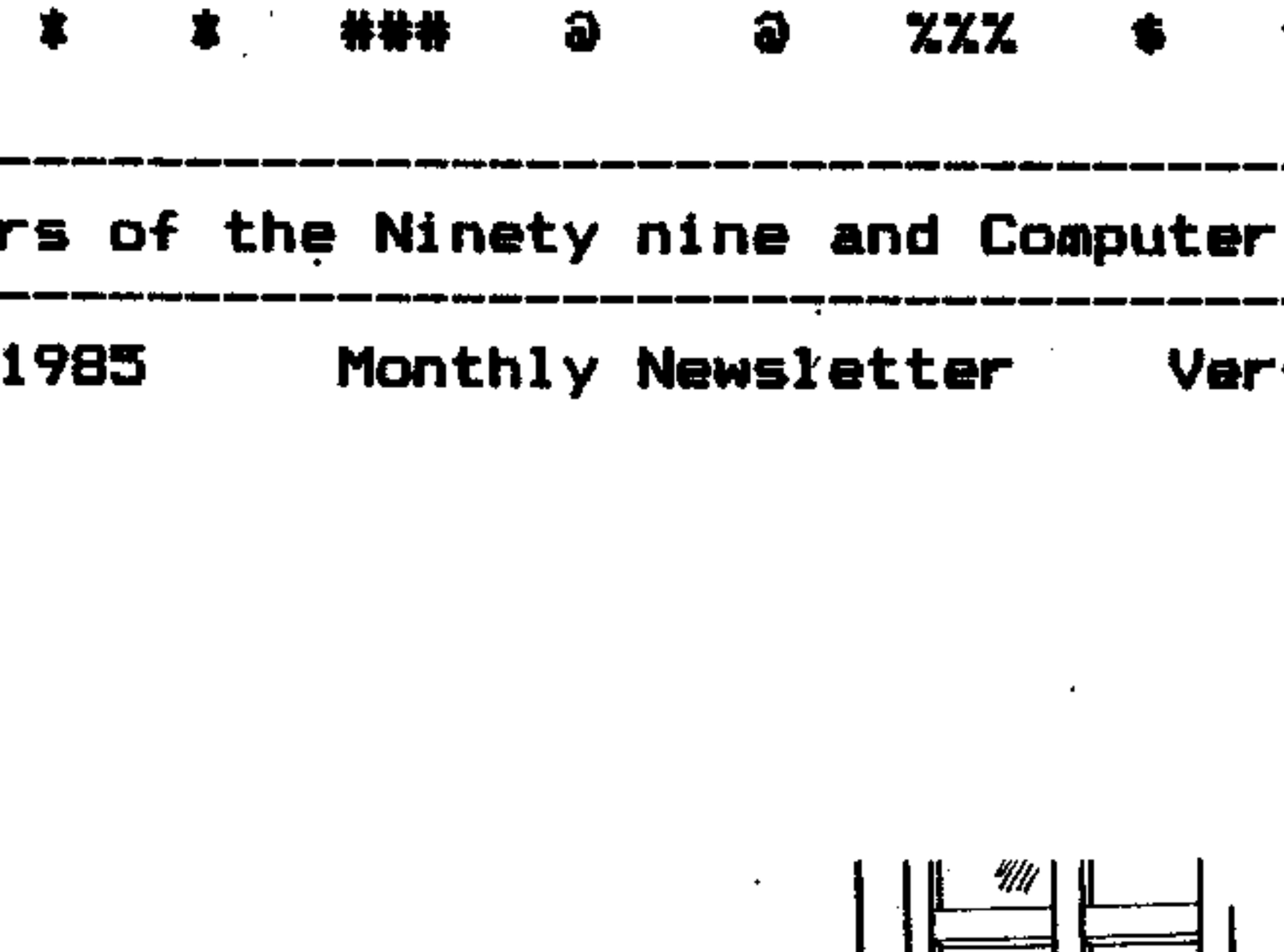

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Mass Users of the Ninety nine and Computer Hobbyists

