

PRESIDENT'S MESSAGE...

Another busy month here at the homestead. With the Christmas season rapidly approaching and the preparations for the elections next month, its been very,very hectic. In addition,I have been devoting a lot of time to the development of the TI-Comm Bulletin Board that has been running (intermitently) during the last two weeks. More on that later.

The formal nominations for club officers will be conducted at this months meeting. If you cannot attend but plan on offering to hold one of these positions for the next year,you must either contact me by phone or mail in last months application before the meeting. So far only one member has offered to hold a position(Secretary:Dona H.). I will not bore you all with yet another plea for support of this club, but I remain hopeful that a few individuals will come forward at the meeting and volunteer a bit of their time so we can keep this club active. The formal elections will be held at the January meeting and each active member is eligible to vote. Absentee ballots will be included in the next newsletter for those members unable to attend. I hope that everyone will plan to attend these next two meetings. Each member failing to attend is effectively casting a vote to disband the club during the next year,which is what a few active members and I are striving to prevent.

I am pleased to announce that as of this Newsletter, Rowland Halliday has taken over the post of Newsletter Editor. Rowland has been a regular contributor to the Newsletter each month and I look forward to more of his informative and humorous articles in the future. Rowland has also been of invaluble help in testing the club's new BBS,and I again want to thank him for this support.

Thanks also go out this month to another very active member,Tom Strahan,who has developed a new club mailing list and utility package that has replaced the antiquated TI mailing list program that we have been burdened with the last few years. This program is an outstanding example of what can be done with the 99/4a. Tom attends every meeting and is the man to see about problems with basic and extended basic programs.

Thats all for now. I hope to see you all at the next meeting.

Fres.

MEMBERSHIP RENEWALS DUE!!!!!!

Thats right,your time is up. Please deposit \$12.00 for the next 525,600 minutes. The membership renewals have begun to trickle in and we are presently optimistic that we will remain financially sound for yet another year. This is the last issue that will be sent out to you unless you submit your payment for the next year by Jan 15th. We are mailing out this months news letter to all the people on our inactive mailing list. We are also considering advertizing in the local Fennysaver newspaper to enhance our membership drive. Our membership goal for the coming year is 100% renewal and 10 new members. We have already had 2 new members join already! I hope that we can all be together for another year,and hope that next year will be as enriching as this year has been for all of our members.

Dave Tavlör

ADDING A NUMERIC KEYPAD TO THE TI99/4A

by Norman Riger

Proficiency with a numeric keypad is a valuable skill. Employment ads in the newspaper often mention requirements of ten thousand keystrokes per hour for keypad operators. Considerable time and practice is required to achieve such speed and the necessary accuracy. Your home computer can provide you with the opportunity to learn this valuable skill. This article shows how to connect a numeric keypad to the TI99/4A. This method will not work with the TI99/4, which is wired differently and has a different keyboard.

My procedure involves selecting a surplus keypad that has ten separate spring type switches, each with two terminals. Both terminals of each switch must be accessible and not permanently connected to the terminals of a different switch. There are four rows of switches on the standard keypad. The top row (left to right) has keys for seven, eight and nine. Below are keys for four, five and six. The third row has keys for one, two and three. The bottom row has a single key (at the left) for zero. There is no ground connection on the keyboard of the TI99/4A and there should be no ground on the keypad selected for this project. Only these ten keys are required and any others are not needed and may be ignored as long as they aren't connected to the required keys.

Turn the computer upside down and remove the seven recessed Phillips screws used to fasten the bottom. Carefully pull out the on/off switch until it comes off and then remove the bottom. A fifteen conductor ribbon cable connects the keyboard to the processor printed circuit board (covered by a metal shield). Only seven wires are needed to connect the keypad and there are several methods possible.

A clamp type connector can be attached to the ribbon cable (use an ohmmeter to make sure that adjacent conductors don't become shorted together). It is possible to disconnect the ribbon cable connector from the processor printed circuit board and place an additional connector between them which contains the seven wires required. These methods have the advantage of requiring no solder connections on either the keyboard or the processor printed circuit board. Another possible method is to scrape some of the insulation off of the required conductors in the ribbon cable and solder directly to them.

My method is to solder the seven wires directly to the printed circuit board in order to save the cost and trouble of finding additional connectors or run the risk of damaging the ribbon cable. The end of the ribbon cable closest to the joystick connector is pin one and the end closest to the I/O port connector is pin fifteen. My method involves soldering each wire and running it through one of the ventilation slots in the bottom of the computer. Bread ties may be used to provide strain relief for the wires.

Pin two of the keyboard connector should be connected to one terminal of the switches on the keypad for the 6, 7, 8, 9 and 0 keys. Pin seven should be connected to one terminal of the switches for the 1, 2, 3, 4 and 5 keys. At this point, each of the ten switches on the keypad should have a connection to one terminal with the second terminal still unconnected.

