

NEWSLETTER OF THE DECATUR 99er USERS' GROUP

PRESIDENT'S NOTES...by Jay Seaberg

We are beginning our third year in existence, and I am looking forward to another year of fun and learning. We all owe a debt of gratitude to our previous two presidents, Joe McMahan and Larry Livergood. Joe and Larry both exemplify the best of the computer 'hacker'. They have given their time, effort, and guidance to all of us.

Over the next year I hope to see the group grow in both size and experience. This will take some effort on all our parts. This effort will pay off in the long run for everyone.

This group fills a very real need for owners of the TI 99/4A. Since being orphaned, the market has grown. There is more available now than ever. Several of our members have gotten fire-sale prices on hardware and software. These sales were found through the members of the User's Group. In the future, we hope to be able to ferret out more of these gold mines.

Our library has grown by leaps and bounds. We now have over thirteen disks full of programs. These programs are available for checkout at our meetings. We also have a very active core group with strong backgrounds in programming and hardware.

These members, and all the officers, are more than willing to help answer questions on programming, hardware, and software. This is your group. Your dues support the monthly meetings and the newsletter. We need this support, and we also need a little of your time. Please take the time to let us know what you would like to see at our meetings. We also like to find out what you think of the newsletter. This does not take much time, but it will help us to fit your needs.

COR-COMP NOTES...by Jess Jolly

Most of the computer publications that acknowledge the existence of the TI 99/4A home computer have, in recent months, carried reviews of COR-COMP products. Since I own three of their most popular products, I decided to add my own comments.

During the first year, the DECATUR 99ER GROUP received an RS232 card, a DISK CONTROLLER card, and a 9900 MICRO EXPANSION SYSTEM for demonstration, courtesy of COR-COMP. Each of these came at a time when I was interested in upgrading my system, so all three of them wound up as part of my system.

It seems that people are either very happy with COR-COMP or very unhappy--no in between. I am one of those who has had very little trouble and have always received an adequate response to my inquiries. The RS-232 card was installed in my expansion box as soon as it arrived and seemed to work

without any problems. I recently removed it and sent it off to my son so he could use a printer.

The DISK CONTROLLER was first tried by another member of the group, and did not perform properly in his system. COR-COMP approved of his loaning it to me for trial while he waited for a replacement. My experience with the card has lead me to believe that they knew what they were doing for it performed as it was supposed to in my system (it is in use as I write this). On the two occasions I had problems, I found that I was doing something wrong.

The 9900 MICRO-EXPANSION SYSTEM has been in service since Feb. of this year and is a pleasure to use. My wife noticed the absence of fan noise immediately. The file commands provide for load and run of dis/fix type of files so such things as FORTH, DISK-FIXER, etc., can be run without the EDITOR/ASSEMBLER module. Among the things listed in the manual as compatible with this system is F-CODE. Since no information on how to run it is given, I assume this is planned as a future expansion.

Not everything about any product is good and this equipment is no exception. Programs that use the TE2/SPEECH SYNTHESIZER combination will no longer speak when brought up from the DISK CONTROLLER title screen. This is a minor problem once you discover that all you have to do is press the space bar twice and bring up BASIC from the TI title screen. I believe this is because the disk controller is active when the COR-COMP title screen is up and only one DSR can be on at a time.

A real problem with the 9900 EXPANSION SYSTEM is its power supply. The supply is all contained in a wall plug unit that is just plain too big to be used this way. It covers up three outlets on a power strip and strip outlets are too expensive to cover up; but I am sure not going to plug it into the wall each time I want to use the computer! The manual that came with the DISK CONTROLLER was excellent and also big enough to be read by anyone--not so for the manuals with the expansion system!

The system manuals are half size with small print that is very difficult to read due to the use of the seemingly invisible and totally unreadable blue ink! Maybe this was Craig Miller's idea since he chose the same size manual and ink for his otherwise excellent advanced diagnostics program. In my case, the manuals did not pose a problem since I have the original DISK CONTROLLER manual. The RS-232 32K MEMORY are also not a problem since they require little reference to a manual.

The so called "toolshed" utilities provided with the manager have received little attention but can be very useful, especially if you do not have EXTENDED BASIC. I have made little use of them so far but did go through and try all of them to see how they work. The EXTENDED BASIC command to load these utilities seems very odd since it is the DELETE command that is used for such things as removing a file from a disk etc. I don't know if this was used because it is the easiest way around the 99/4a's built-in traps or the only way. I would like to see someone print something on this.

The real test of customer satisfaction is how often he returns for another product. Since I have gone back twice I would have to consider myself a satisfied customer.

THIS PROGRAM COMES TO YOU FROM THE EDMONTON USERS' GROUP. WHAT DOES IT DO? WELL, YOU'RE LOOKING AT IT! I WOULD LIKE YOUR COMMENTS ON THE OUTPUT. I FEEL THAT IT WILL HELP TO PROVIDE ERROR FREE PROGRAMS IN THE FUTURE.

LL

100 ! *****

110 ! ** PROGRAM LISTER **

120 ! ** FROM DISK FILE **

130 ! ** TO PRINTER IN **

140 ! ** MULTIPLE FORMATS **

150 ! ** BASED ON AN IDEA **

160 ! ** FROM TI-SHUS **

170 ! ** USER'S GROUP IN **

180 ! ** AUSTRALIA. **

190 ! ** ENHANCED BY BOB **

200 ! ** PASS MAY 08, 1985 **

210 ! *****

220 !

