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**THE HUGGERS
 HOOSIER USERS GROUP**

NOVEMBER, 1984

THE HUGGERS NEWSLETTER

VOLUME 2, NUMBER 8

THE OFFICER'S CORNER

Hasn't this year gone by so quickly? It seems not that long ago that we were all looking forward to summer! Can you believe that Christmas is just a little more than a month away? Like the old saying: Time flies when you're having fun.

Like the workshops, the swap table is another popular addition to the meeting. Many members took advantage of the opportunity to sell or swap TI merchandise. The swap table will be set up again this month, and I also plan to have a couple of spare systems available at the meeting for personal tutorials and added access of the Library.

The response of the membership to volunteer a half hour or so to give a workshop has been slow. We'd like to help people, but we need more group participation to accomplish this. We not only need more volunteers for workshops, but we also need input from the members on what they would like to see a workshop on. We're all in the same situation here, we all have the opportunity to share our knowledge with our fellow members. The meetings do take many hours to plan, each month, but with increased participation, the group as a whole will reap the benefits.

The Library Contest will end at the close of this meeting. Many programs have been added to the Library as a result of the members response. There are new disk in the library on these languages: BASIC, Extended, LOGO and PASCAL, the Speech and Mini-Mem disk are filling up, and a 3 1/4 pass disk copier in FORTH has been added. The rules for the Library contest are printed to the right.

See you November 11, and have a safe Veterans Day and Thanksgiving!
 JSS

THE NEXT MONTHLY MEETING WILL BE
 NOVEMBER 11, 1984,
 STARTING AT 2:00 PM AT CREATIVE LOGIC.
 SEE YOU THERE!

WORKSHOPS: TI FORTH
 CHECKWRITER
 HUGBBS UPLOAD, DOWNLOAD, AND
 PRIVATE MAIL SYSTEM
 CHRISTMAS CARD PRINTER GRAPHICS

AND THE

SWAP TABLE!

South-side Regional Meeting

November 17 at 2:00 pm
 (Library Hour: 1:00 to 2:00 pm)

INDIANAPOLIS COMPUTER & ACCESSORY SHOW

The Indianapolis Computer & Accessory Show will be at the Indianapolis Convention Center Tuesday and Wednesday, November 6 and 7, 1984. The show will be open 12 noon till 9 pm both nights. Admission is \$4.00 at the door.

LIBRARY CONTEST RULES

Whoever contributes the most programs to our Library before the close of the November meeting will win: Sams TI-99/4A: 24 BASIC Programs, and the second place finisher will win: Sams TI-99/4A BASIC Programs. (These books were donated to the Users Group by a member and I thought this would be a nice way to let everybody have a chance at winning one.) Programs will be judged on content and total amount of sectors used. Sorry, no pirated software will be accepted. To participate in this contest, add your name in REM statements at the beginning of the programs you donate and save them on the NEW-PROGRAMS disk in the Library. (If you donate programs typed in from magazines, please type in the source of the program in REM statements also.) I will review and add the programs to the library. The winners will be announced in the December Newsletter and can pick up their prize at the December Monthly Meeting.

HAPPY BIRTHDAY!

A Happy Birthday to the following November, 1983 members!!!! Robert Salzarulo, Wally Martin, Jim Bumgardner, Steven Widdis, Bill Lang, Robert Wellington, Joe Giarratano, Terry Melkey, Milan Olbina, Omer Crusan, Robert Schuck, William Lucid, George Forest, Jr., Scott Harville, James Westover, Ben Lewis, Mike Vandivier, Susan Jordan, Susan Bishop, David Cowell, Scott Strain, John O'Connor, Dan Brackett, Doug Lawrence, David Murphy, James Arnold, John Wagner, Mark Weis, Sara Lakstins, Bill & Jessamine Upson, William Bean, Edward Hicks, Marjorie Tiemeier, Bill & Jill McGregor, Michael Updike and Elizabeth Manning.

REGIONAL NEWS

SOUTH REGIONAL MEETING

The next meeting will be Saturday, Nov. 17, same location, 4582 Moccasin Pl., Greenwood. (Phone:881-5918). The library hour will be 1:00 to 2:00. The general meeting will begin at 2 P.M. Please plan library access only during the designated time.