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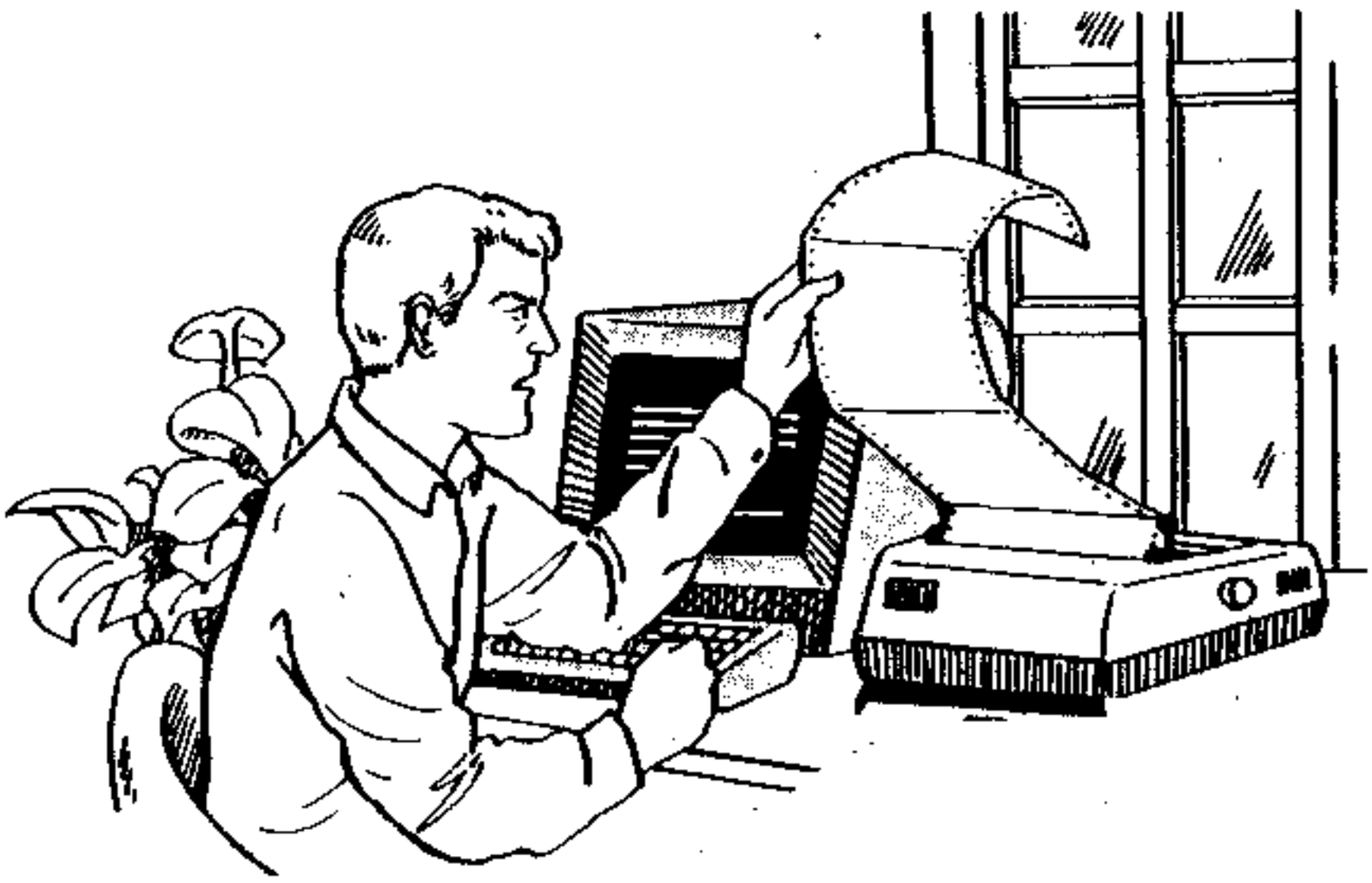
August 1985 Monthly Newsletter Version 4.8



# AUGUST

MINUTES

July 16,1985

President Bruce Willard called the meeting to order at 7:15P.M. There were thirty five members present.
The SECRETARY'S REPORT was accepted as published in the newsletter.
TREASURER'S REPORT Jim Cox reported our checkbook balance is $154.82; income was 46 from new members and renewals; expenses were 11 for postage, 54.50 for the newsletter and 25 for monitor rental.
LIBRARY: Members are requested to return borrowed material in a timely fashion.
TEXTWARE: Jack Sughrue reported on three magazines which still publish a lot of information on the TI. They are Home Computer Magazine, Super 99er Monthly and Micropendium. Jack suggested that subscriptions to any or all of these magazines would be helpful.
OLD BUSINESS: Bruce reported that the membership drive was not as successful as hoped. All members are encouraged to get friends who have TI computers to join.
We have reservations for our meeting room through September.
NEW BUSINESS: It is time for election of Officers again. Bruce asked for volunteers for the Nominating Committee. The committee will consist of John Doon, Mike Miller, Jack Sughrue and hopefully one other.
Jack Sughrue won the raffle which realized $19.
The Business meeting adjourned at 8:00P.M.

---

WELCOME NEW MEMBER: Tom Fiske of No.Brookfield.

---

FOR SALE: Jim Cox will have a pair of TI Joysticks and a Wico stick for sale for $10 each at the next meeting.
If you have something to sell bring it to the meeting, its a GREAT place to sell.

PRESIDENT'S MESSAGE

I have great news. We lucked out. The Southeast Conference Room at the U of M Medical Center will continue to be ours for our business meetings thru August 1986. That's one more major hurdle we're over.