230 OPTION BASE 1 :: DIM P\$(320)

240 CALL CLEAR :: CALL SCREE N(4):: FIL\$="DSK1.PRGH/LIST" :: PRTR\$="PID" :: CALL WIPE R(P\$(1)):: X=1 :: EFL=0

250 DISPLAY AT(2,7):"PROGRAM LISTER:"

260 DISPLAY AT(6,1):"Program is Listed to Disk as": "Filename: ";FIL\$: "Y or N? Y"

270 ACCEPT AT(10,9)BEEP SIZE (-1)VALIDATE("YN"):A\$:: IF A\$="N" THEN CALL FIXNAME(FIL \$):: GOTO 260

280 DISPLAY AT(14,1):"Correct Printer Device Name": "is : ";PRTR\$: "Y or N? Y"

290 ACCEPT AT(18,9)BEEP SIZE (-1)VALIDATE("YN"):A\$:: IF A\$="N" THEN CALL FIXNAME(PRT R\$):: GOTO 280

300 DISPLAY AT(20,1):"Normal or Condensed Format?": "(N or C) C"

310 ACCEPT AT(22,10)BEEP SIZE (-1)VALIDATE("NC"):F\$:: IF

F\$="N" THEN L=110 ELSE L=29

6

320 DISPLAY AT(24,1):"ALL IN PUTS CORRECT, Y/N? Y"

330 ACCEPT AT(24,27)BEEP SIZE (-1)VALIDATE("YN"):A\$:: IF A\$="N" THEN 240

340 OPEN #1:FIL\$:: OPEN #2: PRTR\$,DISPLAY ,OUTPUT,VARIABLE 132

350 DISPLAY AT(12,1)ERASE AL L:"Even Column Length or Raged": "(E or R)? E"

360 ACCEPT AT(14,11)BEEP SIZE (-1)VALIDATE("ER"):E\$:: CALL CLEAR

370 DISPLAY AT(12,1)ERASE AL L:"Do you wish to include any comments at the start of the listing? (Y or N) N"

380 ACCEPT AT(14,19)BEEP SIZE (-1)VALIDATE("YN"):A\$:: IF A\$="Y" THEN CALL COMMENT(P \$(1),X,L,E\$)ELSE CALL CLEAR

390 !

400 ! ** BEGIN FORMATTING **

410 ! ** PROGRAM LISTING **

420 ! ** INTO COLUMNS **

430 !

440 CALL PAGEBUILD(P\$(1),EFL, X,L)

450 CALL ADJUST(L,X,E\$)

460 CALL CLEAR :: DISPLAY AT (3,1):"Assembling and outputting": "print lines to device name": " : ";PRTR\$:: CALL PRINTPAGE(P\$(1),X,L)

470 X=1 :: CALL CLEAR :: IF EFL=0 THEN CALL WIPER(P\$(1)) : GOTO 440

480 CLOSE #1 :: CLOSE #2 :: DISPLAY AT(3,1):"Another listing? (Y or N) N" :: ACCEPT AT(3,27)BEEP SIZE(-1)VALIDATE("YN"):A\$

490 IF A\$="Y" THEN 240

500 !

510 STOP

520 !

530 !*****

540 !** END OF MAIN PRGM **

550 !*****

560 !

570 !

580 !*****

590 !# SUBROUTINE SECTION #

600 !*****

610 !

620 SUB BASICLINE(N\$,E)

630 N\$="" :: IF NX\$="" THEN LINPUT #1:NX\$

640 N\$=N\$&NX\$:: IF LEN(N\$)< 80 OR EOF(1)THEN NX\$="" :: E =EOF(1):: SUBEXIT ELSE LINPUT #1:NX\$

650 PX=POS(NX\$, " ",1):: IF P X<2 OR PX>6 THEN 640

660 P=POS(NX\$, " ",1):: IF P X<P THEN 640

670 NR=-1 :: FOR I=1 TO PX-1 :: C=ASC(SEG\$(NX\$,I,1)):: N R=NR AND C>47 AND C<58 :: N EXT I :: IF NOT(NR)THEN 640

680 IF SEG\$(N\$,LEN(N\$),1)=" " THEN 640

690 IF VAL(SEG\$(NX\$,1,PX-1)) <VAL(SEG\$(N\$,1,P-1))THEN 640

700 NQ,I=0

710 I=POS(N\$,CHR\$(34),I+1):: IF I THEN NQ=NQ+1 :: GOTO 7 10 ELSE IF NQ<>2*INT(NQ/2)TH EN 640

720 SUBEND

730 !

740 !*****

750 !

760 SUB PAGEBUILD(P\$(1),EFL, X,L)

770 FOR I=X TO L

780 IF EFL THEN SUBEXIT ELSE CALL BASICLINE(NEW\$,EFL):: PRINT NEW\$:""

790 IF NEW\$="" THEN 780 ELSE CALL WRITCOL(P\$(1),I,X,NEW \$):: I=X

800 NEXT I

810 SUBEND

820 !

830 !*****

840 !

850 SUB WRITCOL(P\$(1),I,X,N\$)

860 IF LEN(N\$)>28 THEN P\$(X) =SEG\$(N\$,1,28):: N\$=SEG\$(N\$, 29,LEN(N\$)-28):: X=X+1 :: 60 TO 860 ELSE P\$(X)=N\$:: N\$="" :: X=X+1 :: P\$(X)=" " :: X=

X+1

870 SUBEND

880 !

890 !*****

900 !

910 SUB PRINTPAGE(P\$(1),X,L)

920 IF L=296 THEN 940

930 FOR I=1 TO X :: PRINT #2 :TAB(9);P\$(I);TAB(45);P\$(I+X):: NEXT I :: GOTO 1010

940 PRINT #2:CHR\$(15);CHR\$(2 7);"0" :: REM ** Set for com pressed printing **

950 PRINT #2:CHR\$(27);CHR\$(6 8);CHR\$(6);CHR\$(8);CHR\$(37); CHR\$(39);CHR\$(68);CHR\$(70);C HR\$(99);CHR\$(101);CHR\$(0):: REM ** SETS HORIZ. TABS **

960 PRINT #2:TAB(8);RPT\$("-" ,123):: F\$=""

970 FOR I=1 TO X :: A\$=P\$(I) :: B\$=P\$(I+X):: C\$=P\$(I+2*X):: D\$=P\$(I+(3*X))&SEG\$(F\$, LEN(P\$(I+(3*X))),S)

980 PRINT #2:CHR\$(9);" ";CHR \$(9);A\$;CHR\$(9);" ";CHR\$(9); B\$;CHR\$(9);" ";CHR\$(9);C\$;C HR\$(9);" ";CHR\$(9);D\$

990 NEXT I :: REM ** CHR\$(9) tabs the printer to the next tab stop **

1000 PRINT #2:TAB(8);RPT\$("-" ,123)

1010 PRINT #2:CHR\$(18);CHR\$(27);"2";CHR\$(27);CHR\$(68);C HR\$(0);CHR\$(12):: REM ** Clea r Tab Stops and Form Feed **

1020 SUBEND

1030 !

