```
FAIREFAIREFAIREFAIREFAIREFAIREFAIREFAIREFAIREF
    *   *   #   #   +    +    %%%    $   $
   ** **   #   #  ++    +   %   %    $   $
    * * *  #   #  + +   +   %        $   $
    *   *  #   #  +   + + + %       $$$$$
    *   *  #   #  +    ++ +  %   %    $   $
 .  *   *  ###   +  .    +   %%%     $   $
AIREFAIREFAIREFAIREFAIREFAIREFAIREFAIREFAIREFA
```

----------------------------------------------------------

Mass Users of the Ninety-nine and Computer Hobbyist

----------------------------------------------------------

APRIL    1988 Monthly Newsletter Version 7.04
>>>>>>>>>>>>>>>NEW LOCATION!!!!!<<<<<<<<<<<<<<<<



APRIL 88
ADC

FIRST CLASS

SUNDERLAND RD.
COMMUNITY HOUSE

MASS MED. CTR.
(OLD PLACE)

WEST RT. 9 EAST

SUNDERLAND RD.

LIQUOR STORE

P=PARKING
(P)=NO PARKING

THIS IS IT

POLLY'S RES' JRNIT LOU

RT. 122

MR. TUX

(1)

A P R I L  12 '88 / IN OUR NEW CLUBHOUSE!

```
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~    N  C
     MUNCH OFFICERS AND NUMBERS (all in 617 area)   .  o
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~    E  m

     President/Mail   W.C. Wyman      839-4134    .  e
     Vice President   Helen Holmes
     Secretary        Al Cecchini                 F  J
     Treasurer        Jim Cox         869-2704    A  o
     Lugger/Editor    Jack Sughrue    476-7630    I  i
     Adv Prog. Chair  Dan Rogers      248-5502    R  n
     Fudder           Bugs Bunny      444-1124    E
     Library          Al/Lisa Cecchini                U
     Disk/Nwsltr Lib  Louis/Helen Holmes          T  s
     Tape Librarian   Walter Nowak                I  !
     Skinnydipper     September Morn              M
     Building Climber K. Kong                     E
     Swell Gang       Our Growing Membership
```

## LIBRARY NOTICE

*PLEASE RETURN ANY ITEMS BORROWED FROM OUR LIBRARY. We are still missing a considerable number of books, tapes, disks, and so on belonging to YOUR CLUB . Do a little clearing around your computer area (or any places you'd be apt to set things aside). If you locate any library materials (or if you'd like to donate any you no longer use) please come with them to the next meeting. We don't care how long you've had them out. There is no fine. But it would be FINE if other members could have a chance to borrow these things.* King Kong is watching you!

```
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
```

## ADVERTISING RATES:

```
Double Page   (10.5" by 8")     $25.00 per insertion
Full Page     (5" by 8")        $13.00 per insertion
Half Page     (5" by 4")        $ 7.00 per insertion
Quarter Page  (5" by 2" or
              (2.5" by 4")       $ 5.00 per insertion
```
Classified (non-commercial) ads are FREE for MUNCH members.

```
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
```

## ....RAFFLE....

Every month we have this peachy-keen raffle of all kinds of neat stuff given by our generous members and friends. All kinds of software and sometimes hardware are given away free each meeting. The dollar donation helps to defray some of the costs of our monthly rent at the clubhouse, so all members participate help a lot. Donations are happily accepted. Remember: *YOU MUST BE PRESENT TO WIN!*

```
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
```

## APRIL    SALE

Another chance to sell any used consoles, P/Boxes, cards, tape recorders, interface cables, ANYTHING related to your computer system. Also bring any original tapes, cartridges, disks, texts, or other soft/textware. Be prepared to buy a lot and sell a lot. Please come with prices marked on the items. Call Jack Sughrue to let him know what you will be selling. AND BE THERE AT THE APRIL 9th FAIRE IN LEXINGTON!

```
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
```

## NEWSLETTER

Become Immortal! We are looking for articles, cartoons, love letters, programs, lists, old banana peels: in short, anything from the members which can be printed in our newsletter. Text items preferred on SSSD disk through TIW. Printed items also accepted. Share your interest or expertise with other members. Mail all items by the 3rd Tuesday of each month to Jack Sughrue, Box 459, E.Douglas MA 01516. Disks will be returned at the next meeting.

```
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
```

## NEWALS + RENEWALS

NEWALS are $15/year plus a one-time $10 inititation fee (which includes a choice of ANY club disk free); RENEWALS are $15/year. Members have full use of disk/text libraries, free workshops + assistance, 12 full issues of M.U.N.C.H., voting privileges + more! Subscription alone is $10/year. Mail check to address on cover.

```
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
```
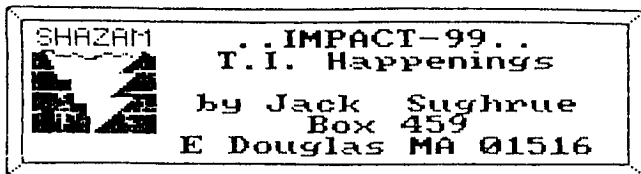
## OLD DAYS

PART I: ANCIENT RITES
"Long, long ago in a world far away...."

In the computer world, the "Good Old Days" are measured in minutes, not in decades (as with real life). So in a real-life decade, the computer world has lived eons.