Pin eight on the keyboard connector should be connected to the one and zero keys on the keypad. Pin nine is connected to the five and six keys. Pin 13 is wired to the 2 and 9 keys. Pin 14 goes to the 3 and 8 keys. The last connection is from pin 15 to the 4 and 7 keys. Check the keypad to be sure that all twenty terminals are connected correctly.

Be careful to avoid cold solder joints and solder bridges between adjacent connectors. A grounded (three wire cord) soldering iron is recommended for the protection of the sensitive computer chips. Replace the bottom of the computer along with the screws and the on/off switch. If it's necessary to remind you that the computer should be turned off and unplugged during the modification procedure, it's recommended that you have the job done by a qualified electronic technician. This can be accomplished by calling the NUMERIC KEYPAD HOTLINE, 825-8941, between 2:00 PM and 6:00 PM, all seven days of the week.

The modification described in this article has been performed successfully and requires no additional hardware or software of any type; however a keypad training program called NUMBER ATTACK will be described and listed in this publication for your convenience. NUMBER ATTACK is also available on cassette tape.

NUMBER ATTACK

by Norman Ragon

NUMBER ATTACK is a numeric keypad dexterity training program. The program is meant to be used with a numeric keypad such as the version previously described in this publication. The TI99/4A version of NUMBER ATTACK is a modification of the public domain program of the same name for the HEATHKIT H-89 computer. This program is supplied for personal use only and may not be sold or used for any commercial or educational purpose without written permission from the author.

