THE DELAWARE VALLEY USERS GROUP

P.O. BOX 6240 STANTON BRANCH, WILMINGTON DE 19804
DEDICATED TO TI-99/4A HOME COMPUTER USERS
MEETS 4TH THURS. EA. MONTH/6:30-9:30 P.M./CHRISTIANA MALL COMMUNITY ROOM

HOPE SPRINGS ETERNAL: A 99/9 COMPUTER? RUMBLING FROM ABOVE...

From the North Country has come a massive publicity effort. It is soliciting information about public TI user response to the latest, and apparently well-grounded, attempt to upgrade TI 99/4A users' capacity and capability to that of "the high-price spread". Via TIBBS systems nation-wide, RYTE DATA of Haliburton in Canada has reached out to dozens of user groups to present the following prospect:

A new computer based on the 9995 TI microprocessor chip (thereby fully compatible with 99/4A hardware and software) is to be formally released at the June U.S. Consumer Electronics Show. Standard configuration: 128K, internally expandable to 512K, with options to address up to one megabyte directly. ROM size not yet fully determined, it would include another 16K VDP RAM (as the 4A now has), with new chip capability of expansion to 64K. Resolution would be finer, with 80 columns supporting both existing 4A (composite) and higher grade RGB color monitors.

Envisioning use of the TI Peripheral Expansion Box (PEB, or P-Box), the new developer is projecting additional RAM disk, Analog/Digital, real time clock and other cards to retain value of previously purchased TI hardware (as well as software). Questions about sound, music and speech in the new system remain open at this point.

Among other changes would be keyboard upgrading to a full-size Selectric type, with various function keys as well. In speed, triple the 99/4A and more than double the IBM PC, a 10 megahertz clock is anticipated. Most significantly, the disk operating system (DOS) would allow quick file/disk control without switching out of programs, various combinations of Single/Double Sided-Density options up to quad density 800K options, and even hard disk use without a separate controller. Obviously, there may be some compatability problems with a few third party items now marketed for the 99/4A ...

[] [] [] [] [] [] [] [] [] [] [] [   ] [] [] [] [] [] [] [] [] [] [] []

REDEFINING THE CURSOR - T.Atkinson, Novia Scotia (several newsletters) REQUIRES: 32K Exp.Memory and XBasic

```
5  CALL CLEAR
10 CALL INIT
20 CALL LOAD(8196,63,248)
30 CALL LOAD(16376,67,85,82,
83,79,82,48,8)
40 CALL LOAD(12288,48,48,63,
255,254,124,24,12)
50 CALL LOAD(12296,2,0,3,248
,2,1,48,0,2,2,0,8,4,32,32,36
,4,91)
60 CALL LINK("CURSOR")
```

The new cursor shape is created by Line 40, in which the eight values following the memory location equal the Decimal equivalent of the Hex values in a CALL CHAR(xx,"aa bb cc dd ee ff gg hh") statement you can use to redefine another character.

Each byte (aa,bb, etc.) is separately indicated; for example, 255= FF in this example, when you change the cursor by an equivalent of CALL CHAR(30,"30 30 3F FF FE 7C 18 0C"). Why not CALL CHAR instead? Not for the cursor, X CAN'T DO THAT X

How do you determine the equivalent Decimal value of the Hex code? 255 is Decimal equivalence of FF in Hex, written as 255 = >FF.

For each byte (a pair of values, such as FF), multiply the left-hand nibble (half a byte, what else?) by 16. Now, add it to the right-hand nibble value. Remember A - F equals 10 through 15. Thus, FF=(15X16) or 240, plus 15, or >FF = 255.

We prefer the convenient conversion programs in Steve Davis' book, PROGRAMS FOR THE TI HOME COMPUTER @ $14.95, ISBN 0-911061-00-2.
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

CONVERTING CARTRIDGE ADVENTURE BASE FROM CASSETTE TO DISK FILES - Jeff Burkhardt,Boise 99ers Computer Club Dec. 1984 REQUIRES: Tape & Disk

TUNNELS OF DOOM cartridge will load data bases for itself and ADVENTURE series. Using FCTN <9> to save for either DSK or CS1 allows method for transfer of file from CS1 to DSK.