Public broadcasting ran an hour-long program called "Computer Graphics" a few months ago. It assaulted the senses; it was so mind-boggling. These incredible graphics were used for media, manufacturing, medicine, mere fun, and MIT (the Massachusetts Institute of Technology), where some of the most advanced computer activities in the world are going on, including a 64 x 64 x 64-foot total computer environment which is simply called The Cube. But the research on Artificial Intelligence performed by some of these most creative scientific geniuses on Earth is where the limits of imagination cease to exist. There are other technical institutes in America and worldwide (particularly in Japan) that are investing large amounts of time and money in AI development. The world is already a completely different one for us than it is for these unusual folk. Reading about the fascinating AI future is the most flabergasting reading I've ever done. (And it gave me an oppurtunity to finally use "flabergasting" in a sentence.)

There is nothing in our lives today that doesn't have a computer relationship. There will be nothing in our future that will not contact computers in some way. All "things" such as books, beds, bowling balls, and bananas have to be shipped and stored and sold and bought. Computers. Optimum growing and harvesting time (bananas and the wood for beds and books) are computerized. Computers help design books and bowling balls and beds and help in the manufacturing.

A walk in the country? Well, unless you live next to the place of the walk (in a house with VCRs, TVs, microwaves), you have to drive in a car (with computerized engineering) to even get to it.

I really tried to think of something in my life that is not affected by computers. I have a library of old P.G. Wodehouse books written, I'm certain, on mechanical typewriters and set by typesetting machines and printed on mechanical presses and bound by mechanical equipment -

all from the 50s and 60s.

Now, if I read any of these books at night at home, I realize some computer is sending me energy and keeping tabs of how much I use.

But, if I squeeze into an old pair of dungarees from my middle-age (pre-computer manufacture) and, barefoot and barechested, go lie on our lawn in the sun to read as humans were intended to, I have the nagging sensation that I'm not fully out of the computer world yet. I try to ignore the cars driving by, the planes flying overhead, the sounds of some silly teenyboppers bopping down the street blaring their silly noises through a boom box.

And, eventually, Wodehouse captures me, and I am computer-free for a few hours.

Maybe.

If the phone doesn't ring; if the neighbor doesn't start up the thundering smoke machine he calls a lawn mower; if nobody offers me a cool, refreshing beer (grown, harvested, processed, canned, delivered, advertised, and sold by our friend, the computer).

Maybe then.

But all this sounds like I don't love my computers. I do. I DO! If they are taking over the world, as I'm certain they are after reading some of the latest AI books, then I want them to know I am on _their_ side!

All this thinking about how quickly and completely computers invaded our lives began at the last meeting of our M.U.N.C.H. User Group. One of our new members (Yes, we are getting new members!) asked what life was like in the old days of the club. Well, the 4/A hasn't existed for a decade yet, so I didn't have any trouble _recalling._

Before the 4/A existed, TI generously loaned me a chicklet-key 99-4 to use for a year in my 5th-grade classroom. We probably had the first computer in an elementary classroom in America. It was great! The kids and I learned to have the computer do calculations. (The 4 had a calculator built in as one of the original screen options.) We learned how to make the computer fill up the screen with our names. We learned to delay with FOR/NEXT. Things like that. There was no software at all and only a xeroxed attempt at a manual.

But it was fun. And very difficult! (I hear the chuckles out there. Think for a minute. NOBODY had a computer. No library. No small business. No stores. No schools. No homes. Making your name come up on the screen was no easy task at first. Still, it was better than watching the test pattern on TV for hours when TVs first came out, but that is another story.) I think it was a 4K prototype. Black and white TV. I can't recall sound.

When I finally bought my first TI, I was floored by the features and by the wonderful keyboard. As a touch-typist I found it much more convenient than the chicklets or the membranes on those early computers (though it still took me an awfully long time to master the peculiarities of it).

The features! For one, it had great things built into it that I didn't recall or learn from the 4: NUM, RES, all those sub calls (SOUND, COLOR, etc.) that still make the 4/A one of the easiest programming computers ever to be made (though its unique BASIC caused many translation problems). It's biggest feature for me (as I still had a black and white TV and hadn't yet received my synthesizer free for buying six cartridges) was the ability to save the programs. A tape recorder. We lost everything on the 4 when we shut it off, but now everything could be saved. The manual even had programs we could type in free.

The manual, 'Beginner's BASIC, was, to me, one of the most lucid, exciting tutorials I have ever seen. I can still recall the sense of accomplishment and wonder and awe I felt when I was able to create the stick figure and make it move. It was called "Mr. Bojangles," crude block graphics that alternated to create the illusion of movement. To me it was a crowning achievement of some kind.

I called my family in to see what I had done. The four kids looked and smiled and left. My wife appeared incredulous.

"Don't you like it?" I asked.

"You paid over $500 and have been up here every night for three months for THIS?"

She missed the point, I think. She was never one to understand compulsive/obsessive behavior. It doesn't run in her family.

Ah, well.

And I saved the program. I still have it. I just got up and pulled it out of the box of tapes in the corner of my computer room. It's called "Dancing Man," but I don't think I'll load it and run it. I'd rather remember things my own way.

I wonder if most of the young techie-whiz types who started off at the same time I did with the TI ever went through those infant and pre-school stages or if they just leaped into techiehood.