The program generates a three digit random number which is displayed on the screen. The student develops proficiency by keying in the same number on the keypad by touch without looking at the keys. It isn't necessary to depress the ENTER key after each number. The number keyed by the student is compared to the displayed number and another random number is displayed on the screen. A continuous score is kept by the computer to be displayed at the end of the program. The requirements of this version are a TI99/4A computer with either a monitor or television set. A cassette recorder is recommended for saving the program. A numeric keypad is also recommended but NUMBER ATTACK will run without it. Here it is:

```

10 V=INT(RND(9)*1000)      'generate 3 digit random number
20 PRINT V                'display number on screen
30 CALL KEY(5,A,S)        'get 1st digit from student
40 IF S=0 THEN 30         'loop if no response yet
50 B=A-48                 'convert ASCII value to numeric value
60 A=0
70 CALL KEY(5,A,S)        'get 2nd digit from student
80 IF S=0 THEN 70
90 C=A-48
100 A=0
110 CALL KEY(5,A,S)       'get 3rd digit from student
120 IF S=0 THEN 110
130 D=A-48
140 A=0
200 Q=(B*100)+(C*10)+D    'derive 3 digit number from 3 key strokes
300 IF V=Q THEN 400       'check for correct comparison
330 IF V<>Q THEN 500      'check for incorrect comparison
400 R=R+1                 'increment correct score
410 IF 100*(R+W) THEN 10  'check for total
500 W=W+1                 'increment incorrect score
510 IF 100*(R+W) THEN 10  'check for total
600 PRINT"RIGHT: ",R      'display correct responses
700 PRINT"WRONG: ",W      'display incorrect responses

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(cont. on next page)

THE NIGHT BEFORE CHRISTMAS

BY

ROWLAND W. HALLIDAY

(WITH SINCEREST APOLOGIES TO CLEMENT CLARKE MOORE)

TWAS THE NIGHT BEFORE CHRISTMAS, WHEN ALL THROUGH THE HOUSE
THE COMPUTER WAS STIRRING, RUN BY ITS OWN LITTLE MOUSE;
THE STOCKINGS WERE HUNG BY THE CHIMNEY WITH CARE,
IN HOPES THAT SOME SOFTWARE SOON WOULD BE THERE.

THE CHILDREN WERE NESTLED ALL SNUG IN THEIR BEDS,
WHILE CUTE LOGO TURTLES DANCED IN THEIR HEADS;
AND MAMMA IN HER BASIC, AND I IN MY BUFFER
HAD JUST PROGRAMMED IN A NAP AFTER SUPPER.

WHEN OUT ON THE LAWN THERE AROSE SUCH A CLATTER,
I SPRANG FROM MY BED TO SEE WHAT WAS THE MATTER.
AWAY TO THE WINDOW I FLEW LIKE A FLASH,
TORE OPEN THE SHUTTERS AND THREW UP THE SASH.

THE MOON, ON THE BREAST OF THE NEW-FALLEN SNOW,
GAVE A LUSTER OF MID-DAY TO OBJECTS BELOW;
WHEN, WHAT TO MY WONDERING EYES SHOULD APPEAR,
BUT A GIANT CRT, WITH A SCREEN CRYSTAL CLEAR,
WITH A LITTLE OLD CURSOR SO LIVELY AND QUICK,
I THOUGHT, FOR A MOMENT, IT MUST BE A TRICK.

MORE RAPID THAN LASERS THIS CURSOR IT CAME,
AND WHISTLED, AND BEEPED, AND PRINTED EACH NAME:
"NOW INPUT! NOW OUTPUT! NOW MICRO AND MODEM!
ON FORTH! ON BASIC! ON PASCAL AND PROGRAM!"
TO THE TOP OF THE SCREEN, TO DISKETTE AND ALL
NOW PRINT: "DASH AWAY, DASH AWAY, DASH AWAY ALL."

AS DRY LEAVES THAT BEFORE THE WILD HURRICANE FLY,
WHEN THEY MEET WITH AN OBSTACLE, MOUNT TO THE SKY,
SO UP TO THE HOUSETOP THE CURSOR IT FLEW,
WITH A RAM FULL OF MEMORY AND A KEYBOARD TOO.

AND THEN IN A TWINKLING I HEARD ON THE ROOF,
THE CLICKING AND CLACKING OF KEYS ON THE LOOSE.
AS I DREW IN MY HEAD, AND WAS TURNING AROUND,
DOWN THE CHIMNEY "99" CAME WITH A BOUND.

IT WAS DRESSED ALL IN SILVER FROM ITS' TOP TO ITS' SWITCH,
THE KEYBOARD WAS QWERTY AND HELD NOT A GLITCH;
THE SCREEN ITSELF WAS A COOL VIVID BLUE,
THAT YOU COULD CHANGE ON A WHIM, TO A FAR DIFFERENT HUE.

ITS CURSOR HOW IT TWINKLED, WHY, IT LOOKED SO MERRY,
AS IT RACED 'ROSS THE SCREEN TO ITS OWN LITTLE HURRY.
ITS' MEMORY WAS FLAWLESS, ITS' DISK WAS SUPERS
IT MOVED BITS AND BYTES WITH A SPEED YET UNHEARD.

IT SPOKE NOT A WORD, BUT WENT STRAIGHT TO ITS' WORK,
AND FILLED ALL THE STOCKINGS; THEN TURNED WITH A JERK,
AND CHANGING THE SCREEN TO A COLOR IT CHOSE
AND GIVING A BLINK, UP THE CHIMNEY IT ROSE.

IT SPRANG TO THE SCREEN, GAVE A SOFT LITTLE WHISTLE,
AND AWAY IT DID FLY LIKE THE DOWN OFF A THISTLE;
BUT I SAW IT PRINT ERE IT WENT OUT OF SIGHT,
"HAPPY CHRISTMAS TO ALL, AND TO ALL A GOODNIGHT!"

NUMBER ATTACK (cont.)

The code, written in TI BASIC, is at the left. It isn't necessary to type in the comments listed at the right.

Only the heart of NUMBER ATTACK is presented in this article in order to allow practice in programming for the student. The final version should clear the screen and print the random number in the center of the screen. As an option, the updated score after each three digit response could be displayed in the upper left hand corner of the screen. A correct response consists of keying in three digits which must be correct and also in the right order. When a one digit random number is generated, it must be preceded by two zeros. A two digit random number must be preceded by a single zero. It is possible to save all of the wrong responses in order to print them at the end of each trail along with the correct responses. Another alternative would be to present the same number again until it is keyed in correctly. The percentage of correct responses could be computed and printed at the end of each trial. NUMBER ATTACK can also be used with a clock and modified to compute the number of total and correct responses per minute.

NUMBER ATTACK can be converted to other uses. Random letters could be used instead of numbers in order to teach touch typing. True and false questions (contained in DATA statements) could be printed on the screen and scored just as easily. Words in another language could be displayed with the correct answer consisting of the English translation. Characters from languages using different alphabets could also be processed and scored (Arabic, Hebrew and Russian characters can be generated by using graphics). The number 100 in line 410 can be changed to allow longer or shorter trials. Line 510 can be changed so that the program ends as soon a ten incorrect responses are made.

Five digit random numbers could be used so that as soon as the first digit was keyed in the remaining four digits would disappear from the screen and have to be remembered by the student. Numerous other variations are possible and may provide a challenge for the student programmer.

* Bulletin Board Update *

The long talked about TI-Comm Bulletin Board System(BBS) has become operational and is currently in the testing/development stage. For those of you who are not familiar with the BBS,Its the one that was demonstrated at the last meeting. A former member and local musician,Rick Felisco (alias Ramblin Rick Steffens) generously constructed the necessary circuit that enables my dumb TI modem to detect the phone ringing,answer the phone and dial the phone like a smart modem. Anyone interested in the schematics for this circuit is welcome to a copy at no charge. The BBS is on line temporarily during the hours of 6:00 p.m. to 10:00 p.m. at my home number (904-255-0326). I have submitted a proposal to the State of Florida that offers to display public service announcements and Volunteer opportunities in this community in exchange for financing the installation and maintainance of the phone line needed. I am optimistic that this proposal will be approved in the near future.

To take advantage of this BBS,you need a modem and RS-232. The combined cost of these two are under \$200 and they are well worth the investment. There are currently four BBS's in the Davtona area, and they are all active. I anticipate more BBS's being set up next year which will specialize in different areas. The direction our BBS is going has not been determined,and I am encouraging help in this area. Please leave your ideas in the Messages For SysOp section.

Dave Taylor

The following program was borrowed from the LA 99ers newsletter.