Subject matter will include a video tape program about the technology of mass storage devices (how many bytes can be recorded on the head of a pin??). Each meeting produces at least one "How do you get something to work?" subject, and, fortunately, we usually have someone in attendance who can help. Anyone who has a possible meeting subject to propose, please call me. All members are welcome to attend. Guests are welcome also.

The library has several new and interesting programs. It will grow even more after the November general meeting which will conclude the group's drive to increase the number of programs. Anyone attending the regional meetings can donate programs to the library on a program disk at my home, and I will see that they are added to the main library.

The library is open on days that the South Regional group meets, but members can also have access to the library at other times by appointment. (Members who use cassette storage should bring their own cassette recorder to insure that the programs they record will load on their own computer.)

FOR SALE

TI DISK CONTROLLER CARD with cables, Disk Manager II Module and manual. \$75
Call 291-3995

WELCOME!

Welcome to these new members who joined in October: Debra Harp, Lester Goss, Frank & Barb Speights, Tony Warner and William Overton.

WELCOME BACK!

Welcome back to these renewing members: Jack Peters, Roy DeLong, Phil Dubbs, Phil Caldwell and William Bensch. Thanks for your continued support.

LIBRARY BITS

by Dennis Sherfy

There are two new X BASIC programs in the HUG library which caught my interest. They are BIG_CHARS and BIGMESSAGE.

BIG_CHARS accepts a keyboard character, then displays the hex code for that character along with an enlarged representation of the character on an 8 by 8 grid. The grid shows you which pixels are turned "on" when the character is shown on your monitor.

BIGMESSAGE is a companion program which uses the principals from BIG_CHARS. It displays a message on the screen utilizing the sprite magnification capability. The letters are four times larger than your regular monitor characters. The message is displayed at an angle to get around the limitation in the TI-99/4A where no more than four sprites may be displayed on any single row or column.

These programs got me interested in developing my own program to display a title in enlarged characters. If you are satisfied with up to four letters on a line, and no more than four lines for your title, you can borrow the BIGMESSAGE technique. In order to produce more than four letters on a line, I borrowed the information produced by the BIG_CHARS program. I copied the character patterns I needed from the 8x8 grid shown on my monitor onto a 16x16 grid on graph paper. I divided the 16x16 grid into four 8x8 sub-grids so I could reproduce the enlarged character with four CALL CHAR subroutines. Arranging them on the screen with CALL HCHAR subroutines produced the enlarged title I wanted. There may be an easier way to accomplish titles, but this way works, and it was fun.

There is a limit to this method as well. You only have so many ASCII character codes you can redefine with CALL CHAR. By studying the 16x16 grid pattern, I found several letters which had identical patterns in one or two 8x8 sub-grids. This allows you to use one CALL CHAR sub-routine as a part of two or more letters.

Both of this month's featured programs are worth studying and enjoying.

BEST OF THE NEWSLETTER!

MICRO'S IN ACTION

BOOK REVIEW

By Bill Jones of Crawfordsville

I just recently purchased the book PROGRAMS FOR THE TI HOME COMPUTER by Steve Davis. I found the book to be very useful if you are into programming in BASIC or Extended BASIC. There are programs that include games, sound, music adult games such as Movie Star Quiz, and a fine looking disk loaded game called Adventure in Oz (which requires memory expansion). He has a bar graph generator program if you have a printer, an a bold title generator that can be used for making titles for your color slides or video system from your color TV monitor. A program called Screen Speak will dump your display to the Speech Synthesizer with TE II. I was glad to see several programs that were directed at modem users. Mail Writer will be useful to those who send electronic mail. I can't wait to try Talking TI Tarot and the Charades program at my next party.

There were a few dogs in the book, but I felt that more than half of them would be useful by me or someone in my family. When I get around to buying a disk drive, the Disk Lister program will surely get use. For the \$14.95 you pay, it will be a good addition to your TI Computer library.

Editor's Note: This Best of the Newsletter first appeared in the May, 1983 issue of the HUGger Newsletter.

DEBUGS!

In the November issue of our newsletter, I made several typos which been brought to my attention.

First, in the "Modem Bit" the phone number for "Online" is 1-800-438-2438.