One of those types - a young man by the name of Bernie Miller - and I were in M.U.N.C.H. way back when. We both had our B&W TVs and tape recorders and we both had typed in the manual. He had been a charter subscriber to the old "99er" magazine, and I had bought an early book of programs by C.W.Engel, called "Stimulating Simulations for the TI-99/4A." Just seeing my computer's name on the cover of a book gave me a thrill the way we VW Beetle owners used to feel when a fellow Beetle driver would pass and toot in the early days of very few Beetles. A fellowship was being formed.

This was long before the big 1983/4 publishing boom for TI, when about 90% of all the 100-plus TI books were published. This is before Extended BASIC.

Bernie said he would type in some of the programs from "99er" and we could both try them out. I said I'd

do the same for the Engel book. It was a great learning experience for both of us, as the listings were not always very accurate. (Engel had done translations, so many BASIC terms were inaccurate.) Typing, trying to figure out what the weird stuff meant, looking up examples in the manual and reference book that came with the console, discussing the problems, and SOLVING the problems to create a finished, working program, was a fine thing to do. (Bernie did most of the solving, but I did a lot of the learning which he seemed to absorb from the air without effort.) I don't think this is a process most home-computer owners go through anymore. Too bad. It was a wonderful way to discover the depths of the computer and of oneself.

One day, almost a year, after Bernie and I started working as a team during our M.U.N.C.H. meetings and at each other's houses a couple times, Bernie announced that we had "over 100 programs!" Granted, a lot of them were simple screen graphics or variations of The Dancing Man, Guess The Computer's Number, and How To Amortize A Loan, but we did it! We had over 100 files and were thrilled.

And we had begun to put our own stamp on those programs. The flashes and whistles, as we learned how to use the techniques of animation and music and color (though I hadn't yet gotten a color TV).

I brought the computer back and forth to school and started to write flashcard programs for my class. With lots of glitter. My kids at home and at school began to take to it.

My two sons helped me debug programs. They began to see things I missed. I saw things as an Enlish-major proofreader. They saw things as computer programmers would see them: symbols or patterns that didn't make sense; even electronic punctuation, which was so different from English.

Then I realized (this is in 1982/3 - and I had bought a second computer "for the kids" at home and a third for my classroom -) that I was of a different age, maybe an entirely different species. These youngsters had no awe of the computer. It did not fill them with wonder. And, though they would all do so much more with the computer than I could dream of, they wouldn't have so much fun doing it. To them, Neil Armstrong's stepping on the moon while I watched it live in my bedroom on another world in the wee hours, was no big deal. Neither is a computer.

To them.

It still fills me with awe and wonder.

(This is the first of three personal recollections about the 4/A's "Good Old Days" as seen through the eyes of a honest-to-goodness non-techie.)
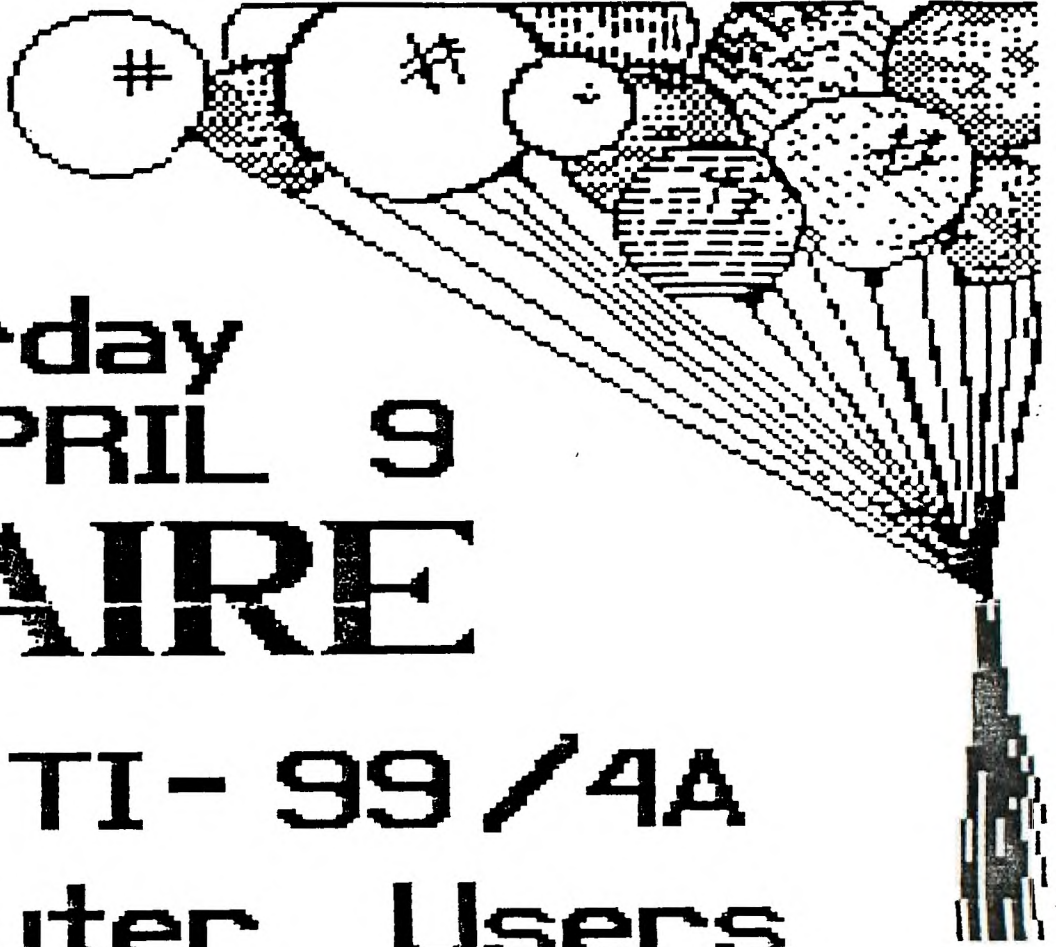
# Saturday APRIL 9 FAIRE

