its name, I felt it was appropriate to have this option.

It will print the new object code in the screen as it goes, If you don't like that, you can change line 55Ø. If it comes to an unrecognized tag, it will tell you what it is, print the line it occurred on, and give you the option to continue anyway.

When it's done, it will give you statistics, so you can measure its effect. It will tell you how many tags, records, and sectors the code had before and after. The tag reduction is more a matter of interest. The record reduction will give you an idea of how much time will be saved when loaded. The sector reduction tells you how much disk space is saved. (If you look on line 45Ø, you can see how I used the rounding up technique I talked about last month.)

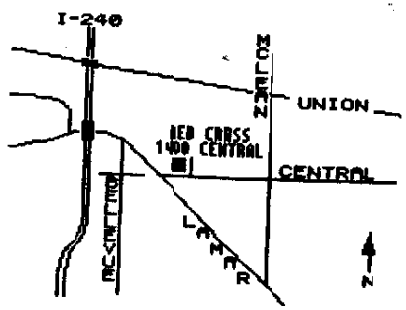
From the studies I've done, CIA reduces compressed object code by about 1Ø% and uncompressed object code by about 25%. The savings aren't as big as I had hoped because compressed object code doesn't have two of the forms of waste, and eliminating the line number turned out to be so minor. but it never hurts, so you might as well Compress It Anyway!

```
 1 ! COMPRESS IT ANYWAY 1Ø/18/92
 2 ! REV 2.1.1 1Ø/24/92
 3 ! BY MARK SCHAFER
 4 ! BLUEGRASS 99 COMPUTER SOCIETY
 9Ø T$="12345678ABCFI"
 1ØØ DIM LA(4),NA(4)
 11Ø PRINT "ENTER FILE NAMES WITH DEVICE NAMES."
 12Ø INPUT "INPUT FILE NEME ":IF$ :: IF IF$="" THEN END
     ELSE IF POS(IF$,".",1)=Ø THEN 11Ø
 13Ø INPUT "OUTPUT FILE NAME: ":OF$ :: IF OF$="" THEN 12Ø
     ELSE IF POS(OF$,".",1)=Ø THEN 11Ø
 14Ø IF IF$=OF$ THEN PRINT "SORRY, FILES ARE NOT ALLOWED
     TO MATCH." :: GOTO 12Ø
 15Ø OPEN #1:IF$,FIXED 8Ø,INPUT
 15Ø LINPUT #1:R$ :: K=ASC(R$) :: IF K=1 OR K=48 THEN 19Ø
 17Ø PRINT "FIRST RECORD IS ";R$:"THAT DOESN'T LOOK LIKE
     OBJECT CODE." :: INPUT "CONTINUE ANYWAY? ":Y$ :: IF
     Y$="N" OR Y$="NO" THEN CLOSE #1 :: GOTO 12Ø
 18Ø INPUT "TREAT AS COMPRESSED? ":Y$ :: IF Y$="" THEN 17Ø
     ELSE IF Y$="Y" THEN K=1 ELSE K=48
 19Ø PRINT "A EXCESSIVE LOAD ADDR TAGS" :: IF K=48 THEN
     PRINT "L LINE NUMBERS";"C CHECKSUMS"
 2ØØ PRINT :: INPUT "WHICH DO YOU NOT WANT TO
     ELIMINATE? ":E$ :: A1=POS(,E$,"A",1) :: L1=POS (E$,
     "L",1) AND K=48 :: C1=POS(E$,"C",1) AND K=48
 21Ø IF POS(E$,"Q",1) THEN CLOSE #1 :: GOTO 12Ø
 22Ø LA(1)=-1 :: IF K=1 THEN B=2 :: HD=256 ELSE B=4 ::
     HD=16
 23Ø P=B+1Ø :: CL=P-1 :: O$=SEG$(R$,1,CL) :: T,R=1 :: L=79
     :: IF L1 THEN L=75
 24Ø IF C1 THEN L=L-B-1
 25Ø OPEN #2:OF$,FIXED 8Ø,OUTPUT
```



```
 26Ø TN=POS(T$,SEG$(R$,P,1),1) :: T=T+1 :: IF TN>Ø THEN
     28Ø
 27Ø PRINT "FOUND TAG";ASC(SEG$(R$,P,1));" IN RECORD ";R$
     :: INPUT "CONTINUE ANYWAY? ":Y$ :: IF Y$="" THEN 27Ø
     ELSE IF Y$="Y" THEN TN=11 ELSE 42Ø
 28Ø ON TN GOTO 33Ø, 33Ø, 36Ø, 36Ø, 36Ø, 36Ø, 37Ø, 37Ø,
     29Ø, 29Ø, 34Ø, 34Ø, 39Ø, 38Ø
 29Ø LAT=TN :: K=Ø :: LA$=SEG$(R$,P+1,B) :: FOR A=1 TO B ::
     NA(A)=ASC(SEG$(LA$,A,1)) :: IF B=4 THEN IF NA(A)>57
     THEN NA(A)=NA(A)-55 ELSE NA(A)=NA(A)-48
 3ØØ IF NA(A)=LA(A) THEN K=K+1
 31Ø NEXT A :: IF K=B THEN 37Ø
 32Ø FOR A=1 TO B :: LA(A)=NA(A) :: NEXT A:: IF A1=Ø THEN
     IF POS(T$,SEG$(R$,P+B+1,1),1)=TN THEN 37Ø
 33Ø A$=SEG$(R$,P,B+1) :: GOSUB 48Ø :: GOTO 26Ø
 34Ø A$=SEG$(R$,P,B+1) :: GOSUB 48Ø :: A=B :: K=2
 35Ø LA(A)=LA(A)+K :: IF LA(A)>=HD THEN LA(A)=LA(A)-HD ::
     K=1 :: A=A-1 :: GOTO 35Ø ELSE 26Ø
 36Ø LAT=Ø :: A$=SEG$(R$,P,B+7) :: GOSUB 48Ø :: GOTO 26Ø
 37Ø P=P+B+1 :: GOTO 26Ø
 38Ø A$=SEG$(R$,P,7) :: GOSUB 48Ø :: GOTO 26Ø
 39Ø R=R+1 :: LINPUT #1:R$ :: K$=SEG$(R$,1,1) :: IF K$=":"
     THEN 41Ø
 4ØØ P=1 :: GOTO 26Ø
 41Ø LAT=Ø :: A$="" :: GOSUB 53Ø :: NR=NR+1 :: GOSUB 62Ø
     :: PRINT #2:SEG$(R$,1,76)&LN$
 42Ø PRINT USING 47Ø:"","OLD","NEW"
 43Ø PRINT USING 47Ø:"TAGS",T,NT
 44Ø PRINT USING 47Ø:"RECORDS",R,NR
 45Ø PRINT USING 47Ø:"SECTORS",1-INT(-R/3),1-INT(-NR/3)
 46Ø CLOSE #1 :: CLOSE #2 :: END
 47Ø IMAGE ######## ##### #####
 48Ø P=P+LEN(A$)
 49Ø K=O$&A$ :: IF LEN(K$)>L THEN 53Ø
 5ØØ O$=K$
 51Ø CL=CL+LEN(A$)
 52Ø NT=NT+1 :: RETURN
 53Ø IF C1 THEN 61Ø
 54Ø O$=O$&"F" :: NT=NT+1 :: NR=NR+1 :: IF L1 THEN GOSUB
     62Ø :: O$=O$&RPT$(" ",75-CL)&LN$
 55Ø PRINT #2:O$ :: PRINT O$
 56Ø IF A1 THEN 58Ø
 57Ø O$=A$ :: CL=LEN(O$) :: GOTO 52Ø
 58Ø IF LAT=Ø THEN 57Ø
 59Ø O$=SEG$(T$,LAT,1) :: FOR A=1 TO B :: IF B=4 THEN IF
     LA(A)>9 THEN K=LA(A)+55 ELSE K=LA(A)+48 ELSE K=LA(A)
 6ØØ O$=O$&CHR$(K) :: NEXT A :: CL=A :: NT=NT+1 :: GOTO
     49Ø
 61Ø O$=O$&"SØØØØ" :: CL=CL+B+1 :: NT=NT+1 :: GOTO 54Ø
 62Ø LN$=RPT$("Ø",4-LEN(STR$(NR)))&STR$(NR) :: RETURN

4 COMMENT LINES            58 LINES
135 STATEMENTS             3Ø76 CHARACTERS
```