EFFICIENT USE OF SubPROGRAM CALLS: J.D. Canning, BOISE 99ers COMPUTER CLUB, Nov. 1984 REQUIRES: XBasic

When using similar CALL routine subprograms, with slightly different parameters (values), don't use an entire new routine and valuable memory. Plan ahead. For instance, pausing various lengths of time as users read different screens might warrant this technique:

```
100 CALL PAUSE(700)
...
150 CALL PAUSE(300)
...
900 SUB PAUSE(T)
910 FOR X=1 TO T::NEXT X
920 SUBEND
```

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

PREVIEWING YOUR TI-WRITER PRINTOUT & SAVING PAPER IN "FORMATTER" MODE Originally from Milwaukee 99/4 UG: REQUIRES: NO PRINTER!

This neat tip beats frustration and the annoying -and costly- form feed of TI-WRITER Formatter option when you want to preview your finished product you used line fills, etc. in TextEditor mode to create.

Print your documents in Formatter mode to DISK by typing: "DSK1. ANYTHING" at the prompt "Print Device Name". This directs output to the disk rather than the printer.

Next load via the Editor to see how the file will look as printed, or to correct information, before printing. Even erase a Form Feed! Then Print File when ready. Print control characters in the text are recognized but won't be printed.

+++++++++++++++++++++++++++++++++++

Based on: TIPS FROM THE TIGERCUB, 156 Collingwood, Columbus OH 43213

```
1 X=2 !RUN IN XBASIC ONLY
2 CALL COLOR(0,X,1)::INPUT "
CURSOR COLOR (2-16)?":X
3 GOTO 2
```

NEW COMPUTER (cont'd. from Page 1)

Ryte Data, as marketing agent, NOT the manufacturer-to-be itself, is seeking direct response from any individual users, who are advised emphatically that their own response will influence the future full-production runs.
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ALL READERS ARE ENCOURAGED TO
EXPRESS THEMSELVES DIRECTLY TO:
Ryte Data, Box 210 Mountain Street
Haliburton, Ontario K0M 1S0 CANADA

During a Canadian postal strike which began March 8, U.S. TI users should write instead to: 20 Starboard Way, Latham, NY 12110. You can call Ryte Data's Bruce Ryan at (705)457-2774 or SOURCE ID:TI 8678
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The developer's name was either surmised or spread quickly among TI users whose many calls have begun to hinder the process of production, the last thing anyone wants. (Which is why we didn't say it at the February 28 DVUG meeting although we got it from a Canadian TIBBS several weeks before.) Your Data Bus will continue to provide updates for DVUG members. Anybody seeking more specifics can send $7 to Ryte Data for seven explicit follow-up newsletters as unveiling time draws nearer.

Here are a few last goodies for what is designated the "99/128":

To keep hardware compatibility, DSR routines have been retained... but the 99/128 will have an option to add an 8088 microprocessor card in the P-Box, allowing MS-DOS (IBM compatible) software to run on it. Better yet, new software is ready to accompany the C.E.S. debut. Any more information gets considerably esoteric on the tech side for now.

There has been no price quoted publicly as yet, although the 99/8 was projected for a $500-600 range just before its withdrawal after a total of about 250 were issued, to TI staff only. Obviously there is even greater development here.

DATA BUS MAILING LABEL NOTICE
! ! !
On your Data Bus mailing label now will be found the date of your last paid-up membership newsletter to which you are entitled. This is the four-digit Month/Year entry to the left of your name. (Exchange or other complimentary copies will show a code of 0000.) Please help keep membership timely paid, so we may save postage and avoid missing or sending an issue unecessarily.

For convenience referencing the Mailing List program, the name on this label may have been slightly altered for label printouts. DVUG records continue to show any other spouse or family member inclusion, as was provided on an application.