```
100 REM TANK FIGHT FOR THE 99/4A FROM THE LA 99'ERS
110 CALL CLEAR
120 CALL CHAR(139,"FFFFFFFFFFFFFF")
130 CALL HCHAR(1,2,139,30)
140 CALL HCHAR(24,2,139,30)
150 CALL VCHAR(1,1,139,24)
160 CALL VCHAR(2,31,139,23)
170 CALL VCHAR(2,6,139,6)
180 CALL VCHAR(18,6,139,6)
190 CALL VCHAR(7,11,139,12)
200 CALL VCHAR(2,16,139,6)
210 CALL VCHAR(18,16,139,6)
220 CALL VCHAR(7,21,139,12)
230 CALL VCHAR(2,26,139,6)
240 CALL VCHAR(18,26,139,6)
250 CALL CHAR(96,"0000002200000000")
260 CALL CHAR(97,"0010000000100000")
270 CALL CHAR(98,"0000100000001000")
280 CALL CHAR(99,"0002000000200000")
290 CALL CHAR(100,"0000200000002000")
300 CALL CHAR(106,"00D8707E70D80000")
310 CALL CHAR(102,"447C3B7C54101000")
320 CALL CHAR(108,"001010547C3B7C44")
330 CALL CHAR(109,"0018C2747B7018C0")
340 CALL CHAR(103,"C018707B74C21800")
350 CALL CHAR(104,"001B0E7E0E1B0000")
360 CALL CHAR(107,"0018432E1E0E1803")
370 CALL CHAR(101,"031B0E1E2E431B00")
380 X=3
390 Y=12
400 D=12
410 P=29
420 M=104
430 Z=106
440 CALL HCHAR(D,P,M)
450 CALL HCHAR(Y,X,Z)
460 CALL KEY(1,K,S)
470 IF K=18 THEN 480 ELSE 490
480 ON Z-100 GOSUB 1930,860,1100,2100,1120,790,1830,930,1000
490 CALL JOYST(1,DX,DY)
500 IF DX=0 THEN 510 ELSE 520
510 IF DY=0 THEN 620 ELSE 520
520 Z=105+(DX/4+DY/4*3)
530 CALL HCHAR(Y,X,32)
540 X=X+DX/4
550 Y=Y-DY/4
560 CALL GCHAR(Y,X,H)
570 IF H=32 THEN 610
580 CALL SOUND(100,440,3)
590 X=X-DX/4
600 Y=Y+DY/4
610 CALL HCHAR(Y,X,Z)
620 CALL KEY(2,D,S)
630 IF D=18 THEN 640 ELSE 650
640 ON M-100 GOSUB 1390,1560,1730,1220,1180,2030,1290,1490,1630
650 CALL JOYST(2,DP,DO)
660 IF DP=0 THEN 670 ELSE 680
670 IF DO=0 THEN 460 ELSE 680
680 M=105+(DP/4+DO/4*3)
690 CALL HCHAR(D,P,32)
700 F=F+DP/4
710 D=D-DO/4
720 CALL GCHAR(D,P,J)
730 IF J=32 THEN 770
740 CALL SOUND(100,440,3)
750 F=F-DF/4
760 D=D+DO/4
770 CALL HCHAR(D,P,M)
780 GOTO 460
790 FOR F=X+1 TO 30
800 CALL GCHAR(Y,F,E)
810 IF E=32 THEN 820 ELSE 1200
```