Secondly, in the Forth Page, I ran thru the TI-Writer Formatter and forgot to change the "2" to "22" and so all the "2's" were read as double-strike control characters. Anyway, instead of reprinting the whole program again, I am reprinting only those lines each of the screens that need to be corrected. Ed.

```
( SCREEN #1 Catalog 9/24/84)
PABS 2 10 + [BUF] 1400 FILE DIRECT
```

```
( SCREEN #2
: !LEN! 2 SPACES SEC 2 . ;
: AV CR ." SEC= " TSEC 2 . ." USED=" TSEC 2 SEC 2 - 2+ .
: AVAI=" SEC 2 . CR CR
: FILE_TYPE =TYPE= 2 CASE
05 OF ." PROGRAM" [SP] 2 3 + SPACES ENDOF ENDCASE ;
```

```
( SCREEN #3
=TYPE= ! C2 + 1+ COUNT OVER OVER FAC SWAP CMOVE STR FAC)
PAD COUNT >R DROP F->S =TYPE= 2 IF . ELSE TSEC ! ENDF
FILE_TYPE PROT 2 IF ." Y" ENDF ;
OPEN BEGIN RD DROP [BUF] C2 WHILE SCAT REPEAT CLSE CR CR CR ;
```

by Bill Cagle

Even with the new found market for Micro-computers, there is going to be a blood bath in the micro computer market. According to U.S. Business News, four out of ten computer companies are losing a lot of money and even with large cutbacks, quite a few companies will fold in the next year. At the Itty Bitty Machine Co. a revolution is about to take place. Now that they have their production efficiency up, IBM is expected to lower the boom on the "IBM look-a-likes" by reducing the price to the 1500 dollar range. By the way, it might be interesting to mention that this production efficiency has been brought about by TI using their old 99/4A plant to manufacture IBM's PC.

We are about to see the next generation of computers and their specialty will be "user friendliness" that requires no keyboard or training to use. The battle cry of this generation will be "INCREASED PRODUCTION, INCREASED PROFITS." This movement has already been started, as witnessed by the Mouse. Hewlett Packard has also joined the fray with their version that features a "touch" screen. It's software creates a menu on the screen and when you touch the part of the screen dedicated to that element of the menu, your finger breaks one the many infrared beams shining a cross the face of the screen and that menu selection is done for you.

Have you noticed some of the changes in our bulletin board? Steve Sims and Bill Jones (of Indy) have hard hours to bring us one of the few Caltex Boards that have individual electronic mail boxes and some other refinement. I guess that at some point these guy's will have rewritten enough of this package that it will lose it's "Caltex" identity. A huge round of applause is due them. Take a bow, boys. For those of you that haven't tried it, beg or borrow a modem and get on the bandwagon or should I say bulletin-board!

AUXILLARY POWER SUPPLY FOR DISK DRIVES by William M. Lucid

This is a presentation of a power supply, that I have been using over a year with no problem, and it is still on-line. Before I begin, this presentation deals with modifications to the TEXAS INSTRUMENTS EXPANSION SYSTEM, also known as the P-Box, and could void warranty and/or exchange rights.

Developing an aux. power supply I had the following goals: (1.) Provide power for up to three additional drives, (2.) Eliminate turning on an additional power switch, and (3.) Mount the aux. power supply inside the P-Box.

Fairchild voltage regulators 78H05 and 78H12 were selected because they are capable of delivering five amps and offer excellent ripple rejection. Before beginning my project I studied the inside, physical layout of the P-Box side that contains the main P-Box power supply. Anything mounted in this area needs to avoid physical contact with: (1.) P-Box power supply printed circuit board, (2.) A.C. line filter, (3.) P-Box transformer, (4.) Ventilation fan, and (5.) P-Box power switch and its mounting bracket. Anything mounted inside the P-Box must allow the reassembly of the P-Box "chassis cover" to the P-Box chassis.

Using an A.C. voltmeter I located a "switched source" of 110 A.C. volts that allows the aux. power supply to be off when the P-Box is off, and on when the P-Box is on. This source for me turned out to be the top two "quick connectors" on back of the P-Box power switch.