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
X                                X
X CALL GIGO ... Errata Notices:  X
X                                X
X Program lines in The Data Bus  X
X indicated should read instead: X
X                                X
X Vol.3:1, Feb.85, p.2:          X
X    150 T$=A$(X)                X
X                                X
X Vol.2:11, Nov./Dec. 84, p.2    X
X in line 160:                   X
X    ... TIME=INT(D/3.75) ...    X
X instead of:                    X
X    ... TIME=INIT(D/3.75) ...   X
X                                X
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

```
+++++++++++++++++++++++++++++++++++
+                                 +
+ NOTICE TO "MASSCOPY" FREEWARE   +
+ USERS: DO NOT INITIALIZE YET!   +
+                                 +
+    Steve Lawless of our DVUG,   +
+ Author of MASSCOPY, the super   +
+ disk reproduction program, is   +
+ alerting users to an overflow   +
+ problem which causes the loss   +
+ of a few sectors from another   +
+ disk, when initializing with    +
+ MASSCOPY.   This is corrected   +
+ in Version 3.23, available at   +
+ the DVUG meeting March 28.      +
+                                 +
+++++++++++++++++++++++++++++++++++
```

RESOURCE LISTING FOR TEXAS INSTRUMENTS-99/4A HOME COMPUTERS

(These listings are provided as a convenience by the Editor, and do not constitute an endorsement by the Delaware Valley Users Group. They are provided to help some of our members realize the variety of resources available to them as TI users in 1985.)

ASSEMBLY LANGUAGE PUBLICATIONS (Prices shown are suggested retail):

ASSEMBLY LANGUAGE PRIMER, John T. Dow, 6560 Rosemoor St., Pittsburgh, PA 15217: $20.00 (NOTE: This author also markets the Dow Editor/Assembler on tape which loads in Basic for the Mini-Mem cartridge: $25.00) (412)521-9385

ASSEMBLY LANGUAGE TUTORIAL, The Softies, 7300 Gallagher, Suite 229 Edina, MN 55435: $14.50 (612)831-4872

BEGINNER'S GUIDE TO ASSEMBLY LANGUAGE ON THE TI-99/4A, Peter M.L. Lottrup, COMPUTE! Publications, Inc., P.O. BOX 5406, GREENSBORO, NC 27403: $12.95 (NOTE: Special sale price through Apr. 30 allows 15% reduction if ordered with other publications.) - FOR MINI-MEMORY ONLY ISBN 0-942386-74-4 (800)334-0868

BEGINNING ASSEMBLY LANGUAGE FOR THE TI HOME COMPUTER, Ed. Edward York and Timothy Inzana, D&D Publishing Co., 3177 Bellevue, Toledo, OH 43606: $19.95 A new highly-regarded work for starters.

FUNDAMENTALS OF TI-99/4A ASSEMBLY LANGUAGE, M.S. Morley, TAB Books, Inc., Blue Ridge Summit, PA 17214: $11.50, ISBN 0-8306-1722-1 - FOR MINI-MEMORY ONLY

INTRODUCTION TO ASSEMBLY LANGUAGE FOR THE TI HOME COMPUTER, Ralph Molesworth, Steve Davis Publishing, P.O. Box 190831, Dallas, TX 75219: $16.95, ISBN 0-911061-01-0 (NOTE: Prentice-Hall's paperback Spectrum Books Division assumed publication of Steve Davis' PROGRAMS FOR THE TI HOME COMPUTER, ISBN 0-911061-00-2, $14.95 in 1984. Davis edited the Molesworth volume.)

LEARNING TI 99/4A HOME COMPUTER ASSEMBLY LANGUAGE PROGRAMMING, Ira McComic, Wordware Publishing, Inc., 1104 Summit Ave., Suite 104, Plano, TX 75074 ISBN 0-13-527862-7: $16.95 (214)423-0090. This seems the most popular reference among our members presently.

Or you may wish to compare convenience of using one of the major TI catalog suppliers such as (but not limited to):
  Tex-Comp, P.O. Box 33084, Grenada Hills, CA 91344 (818)366-6631
  Tenex, P.O. Box 6578, South Bend, IN 46660 (800)348-2778
  Triton, P.O. Box 8123, San Francisco, CA 94128 (800)227-6900
  Unisource, P.O. Box 64240, Lubbock, TX 79464 (800)858-4580

THE DATA BUS is interested in running articles or programs in Assembly Language monthly or bi-monthly. Tutorial discussions would be especially helpful. Please contact the Editor at the address shown elsewhere in this newsletter. Thank You.