## For TI-99/4A Computer Users

10 A.M. – 5 P.M.

Diamond Jr.
High School
99 Hancock St.
Lexington, MA

Vendors
Software
Hardware
Speakers
User Groups
Used Equipment

SPONSORED BY

The Boston Computer
Society's TI-99/4A
User Group

Admission
$4.00 Adult
$2.00 3-12 Child

# Saturday, April 9, 1988

The Third Annual New England TI Fayah for TI-99/4A Computer Users
Sponsored by:  The Boston Computer Society's TI 99/4A User Group
Diamond Middle (Jr. High) School, 99 Hancock Street, Lexington, MA

═══════════════════════════════════════════════════════════════

## VENDORS, VENDORS, VENDORS

Genial Computerware       Disk Only Software    Telecommunications      Ken's T.V.
Olympys Technologies      Asgard                Rave 99                 HAC Labs

## USER GROUPS

The Boston Computer Society's      MAGNETIC (North Andover)    Los Angeles UG
   TI-99/4A User Group             MUNCH    (Worcester)        Ottawa (Canada)
                                   Greater Brockton         New Hampshire 99'ers

## SPEAKERS, SPEAKERS, SPEAKERS

Topics:  TI-Writer, FunnelWeb, Plato, Gramulator, and more.....

## PANEL DISCUSSION
## TI LUMINARIES

Barry Traver, J. Peter Hoddie, Paul Charlton, Mike Dodd, Warren Agee, Scott
Darling, Chris Bobbitt, Jonathan Zittrain, Tom Freeman, and Terrie Masters, are
only a few of the exciting people you'll be able to meet at this year's Fayah.

## USED EQUIPMENT

Want to turn your surplus TI Equipment into cash?  Bring it to the Fayah and
we'll sell it for you! Disk Drives, Expansion Boxes, Modules, Keyboards,
Books, whatever.......Your Trash may be someone else's Treasure!

# For Further Information Contact:

BCS Bulletin Board 331-4181 or 335-8475
Or J. Peter Hoddie (School 375-6003) (Home 861-8733 during Spring Break)

# Directions

Off Route 95, EXIT 31A to Route 4 towards Lexington

General Public:  Take a Left at the Mobil Station (just past the traffic light)
onto North Hancock Street.  When N. Hancock joins Hancock Street at the
Lexington Gardens, go past the front of Lexington Gardens and take the next
left onto Coolidge Avenue.  At the end of Coolidge Avenue, take a left onto
Adams Street.  The next left off of Adams Street is Hathaway Road (ignore the
Fiske School on your right).  Then take another Left onto Stedge Road which
leads directly into the Diamond School's Main Parking Lot at the front of the
building.  (School is unmarked).

Vendors Entrance: Exit 31A Off Route 95 towards Lexington, left at Mobil Station
just past the traffic lights onto North Hancock.  When N.Hancock joins Hancock
Street at a triangle, follow the road that runs behind Lexington Gardens past
the side of the greenhouses for rear entrance to Diamond School (building has
two parking lots that do not join each other).

TIPS FROM THE TIGERCUB

#46

Copyright 1987

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.

Over 130 original programs in Basic and Extended Basic, available on cassette or disk, NOW REDUCED TO JUST $1.00 EACH!, plus $1.50 per order for cassette or disk and PFM. Minimum order of $10.00. Cassette programs will not be available after my present stock of blanks is exhausted. The Handy Dandy series, and Color Programming Tutor, are no longer available on cassette.
Descriptive catalogs, while they last, $1.00 which is deductable from your first order.

Tigercub Full Disk Collections, reduced to $5 postpaid. Each of these contains either 5 or 6 of my regular catalog programs, and the remaining disk space has been filled with some of the best public domain programs of the same category. I am NOT selling public domain programs - they are a free bonus!
TIGERCUB'S BEST, PROGRAMMING TUTOR, PROGRAMMER'S UTILITIES, BRAIN GAMES, BRAIN TEASERS, BRAIN BUSTERS!, MANEUVERING GAMES, ACTION REFLEX AND CONCENTRATION, TWO-PLAYER GAMES, KID'S GAMES, MORE GAMES, WORD GAMES, ELEMENTARY MATH, MIDDLE/HIGH SCHOOL MATH, VOCABULARY AND READING, MUSICAL EDUCATION, KALEIDOSCOPES AND DISPLAYS

NUTS BOLTS (No. 1), a full disk of 100 Extended Basic utility subprograms in merge format, ready to merge into your own programs. Plus the Tigercub Menuloader, a tutorial on using subprograms, and 5 pages of documentation with an example of the use of each subprogram. Reduced to $15.00 postpaid.
NUTS BOLTS NO. 2, another full disk of 108 utility subprograms in merge format, all new and fully compatible with the last, and with 10 pages of documentation and examples. Also $15 postpaid.