1040 !!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1150 SUBEND	Q* THEN P\$(X-1)=" :: GOTO 1	1320 SUB ADJUST(L,X,E\$)
1050 !	1160 !	270	1330 IF L=296 THEN 1370
1060 SUB WIPER(P\$(I))	1170 !!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1240 DISPLAY AT(1,26)SIZE(3)	1340 IF INT(X/2)=X/2 THEN 13
1070 FOR I=1 TO 320 :: P\$(I)	1180 !	:STR\$(L-X+1):: IF X=L THEN C	50 ELSE X=X+1
= " " :: NEXT I	1190 SUB COMMENT(P\$(I),X,L,E\$	ALL ADJUST(L,X,E\$):: CALL PR	1350 IF X>L OR E\$="E" THEN X
1080 SUBEND)	INTPAGE(P\$(I),X,L):: CALL WIP	=X/2 ELSE X=55
1090 !	1200 CALL CLEAR :: DISPLAY A	ER(P\$(I)):: X=1 :: GOTO 1240	1360 SUBEXIT
1100 !!!!!!!!!!!!!!!!!!!!!!!!!!!!!	T(1,1):"ENTER QQ TO QUIT. L	1250 NEXT I	1370 IF INT(X/4)=X/4 THEN 13
1110 !	INES=":STR\$(L-X+1):".....	1260 CALL HCHAR(4,1,32,640):	80 ELSE X=X+1 :: GOTO 1370
1120 SUB FIXNAME(N\$)	1210 FOR I=5 TO 23	: DISPLAY AT(4,1):P\$(X-1)::	1380 IF X>L OR E\$="E" THEN X
1130 CALL HCHAR(22,1,32,96)	1220 ACCEPT AT(1,1)BEEP SIZE	GOTO 1210	=X/4 ELSE X=74
1140 DISPLAY AT(22,1):"CORRE	(28)VALIDATE(UALPHA,NUMERIC,	1270 CALL CLEAR	1390 SUBEND
CT NAME SHOULD BE....." :: A	"::!(?)&=/=^"):P\$(X)::	1280 SUBEND	
CCEPT AT(24,1)BEEP:N\$:: CAL	X=X+1	1290 !	
L HCHAR(22,1,32,96)	1230 IF SEB\$(P\$(X-1),1,2)="Q	1300 !!!!!!!!!!!!!!!!!!!!!!!!!!!!!	
		1310 !	

LIBRARY CORNER

Here are a few new listings in our library:

G053 SLOTS An old Las Vegas favorite brought to the computer. Much cheaper than the real thing, but still fun to win or lose. Console basic.

U021 AUTO CHARACTER DEFINITION A handy little program for the definition of graphics characters. You design the character and the computer gives the graphics code. Could be modified to save the code. Console Basic or extended basic.

U019 DISK CATALOG A utility program with a delete feature for editing disk files. Very handy. Requires disk and extended basic.

G013 DUCK! A game of devilish speed and quick wits. Challenging and exhilarating, but lots of fun. Requires Extended Basic.

G038 LIFELINE TO TITAN A landing game requiring skill and timing. Good graphics, speed, and challenge. Requires Extended Basic. .BF

THIS PROGRAM IS BY CHARLES STRINGER. THE COPY YOU ARE LOOKING AT WAS PRODUCED BY BOB PASS' PROGRAM LISTER. THE CODE FOR IT IS ELSEWHERE IN THE NEWSLETTER. HIS PROGRAM ALLOWS FOR TWO FORMATS (TWO AND FOUR COLMN) PLEASE LET US KNOW WHICH ONE YOU LIKE BEST.

100 REM+++++

110 REM+ +

120 REM+ 'SPRITE MASK' +

130 REM+ +

140 REM+ C.S.STRINGER +

150 REM+ +

160 REM+ DECATUR 99er +

170 REM+ +

180 REM+ USERS' GROUP +

190 REM+ +

200 REM+ 1 JUNE '85 +

210 REM+ +

220 REM+++++

230 REM :THIS PROGRAM DEMONSTRATES A WAY OF SELECTIVELY MASKING SPRITES.

240 REM :IT WORKS ONLY FOR STATIONARY SPRITES. THE 'CALL SPRITE' STATEMENT MUST NOT CONTAIN OPERANDS FOR ROW AND COLUMN VELOCITIES.

250 REM: THOSE OPERAND FIELDS MUST BE BLANK; ZERO VALUES ARE NOT PERMITTED.

260 REM: NEITHER CAN THE PROGRAM CONTAIN A 'CALL MOTION' STATEMENT.

270 REM: THE METHOD IS BASED ON THE OBSERVATION THAT A

SPRITE CAN BE REMOVED FROM THE SCREEN BY MOVING IT TO

280 REM: A DOT-ROW OF NUMBER GREATER THAN 192 BY USE OF THE 'CALL LOCATE' INSTRUCT

290 REM: ION; IF THE CHOSEN ROW IS #210, THE SPRITE THAT IS MOVED AND EVERY HIGHER-NUMBERED SPRITE BECOMES INVISIBLE.

300 REM: WHEN THE SPRITE ON DOT-ROW 210 MOVES TO SOME OTHER ROW, THE HIGHER-NUMBERED SPRITES REAPPEAR.

310 REM

320 REM: THE ONLY DOCUMENTATION KNOWN TO THE WRITER IS THE PARAGRAPH ON SPRITES ON PAGE 1 OF THE ADDENDUM TO

330 REM: THE "USER'S REFERENCE GUIDE"; THE 'MAGIC NUMBER' IS THERE GIVEN AS '208'.

340 REM: YOU MAY NEED TO EXPERIMENT WITH THE VALUE ASSIGNED TO VARIABLE 'K'. FOR MY MACHINE, '208' DOES'NT WORK, BUT '210' DOES.

350 REM

360 REM

370 K=210 :: CALL CLEAR

380 FOR I=1 TO 26 :: CALL SPRITE(#I,64+I,7,I*7,I*8+16)::
NEXT I !DEFINES A DIAGONAL LINE OF 26 SPRITES AS THE LETTERS OF THE ALPHABET

390 REM

400 DISPLAY AT(22,1):"HIT ANY LETTER," :: DISPLAY AT(23,1):"THEN PRESS 'ENTER'." !!!
!ASKS FOR INPUT OF A LETTER-CODE.

410 REM

420 ACCEPT AT(24,1)SIZE(1)VA
LIDATE("ABCDEFGHJKLMNOPQRST
UVWXYZ")BEEP:A\$:: DISPLAY A
T(24,1):A\$!!!ACCEPTS AND DI
SPLAYS THE LETTER-CODE.