```
820 CALL HCHAR(Y,F,96)
830 CALL HCHAR(Y,F,32)
840 NEXT F
850 RETURN
860 FOR F=Y+1 TO 23
870 CALL GCHAR(F,X,L)
880 IF L=32 THEN 890 ELSE 1200
890 CALL HCHAR(F,X,97)
900 CALL HCHAR(F,X,32)
910 NEXT F
920 RETURN
930 FOR F=Y-1 TO 2 STEP -1
940 CALL GCHAR(F,X,E)
950 IF E=32 THEN 960 ELSE 1200
960 CALL HCHAR(F,X,98)
970 CALL HCHAR(F,X,32)
980 NEXT F
990 RETURN
1000 G=Y
1010 FOR F=X+1 TO 30
1020 G=G-1
1030 CALL GCHAR(G,F,E)
1040 IF E=32 THEN 1050 ELSE 1200
1050 CALL HCHAR(G,F,99)
1060 CALL HCHAR(G,F,32)
1070 IF G=2 THEN 450
1080 NEXT F
1090 RETURN
1100 G=Y
1110 FOR F=X+1 TO 30
1120 G=G+1
1130 CALL GCHAR(G,F,E)
1140 IF E=32 THEN 1150 ELSE 1200
1150 CALL HCHAR(G,F,100)
1160 CALL HCHAR(G,F,32)
1170 IF G=23 THEN 450
1180 NEXT F
1190 RETURN
1200 IF E=139 THEN 620 ELSE 2170
1210 IF E=139 THEN 460 ELSE 2170
1220 FOR F=P-1 TO 4 STEP -1
1230 CALL GCHAR(D,F,E)
1240 IF E=32 THEN 1250 ELSE 1210
1250 CALL HCHAR(D,F,96)
1260 CALL HCHAR(D,F,32)
1270 NEXT F
1280 RETURN
1290 H=0
1300 FOR F=P-1 TO 4 STEP -1
1310 H=H-1
1320 CALL GCHAR(H,F,E)
1330 IF E=32 THEN 1340 ELSE 1210
1340 CALL HCHAR(H,F,100)
1350 CALL HCHAR(H,F,32)
1360 IF H=3 THEN 1380
1370 NEXT F
1380 RETURN
1390 H=0
```

(Continued on next page)

A quick fix for S-Bug bug

By TOM KNIGHT

When TI finally released Super Bugger it had a "bug" in that it is supposed to be able to disassemble or dump memory to a disk and will not properly do this. (In my opinion, this was a TI-induced bug.)

I have been working on this problem and have found a solution that, so far, seems to work fine.

With no other program in memory, "S-Bug" loads from > A000 to > B96A and I will be referencing memory with this assumption.

Memory Location	Contains	Change To
A15A	3F20	101F
B2DE	7F00	0FFF
B2F2	3F09	1009
B32A	7F20	101F
B342	7F05	1005
B356	7F00	0FFF
B366	3F09	1009
B37A	7F00	0FFF
B3E2	3F09	1009

These locations are all references to either the PAB or the data buffer which is used by DSRLNK which, by the way, is included in Super Bugger as are the other utilities used by the program. It is completely stand-alone. All of the utilities are very similar to the ones that come with the Editor/Assembler cartridge.

There are three ways to make these changes:

1. Each time you load the program you can make the changes while the program is running.

2. The regular version (uncompressed) can be changed using the "Editor" or with TI-Writer. Be sure that on each line that you change you also change the "checksum" flag to an 8 (it is normally a 7).

3. To change the compressed version you need Disk Fixer or something similar. You actually change the disk information. If you are

(Tank battles continued)

```

1400 FOR F=P-1 TO 4 STEP -1
1410 H=H+1
1420 CALL GCHAR(H,F,E)
1430 IF E=32 THEN 1440 ELSE 1210
1440 CALL HCHAR(H,F,99)
1450 CALL HCHAR(H,F,32)
1460 IF H=23 THEN 1300
1470 NEXT F
1480 RETURN
1490 FOR F=0-1 TO 2 STEP -1
1500 CALL GCHAR(F,P,E)
1510 IF E=32 THEN 1520 ELSE 1210
1520 CALL HCHAR(F,P,97)
1530 CALL HCHAR(F,P,32)
1540 NEXT F
1550 RETURN
1560 FOR F=0+1 TO 23
1570 CALL GCHAR(F,P,E)
1580 IF E=32 THEN 1590 ELSE 1210
1590 CALL HCHAR(F,P,97)
1600 CALL HCHAR(F,P,32)
1610 NEXT F
1620 RETURN
1630 G=0
1640 FOR F=P+1 TO 30
1650 G=G-1
1660 CALL GCHAR(G,F,E)
1670 IF E=32 THEN 1680 ELSE 1210
1680 CALL HCHAR(G,F,99)
1690 CALL HCHAR(G,F,32)
1700 IF G=2 THEN 1720
1710 NEXT F
1720 RETURN
1730 G=0
1740 FOR F=P+1 TO 30
1750 G=G+1
1760 CALL GCHAR(G,F,E)
1770 IF E=32 THEN 1780 ELSE 1210
1780 CALL HCHAR(G,F,100)
1790 CALL HCHAR(G,F,32)
1800 IF G=23 THEN 1820
1810 NEXT F
1820 RETURN
1830 H=Y
1840 FOR F=X-1 TO 4 STEP -1
1850 H=H-1
1860 CALL GCHAR(H,F,E)
1870 IF E=32 THEN 1880 ELSE 1200
1880 CALL HCHAR(H,F,100)
1890 CALL HCHAR(H,F,32)
1900 IF H=3 THEN 1920
1910 NEXT F
1920 RETURN
1930 H=Y
1940 FOR F=X-1 TO 4 STEP -1
1950 H=H+1
1960 CALL GCHAR(H,F,E)
1970 IF E=32 THEN 1980 ELSE 1200

```

familiar with the use of Disk Fixer you should have no problem, otherwise it could get very hairy.

These is one other way to have these changes incorporated and that is too send me your disk with Super Bugger on it. Include a mailer to send it back in, enough postage and \$2. I will then copy both updated versions of the program on the disk and the help file and return the disk. If you do not have Super Bugger but would like to have it, send a blank disk, a return mailer and postage and \$5 and I will do the same thing.

Ed. Knight can be reached at 7266 Bunton Dr., Jacksonville, FL 32222.