TIPS FROM THE TIGERCUB

#19

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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 casette, packing and postage, or $3.00 for diskette, PPM) Some users groups charge their members that much for public domain programs! I will send you my descriptive catalog for a dollar, which you can then deduct from your first order.

Folks, I just can't afford to keep mailing out these Tips if you don't BUY something once in awhile! I am hearing from more and

more groups who want to get on my mailing list, but I am having to cut back. I am dropping those groups which don't give any indication that their members ever get to see the Tips, and I'll have to cut further. If you do send me an order, or even ask for my catalog, mention your users group so I'll know there is someone still alive out there!

If you know of any schools in your area, especially elementary schools, that have TI-99/4As in the classroom, won't you please give me their address? I'll send them a free catalog.

Danny Michael has improved his graphics screen dump to include rotate and double size! It is in assembly, very fast, and runs out of XBasic, E/A module or Mini Memory. He has also written an assembly Neatlist program which lists an XBasic program to a printer in single line statements, indented, expanded, etc., very useful for debugging, setting up pre-scan, etc.

These are freeware, pay if you want and whatever you want. Just send an initialized disk for either one, or two disks (or SSDD or flippy) for both, in a returnable mailer with ENOUGH RETURN POSTAGE, to

Danny Micnael,
Rt 9 Box 460
Florence, AL 35630.

John Hamilton of the Central Iowa Users Group will send you his 22-page boklet of "99 Tips" for the TI-99/4A, for just $4.00. The address is

John Hamilton,
4228 E. Clinton, Des Moines IA 50317.

I have been experimenting with

TI-Writer, and this issue of the Tips is being printed in 4 columns, right justified directly from the printer. Here's how –

Use TI-Writer, editor mode, in any line length you want. The first line should be .RM 27;FI;AD but don't use any other formatter codes. Don't indent paragraphs. Use some other character as a temporary substitute for any ^, @, & or $ in the text. Don't include any program listings, yet.

Save the file as DSK1.TEXT. Print an edit copy. Then go into formatter mode. Select DSK1.TEXT to be printed, but instead of your printer spec, type DSK1.TEXT2. Your file will now be in 28-column format and right justified, and indented.

If the text is to include any program listings, run them through my 28-Column converter (see Tips #18), using the Editor option of that program.

Go back to TI-Writer editor and load DSK1.TEXT2. Merge in the program listings. Then PF to print file, but instead of a printer spec, type C DSK1.TEXT3. When it has printed to disk, LF the DSK1.TEXT3 and you will find that all control characters are gone.

Now for a bit of editing. Delete the 3 blank lines at the beginning, and the 6 blank lines that have appeared after every 60th line. Center the title by erasing with the space bar and retyping – do NOT use FCTN 2! Also replace any temporary characters with the ^, @, & or $.

You will print 4 columns of 60 lines per page, so the total lines in your file must be a multiple of 240. Add enough blank

lines to the end of the file to reach that count.

Save that file back to disk as DSK1.TEXT3. Now go into XBasic, key in this program and RUN!

```
100 OPEN #1:"DSK1.TEXT3",INP
UT :: OPEN #2:"PIO",VARIABLE
255 :: PRINT #2;CHR$(15);CH
R$(27);CHR$(69):: DIM B$(240
)
110 FOR A=1 TO 2 :: FOR B=1
TO 240 :: LINPUT #1:B$(B)::
NEXT B
120 FOR C=1 TO 60 :: PRINT #
2;TAB(10);B$(C);TAB(41);B$(C
+60);TAB(72);B$(C+120);TAB(1
03);B$(C+180):: NEXT C :: PR
INT #2;CHR$(27);CHR$(97);CHR
$(6):: NEXT A :: CLOSE #1 ::
CLOSE #2 :: END
```

The A loop is for a 2-page printout of 480 lines, of course.

You can modify this routine to print in 2 or 3 columns, adjust the margins, change the type font or size, rewrite for your own printer, etc. And the column width can be anything you want, just change that .RM 27 in the first line of the text (don't forget that the left margin is set at 0, not 1).