While we are on the subject of the Medical Center, I would like to advise our attending membership that the Center has beefed up their security. If you are bringing in materials (hardware, software, or textware) you must check in at the information desk. They will note what you are transporting in so that you will be able to transport it out without any hassles. I was challenged by security upon departure from the July meeting. It is for everyone's protection. Just another point. If they are worried about theft, then we all should be very attentive around our equipment while at the meetings.

We all had a lot of fun at the July games meeting. A dozen kids participated and tried their best for the two prizes. The winner in the younger group was Nancy Mason with a total score of 23,217. The older group winner was Chris Moir with a total score of 180,510. Congratulations to the top scorers in the two groups and to all the rest who just had fun playing. How about some feedback? If we get enough requests we might do it again sooner next time.

Check the agenda for the hot items for both the August and September metings. You'll find them very worthwhile. Any other ideas for topics at the meetings please one of your officers. See you at the meeting.

---------- Bruce Willard, Pres. ----------

PS Sorry, but the review of SKETCHIT and GRAPHX will have to wait until next month.

MUNCH OFFICERS AND NUMBERS (all in 617 area)

| | | |
|---|---|---|
| President | Bruce Willard | 852-3250 |
| Vice Presidents | Ota Jiroutek | 852-0835 |
| | John Doon | 852-4295 |
| Secretary | V. Foster-Erlandson | 481-8060 |
| Treasurer | Jim Cox | 869-2704 |
| Editor | Pete Blackford | 892-4946 |
| Hardware Chair | Bernie Miller | |
| Programs Chair | Pete Rauktis | 799-6035 |
| Adv Prog. Chair | Dan Rogers | 248-5502 |
| Club Reviewer | Jack Sughrue | 476-7630 |
| Library | Al & Lisa Cecchini | |
| Mail & Messages | Video Connection | 852-8213 |

AGENDA for August 20, 1985

7:00 - 7:15 Open Demonstrations
New Member Registration
Software Exchange (members only)

7:15 - 7:45 Business Meeting:
Approval of Minutes
Treasurers Report
Committee Reports
Old Business
New Business
Announcements
Raffle

7:45 - 9:00 Special Interest Group Meetings
and Open Demonstrations and Discussion

Demo of Disk Manager III and Asgard software -- by Jack Sughrue
Basic Programming -- as required
Assembly Language -- by Dan Rogers

Plan for September meeting:

Demonstration of the Navarone Data Base Management System by John Shoikour of Computer Sense Center in Westboro

**********

## LIBRARY NOTICE

With the increased demand for the newer TI-99/4A related books we must request book loans to be only one month. If you have any books on loan please bring them to the next meeting. If you can't make it to the next meeting please ask a friend to return the book(s). Thanks! This gives everyone a better chance to see one they haven't seen yet.

Please return all borrowed materials to the MUNCH library at each meeting. This will give other members a chance to enjoy our collection of "text-ware" as much as you have !!! THANK YOU !!!

## " _ _ _ RAFFLE _ _ _ RAFFLE _ _ _ "

The raffle prize for August is a ten pack of OMNI Resources diskettes in a library case or a twelve pack of C-30 cassettes. It's the winner's choice. We thank OMNI Resources for the diskette donation and Hector Beaudreau of Bailey's Audio Visual for the cassette donation to help offset the rental of the monitors.

The winner of the July raffle of the game Jack Sughrue. Congratulations Jack!

Just as a reminder to all members, these raffles are to generate enough funds to operate our club. Lately, we have almost covered the monitor expenses. Notice, I said **ALMOST**. More active members is what we need. Or, monetary donations will also be accepted. Suggestions of other ways to generate funds for M.U.N.C.H. will joyously be accepted.

The raffle is open to all who attend. The drawing will be held immediately after the business meeting before we break into the various Special Interest Groups. Remember:

******* YOU MUST BE PRESENT TO WIN *******

**Bruce Millard, Pres.**

## VOLTAGE DOES IT

MICROpendium / June 1985

William Fielden, of Louisville, Kentucky, writes: "Having tried loading many cassette programs and encountering the NO DATA FOUND or the ERROR IN DATA messages once too often I called TI to see if they could offer any help. From their assistance I found the computer is looking for a signal of one volt measured peak to peak. With this knowledge, I constructed a 'Y' connecter to allow the connection of a Volt-Ohm-Meter to be connected to the ear phone jack from the tape recorder. Next, I set the V.O.M. to 2.5 volts A.C. and tried loading a program while adjusting the volume control and leaving the tone at maximum. By adjusting the volume to give a reading of approximately one volt the program went right in. Then I again tried all the difficult programs that could not be loaded previously and found that out of approximately 50 all but one loaded on the first attempt, and that one loaded on the second attempt. Needless to say, I was very pleased."

The following BASIC program is copied from CHUG's Febuary 85 newsletter. It dials phone numbers by producing the tone of a touch-tone and plays it into the mouthpiece of a tele-phone. It could use a bit of improvement and I have modified it slightly and may do more later, but it works. PLEASE, use RES when possible before submitting programs.