*********************************
* NUTS BOLTS #3 is now        *
* ready, another full disk    *
* of 140 new merge-format      *
* utility subprograms, all     *
* compatible with the pre-     *
* vious. With 11 pages of      *
* documentation, $15 ppd.      *
*********************************

TIPS FROM THE TIGERCUB, a full disk containing the complete contents of this newsletter Nos. 1 through 14, 50 original programs and files, reduced to $10 ppd.
TIPS FROM THE TIGERCUB VOL. 2, another diskfull, complete contents of Nos. 15 through 24, over 60 files and programs, also just $10
TIPS FROM THE TIGERCUB VOL. 3, another 62 programs, tips and routines from Nos. 25 through 32, $10 postpaid.
TIPS FROM THE TIGERCUB VOL. 4, another 48 programs and files from issues 33 through 41, also $10 postpaid.

TIGERCUB CARE DISKS #1, #2 #3, three full disks of text files, mostly of lessons on programming in XBasic, $5 per disk postpaid.

This one is explained in lines 180-190. I think that it will run on any Gemini printer.

```
100 DIM B(25,12),B$(25),CH$(12),L$(12)
110 GOTO 150
120 S,K,T$,C$,V,J,A,CH$(),X,X$,B$(),B(X,J),T,M,Q$,L$(),C,C1$,C2$,L,M$
130 CALL CLEAR :: CALL COLOR :: CALL SCREEN :: CALL CHAR :: CALL KEY :: CALL NUMTH
140 !P-      P-      P-      P-
150 !SEGMENTED BAR GRAPH
    by Jim Peterson 10/87
160 CALL CLEAR :: FOR S=1 TO 12 :: CALL COLOR(S,2,8):: NEXT S :: CALL SCREEN(5):: DISPLAY AT(3,10):"TIGERCUB" :: DISPLAY AT(5,6):"SEGMENTED BAR GRAPH"
170 CALL CHAR(95,"3C4299A1A199423C"):: DISPLAY AT(7,12):"_ 1987" :: DISPLAY AT(9,2):"For free distribution but no":"price or copying fee may be":"charged."
180 DISPLAY AT(14,2):" Will output to a Gemini":"printer a horizontal bar-":"graph of up to 25 bars, each":"segmented into up to 12"
190 DISPLAY AT(18,1):"values, with a title for":"each and optionally with a":"table of identification of":"the segment symbols."
200 DISPLAY AT(24,8):"" :: DISPLAY AT(24,8):"PRESS ANY KEY" :: CALL KEY(0,K,S):: IF S=0 THEN 200
210 ON WARNING NEXT
220 DISPLAY AT(12,1)ERASE ALL:"GRAPH TITLE?" :: ACCEPT AT(14,1):T$ :: T$=RPT$(" ",17-LEN(T$)/2)T$ :: C$=CHR$(27)
230 DISPLAY AT(16,1):"HOW MANY SEGMENTS PER BAR?" :: ACCEPT AT(16,27)VALIDATE(DIGIT)SIZE(2):V :: IF V=0 OR V>12 THEN 230
240 !P+      P+      P+      P+
250 DATA 239,229,168,251,173,175,184,236,169,250,160,207
260 !P-      P-      P-      P-
270 FOR J=1 TO V :: READ A :: CH$(J)=CHR$(A):: NEXT J
280 DISPLAY AT(3,1)ERASE ALL:"Type END when finished"
290 X=X+1 :: IF X>25 THEN 330
300 CALL NUMTH(X,X$):: DISPLAY AT(12,1):"Title of "X$" bar?" :: ACCEPT AT(14,1):B$(X):: IF B$(X)="END" OR B$(X)="end" THEN 330
310 FOR J=1 TO V :: CALL NUMTH(J,X$):: DISPLAY AT(16,1):X$" segment value?" :: ACCEPT AT(18,1)VALIDATE(NUMERIC):B(X,J):: T=T+B(X,J):: NEXT J
320 M=MAX(M,T):: T=0 :: GOTO 290
330 X=X-1 :: DISPLAY AT(20,1):"Print labels? Y/N" :: ACCEPT AT(20,19)VALIDATE("YN")SIZE(1):Q$ :: IF Q$="N" THEN 350
340 FOR J=1 TO V :: CALL NUMTH(J,X$):: DISPLAY AT(22,1):X$" label?" :: ACCEPT AT(24,1):L$(J):: NEXT J
350 C=120/M :: C1$=C$"B"CHR$(1)C$"G"C$"E" :: C2$=C$"B"CHR$(3)