If you want a 2-column page, you can dump the file back to disk instead, and then print it out of TI-Writer editor. Use this routine, modified as you wish.

```
100 !Opens a file TEXT3 of 2
40 lines 35 char long and co
nverts it into a file which
can be printed out of TI-wri
ter Editor as 2 pages in 2 c
olumns
110 OPEN #1:"DSK1.TEXT3",INP
UT :: OPEN #2:"DSK1.TEXT4",O
UTPUT :: DIM B$(120)
120 FOR A=1 TO 2 :: FOR B=1
TO 120 :: LINPUT #1:B$(B)::
NEXT B
130 FOR C=1 TO 60 :: PRINT #
2:"    "&B$(C)&RPT$(" ",38-
```

LEN(B$(C)))&B$(C+60):: NEXT
C :: FOR D=1 TO 6 :: PRINT #
2:" " :: NEXT D :: NEXT A ::
CLOSE #1 :: CLOSE #2

It is best to run a
program to set up your
printer, and leave it turned
on, before printing that
file out of the Editor. It
is not at all easy to imbed
control characters in the
file, because they affect
the line in all columns and
also shift the lines out of
alignment.

I understand that there
a couple of kids who wait
every month for their dad to
key them in a bit of
nonsense from the Tigercub,
so -

```
100 !KEYZAP - by Jim Peterso
n
110 DISPLAY AT(6,11)ERASE AL
L:"KEYZAP" :: DISPLAY AT(12,
1):" Zap the Zprite by typ
ing the key in the correspon
dingposition on the keyboard
."
120 DISPLAY AT(24,10):"Press
any key" :: CALL KEY(0,K,S)
:: IF S=0 THEN 120
130 RANDOMIZE
140 CALL CHAR(47,"817EA5B199
A5423C")
150 CALL CLEAR :: T=0 :: CAL
L FLASH(T)
160 CALL KEY(3,K,ST):: IF ST
=0 THEN 180
170 C=C+1 :: IF C=101 THEN 1
90 ELSE CALL KEYBOARD(K,T)
180 CALL MOTION(#1,25#RND-25
#RND,25#RND-25#RND):: CALL C
OINC(#1,#2,16,A):: IF A=0 TH
EN 160 ELSE CALL FLASH(T)::
GOTO 160
190 CALL DELSPRITE(ALL):: DI
SPLAY AT(12,9):"GAME OVER" :
: DISPLAY AT(14,9):"SCORE";C
:: DISPLAY AT(16,9):"PLAY A
GAIN?"
200 CALL KEY(3,K,S):: IF S<1
THEN 200
210 IF K=89 THEN C=0 :: GOTO
150 ELSE END
220 SUB KEYBOARD(K,T)
230 IF FLAG=1 THEN 250 :: FL
```

```
AG=1
240 KEY$="1234567890=QWERTYU
IOP/ABDFGHJKL;"&CHR$(13)&"ZX
CVBNM,."
250 IF (K=47)+(K=61)+(K=13)T
HEN SUBEXIT ELSE X=POS(KEY$,
CHR$(K),1):: Y=ABS(X>11)-(X>
22)-(X>33)+1 :: R=Y&6 :: C=(
(X+(Y>1)&(Y-1)&11)&3)
260 CALL SPRITE(#2,42,16,R&8
-7,C&8-7):: CALL COINC(#1,#2
,16,M):: IF M=0 THEN SUBEXIT
270 CALL FLASH(T):: SUBEND
280 SUB FLASH(T):: FOR W=1 T
O 10 :: CALL SCREEN(16):: CA
LL SCREEN(8):: NEXT W :: CAL
L SPRITE(#1,47,2,1,1):: T=T+
1 :: DISPLAY AT(1,20):T :: S
UBEND
```