-W.M.Creator

```
100 CALL SCREEN(2)
110 FOR C=1 TO 12
120 CALL COLOR(C,4,2)
130 NEXT C
240 REM ********************
241 REM HOME PROGRAM REV 3
242 REM LARRY BRYANT
250 REM ********************
259 DATA CHUG
260 DATA CHUG/BOX 136 HIXSON TN
    37343,8755591
270 DATA NAME2
280 DATA FIRST & LAST NAME 2/
    ADDRESS NAME 2/CITY/STATE    /
    ZIP,5555555
290 DATA NAME 3,FIRST& LAST
    NAME3/ADDRESS/CITY/STATE    /
    ZIP,16153333333
760 DATA WEATHER,NO ADDRESS
    AVAILABLE,8551234
780 DATA EOF
790 A1=697
800 A2=770
810 A3=852
820 A4=941
830 B1=1209
840 B2=1336
850 B3=1477
860 REM COUNT DATA
870 N=0
880 READ DATA$
890 N=N+1
900 IF DATA$="EOF"THEN 920
910 GOTO 880
920 REM IDENTIFY DATA
```

```
930 DIM D$(200)
940 RESTORE 250
950 FOR I=1 TO (N-1)
960 READ D$(I)
970 NEXT I
971 DIM Y$(11)
972 DATA 00,01,01,03,04,05,06,
    07,08,09
973 FOR I=1 TO 11
974 READ Y$(I)
975 NEXT Y
980 CALL CLEAR
990 REM MAIN SCREEN
1000 PRINT TAB(8);"MAIN INDEX": :
 1025 FOR I=2 TO 11 STEP 2
 1030 PRINT " ";Y$(I);" ";D$((I-1)
     *3-2)," ";Y$(I+1);"
     ";D$(I*3-2)
1040 NEXT I
1080 PRINT :"press (A) for address
     or (P) for phone number and
     number beside name wanted."
1090 PRINT"enter (R) to exit
     program."
1100 CALL KEY(0,K,S)
1110 IF S=0 THEN 1100
1120 IF K=32 THEN 1160
1130 IF K=65 THEN 1340
1140 IF K=80 THEN 1430
1150 GOTO 1100
1160 END
1170 REM TWO DIGIT CALLKEY
     SUBROUTINE
1180 FOR DELAY= 1 TO 100
1190 NEXT DELAY
1200 CALL KEY(0,L,T)
1210 IF T=0 THEN 1200
1220 IF L=82 THEN 980
1230 IF (L>57)+(L<48) THEN 1200
1250 FOR DELAY=1 TO 100
1260 NEXT DELAY
1270 CALL KEY(0,M,U)
1280 IF (U=0)+(M>57)+(M<48) THEN
     1270
1290 IF M=82 THEN 980
```

```
1320 V=((10*(L-48))+(M-48))+1
1330 RETURN
1340 REM ADDRESS SUBROUTINE
1350 GOSUB 1170
1360 CALL CLEAR
1370 PRINT D$(V*3-1): : : : : : :
1380 PRINT "press (R) to return
     to main screen"
1390 CALL KEY(0,C,D)
1400 IF D=0 THEN 1390
1410 IF C<>82 THEN 1390 ELSE 980
1420 STOP
1430 REM PHONE SUBROUTINE
1440 GOSUB 1170
1450 CALL CLEAR
1460 PRINT D$((V*3)-2: : : :D$(V*3)
     : : : : : : : : : :
1470 FOR I= 1 TO LEN(D$(V*3))
1480 X$=SEG$(D$(V*3),I,I)
1490 FOR DELAY=1 TO 50
1500 NEXT DELAY
1510 IF VAL(X$)=0 THEN 1550
1520 ON VAL(X$)GOSUB1570,1590,1610
     1630,1650,1670,1690,1710,1730
1530 NEXT I
1535 FOR DELAY=1 TO 2000
1536 NEXT DELAY
1540 GOTO 980
1550 CALL SOUND(200,A4,0,B2,0)
1560 GOTO 1530
1570 CALL SOUND(200,A1,0,B1,0)
1580 RETURN
1590 CALL SOUND(200,A1,0,B2,0)
1600 RETURN
1610 CALL SOUND(200,A1,0,B3,0)
1620 RETURN
1630 CALL SOUND(200,A2,0,B1,0)
1640 RETURN
1650 CALL SOUND(200,A2,0,B2,0)
1660 RETURN
1670 CALL SOUND(200,A2,0,B3,0)
1680 RETURN
1690 CALL SOUND(200,A3,0,B1,0)
1700 RETURN
```

```
1710 CALL SOUND(200,A3,0,B2,0)
1720 RETURN
1730 CALL SOUND(200,A3,0,B3,0)
1740 RETURN
1750 STOP
```

## PROGRAM TESTING

by Jim Peterson

No programmer should test his own programs, for two very good reasons-

No. 1. By the time you have a program debugged, you are so sick of looking at it that you test it all too briefly, while your mind is on that next program you're itching to get started on.