360 OPEN #1:"PIO",VARIABLE 255 :: PRINT #1:C$"" :: PRINT #1:C$"E"C$"G"C$"M"CHR$(6)
370 PRINT #1:CHR$(14)T$CHR$(20):"":RPT$(CHR$(229),70):: :: PRINT #1:C$"3"CHR$(10)
380 FOR J=1 TO X :: PRINT #1:B$(J)C2$ :: FOR L=1 TO V :: M$=M$&RPT$(CH$(L),INT(B(J,L)*C+.5)):: NEXT L
390 PRINT #1:RPT$(CHR$(232),LEN(M$)):: PRINT #1:M$ :: PRINT #1:M$ :: PRINT #1:RPT$(CHR$(231),LEN(M$))
400 M$="" :: PRINT #1:C1$;:: NEXT J :: IF Q$="N" THEN STOP
410 PRINT #1:"":""
420 FOR J=1 TO V :: PRINT #1:C2$RPT$(CHR$(232),10):: PRINT #1:RPT$(CH$(J),10)C1$"
```

```
"L$(J):: PRINT #1:C2$
RPT$(CH$(J),10):: PRINT #1:R
PT$(CHR$(231),10):: NEXT J
430 !P+    P+    P+    P+
440 SUB NUMTH(N,N$):: IF FLA
G=1 THEN 520 :: FLAG=1 :: RE
STORE 480
450 GOTO 480
460 J,ONE$(),TEEN$(),TEN$(),
N,N$
470 !P-    P-    P-    P-
480 DATA first,second,third,
fourth,fifth,sixth,seventh,e
ighth,ninth,tenth
490 DATA eleventh,twelfth,th
irteenth,fourteenth,fifteent
h,sixteenth,seventeenth,eigh
teenth,nineteenth
500 DATA twenty,THIRTY,FORTY
,FIFTY,SIXTY,SEVENTY,EIGHTY,
NINETY
510 FOR J=1 TO 10 :: READ ON
E$(J):: NEXT J :: FOR J=1 TO
 9 :: READ TEEN$(J):: NEXT J
 :: FOR J=2 TO 9 :: READ TEN
$(J):: NEXT J
520 IF N<11 THEN N$=ONE$(N):
: SUBEXIT
530 IF N<20 THEN N$=TEEN$(N-
10):: SUBEXIT
540 IF N/10=INT(N/10)THEN N$
=SEG$(TEN$(N/10),1,LEN(TEN$(
N/10))-1)"ieth" :: SUBEXIT
550 N$=TEN$(INT(N/10))"-"ON
E$((N/10-INT(N/10)))
560 !P+    P+    P+    P+
570 SUBEND

And  a little  something
educational -

100 DIM M$(100)
110 GOTO 150
120 S,J,M$(),A$,Z$,X,W$(),X,
Y,ADV$,A,Q$
130 CALL CLEAR :: CALL COLOR
 :: CALL SCREEN :: CALL CHAR
 :: CALL KEY :: CALL ADVERB
 :: CALL SOUND
140 !P-    P-    P-    P-
150 CALL CLEAR :: FOR S=0 TO
 12 :: CALL COLOR(S,2,8):: N
EXT S :: CALL SCREEN(5):: DI
SPLAY AT(3,2):"ADJECTIVE TO
ADVERB  V.1.3"
160 CALL CHAR(64,"3C4299A1A1
99423C"):: DISPLAY AT(5,6):"
 Tigercub Software":::" For"

free distribution with  no
charge or copying fee."
170 FOR J=1 TO 100 :: READ M
$(J):: A$=A$CHR$(J):: NEXT
J :: Z$=A$ :: CALL KEY(3,K,S
)
180 W$(1)=" If adjective end
s in Y,    change the Y to
ILY." :: W$(2)=" If adjectiv
e ends in C,    add ALLY."
190 W$(3)=" If adjective end
s in LL,   just add Y."
200 W$(4)=" If adjective end
s in LE,   preceded by a con
sonant,    drop the E and ad
d Y."
210 W$(5)=" If the word ends
 in E      preceded by a con
sonant,    preceded by a vow
el, just    add LY."
220 W$(6)=" This word is an
exception  to the rule - the
 adverb is WHOLLY."
230 W$(7)=" If the adjective
 does not  end in C,E,LL or
Y, always  just add LY."
240 W$(8)=" This is an excep
tion to the rule. The prefer
red advert form is DRYLY."
250 W$(9)=" If the adjective
 ends in E  preceded by a vo
wel, drop   the E and add LY
260 W$(10)=" If the adjectiv
e ends in E preceded by a co
nsonant    other than L, ad
d LY."
270 RANDOMIZE :: X=INT(RND*L
EN(Z$)+1):: Y=ASC(SEG$(Z$,X,
1)):: Z$=SEG$(Z$,1,X-1)SEG$
(Z$,X+1,255):: IF LEN(Z$)=0
THEN Z$=A$
280 ACCEPT AT(24,1):M$(Y)
290 CALL ADVERB(M$(Y),ADV$,A
)
300 DISPLAY AT(12,1):" Type
the adverb form of -" :: DIS
PLAY AT(15,1):M$(Y):: DISPLA