And here's another -

```
100 ! QUICK & DIRTY DOODLER
        by Jim Peterson
Use joystick #1. Press fire
button to change color or
pattern, Enter to clear the
screen.
110 DATA FFFFFFFFFFFFFFFF,FF
,0101010101010101,0000000000
0000FF,808080808080808,01020
4081020408,8040201008040201,
FF818181818181FF
120 CALL CLEAR :: FOR J=1 TO
8 :: READ CH$(J):: NEXT J
130 FOR CH=32 TO 136 STEP 8
:: FOR CN=CH TO CH+7 :: X=X+
1 :: CALL CHAR(CN,CH$(X))::
NEXT CN :: X=0 :: NEXT CH ::
CALL CHAR(32,"0")
140 CALL SCREEN(16):: FOR S=
2 TO 14 :: CALL COLOR(S,S+1,
1):: NEXT S :: R=12 :: C=16
:: CH=33
150 CALL HCHAR(R,C,CH):: CAL
L FASTJOY(C,R,Q):: IF Q=18 T
HEN CH=CH+1+(CH=143)&110
160 CALL KEY(0,K,S):: IF K=1
3 THEN CALL CLEAR :: GOTO 15
0 ELSE 150
170 SUB FASTJOY(C,R,Q):: CAL
L JOYST(1,X,Y):: CALL KEY(1,
Q,S):: X=SGN(X):: Y=-SGN(Y):
: C=C+X+(C=32)-(C=1):: R=R+Y
+(R=24)-(R=1):: SUBEND
```

And a pretty one -

```
100 CALL CLEAR :: CALL SCREE
N(2):: FOR S=2 TO 8 :: CALL
```

```
COLOR(S,15,1):: NEXT S :: DI
SPLAY AT(12,7):"KALEIDOSQUAR
ES" ! by Jim Peterson
110 FOR CH=40 TO 136 STEP 8
:: FOR L=1 TO 4 :: RANDOMIZE
:: X$=SEG$("0018243C425A667
E8199A5BDC3DBE7FF",INT(16#RN
D+1)#2-1,2)
120 B$=B$&X$ :: C$=X$&C$ ::
NEXT L :: CALL CHAR(CH,B$&C$
):: B$,C$=NUL$ :: NEXT CH
130 FOR B=2 TO 14 :: X=INT(1
5#RND+2)
140 Y=INT(15#RND+2):: IF (Y=
X)+(Y=8)THEN 140
150 CALL COLOR(B,X,Y):: NEXT
B
160 AR,R,AVR,VR=1 :: AC,C,AH
C,HC=4 :: TT=24 :: XX,XT=13
170 FOR L=1 TO 12 :: T=TT ::
XT=XX :: R=AR :: VR=AVR ::
C=AC :: HC=AHC
180 FOR J=1 TO XT :: X=INT(1
3#RND+2)&8+24 :: CALL HCHAR(
R,HC,X,T):: CALL HCHAR(25-R,
HC,X,T):: CALL VCHAR(VR,C,X,
T)
190 CALL VCHAR(VR,31-C,X,T):
: T=T-2 :: HC=HC+1 :: VR=VR+
1
200 NEXT J :: AR=AR+1 :: AVR
=AVR+1 :: AC=AC+1 :: AHC=AHC
+1 :: TT=TT-2 :: XX=XX-1 ::
NEXT L
210 IF INT(2#RND)<>0 THEN 23
0
220 FOR S=INT(12#RND+2)TO 14
:: CALL COLOR(S,1,1):: NEXT
S
230 FOR J=1 TO INT(20#RND+1)
:: S=INT(13#RND+2):: X=INT(1
5#RND+2):: Y=INT(15#RND+2)::
CALL COLOR(S,X,Y):: NEXT J
240 CALL SCREEN(INT(15#RND+2
)):: ON INT(5#RND+1)GOTO 130
,160,220,230,240
```

The challenge in Tips
#16 was - how can you store
a hundred or more values of
any size, positive or
negative, integer or
non-integer, even in
exponential notation,
without dimensioning an
array or opening a file, and
then link to another program
with a RUN statement and
recover those values - not
by reading them from the
screen? I had just one

reply! Was it too easy, too
hard, or doesn't anyone
care? Anyway -

```
20591 SUB CHARSAVE2(CH,N)::
N$=STR$(N):: N$=RPT$("0",16-
LEN(N$))&N$
20592 IF POS(N$,".",1)=0 THE
N 20593 :: N$=SEG$(N$,1,POS(
N$,".",1)-1)&"A"&SEG$(N$,POS
(N$,".",1)+1,LEN(N$))
20593 IF POS(N$,"+",1)=0 THE
N 20594 :: N$=SEG$(N$,1,POS(
N$,"+",1)-1)&"B"&SEG$(N$,POS
(N$,"+",1)+1,LEN(N$))
20594 IF N<0 THEN N$=SEG$(N$
,1,POS(N$,"-",1)-1)&"F"&SEG$
(N$,POS(N$,"-",1)+1,LEN(N$))
20595 CALL CHAR(CH,N$):: SUB
END
```