No. 2. You wrote the program, you know which keys to hit, you subconsciously avoid hitting the wrong ones.

The best way to get a program tested is to go out and catch a 6-year old, wipe the jam from his fingers, set him down at the keyboard and turn him loose. He will hit all the right keys in the wrong order, all the wrong keys in the wrong order, and all the keys at once. He will make your program do things you never dreamed of, and produce error messages that you didn't know were in the computer's vocabulary!

I have one program which will begin to print the alphabet across the top of the screen after you deliberately hit the wrong key 28 times. A 6-year old showed me that - and I still haven't found anything in the program logic to account for it!

The next best way to test a program is to demonstrate it to a group of people. This is absolutely guaranteed to cause it to crash, lock up, and otherwise embarrass you in every possible way. And all you can say is **"@#$%K"! It never did that before!"**

**********

WANTED: A couple of used Pro-Stick II joy sticks.
Call Bruce Willard -- 852-3250.

**********

# THE VIDEO CONNECTION

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G.E. 10" Monitor/TV's.....$329.00

SPECIAL for M.U.N.C.H. Members the 10% discount will apply to all sale items until September 30th. Come in while there are still good supplys. This special discount will be for M.U.N.C.H. members only. Please bring your membership card at time of purchase.

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# PROGRAMMING TIPS

by Bob Gagnon

Between the addresses -32000 (>8300) and -31745 (>83FF) lies a section of memory called the CPU RAM PAD. Many unique and interesting things can be accomplished using "CALL PEEK" and "CALL LOAD" within this 255 byte range. Some of these are listed below:

-31879 (>8379) There is a counter at this address which continuously counts from 1 to 256 at a 1/60 second rate while a program is running.

-31888 (>8370) Disk drive switch. 55 for disk drive on. <>55 for disk drive off.

-31748 (>83FC) Cursor blink rate control. 1 for the normal rate. 2 for fast blink rate.

-31878 (>837A) 0 to 28 sets the number of sprites being controlled. Setting this to the exact number of sprites in your program supposedly increases the speed of the program.

-31806 (>83C2) 0 for nothing disabled. 16 disables "QUIT". 32 disables "CALL SOUND". 64 disables sprite motion. Don't know what 1, 2, 4, 8 and 128 disable.

-31962 (>8326) 32 is the equivalent of pressing "QUIT". 255 is the equivalent of pressing "QUIT" and then selecting Ext BASIC.

-31880 (>8378) Generates a random number between 1 and 99 each time the command "RANDOMIZE" is used.

-32116 (>828C) 4 switches the computer directly from Ext BASIC to BASIC. 8 is the equivalent of pressing QUIT and then selecting Ext BASIC.

Remember that there are a total of 255 addresses in this section of RAM. If any of you have discovered other addresses that allow unique control of the 99, please let the MUNCH newsletter staff know about them.

# EXTENDING EXTENDED BASIC

by Tony Falco

Last month I suggested that an appropriate activity for users groups like MUNCH might be to create and assemble a set of subprograms to add commands to the Extended Basic language. "Extending Extended Basic" if you will. In keeping with that suggestion, this month I have written a program which supplies several subprograms. These CALLs can be effectively used in programs for young (and young at heart) people. They provide some easy ways to use some of the 99/4A's more spectacular sound, color, and graphics effects.

The program consists of a series of subprograms which are in lines numbered 10000 and above. Lines 100 to 140 consist of a brief demonstration on how to how to CALL the subprograms. If you want to use the routines in your own programs then simply delete lines 100-140 and save the rest to tape or disk. Before you type in a new program put the routines in memory by means of the OLD command. Then write your program CALLing the routines as needed. Just be sure that none of your line numbers exceed 9999.

Here is a brief summary of how they work:

-CALL BORDER(C1,C2,C3)- creates 3 color screen border. C1,C2,and C3 are constant or variables with values 1 to 16 (for TI's color code)

-CALL FLASHBORDER (C1,C2,C3)- makes an already created border flash the sequence of 3 colors C1,C2, and C3.

-CALL SHOW(<string variable or string expression>)- Centers a string at the screen's dead center.

-CALL EXPLODE -noises and flahing screen.

-CALL SIREN, CALL POLICE, and CALL EMERGENCY - these are siren like sound effects of different types.