```

1980 CALL HCHAR(H,F,99)
1990 CALL HCHAR(H,F,32)
2000 IF H=23 THEN 2020
2010 NEXT F
2020 RETURN
2030 FOR F=P+1 TO 30
2040 CALL GCHAR(O,F,E)
2050 IF E=32 THEN 2060 ELSE 1210
2060 CALL HCHAR(O,F,96)
2070 CALL HCHAR(O,F,32)
2080 NEXT F
2090 RETURN
2100 FOR F=X-1 TO 4 STEP -1
2110 CALL GCHAR(Y,F,E)
2120 IF E=32 THEN 2130 ELSE 1200
2130 CALL HCHAR(Y,F,96)
2140 CALL HCHAR(Y,F,32)
2150 NEXT F
2160 RETURN
2170 FOR A=1 TO 20
2180 CALL SCREEN(7)
2190 NEXT A
2200 CALL SCREEN(4)
2210 GOTO 110

```

Tidbits
BY
ROWLAND W. HALLIDAY

ALL I WANT FOR CHRISTMAS IS MY HOME COMPUTER MAGAZINE!!! YES FRIENDS HERE IT IS THE FIRST OF DECEMBER AND I AM STILL WAITING FOR THE OCTOBER!!! ISSUE OF "MY FAVORITE MAGAZINE." I CAN'T WAIT TO READ THEIR EXCUSE THIS MONTH. HECK, WITH A LITTLE LUCK THEY MAY BE OUT OF BUSINESS AND I WON'T HAVE "HCM" TO KICK AROUND ANYMORE. I KNOW, I KNOW, YOU COULD CARE LESS ABOUT MY PROBLEMS WITH "HCM", BUT THERE IS A METHOD TO MY MADNESS. THIS NEWSLETTER IS TWELVE PAGES IN LENGTH AND I HAVE TO FILL UP SPACE SOMEHOW. NOW, I HAVE THIS IDEA THAT IF YOU PEOPLE OUT THERE GET TIRED OF READING MY RAMBLINGS YOU WILL SUBMIT YOUR OWN ARTICLES. THESE ARTICLES WILL TAKE UP SPACE, FORCING ME TO CUT BACK ON WHAT I HAVE TO SAY. IF ENOUGH ARTICLES ARE SUBMITTED YOU MAY FORCE MY WITTICISMS(WAIT TILL MY SPELL-CHEK GETS HOLD OF THAT WORD) AND CRITICISMS OFF THE PAGE ENTIRELY. BUT UNTIL YOU DO, HERE I AM!!! (IS DAVE'S MESSAGE LONGER THIS MONTH? DOES BRYAN HAVE MORE ADS?)

TO SHOW YOU I'M NOT REALLY A BAD GUY(YOU DON'T BELIEVE ME, ASK MY WIFE.) I AM GOING TO PASS ALONG A LITTLE PROGRAM I DOWNLOADED FROM RALPH FOWLER'S TIBBS IN ATLANTA LAST NIGHT. I MEAN IT IS THE CHRISTMAS SEASON, AND CONSIDERING THE FACT THAT I AM BUILT LIKE SANTA CLAUS, I MAY AS WELL ACT LIKE SANTA CLAUS AND PASS OUT SOME GIFTS!! THIS ONE IS FOR X-BASIC OWNERS. IT CHANGES THE CURSORS SHAPE TO THAT OF THE STATE OF TEXAS. HERE IT IS.

```
100 REM CURSOR REDEFINER
110 CALL INIT
120 CALL LOAD(8196,63,248)
130 CALL LOAD(16376,67,85,82,83,79,82,48,8)
140 CALL LOAD(12288,48,48,63,255,254,124,24,12)
150 CALL LOAD(12286,2,0,3,248,2,1,48,0,2,2,0,8,4,32,32,36,4,91)
160 CALL LINK("CURSOR")
170 CALL COLOR(0,16,1)
180 REM REST OF PROGRAM HERE
```

AND NOW FOR YOU BASIC AFFICIONADOS. A LITTLE PROGRAM TO HELP YOU ADD UP THOSE CHRISTMAS BILLS THAT WILL COME IN AFTER YOU HAVE EXPANDED YOUR TI TO A SUM YOU WOULD NOT HAVE THOUGHT POSSIBLE!! THIS "QUIK ADDER" AS I CALL IT, WILL KEEP A RUNNING TOTAL OF FIGURES ON THE RIGHT SIDE OF THE SCREEN AS YOU ENTER AMOUNTS ON THE LEFT. IT MAY NOT BE THE WORLD'S GREATEST ADDING MACHINE, BUT IT WORKS AND THE PRICE IS RIGHT!!