430 REM

440 J=ASC(A\$)-64 !DECODES TO
OBTAIN SPRITE NUMBER.

450 REM

460 CALL SHOW(J,HOMEROW,HOME
COL)!DISPLAYS THE LETTER COD
E FOR THE CHOSEN SPRITE AND
ITS DOT-ROW ADDRESS ON THE
SCREEN. GIVES CODE AND

470 REM: ADDRESS OF THE SPRI
TE OF NEXT-HIGHER NUMBER.

480 REM

490 CALL LOCATE(#J,210,HOME
COL)!MOVES SPRITE TO DOT-ROW
210.

500 REM

510 CALL SHOW(J,DUMMYROW,DUM
MYCOL)!DISPLAYS THE PARTIALL
Y-MASKED SPRITE LINE, DEMONS
TRATES THAT SPRITE 'J' IS

520 REM: ON LINE 210, AND
THAT ITS RIGHT-HAND NEIGHBOR
IS STILL AT HOME, THOUGH
INVISIBLE.

530 REM

540 CALL LOCATE(#J,RND*255+1
,HOMECOL)! MOVES SPRITE 'J'
TO A RANDOMLY CHOSEN DOTROW.

550 REM

560 CALL SHOW(J,DUMMYROW,DUM
MYCOL)!DISPLAYS THE RESTORED
SPRITES.

570 REM

580 CALL LOCATE(#J,HOMEROW,H
OMECOL)! TAKES SPRITE 'J'
BACK HOME.

590 REM

600 CALL SHOW(J,DUMMYROW,DUM
MYCOL)!DISPLAYS THE RESTORED
SPRITE-LINE.

610 REM

620 GOTO 420 ! GOES BACK TO
GET ANOTHER CODE.

630 STOP

640 REM

650 SUB SHOW(SPRITENUM,R,C)

660 REM

670 CALL POSITION(#SPRITENUM
,R,C)!GETS DOT-ROW ADDRESS
OF SPRITE 'J'...

680 CALL POSITION(#SPRITENUM
+1,R1,C1)!...AND OF ITS NEI-
GHBOR.

690 REM

700 DISPLAY AT(24,3):"AT ";R
;" ";CHR\$(64+(SPRITENUM+1
));" AT ";R1 !DISPLAYS THE CO
DES AND ADDRESSES.

710 REM

720 FOR DELAY=1 TO 500

730 NEXT DELAY

740 DISPLAY AT(24,3):"
"

750 FOR DELAY=1 TO 50 :: NEX
T DELAY

760 SUBEND

770 END

TIPS FROM THE TIGERCUB

023

Copyright 1985

TIGERCUB SOFTWARE
156 Collingwood Ave.
Columbus, OH 43213

Distributed by Tigercub Software to TI-99/4A Users Groups for promotional purposes and in exchange for their newsletters. May be reprinted by non-profit users groups, with credit to Tigercub Software.

The entire contents of Tips from the Tigercub Nos. 1 through 14, with more added, are now available as a full disk of 50 programs, routines and files for just \$15.00 postpaid!

Nuts & Bolts is a diskfull of 100 (that's right, 100!) XBasic utility subprograms in MERGE format, ready for you to merge into your own programs. Contents include 13 type fonts, 14 text display routines, 12 sorts and shuffles, 9 data saving and reading routines, 9 wipes, 8 pauses, 6 music, 2 protection, etc., and now also a tutorial on using subprograms, all for just \$19.95 postpaid!

And I have about 140 other absolutely original programs in Basic and XBasic at only \$3.00 each! (plus \$1.50 per order for cassette, packing and postage, or \$3.00 for diskette, PPM) I will send you my descriptive catalog for a dollar, which you can then deduct from your first order.

Several different routines have been published which will extract and save a specified series of lines out of a program, but this one by George Steffen of the L.A. 99ers is certainly the

best.

```
1 !SUBROUTINE EXTRACTOR by G
  eorge F. Steffen. SAVE in ME
  RGE format. MERGE into any p
  rogram (with line # starting
  above B). RUN to extract
  2 !selected lines. Deletes i
  tself. Then BE SURE to SAVE
  the selected lines in MERGE
  format because the remaining
  lines are still in memory!
  3 CALL CLEAR :: CALL INIT ::
  INPUT "Line numbers of rout
  ine to be saved: First,Last?
  ":L,M :: 6=256 :: CAL
  L PEEK(-31952,H,I,J,K)
  4 C=INT(M/6):: D=M-C*6 :: F=
  (J-6)*6+K :: FOR E=(H-6)*6+1
  TO F STEP 4 :: CALL PEEK(E,
  A,B):: IF A=C AND B=D THEN 6
  5 NEXT E :: PRINT "LINE";M;
  "NOT FOUND!" :: STOP !@P-
  6 H=INT(E/6):: I=E-(6*H):: H
  =H+6 :: C=INT(I/6):: D=L-C*6
  :: FOR E=E+4 TO F STEP 4 ::
  CALL PEEK(E,A,B):: IF A=C A
  ND B=D THEN 8 !@P-
  7 NEXT E :: PRINT "LINE";L;
  "not found!" :: STOP !@P-
  8 E=E+3 :: J=INT(E/6):: K=E-
  (6*J):: J=J+6 :: CALL LOAD(-
  31952,H,I,J,K):: STOP !@P-
```

The enhancements to my Menu Loader, published in Tips #22, contained an error. Please change line 413 to read -

```
413 LINPUT #2:M$ :: PRINT M$
  :: IF EOF(2)THEN 416
```

Some folks were interested in the idea of a program that writes a program, so let's write a program that will write a program to list the token codes that you need to use to write a program that will write a program -

```
100 OPEN #1:"DSK1.TOKENLIST"
  ,OUTPUT,DISPLAY ,VARIABLE 16
  3 :: FOR N=129 TO 254 :: L1=
  INT(N/256):: L2=N-256*L1
  110 PRINT #1:CHR$(L1)&CHR$(L
  2)&CHR$(131)&CHR$(N)&CHR$(0)
  :: NEXT N
  120 PRINT #1:CHR$(255)&CHR$(
```

255):: CLOSE #1 :: END

Key that in and SAVE it just in case, then RUN it. When READY, type NEW, then MERGE DSK1.TOKENLIST. Now LIST it and you will see a list of ASCII codes 129 through 254 and their token meanings. Delete lines 171 through 175, 185, 198, 226 through 231, and 242. Change the definition of 199 to QUOTED STRING, of 200 to UNQUOTED STRING, and add line 255 END OF FILE.