-CALL CRAWL(<row#>, <string variable or string expression>) - causes message to crawl across the screen along the specified row.

```
100 CALL CLEAR :: CALL SHOW("A COLORED B
ORDER"):: CALL BORDER(3,11,14):: CALL SH
OW("LISTEN TO THE SIREN"):: CALL SIREN
110 CALL SHOW("HERE ARE THE POLICE"):: C
ALL POLICE
120 CALL SHOW("IT FLASHES TOO!"):: CALL
FLASHBORDER(7,16,6):: CALL EXPLODE :: CA
LL FLASHBORDER(11,15,3)
130 CALL SHOW("IT'S AN EMERGENCY!!"):: C
ALL EMERGENCY
140 CALL CRAWL(24,"THIS IS A TEST OF THE
 CRAWL ROUTINE. TO END IT AND THE PROGRA
M PRESS ANY KEY."):: CALL CLEAR :: END
```

```
9995 !-------------------------------------------------
10000 SUB BORDER(A,B,C):: CALL COLOR(13,
A,B,14,C,C):: CALL CHAR(134,"0",135,RPT$
("F",16),136,"0")
10010 FOR T=1 TO 3 :: CALL HCHAR(T,1,133
+T,32):: CALL HCHAR(25-T,1,133+T,32):: N
EXT T
10020 FOR T=1 TO 3 :: CALL VCHAR(T,T,133
+T,26-2*T):: CALL VCHAR(T,33-T,133+T,26-
2*T):: NEXT T :: SUBEND
10025 !-------------------------------------------------
10030 SUB FLASHBORDER(A,B,C):: FOR I=1 T
O 50 :: T=A :: A=B :: B=C :: C=T :: CALL
 COLOR(13,A,B,14,C,C):: FOR J=1 TO 30 ::
 NEXT J :: NEXT I :: SUBEND
10035 !-------------------------------------------------
10040 SUB EXPLODE :: CALL SHOW("KA-BOOM"
):: FOR SC=2 TO 16 :: CALL SCREEN(SC)::
CALL SOUND(-2000,INT(4*RND-8),0)
10050 CALL SOUND(-2000,INT(4*RND-8),0)::
 NEXT SC :: SUBEND
10055 !-------------------------------------------------
10060 SUB SIREN :: FOR N=1 TO 4 :: FOR F
=700 TO 900 STEP 5 :: CALL SOUND(-99,F,0
):: NEXT F
10070 FOR F=900 TO 700 STEP -8 :: CALL S
OUND(-99,F,0):: NEXT F :: NEXT N :: SUBE
ND
10075 !-------------------------------------------------
10080 SUB POLICE :: FOR N=1 TO 20 :: FOR
 F=1200 TO 900 STEP -30 :: CALL SOUND(-9
9,F,0):: NEXT F :: NEXT N :: SUBEND
10085 !-------------------------------------------------
10090 SUB EMERGENCY :: FOR T=1 TO 30 ::
CALL SOUND(150,1320,0,1324,5):: CALL SOU
ND(150,880,0,888,5):: NEXT T :: SUBEND
10095 !-------------------------------------------------
10100 SUB SHOW(M$):: DISPLAY AT(12,4)SIZ
E(24):RPT$(" ",24):: DISPLAY AT(12,15-IN
T(LEN(M$)/2))SIZE(LEN(M$)):M$ :: SUBEND
10105 !-------------------------------------------------
10110 SUB CRAWL(ROW,M$):: M$=RPT$(" ",28
)&M$
10120 FOR T=1 TO LEN(M$):: DISPLAY AT(RO
W,1):SEG$(M$,T,28)
10130 FOR D=1 TO 9 :: NEXT D :: CALL KEY
(0,K,S):: IF S<>0 THEN DISPLAY AT(ROW,1)
:RPT$(" ",28):: SUBEXIT
10140 NEXT T :: GOTO 10120 :: SUBEND
```

# T E X T W A R E / S O F T W A R E  R E V I E W

by JACK SUGHRUE

One of the good feelings I have about STIMULATING SIMULATIONS FOR THE TI-99/4A by C.W.Engel (105 pp, Hayden Book Company, Hasbrouck Heights, N.J., $7.95) is the assumptions the author makes about the reader. He assumes you want to type in programs to get programs into your library. That's obvious. That's why we plunk down the bucks. (About 53 cents a program, by the way.)

But Engel assumes further that you're going to take the time and trouble to figure out how the simulations are created and you're going to enhance them to suit your own needs.

He's right, too.

Once you start into this book, it is hard not to begin adding, fiddling, manipulating, deleting, changing. And it's easy because of the excellent structure. Each of the simulations begins with a scenario explaining the program. Many of these scenarios have charts and diagrams which I found lucid and helpful.

The scenarios (running from two short paragraphs to 14 long ones) are followed by sample runs. These printouts show how the program operates (or how it should operate if yours has bugs). This if followed by a list of all the variables used (I wish all program books would do this.) and by a complete program listing ready for typing. These in turn are followed by two batches of modifications: minor and major. Toughies, these. There is usually an illustration or game board or display interspersed among the items above. They add to the overall nice effect, and, in some instances, are essential for play.

The final item in each section is a flowchart of the simulation.