Y AT(18,10):"" :: ACCEPT AT(
15,15)BEEP:Q$
310 IF Q$=ADV$ THEN DISPLAY
AT(18,10):"CORRECT!" :: GOTO
 240
320 CALL SOUND(100,110,5,-4,
5):: DISPLAY AT(20,1):W$(A):
"":"" :: GOTO 300
330 !P+    P+    P+    P+
340 DATA DUE,COOL,SOLE,STOIC
,FRANTIC,COMIC,ABLE,FULL,POO

R,HANDY,SORE,SOCIAL,PENAL,SL
OW,HIGH,LOW
350 !P-    P-    P-    P-
360 DATA FRISKY,PLAYFUL,HEAL
THY,ROUGH,BUSY,SILLY,SICK,SM
ART,SORE,FAIR,ANGRY,BARE,TIR
ED,WISHFUL,ACTUAL
370 DATA HASTY,LONE,HECTIC,O
FFICIAL,MAGIC,MAGICAL,MATHEM
ATIC,LOGIC,TRAGIC,PATHETIC,T
RAUMATIC
380 DATA DRAMATIC,AUTOMATIC,
AROMATIC,EQUAL,SERIAL,BASIC,
USUAL,FAVORABLE,UNSTABLE,LEG
IBLE
390 DATA HECTIC,LIVE,WARY,VI
SIBLE,TERRIBLE,HORRIBLE,VIVI
D,FANCY,EASY,VILE,WICKED,BLO
ODY,SHODDY
400 DATA NOBLE,HAPPY,LEGAL,M
ERRY,JOLLY,CRAZY,CASUAL,CARE
FUL,FOOLISH,FAMOUS,GAY,GUILT
Y
410 DATA HOPEFUL,HATEFUL,TIM
ID,BRAVE,BEAUTIFUL,DRY,NICE,
LARGE,PAINFUL,SINFUL,SORROWF
UL,SIMPLE,WILLFUL
420 DATA MENTAL,MORAL,PALE,W
HOLE,HUNGRY,FINAL,FORMAL,TRU
E,AMPLE,DOUBLE
430 !P+    P+    P+    P+
440 SUB ADVERB(M$,ADV$,A)::
L=LEN(M$):: E$=SEG$(M$,L,1):
: F$=SEG$(M$,L-1,2):: G$=SEG
$(M$,L-1,1):: P$=SEG$(M$,1,L
-1):: H$=SEG$(M$,L-2,1)
450 IF ASC(SEG$(M$,1,1))<97
THEN A$="ALLY" :: I$="ILY" :
: L$="LY" :: Y$="Y" :: V$="A
EIOU" ELSE A$="ally" :: I$="
ily" :: L$="ly" :: Y$="y" ::
460 IF M$="WHOLE" THEN ADV$=
"WHOLLY" :: A=6 :: SUBEXIT
470 IF M$="DRY" THEN ADV$="D
RYLY" :: A=8 :: SUBEXIT ELSE
 IF F$="LL" OR F$="ll" THEN
ADV$=M$Y$ :: A=3 :: SUBEXIT
480 IF E$="C" OR E$="c" THEN
ADV$=M$A$ :: A=2 :: SUBEXI
T ELSE IF E$="Y" OR E$="y" T
HEN ADV$=P$I$ :: A=1 :: SUB
EXIT
490 IF E$<>"E" AND E$<>"e" T
HEN 530
500 IF G$="L" OR G$="l" THEN
 IF POS(V$,H$,1)<>0 THEN ADV
$=M$L$ :: A=5 :: SUBEXIT EL
SE ADV$=P$Y$ :: A=4 :: SUBE

XIT
510 IF POS(V$,G$,1)<>0 THEN
ADV$=P$L$ :: A=9 :: SUBEXIT
520 IF POS(V$,SEG$(M$,L-2,1)
,1)=0 THEN ADV$=M$L$ :: A=1
0 :: SUBEXIT ELSE ADV$=M$L$
 :: A=5 :: SUBEXIT
530 ADV$=M$L$ :: A=7 :: SUB
END

100 !MOCKINGBIRD TINYGRAM by
 Jim Peterson. Tap your
 tune on the 1 to 0 keys
 (tuned A through C)
110 !Then press any other
 key to hear it repeated
120 DATA 220,247,262,294,330
,349,392,440,494,523
130 FOR J=1 TO 10 :: READ N(
J):: NEXT J :: J=0 :: DIM T(
50,2)
140 CALL KEY(5,K,S):: IF S=0
 THEN 140
150 ON ERROR 190
160 CALL KEY(5,K,S):: IF K=-
1 THEN 160 :: K=K-(K=48)
:: T(J,1)=N(K-48):: CALL SOU
ND(-999,T(J,1),0)
170 IF K=K2 THEN T(J,2)=T(J,
2)+1 :: GOTO 160
180 K2=K :: J=J+1 :: GOTO 16
0
190 FOR X=0 TO J-1 :: CALL S
OUND((T(X,2)+1)*0,T(X,1),0
,T(X,1)*1.01,0):: NEXT X ::
J=0 :: GOTO 140

   A little subprogram to add
a bit of variety to your
"PRESS ANY KEY" routine.

1 CALL CLEAR :: CALL PRESSKE
Y(24)
30000 SUB PRESSKEY(R)
30001 C=C+1 :: IF C=16 THEN
30002 :: DISPLAY AT(R,1):""
:: DISPLAY AT(R,C):"PRESS AN
Y KEY" :: DISPLAY AT(R,C):"p
ress any key" :: CALL KEY(0,
K,S):: IF S=0 THEN 30001 ELS
E 30003
30002 C=C-1 :: IF C=0 THEN 3
0001 :: DISPLAY AT(R,1):"" :
: DISPLAY AT(R,C):"PRESS ANY
 KEY" :: DISPLAY AT(R,C):"pr
ess any key" :: CALL KEY(0,K
,S):: IF S=0 THEN 30002
30003 DISPLAY AT(R,1):"" ::
```