You don't need all those exclamation points, so change the program to a DIS/VAR #0 file by LIST "DSK1.TOKENLIST". Then key in this little routine.

```
100 OPEN #1:"DSK1.TOKENLIST"
  :: OPEN #2:"PIO"
  110 LINPUT #1:A$ :: PRINT #2
  :SEG$(A$,1,4)&SEG$(A$,6,LEN(
  A$)):: IF EOF(1)<>1 THEN 110
  120 CLOSE #1 :: CLOSE #2 ::
  END
```

RUN it, and print out a list of all the token codes. More on this next month - if someone buys a few programs so that I can afford another month.

Now that we've done about all that we can with the Menu Loader, here is another version to use on your finalized library disks of programs. It lacks the features that you will no longer need, but will list your programs by their full names, up to 24 characters long.

```
100 !NAMELOADER by A. Kludge
  /M. Gordon/T. Boisseau/J. Pe
  terson/etc.
  110 CALL CLEAR :: CALL SCREE
  N(5):: FOR S=1 TO 14 :: CALL
  COLOR(S,7,16):: NEXT S :: C
  ALL VCHAR(1,31,1,96):: CALL
  COLOR(0,2,16)
  120 OPTION BASE 1 :: DIM P66
  (99),M$(99)
```

130 ! List the full names of the programs on the disk in the DATA statements, in the sequence in which they are listed by an ordinary disk cataloger program

140 !Then SAVE this program under the filename LOAD

```
150 DATA
  160 DATA
  170 DATA
  180 DATA
  190 DATA END
  200 FOR J=1 TO 99 :: READ M$(
  J):: M$(J)=SEG$(M$(J),1,24)
  210 IF M$(J)="END" THEN M$(J
  )=" " :: GOTO 230
  220 NEXT J
  230 IMAGE #0
  240 DISPLAY AT(1,4):"TIGERCU
  B NAMELOADER"
  250 D$="DSK1." :: OPEN #1:D$
  ,INPUT ,RELATIVE,INTERNAL ::
  INPUT #1:P$
  260 FOR X=1 TO 99 :: IF X/20
  <>INT(X/20)THEN 290
  270 DISPLAY AT(24,1):"Type #
  of choice or Enter 0" :: AC
  CEPT AT(24,27)VALIDATE(DIGIT
  )SIZE(-3):K :: IF K=0 THEN 2
  80 :: IF K>0 AND K<NN+1 THEN
  390 ELSE 270
  280 X=1
  290 I=I+1 :: IF I>127 THEN K
  =X :: GOTO 370
  300 INPUT #1:P$ :: NN=NN+1
  310 IF LEN(P$)=0 THEN 350
  320 DISPLAY AT(X+3,2):USING
  230:NN :: DISPLAY AT(X+3,5):
  M$(NN):: P66(NN)=P$
  330 CALL KEY(0,KK,ST):: IF S
  T=0 THEN 340 :: FLAG=1 :: GO
  TO 350
  340 NEXT X
  350 DISPLAY AT(X+4,1):" " ::
  DISPLAY AT(X+5,2):USING 230
  :NN+1 :: DISPLAY AT(X+5,6):"
  Terminate"
  360 DISPLAY AT(X+6,1):" C
  hoice?" :: ACCEPT AT(X+6,16)
  SIZE(2)VALIDATE(DIGIT):K ::
  IF K<>NN AND K<NN+1 THEN 30
  0
  370 IF K=NN+1 THEN CALL CLEA
  R :: CLOSE #1 :: END
  380 !IF K<1 OR K>99 OR LEN(P
  66(K))=0 THEN 350
  390 CLOSE #1
  400 CALL INIT :: CALL PEEK(-
  31952,A,B):: CALL PEEK(A*256
```

```

+B-65534,A,B):: C=A1256+B-65
534 :: A=0&P68(K):: CALL L
OAD(C,LEN(A))
410 FOR I=1 TO LEN(A):: CAL
L LOAD(C+I,ASC(SEG$(A$,I,1)
):: NEXT I :: CALL LOAD(C+I,
0)
420 CALL VCHAR(1,3,32,672)::
CALL SCREEN(0):: FOR S=0 TO
14 :: CALL COLOR(S,2,1):: N
EXT S :: DISPLAY AT(12,2)::"L
OADING ";M$(K)
430 RUN "DSK1.1234567890"

```

Last month I forgot to have anything for the kids, or anything in Basic, so -

```

100 CALL CLEAR
110 REM by Jim Peterson of
Tigercub Software
120 PRINT TAB(1);"***AUTOMA
TIC MOUSE MAZE***": : : "
Choose your mouse and:"wa
tch it try to find its way"
130 PRINT "through the maze.
": : " When one of the mice
has": "taken 50 extra steps,
the": "cat gets it!"
140 PRINT : : "Touch any key"
150 CALL KEY(0,K,ST)
160 IF ST<1 THEN 150
170 CALL CLEAR
180 CALL CHAR(120,"007BFEFFF
E78")
190 CALL CHAR(121,"1038387C7
C7C7C38")
200 CALL CHAR(122,"387C7C7C7
C383810")
210 CALL CHAR(123,"001E7FFF7
F1E")
220 CALL CHAR(128,"001E61816
11E")
230 CALL CHAR(129,"384444444
4242410")
240 CALL CHAR(130,"102828444
4444430")
250 CALL CHAR(131,"007886810
678")
260 CALL SCREEN(5)
270 T1=610
280 T2=610
290 CALL CHAR(136,"FFFFFFF
FFFFFF")
300 CALL COLOR(14,16,16)
310 CALL COLOR(13,2,16)
320 CALL COLOR(12,2,16)
330 R=10
340 GOSUB 1460