I'm not a big flowchart person (no more than I approve of outlines for papers), but as they come after all the other stuff, they do prove helpful in understanding the process of the program.

We'll follow one through in a couple minutes, but first I want to discuss the programs and the book.

The book is 6X9, a decent size. The text type is tiny, so I'm glad I have bifocals. (When I bought this book last year, I didn't have bifocals, so I couldn't deal with it and its relationship to distant keyboad, screen, printer, and so on. Thanks to Good Ol' Doc Joseph I have overcome. Have dug out book. Have enjoyed.

Except for a few things.

One, I hate computer books without ring binders.

Two, I loathe T.I. books which do not have their listings in resequenced order by 10s.

Three, I despise books which aren't carefully proofread in the listings (They should just be printed out directly from the program with LIST "PIO" or LIST "RS232". What's so hard about that? The books are all offset anyway, so the publisher can be guaranteed a perfect copy.

And STIMULATING SIMULATIONS is guilty on all three counts. But! In addition to the above goodies, which most program-listing books do not have, this one starts off with two pages which describe each of the programs in the book in a clear paragraph which includes the number of lines. Hey! Here's one that's only 63 lines. Sounds good, too. I'll do that one first and the 225 liner last.

Can't do that with any other books.

Be wary, Future Purchaser. You are not buying a book of arcade games here. They are not loaded with graphics and cutesy melodies and neon lights. You can add the whistles and grunts. And the flying orangutans.

But they aren't there.

Here is what is there:

3 Soccer Programs (requiring Extended BASIC) [The other 12 may run in BASIC or X.]

Art Auction - Buy and sell paintings to make a profit.

Monster Chase - A graphic maze-like (not too much thinking) chase.

Lost Treasure - A short simulation of treasure finding on a map/grid.

Gone Fishing - Catch lots of fish avoiding storms, wrecks, etc.

Space Flight - Deliver medical supplies to distant planet.

Forest Fire - Extinguish a forest fire with backfires and chemicals.

Nautical Navigation - Navigate sailboat to 3 different islands.

Business Management - Maximize profits by clever use of buying and finishing raw materials.

Rare Birds - Identify as many birds as possible. This is weird.

Diamond Thief - You find museum diamond thief from 5 suspects.

The Devil's Dungeon - This one's been around for a long time. It's a fantasy adventure in a bottomless cave full of poison gases, monsters, demons, and gold. What one won't do for gold!

and

Life - "Beginning as an uneducated bum whose only source of income is mugging, the player advances through education and luck to become an executive who earns lots of money." I would have said that if Engel didn't.

Interesting selection of simulations, eh?

Let's look into one: Gone Fishing. (Not my favorite, but a good one.)

You're going on a fishing trip. You may use the 8X8 grid in the book to place markers on. You travel N,S,E,W, or F (to stay fishing in the same place or square). If you keep fishing the same spot you will not succeed, as each square has a predetermined density. Moving can cause

unexpected events (not good) to happen. Fishing too long will probably result in your being caught in an afternoon storm. You don't want to get too far from the dock, as you have a time limit, but the bigger fish are out in the farthest reaches of the pond.

Decisions. Decisions.

That's what simulations are all about.

You can change anything, of course. Grid size could make things easier or harder. Line 30 sets the probability of catching fish within a square. Line 40 sets the maximum density of fish in a square. Line 150 sets the maximum time for fishing. Storms - Line 330. Rating scale as fisherman - 540.

Major changes could be to add different kinds of hazards (whales, reefs, UFOs); utilize sonar devices to help locate fish; use fuel to run the boat; and so on.

The fun with this book is what happens AFTER you've typed in the program.

Here's GONE FISHING as a sample. I'd like to print a listing of the best adaptation/enhancement. Be ingenious. Mail your tape or disk to me (It will be returned.): Jack Sughrue, Box 459, East Douglas, MA 01516.