```
5 REM QUIK ADDER
10 PRINT " AMOUNT"
15 INPUT A
20 B=B+A
30 PRINT ", " TOTAL"
35 PRINT ,B
40 GOTO 10
50 REM IT SUBTRACTS TOO, JUST USE MINUS SIGN IN FRONT OF YOUR INPUT NUMBER
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NOW, I DIG INTO MY LITTLE SACK AGAIN AND HO,HO,HO, I FIND ANOTHER PRESENT. BY GOLLY YOU MUST HAVE ALL BEEN GOOD THIS PAST YEAR FOR SANTA TO FIND SO MANY GIFTS IN HIS SACK!!!

THIS PUZZLE IS FOR THE WORLDS BEST COMPUTER. NO IT'S NOT THE TI, OR

THE APPLE, OR THE IBM, OR ANY OTHER MAN MADE MACHINE. THIS ONE IS FOR THE MIND!!! AND YET, AS I WORKED THIS OUT(NO I DIDN'T GET IT RIGHT!) I WONDERED IF IT WOULD BE POSSIBLE TO CREATE A PROGRAM THAT WOULD GIVE THE RIGHT ANSWER. THE PUZZLE IS WORKED OUT LOGICALLY, ALTHOUGH MAYBE NOT COMPUTER LOGICALLY, BUT SINCE I AM NOT INTO PROGRAMMING I DON'T KNOW IF IT CAN BE DONE. MAYBE ONE OF YOU OUT THERE WHO ENJOYS A CHALLENGE WILL TRY TO WORK IT OUT ON THE TI. IF YOU DO I SURE WOULD LIKE TO SEE THE PROGRAM. THE REST OF YOU CAN HAVE FUN WITH THE "GREY MATTER" COMPUTER. HERE IS WHAT SOME HAVE REFERRED TO AS "THE ALL TIME GREATEST PUZZLE." IT IS ALSO KNOWN AS THE SMITH-JONES-ROBINSON CLASSIC. IT HAS BEEN REPORTED THAT IN ONE GROUP OF 240 PEOPLE TRYING IT, ONLY 6 CAME UP WITH THE SOLUTION. BUT THERE IS NO "CATCH" IN IT, AND THE ANSWER HAS BEEN WORKED BY MANY PEOPLE IN FIVE TO TEN MINUTES. EVERY FACT IS IMPORTANT AND MUST BE CONSIDERED. I WILL GIVE YOU THE SOLUTION NEXT MONTH.

ON A TRAIN, SMITH, ROBINSON AND JONES ARE THE FIREMAN, BRAKEMAN AND ENGINEER, BUT NOT RESPECTIVELY. ALSO ABOARD THE TRAIN ARE THREE BUSINESSMEN WHO HAVE THE SAME NAMES: A MR. SMITH, A MR. ROBINSON AND A MR. JONES.

1. MR. ROBINSON LIVES IN DETROIT.
2. THE BRAKEMAN LIVES EXACTLY HALFWAY BETWEEN CHICAGO AND DETROIT.
3. MR JONES EARNS EXACTLY\$20,000.00 PER YEAR.
4. THE BRAKEMAN'S NEAREST NEIGHBOR, ONE OF THE PASSENGERS, EARNS EXACTLY THREE TIMES AS MUCH AS THE BRAKEMAN.
5. SMITH BEATS THE FIREMAN AT BILLIARDS.
6. THE PASSENGER WHOSE NAME IS THE SAME AS THE BRAKEMAN'S LIVES IN CHICAGO.

WHO IS THE ENGINEER ?

I SEE THAT MY SACK IS NOW EMPTY(I LOOK LIKE SANTA CLAUS, NOT J. PAUL GETTY!), SO I WILL HOP ON MY LITTLE CURSOR, FLASH ACROSS THE SCREEN AND DISAPPEAR INTO WHEREVER LITTLE CURSORS GO WHEN THE SCREEN TURNS TO SNOW. BUT BEFORE I DO, LET ME LEAVE YOU WITH THIS THOUGHT. "IN ANY COLLECTION OF DATA, THE FIGURE MOST OSVIDOUSLY CORRECT, BEYOND ALL NEED OF CHECKING, IS THE MISTAKE!!"

HAVE A VERY MERRY CHRISTMAS AND A HAPPY NEW YEAR!!!!

BYE-TE FOR NOW.