# TI BITS *
by Jim Swedlow

## ON DISKS AND DRIVES

A while back the Disk Doctor attended one of our meetings. He had a number of interesting things to say. Since some of you missed it, here are a few of his comments.

o Don't clean your drives until you need to. Your system will tell you when it is time - you will have trouble reading disks.

o When you do clean your drive, use any brand name commercial disk drive cleaner and follow instructions.

o If this fails, you need to have your drive cleaned professionally. If you want to try yourself and you have a double sided drive, be careful with the second read/write head. It is very, very easy to bend the bracket to the point that the head must be reallIgned.

o He has tested the amount of residue left on heads with brand name disks ($1.00 + each) and the cheepies ($0.25 or so). He found no difference. This doesn't mean that they are of equal quality, only that the cheepies are not dirtier.

o He opposes flippies for single side users. His point is that when you flip the disk and it runs backwards in its cover, dirt is loosened and spun into your drive.

o His overall advise is the first rule of engineering: If it ain't broke, don't fix it.

## SOME · ⁝ THOUGHTS ON BACKING UP DISKS

Over the years I have mentioned the importance of backing up your disks. Simply put, disk drives eat disks. On the first weekend of October, I was working on some letters. This was the weekend where the temperature was well over 100 degrees. I blew both my word processing disk and my data disk.

I had a backup of the word processor, but it was not configured. That night, after it cooled down a bit, it took me about half an hour to recreate a working disk. The data files were simply lost.

The moral? Keep two back ups of your program disks. One of the disk as you received it (the master) and one of your configured working disk (back up working

disk). Don't forget to back up your data disks every now and then. This will save you time and aggravation next time your drive gets hungry.

## ANOTHER TI-IBM CONNECTION

I have three TI's and an IBM clone. I use all of my computers. As I sit here typing, it is on the good ol' 49 keys that TI so kindly gave us.

I upgraded my clone to color and bought a Magnavox RGB Monitor 80. It has two inputs, composite and RGB. On the front there are the usual picture controls and two buttons. One lets you switch from a color monitor to a green screen. The other changes input mode from RGB to composite.

I wondered how my nice new monitor would work with my TI. I plugged my TI monitor cables into the composite inputs, leaving the clone RGB cable in place. Guess what, the Magnavox works with both the IBM and the TI. At once. I can have both running and switch from one to another with the front switch (RGB to composite).

## TI WRITER's INCLUDE FILE

One of TI Writers nicer features is Include File (.IF). It has a few limitations, but it extends TI Writers capabilities.

TI Writer cannot work on large files. No books in one file here. As you reach the size limit, the time it takes to load and save files increases markedly. Include File to the rescue.

Suppose your have written two chapters of your next book. Your named your files CHAPTER1 and CHAPTER2 (very original). At the end of Chapter 1 (the very last line), add this:

    .IF DSK1.CHAPTER2

Name CHAPTER1 for the Formatter and it will print both chapters. All the formatting commands you set for Chapter 1 will be used when Chapter 2 is printed, so you don't have to restate the margins and such.

Ah, you finish Chapter 3. No problem. At the end of Chapter 1, add another line:

    .IF DSK1.CHAPTER3

You cannot do this at the end of Chapter 2, as you can't chain these commands. Also note that you must specify the drive number (DSK1 in this case).

*from ROM*

I prefer to make a master file (called CHAPTER0) will all of the .IF commands:

    .IF DSK1.CHAPTER1
    .IF DSK1.CHAPTER2
    .IF DSK1.CHAPTER3

Before (not after) your .IF lines, put in your format, header and footer instructions. Now you have all of your format commands in one place that is easy to find and edit.

                              Enjoy.

..........................................

## ABOUT FLIPPIES
by N.Armstrong

My first expansion system ((I traded a sailboat) included three disk drives, Siemens FDD100-5B. These are hard-wired duel-sided (flippy) drives. They have two index sensing and two write protect circuits that allow writing on either side of the diskette (notch up or notch down). I have been using these drives and both sides of my diskettes without problems for over four years. Flippys prepared on these drives can be read by 90-percent of the drives in use on TIs.

..........................................
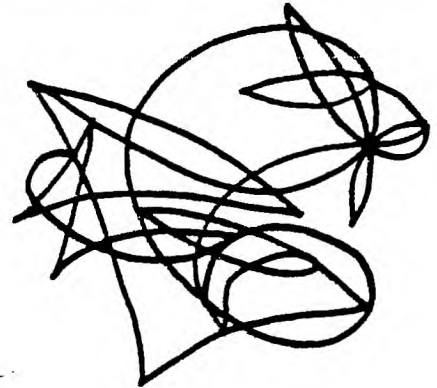
*"TIPS" concluded*

SUBEND

   And a new way to wipe the screen -

```
1 CALL CORNERWIPE(30)
29000 SUB CORNERWIPE(CH):: F
OR T=1 TO 24 :: CALL HCHAR(T
,3,CH,T+4):: CALL HCHAR(25-T
,32-T,CH,T):: NEXT T :: CALL
CLEAR :: SUBEND
```

      MEMORY FULL

         Jim Peterson    ⑨

# TI-99/4A FAIRE

Burlington Shopping Mall

Middlesex Turnpike

Route 3

BURLINGTON

Exit 32B

(Formerly 128) Route 95

Diamond Middle School (Jr. High) 99 Hancock St. Lexington, MA

Hathaway Road

Stedge Road

DIAMOND School

Fiske School

DAY'S INN

Exit 31B

Exit 31A

Bedford

Hancock

WOBUR

Lexington Center