Enjoy!

```
1 REM +++ GONE FISHING +++
2 REM +++   STIMSIM    +++
5 REM SET PROBABILITIES AND  DENSITY
6 DIM P(8,8),D(8,8)
7 RANDOMIZE
10 CALL CLEAR
11 CALL SCREEN(13)
20 FOR I=1 TO 8
22 FOR J=1 TO 8
30 P(I,J)=.7*RND
40 D(I,J)=INT(RND*5+1)
50 NEXT J
55 NEXT I
60 P(1,1)=0
62 LB=0
63 R=1
64 C=1
145 REM MAIN LOOP
150 FOR T=0 TO 6 STEP .1
155 PRINT
```

```
160 IF (RND>P(R,C))+(D(R,C)<1)THEN 162 ELSE 170
162 PRINT "    NO  BITES!": : : :
163 GOTO 220
170 N=INT(RND*D(R,C)+1)
180 W=INT(RND*R*C)+1
190 LB=LB+N*W
195 PRINT
200 PRINT "  YOU CAUGHT";N;"FISH,"
210 PRINT "  EACH WEIGHING";W;"LBS.,"
220 PRINT "  AT LOCATION";R;C
230 PRINT : : :"TOTAL LBS. THIS TRIP IS";LB;
231 PRINT : : :
325 REM UNEXPECTED EXPIERIENCES
330 IF RND<T/60 THEN 335 ELSE 340
335 PRINT "STORM--LOST 1/2 HOUR": : : :
337 T=T+.5
340 J=INT(100*RND)+1
350 IF J>4 THEN 370
360 ON J GOSUB 600,700,800,900
370 PRINT "  YOU HAVE FISHED FOR";T;"HOURS.": : : :
380 INPUT "MOVE(N,S,E,W,F,B)? ":M$
390 IF M$="E" THEN 395 ELSE 400
395 C=C+1
400 IF M$="N" THEN 405 ELSE 410
405 R=R-1
410 IF M$="W" THEN 415 ELSE 420
415 C=C-1
420 IF M$="S" THEN 425 ELSE 430
425 R=R+1
430 IF M$="B" THEN 435 ELSE 440
435 GOTO 5
440 IF (R<1)+(R>8)+(C<1)+(C>8)THEN 445 ELSE 450
445 PRINT "GROUNDED--SUNK!!": : : :"ALL HAS BEEN LOST!!!!": : : :
446 GOTO 550
450 IF (R=1)*(C=1)THEN 500 ELSE 460
460 NEXT T
470 PRINT "TIME UP!  THE SUN HAS SET.": : :
480 PRINT "1/2 YOUR CATCH HAS SPOILED.": : : :
490 LB=LB/2
495 REM  SUMMARY OF TRIP
500 IF T=0 THEN 505 ELSE 510
505 PRINT "STILL AT DOCK": : :
506 GOTO 10
510 PRINT "YOU ARE BACK AT THE DOCK"
520 PRINT "AFTER";T;"HOURS OF FISHING."
530 PRINT "CLEAN";LB;"LBS. OF FISH."
```

```
540 PRINT "YOU RATE";INT(LB/5);"AS A FISHERMAN."
550 PRINT : :
552 INPUT "ANOTHER TRIP? ":X$
555 IF X$="Y" THEN 7
560 END
595 REM  SUBROUTINE
600 IF R+C<9 THEN 660
610 PRINT "FISH SCARED OFF BY SHARK."
620 PRINT "NOT BITING AS OFTEN."
630 FOR I=1 TO 8
635 FOR J=1 TO 8
640 P(I,J)=P(I,J)-.1
650 NEXT J
655 NEXT I
660 RETURN
700 PRINT "SEA GULLS ATE SOME OF YOUR  BAIT."
710 PRINT "CATCH WILL BE SMALLER THIS  TRIP."
720 FOR I=1 TO 8
725 FOR J=1 TO 8
730 D(I,J)=D(I,J)-1
740 NEXT J
745 NEXT I
750 RETURN
800 PRINT "WATER SPOUT DISPLACES YOU."
810 R=INT(8*RND+1)
820 C=INT(8*RND+1)
830 PRINT "YOU ARE NOW AT LOCATION";R;C
840 T=T+.2
850 RETURN
900 PRINT "YOU CAUGHT A 50-LB. SHARK."
910 LB=LB+50
920 PRINT "TOTAL LBS. THIS TRIP IS";LB;"."
930 RETURN
```

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# PROGRAMMING TIPS

by Bob Gagnon

While rummaging thru my files, I found another program to move a graphics character around the screen in response to the arrow keys. This technique is much shorter than the one I listed in "PROGRAMMING TIPS" dated 4/26/85. Lets give credit where credit is due. This program was originated by Jim Peterson of the Sidney, Australia users group. I have added one line (*165) to erase the character at its old position before displaying it at the new position.

```
100 CALL CLEAR
110 CALL CHAR(44,"FFFF")
120 R=1
130 C=3
140 CALL HCHAR(R,C,44)
150 CALL KEY(0,K,S)
160 IF S=0 THEN 290
165 CALL HCHAR(R,C,32)
170 IF K=68 THEN 210
180 IF K=69 THEN 230
190 IF K=83 THEN 250
200 IF K=88 THEN 270
210 C=C+ABS(C<30)
220 GOTO 280
230 R=R-ABS(R>1)
240 GOTO 280
250 C=C-ABS(C>3)
260 GOTO 280
270 R=R+ABS(R<24)
280 CALL HCHAR(R,C,44)
290 \_____________________
      the rest of your program
    /_____________________
*** GOTO 150
```

M.U.N.C.H.

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FIRST CLASS

TO:

**********
IMPORTANT NOTICE
**********

August meeting will be on August 20, 1985
at University of Massachusetts Medical Center
(Come to the VISITORS entrance and follow the signs for MUNCH...)