ITEMS FOR SALE:

MINI MEMORY,SPECIAL PURCHASE,while they last,	\$ 79.00
MEMORY, 32K T.I. fits into P.E.BOX	\$ 139.00
RS-232, from MYARC fits into P.E.BOX	\$ 110.00
DISK CONTROLLER CARD, T.I.	\$ 139.00
DISK CONTROLLER CARD,CORCOMP, DSDD, for P.E.BOX	\$ 189.00
DISK DRIVE, double sided, TEAC, NEW, half high, half power	\$ 189.00
DISK DRIVE, double sided, WITH power supply & cable, new TEAC	\$ 255.00
DISK DRIVE, ORIGINAL T.I. STYLE fits into P.E.BOX	\$ 125.00
DISK DRIVE #2, SSDD, with case & power supply	\$ 155.00
T.I.EDITOR ASSEMBLER, NEW,	\$ 43.00
PRINTER CABLE, RS-232 to parallel printer.	\$ 24.00
PRINTER, STAR DP-8480 new with cable.	\$ 225.00
PRINTER EPSON RX-80 F/T used once with cable	\$ 299.00
EXTENSION CABLE, P.E.BOX, allows relocation of speech synthesizer	\$29.00
CHECK CARRIER, runs your checks thru your printer	\$ 14.00
"COPY-CAT(TM)" DISK COPY PROGRAM, copies by sector,	\$ 19.00
PEWTERWARE SOFTWARE, \$ 9.95 each or 2/\$ 16.00, 3/\$22.00, 4/\$25.95 (ask about free software with purchase over \$100.00.)	
JOYSTICK ADAPTER, allows use of ATARI joysticks.	\$ 8.00
T.I.WRITER WORD PROCESSOR, new use with expan.sys.& printer	\$ 75.00***
T.I.MICROSOFT MULTIPLAN, new, use with expan.system & printer	\$ 95.00
T.I.LOGO I, Sprites & more, complete, NEW,	\$ 49.00
DUST COVERS, for T.I. console	\$ 8.00
SPEECH SYNTHESIZER,	\$ 65.00
A.C. OUTLET STRIP, Surge protected, switched, fused	\$ 20.00

all new items are under factory warranty. I will guarantee any used items.

PACKAGE PRICES AVAILABLE ON ANY OR ALL ITEMS LISTED ABOVE.ADD 5% STATE TAX.
contact: BRIAN MCGREGOR AT MEETING OR

CALL 258-0348

P.S. Brian is now also a dealer for the CorComp Hardware for the TI-99/4A

!!!!!! MASTER CARD AND VISA NOW ACCEPTED !!!!!!!

CLUB INFORMATION

THE DAYTONA 99'ERS (DAYTONA 99'ERS COMPUTER CLUB) IS A NON-PROFIT COMPUTER GROUP (MEMBERS) FOR PEOPLE INTERESTED IN THE TEXAS INSTRUMENTS BRAND OF HOME COMPUTERS. THE USERS GROUP BEGAN IN 1982.

MEMBERSHIP DUES ARE \$12.00 PER YEAR AND ENTITLE THE MEMBER TO ORDER FROM OUR LOW-COST PROGRAM LIBRARY, RECEIVE THE MONTHLY NEWSLETTER AND ATTEND MONTHLY MEETINGS. THE MONTHLY MEETINGS NOW INCLUDE A WORK SESSION, WORKSHOP FOR THE VERY NEW TI OWNERS, THE INTERMEDIATES, ETC.

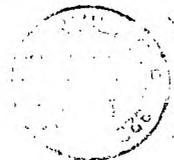
THE MONTHLY GROUP MEETING IS HELD AT THE DAYTONA BEACH COMMUNITY COLLEGE CONFERENCE CENTER (BUILDING 16, ROOM 111). THIS IS THE BUILDING FACING US 92, AND HAS PLENTY OF PARKING SPACE.

THE MEETING IS HELD ON THE 3RD THURSDAY OF EACH MONTH AT 7 P.M. INTERESTED NON-MEMBERS ARE INVITED TO ATTEND AND ARE ENCOURAGED TO JOIN THE CLUB. AT EACH MEETING, THERE WILL BE A SHORT BUSINESS SESSION, FREE DOOR PRIZES, (TAPED PROGRAMS AND GAMES) FREE REFRESHMENTS, AND BEST OF ALL, THE WORK SESSION, WORKSHOPS MENTIONED ABOVE.

1984 CLUB OFFICERS

PRESIDENT: DAVE TAYLOR (904) 255-0326
SECRETARY: DONA HARPER (904) 677-1568
TREASURER: CHUCK HARGRAVES (904) 775 2498
DELAND CORRESPONDENT: TOM STRAHEN (904) 985-4583
NEWSLETTER EDITOR: ROWLAND W. HALLIDAY (904) 252-5165

DAYTONA 99'ERS COMPUTER CLUB (USERS GROUP)
P. O. BOX 4594
SOUTH DAYTONA FLORIDA 32022



FIRST CLASS MAIL

99ER USERS GROUP EDMONTON
P.O. BOX 11983
EDMONTON, ALBERTA CAN. T5J-3L1

ADDRESS CORRECTION REQUESTED