```

```

350 R1=10
360 C=2
370 C1=2
380 CALL HCHAR(R,C,136,2)
390 C=C+1
400 M=120
410 M2=120
420 RANDOMIZE
430 A=(INT(2*RND)+1)*2
440 B=INT(10*RND)+1
450 ON B GOSUB 470,470,470,4
70,510,510,550,550,590,590
460 GOTO 420
470 IF C+A>30 THEN 630
480 CALL HCHAR(R,C,136,A)
490 C=C+A
500 RETURN
510 IF R+A>20 THEN 540
520 CALL VCHAR(R,C,136,A)
530 R=R+A
540 RETURN
550 IF R-A<2 THEN 580
560 CALL VCHAR(R-A+1,C,136,A
)
570 R=R-A
580 RETURN
590 IF C-A<3 THEN 620
600 CALL HCHAR(R,C-A+1,136,A
)
610 C=C-A
620 RETURN
630 CALL HCHAR(R,C,136)
640 C=C+1
650 IF C<31 THEN 630
660 R2=R
670 C2=C
680 CALL HCHAR(R1,C1,M)
690 CALL HCHAR(R2,C2,M2)
700 Y=Y+1+(Y=2)*2
710 IF Y=2 THEN 1020
720 CALL HCHAR(R1,C1,136)
730 ON M-119 GOTO 800,900,74
0,850
740 IF C1=31 THEN 950
750 CALL GCHAR(R1,C1+1,6)
760 IF 6=32 THEN 850
770 C1=C1+1
780 M=120
790 GOTO 950
800 CALL GCHAR(R1-1,C1,6)
810 IF 6=32 THEN 740
820 R1=R1-1
830 M=121
840 GOTO 950
850 CALL GCHAR(R1+1,C1,6)
860 IF 6=32 THEN 900
870 R1=R1+1
880 M=122
890 GOTO 950
900 CALL GCHAR(R1,C1-1,6)

```

```

910 IF 6=32 THEN 800
920 C1=C1-1
930 M=123
940 GOTO 950
950 CALL HCHAR(R1,C1,M)
960 IF (C1=31)*(C2=2)THEN 13
20
970 IF C1<31 THEN 700
980 T2=T2-10
990 CALL SOUND(50,T2,5)
1000 IF T2=110 THEN 1340
1010 GOTO 700
1020 CALL HCHAR(R2,C2,136)
1030 ON M2-127 GOTO 1040,120
0,1090,1150
1040 CALL GCHAR(R2+1,C2,6)
1050 IF 6=32 THEN 1090
1060 R2=R2+1
1070 M2=129
1080 GOTO 1250
1090 IF C2=2 THEN 1250
1100 CALL GCHAR(R2,C2-1,6)
1110 IF 6=32 THEN 1150
1120 C2=C2-1
1130 M2=128
1140 GOTO 1250
1150 CALL GCHAR(R2-1,C2,6)
1160 IF 6=32 THEN 1200
1170 R2=R2-1
1180 M2=130
1190 GOTO 1250
1200 CALL GCHAR(R2,C2+1,6)
1210 IF 6=32 THEN 1040
1220 C2=C2+1
1230 M2=131
1240 GOTO 1250
1250 CALL HCHAR(R2,C2,M2)
1260 IF (C2=2)*(C1=31)THEN 1
320
1270 IF C2>2 THEN 700
1280 T1=T1-10
1290 CALL SOUND(50,T1,5)
1300 IF T1=110 THEN 1370
1310 GOTO 700
1320 CALL HCHAR(1,1,32,768)
1330 GOTO 330
1340 GOSUB 1460
1350 PRINT "THE CAT GOT THE
WHITE MOUSE": :
1360 GOTO 1390
1370 GOSUB 1460
1380 PRINT "THE CAT GOT THE
BLACK MOUSE": :
1390 PRINT "TO PLAY AGAIN, T
OUCH ANY KEY"
1400 CALL KEY(0,K,ST)
1410 IF ST<1 THEN 1400
1420 T1=610
1430 T2=610
1440 CALL HCHAR(1,1,32,768)

```

```

1450 GOTO 330
1460 CALL HCHAR(23,1,32,32)
1470 PRINT CHR$(120);(T1-T1
)/10;TAB(20);CHR$(128);(T10-T1
0)/10
1480 RETURN

```

Did you know that ACCEPT AT(1,0) will accept a full line of 28 characters? Did you know that ACCEPT AT (R,0)SIZE(-28) and Enter will accept everything on row R? And did you know that ACCEPT M\$ will accept a string of 255 characters?

Need a filler, so

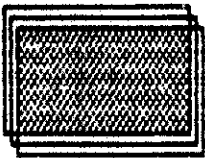
```

100 !MUSICAL BARGRAPH by Jim
Peterson
110 CALL CLEAR :: CALL SCREE
N(5):: FOR J=2 TO 14 :: X=J-
(J>4):: CALL COLOR(J,X,1)::
NEXT J
120 DIM M$(13),N(13):: M$="(
080HPX'hp"&CHR$(128)&CHR$(1
36):: FOR J=1 TO 13 :: M$(J)
=SEG$(M$,J,1):: DISPLAY AT(J
+6,1)SIZE(1):M$(J):: NEXT J
130 X=110 :: FOR J=1 TO 13 :
: N(J)=X+1.059463094^(J-1)::
NEXT J
140 A=INT(13*RND+1):: B=INT(
25*RND+1):: DISPLAY AT(A+6,2
)SIZE(28):RPT$(M$(A),B):: CA
LL SOUND(B*40,N(A),0,N(A)*2+
4,0,N(A)*4+6,0)
150 DISPLAY AT(A+6,2):" ::
GOTO 140

```

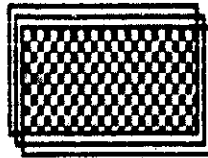
MEMORY FULL

Jim Peterson

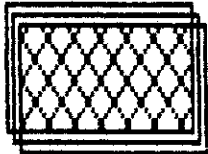
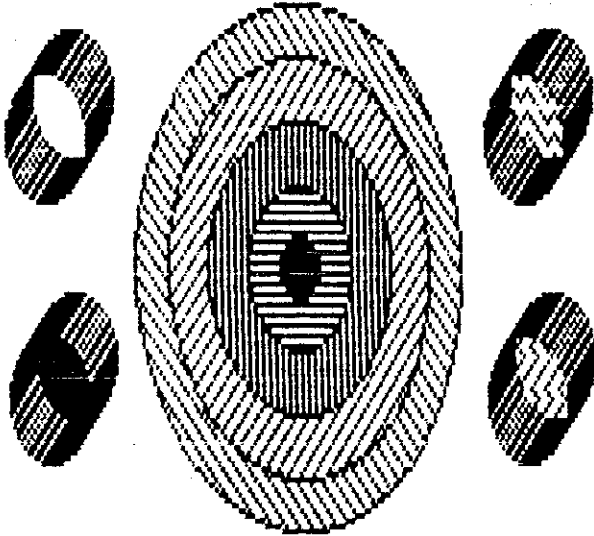