LOCATION MAP

WORKSHOP : to be announced.

PROGRAM BIT - third Thursday

JANUARY 21st , 1993

MEETING: 7:00pm - Red Cross Building - 1400 Central.

7:00pm - Doors Open

7:15pm - General announcements, elections.

7:30pm - Demonstration of PC 99 TI Emulator for IBM compatibles.

9:30pm - Meeting ends.

9:45pm - Late dinner at Shoney's on Union Ave.

NOTICE

Information contained in TIdbits is accurate and true to the best of our knowledge. Viewpoints and opinions expressed in TIdbits are not necessarily that of the Mid-South 99'ers. We welcome any opinions/corrections from our readers. Articles may be reprinted elsewhere as long as credit is given to the author and newsletter.

GROUP INFO

Visitors and potential members may receive 2 free issues of TIdbits while they decide if they wish to join (no obligation) On the top of your label is a code. A Y means you are a member, N means 2 free list, UG means user group and $ means a business. Beside the Y is a date, one year from that date your dues are due. A dollar sign ($) on the label will indicate that your dues are due. The library is open only to members. Library list is $1. Mail order disk library access is $2 for the first disk and $1 for each additional disk - max of 5 disks per month. Order by disk number only. At meetings, library access is FREE if you exchange your disk for ours or $1 per disk for our disks. Send all mail order library requests to librarian's address! Send dues and correspondence to group address.

CALENDAR

MEETINGS: JAN 21 FEB. 18, (3rd Thursday!)
WORKSHOPS: TO BE ANNOUNCED

24HR TI BULLETIN BOARD

The 9640 NEWS BBS 300/1200/2400/4800/7200/9600/12000/14400
Hayes. 901-368-0112

GROUP MAILING ADDRESS

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P.O. Box 38522
Germantown, Tn. 38183-0522

LIBRARY ADDRESS

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