And to recover the
values -

```
20596 SUB READCHAR(CH,N):: C
ALL CHARPAT(CH,CH$)
20597 IF POS(CH$,"A",1)=0 TH
EN 20598 :: CH$=SEG$(CH$,1,P
OS(CH$,"A",1)-1)&"."&SEG$(CH
$,POS(CH$,"A",1)+1,LEN(CH$))
20598 IF POS(CH$,"B",1)=0 TH
EN 20599 :: CH$=SEG$(CH$,1,P
OS(CH$,"B",1)-1)&"+"&SEG$(CH
$,POS(CH$,"B",1)+1,LEN(CH$))
20599 IF POS(CH$,"F",1)<>0 T
HEN CH$="-"&SEG$(CH$,POS(CH$
,"F",1)+1,LEN(CH$))
20600 N=VAL(CH$):: SUBEND
```

Here's a jewel of a
routine from Danny Michael,
to avoid those lockups and
other foul-ups that occur
when you CALL INIT after you
have already CALLed INIT -
CALL PEEK(8198,A):: IF A<>17
0 THEN CALL INIT

The best way to edit a
program is to type NUM and
the first line number, then
Enter will take you through
line by line with no danger
of accidentally deleting a
line. The edit functions
will still work, and FCTN 4
gets you out of the NUM
mode.

MEMORY FULL!

Jim Peterson

NOTES FROM THE DVUG SECRETARY...

If you missed our last month's meeting, you missed a great deal of fun. The February meeting was our second anniversary, and, like last year, we celebrated with a party.

The new officers for our third year were introduced: President Dan Lounsberry (New Jersey); Vice President Tom August (Delaware); Treasurer Tom Kline (Pennsylvania) and Secretary Lynn Acquard (Delaware). [Ed. Note: Bill Acquard was chosen Sgt.-at-Arms.] Next, each Committee Chairperson was introduced. Most are last year's people who offered to continue another year.

After some formal business was handled, the meeting was turned over to Tom August and Jim Davis, who gave an interesting talk on the MBX system and speech recognition (the ability of the computer to respond to voice commands).

As usual, there were many products for our computers - software and hardware available to buy. Another source of parts for the TI was noted: Radio Shack now has keyboards, transformers and power supplies. The Computer Shopper also had offered members a special 6-month sub rate of $5.00 for six issues. Many people took advantage of that!

Our next meeting will be Thursday, March 28, same time and place - see you there! Wait, late news:

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
For the third year in a row, we have been invited to the U. of D. personal computer fair! Mark your calendar for Sunday, May 5th, from 10 a.m. to 4 p.m. We've had great times there in the past. More at the March 28th meeting... Bye now.
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It costs $36.00 including shipping and handling for a new battery for your Mini Memory. Send to: Texas Instruments, P.O. Box 53, Lubbock, TX 79408.

AMAZING RESOURCES: Conrad Kussner has announced a 6-module widget, the Cartridge Commander, soon to be offered to all TI users according to Birmingham, Alabama's TIBUG News. It operates via a cable inserted in the console module port.

QUESTIONABLE RESOURCES: Navarone's popular Widget (Cartridge Expander as they call it) may hit the spot with lots of folk, but not some of their other recent products. HOMEWORK HELPER, as demonstrated during the November DVUG meeting, has "four-letter words" in a Spelling Checker for Elementary grade kids, and the DATA BASE MANAGEMENT sort/file/etc. multi-purpose cartridge also has drawn some ire for manual as well as operating shortcomings. And they aren't cheap, folks.