TI-ARTIST

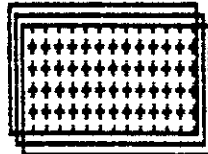
by Inscobot



NOW AVAILABLE FROM RAMSOFT ENTERPRISES



\$30.00



TI-Artist is a very advanced graphics design program written in assembly language. The program can make circles, spheres (solid circles), boxes, frames (empty boxes), rays, linking rays, free hand drawing, and more. It features a wide variety of brush strokes and a full choice of colors. The program can paint (fill) with solid colors or with a variety of interesting patterns. TI-Artist can even zoom in on a particular area and magnify it for easy detailed work. It also features an advanced four way mirroring routine demonstrated on the left. The program can print characters in 81 different sizes, and can dump it's pictures to Okidata, Epson (and compatibles), and Axion printers in different densities and magnifications. TI-Artist can save your works to disk, and can even load files created by other program such as Draw N Plot!

TI-Artist requires 48K, disk, and one of the following: Extended Basic, Editor/Assembler, Mini Memory, TI-Writer, or the CorComp disk controller.

To order from Ramsoft, send \$30.00 plus \$1.50 shipping and handling to Ramsoft at:

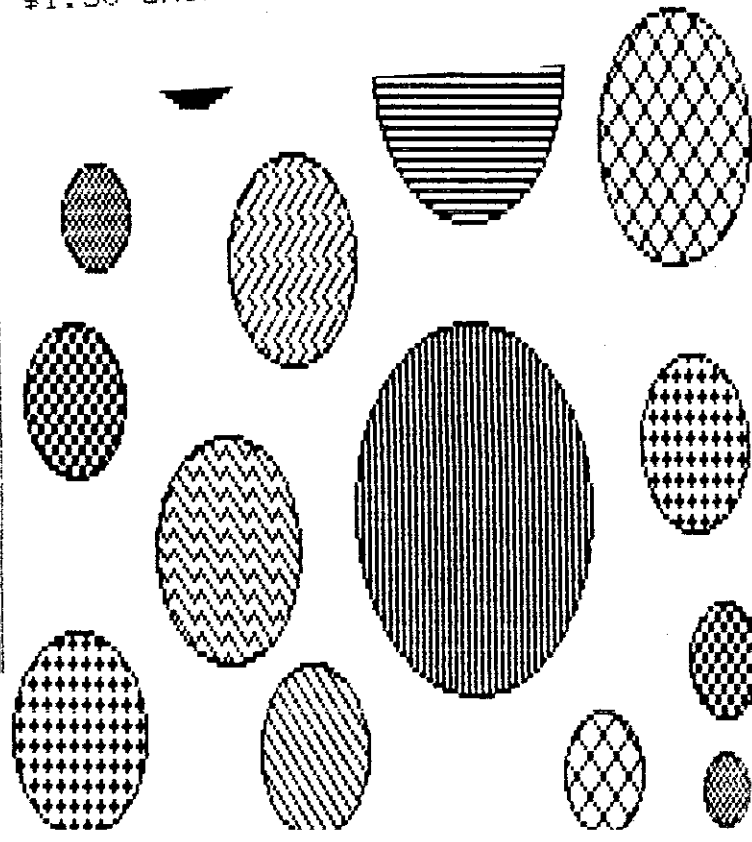
RAMSOFT ENTERPRISES
1501 East Chapman Avenue . Suite 338
Fullerton, California 92631
(714) 738-5665

NOW ONLY \$19.00
PLUS \$1.50 SHIPPING AND HANDLING

If you would like to
Mail order TI-Artist
add \$1.50 S/H

of Bill Brown Inc. 21
2217A-11 92610 714
738-5665

214 21 20 244 115 05 18 400
115 05 18 400 115 05 18 400
115 05 18 400 115 05 18 400
115 05 18 400 115 05 18 400



TC-MAIL

A \$9.95 TI-FORTH MAILING LIST PROGRAM I

TC-MAIL is a TI-FORTH based mail list program written by long time 99'er Thi Chau. TC-MAIL is TI-FORTH fast and reasonably priced. It has many advantages over extended basic mail list programs because it uses the many advantages of the TI-FORTH system.

TC-MAIL uses a 40 column display, has a full screen data editor, and sorts by any field. It will print 1, 2, or 3 across labels, mail lists, or phone lists. The whole program resides in memory so the single disk user will not get tennis elbow. TC-MAIL can initialize data disks directly from the program, do multiple sorts, and is binary saved for fast loading. The program will set colors for a monochrome or color monitor (television). YOU DO NOT NEED TO KNOW A THING ABOUT TI-FORTH TO USE TC-MAIL!

On your TC-MAIL disk, you will get two TC-MAIL programs, Series A TC-MAIL, and Series B TC-MAIL. Use the one that appeals to you the most. The differences are listed below (remember, you get both):

SERIES A

- 4 CHARACTER TITLE -
- 2 COLUMN PHONE LIST -
- 12 CHARACTER LAST NAME -
- 12 CHARACTER FIRST NAME -
- 710 RECORDS PER DATA DISK -

SERIES B

- 4 CHARACTER TITLE -
- 1 COLUMN PHONE LIST -
- 18 CHARACTER LAST NAME -
- 24 CHARACTER FIRST NAME -
- 622 RECORDS PER DATA DISK -

TC-MAIL is available for only \$9.95 plus shipping and handling. The program is being marketed at this price to try to reduce unauthorized copying, thereby benefitting everyone involved (consumers - good product at good price; retailer - less copying equals more sales; author - less pirating means more returns for programming effort).

TC-MAIL requires the Editor/Assembler, 48K, one disk drive, and a printer (optional, but recommended). TC-MAIL is available from Ramsoft direct, or may be available from your local dealer. To obtain your copy from Ramsoft direct, send \$9.95 plus \$1.50 (per copy) shipping and handling to:

RAMSOFT ENTERPRISES

1501 East Chapman Avenue Suite 338
Fullerton, California 92631
(714) 738-5665

California residents add 6 percent sales tax

COD orders add \$5.00

VOLUME ORDERS SHIPPED TO ONE ADDRESS (NO INDIVIDUAL PACKAGING)

- 10 or more orders: \$9.95 per copy and FREE SHIPPING AND HANDLING!
- 25 or more orders: \$8.95 per copy and FREE SHIPPING AND HANDLING!
- 50 or more orders: \$6.95 per copy and FREE SHIPPING AND HANDLING!

Y
O
R
Z
M
*
*
*
*
*

IDS * Do you want your children to learn to play the piano, but can't afford one right now? Here is an inexpensive substitute: the TI-99/4A piano.

You play only the bottom three rows, essentially all of the letter keys. You can play them with the shift key up or down. In one case you play whole notes, in the other one you play half notes, which repeat when you hold down the key.

The very bottom row plays noise tones when the shift key is locked down, very amusing to little children.

To keep the program simple, the screen is left blank. But that does not impede all you budding programmers to create some nice graphics to enliven this music program, and make it even more attractive to children.

This program was published in Nittinian, the Swedish newsletter for 99-ers, by an unknown author. The translation was done by Maurice E.T. Swinnen of the Washington DC Area 99-er Computer Club.

```
50 REM PIANO, NITTINIAN 84-2
100 CALL KEY(0,K,S):: IF S=0 THEN 100
110 IF K=45 THEN 100
120 IF K<44 THEN 100 ELSE IF K>46 AND K<
58 THEN 100 ELSE IF K>60 AND K<65 THEN 1
00
130 IF K>90 AND K<96 THEN 100 ELSE IF K>
96 THEN 200 !CHECK IF LOWER OR UPPER CAS
E LETTER HAS BEEN PRESSED
140 IF K=44 THEN CALL SOUND(-100,1568,0)
:: GOTO 100
150 IF K=46 THEN CALL SOUND(-100,1760,0)
:: GOTO 100
160 IF K=59 THEN CALL SOUND(-100,698,0):
: GOTO 100
170 IF K=58 THEN CALL SOUND(-100,1661,0)
:: GOTO 100
180 IF K=60 THEN CALL SOUND(-120,-8,0)::
GOTO 100
185 REM UPPER CASE LETTERS ASCII=65->90
190 ON K-64 GOTO 210,220,230,240,250,260
,270,280,290,300,310,320,330,340,350,360
,370,380,390,400,410,420,430,440,450,460
195 REM LOWER CASE LETTERS ASCII=97->122
200 ON K-96 GOTO 470,480,490,500,510,520
,530,540,550,560,570,580,590,600,610,620
,630,640,650,660,670,680,690,700,710,720
205 REM UPPER CASE LETTERS=HALF TONES+NO
ISE
210 CALL SOUND(-120,466,0):: GOTO 100
220 CALL SOUND(-120,-6,0):: GOTO 100
230 CALL SOUND(-120,-1,0):: GOTO 100
240 CALL SOUND(-120,622,0):: GOTO 100
250 CALL SOUND(-120,158,0):: GOTO 100
260 CALL SOUND(-120,740,0):: GOTO 100
270 CALL SOUND(-120,831,0):: GOTO 100
280 CALL SOUND(-120,932,0):: GOTO 100
290 CALL SOUND(-120,311,0):: GOTO 100
300 CALL SOUND(-120,1109,0):: GOTO 100
310 CALL SOUND(-120,1245,0):: GOTO 100
320 CALL SOUND(-120,1480,0):: GOTO 100
330 CALL SOUND(-120,-4,0):: GOTO 100
```

```
340 CALL SOUND(-120,-5,0):: GOTO 100
350 CALL SOUND(-120,370,0):: GOTO 100
360 CALL SOUND(-120,415,0):: GOTO 100
370 CALL SOUND(-120,177,0):: GOTO 100
380 CALL SOUND(-120,185,0):: GOTO 100
390 CALL SOUND(-120,554,0):: GOTO 100
400 CALL SOUND(-120,208,0):: GOTO 100
410 CALL SOUND(-120,277,0):: GOTO 100
420 CALL SOUND(-120,-7,0):: GOTO 100
430 CALL SOUND(-120,139,0):: GOTO 100
440 CALL SOUND(-120,-2,0):: GOTO 100
450 CALL SOUND(-120,233,0):: GOTO 100
460 CALL SOUND(-120,-3,0):: GOTO 100
465 REM LOWER CASE LETTERS=WHOLE TONES
470 CALL SOUND(-100,294,0):: GOTO 100
480 CALL SOUND(-100,1175,0):: GOTO 100
490 CALL SOUND(-100,988,0):: GOTO 100
500 CALL SOUND(-100,349,0):: GOTO 100
510 CALL SOUND(-100,131,0):: GOTO 100
520 CALL SOUND(-100,392,0):: GOTO 100
530 CALL SOUND(-100,440,0):: GOTO 100
540 CALL SOUND(-100,494,0):: GOTO 100
550 CALL SOUND(-100,220,0):: GOTO 100
560 CALL SOUND(-100,523,0):: GOTO 100
570 CALL SOUND(-100,587,0):: GOTO 100
580 CALL SOUND(-100,659,0):: GOTO 100
590 CALL SOUND(-100,1397,0):: GOTO 100
600 CALL SOUND(-100,1319,0):: GOTO 100
610 CALL SOUND(-100,247,0):: GOTO 100
620 CALL SOUND(-100,262,0):: GOTO 100
630 CALL SOUND(-100,110,0):: GOTO 100
640 CALL SOUND(-100,147,0):: GOTO 100
650 CALL SOUND(-100,330,0):: GOTO 100
660 CALL SOUND(-100,165,0):: GOTO 100
670 CALL SOUND(-100,196,0):: GOTO 100
680 CALL SOUND(-100,1047,0):: GOTO 100
690 CALL SOUND(-100,123,0):: GOTO 100
700 CALL SOUND(-100,880,0):: GOTO 100
710 CALL SOUND(-100,175,0):: GOTO 100
720 CALL SOUND(-100,784,0):: GOTO 100
```