PRODUCT ANNOUNCEMENTS SENT TO DVUG this month (brochures available at March 28 DVUG meeting):
DATAGUARD, installed in less 'n two minutes (no battery needed) to any extension phone to avoid modem disconnects if someone else picks up another receiver. FCC approved, $39.95, in-phone or a snap-in cord version: Control Industries, P.O. Box 6292, Bend, Oregon 97708 or at (503)389-1969. Charges accepted.
QUALITY 99 SOFTWARE — 11 items, at 10% off if ordered before 3/31. Included are QS-WRITER which loads TI-WRITER without that module, for $39.95 (or $44.95 with TI-WRITER files on same disk as QSW); DISK MANAGER III on disk to handle Disk Mgr chores without disturbing program [works with CorComp or TI and doesn't need DSK MGR 2] at $39.95; SDUMP for 27-sec. dump for various printers at $19.95; some graphics and a data base program. (202)667-3574 to charge, or: _ 1884 Columbia Rd. #500, Washington DC 2009. Add $2.50 for handling, etc.
WEBER AND SONS Disk labels and inexpensive storage boxes. 3468 U. S. Highway 9, R.D. 4, Freehold NJ 07728 (201)431-1128 or order: 800-225-0044. 10% discount in volume.

SPELLING CHECKER REVISION OUT

Dragonslayer American Software Co. has released Version 1.1 of its Auto Spell-Check program, which works as a TI-Writer Utility File. The new version runs 70% faster. Anyone with Version 1.0 can send $3 and original diskette A and an updated version will be returned from Dragonslayer, at 2606 Ponderosa Drive, Omaha, NE 68123.

MORE TI-99/4A NEWSLETTERS

In addition to the over 300 User Groups, many of whom have their own newsletters, and the publications mentioned in Data Bus for January, here are some other, recently started, newsletters of note:

MINI-MAG 99, by S.O.S. Publishers, 21777 Ventura Blvd., #203, Woodland Hills, CA 91364 $20 annually (issued monthly).

SUPER 99 MONTHLY, by Bytemaster Computer Services, 171 Mustang St., Sulpher, LA 70663 $12 annually (issued monthly).

For our Sanyo fans, try $15 annually to subscribe to/ join BUG, Brevard Users Group, Inc. P.O.Box 2111, Satellite Beach, FL 32937. Each month's 12-pg. newletter is divided 50-50 TI and MS-DOS (Sanyo) items.

WELCOME TO NEW Data Bus ADVERTISER

We're pleased to have the cooperative Hearne Bros. of Audio Video Computer World in Newark, Del., providing not only an outlet for TI-connected items, but also supporting our Data Bus with paid advertising. When you visit, be sure to mention seeing their ad here.

ADVERTISING RATES IN THE DATA BUS ARE:

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1/4  Pg. $ 5/issue or $ 45/12 issues
1/2  Pg. $ 8/issue or $ 75/12 issues
Full Pg. $15/issue or $125/12 issues
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which brings us to the next item, what will be the future format of our Data Bus newsletter. At present, costs and available editorial time suggest keeping a monthly 8-page style. We are in a transition in choosing the right mix of both articles and layout to provide the best balance for our very diversified group. TIPS FROM THE TIGERCUB on pages 6-7 are rich in program content-note this is a publicity newsletter to seek purchasers of tapes/disks - but a monthly reprint is a big commitment.

Do you MEMBERS prefer a product review instead? Other gleanings such as on page 2? We're providing a monthly categorical listing (pg. 5), and hope to have articles rotating among different languages (Basic,XBasic, Assembly, Forth, -LOGO anyone?, etc.) What is your preferred layout - 1 or 2 columns or a condensed print 3-4 columns? Here's your chance: Chirp up now!

TEAR OFF AT DOTTED LINE AND RETURN TO DVUG BY MAIL OR IN PERSON BY 3/28:

STYLE OF PRINTING:

( ) Current mix is fine. Let the content dictate display.

( ) Single column for articles only; use mostly two columns.

( ) Cram 'em in there. It's the content that counts.

ENTER YOUR OTHER THOUGHTS USING ANOTHER SHEET ATTACHED TO THIS ONE (which shows membership status on the reverse) and mail or bring them to addresses on p.1, or mtg. 3/28

CONTENT MIX:

( ) I love program tips. Prefer the short tips - I don't love typing.
( ) Give me all I can get. Love the TIGERCUB. More, more, more.
( ) Emphasize Basic/XB - Keep other languages as special features only.
( ) Jumble of everything. There are now more "advanced" features than the Basics. How else can we all learn?
( ) Resources, products, peripherals - where can I get 'em, describe 'em!

March 28th Topic:

A closer Look at

EXTENDED BASIC Features

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