Mounting of the aux. power supply was accomplished by designing a printed circuit board. Voltage regulators, heatsinks, full-wave bridge rectifier, filtering capacitors and a few other components are mounted on the printed circuit board. Space inside the P-Box is very limited! I found this to be a limiting factor as to the physical size of the aux. power supply transformer. The transformer I used was rated at eighteen volts, three amps. Aux. power supply printed circuit board end with the heat sinks is mounted about one inch from the ventilation fan and is mounted flush against the upper left side of the "chassis cover" using one inch spacers between aux. printed circuit board and "chassis cover". This mounting places the heat sinks directly in the air flow.

All voltages were verified with and without loads using a voltmeter and a oscilloscope, before hooking the aux. power supply up to a disk drive. This aux. power supply should work with other disk drives requiring plus five volts and plus twelve volts. I am using a pair of QUME 142 disk drives mounted internally in the P-Box.

Looking back, I feel if I was just starting this project I would build the aux. power supply in its own enclosure. A "Cinch" connector could be used on the back of the P-Box, then come off the "Cinch" connector inside with the standard disk drive power connector.

ARTS LIST FOR AUXILLIARY PLUS FIVE AND PLUS TWELVE POWER SUPPLY
 by William M. Lucid

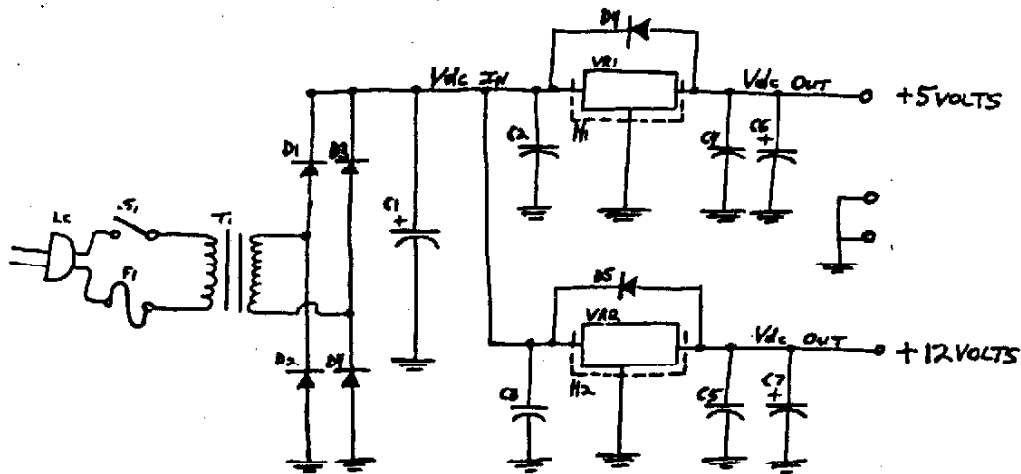
- VR1 FAIRCHID 78H05 Voltage Regulator
- VR2 FAIRCHILD 78H12 Voltage Regulator
- D1-D4 * FULL-WAVE BRIDGE (Rectifier diodes 400 PIV, 3 Amps)
- D5,D6 IN4002 Diode
- C1 4,700 UF, 50vwdc, Radial lead, Electrolytic capacitor
- C2,C3 .33 UF, 50 vwdc, capacitor
- C4,C5 .1 UF, 50vwdc, Tantulum, capacitor
- C6,C7 470 UF, 50vwdc, Radial lead, Electrolytic capacitor
- T1 * Transformer 120 volt primary, 18 volt secondary, rated at 3 Amps
- F1 * Fuseholder and fuse, fuse rated 3 Amps
- H1,H2 * Heatsinks for single TO-3 case with one inch fins
- LC Linecord with plug
- S1 Switch, single pole, single throw

Comments: V_{dc} IN needs to be 15.5 to 25 volts at 78H05 and 78H12
 * Items need to be changed to get full five amps if needed.
 Mount C2, C4, D5 close to VR1
 Mount C3, C5, D6 close to VR2

Printed circuit board mentioned in this presentation was produced using the photo negative method, I produced the original artwork, exposed the board, etched, and assembled the whole assembly.

There are POTENTIALLY dangerous voltages involved, along with HEAVY CURRENT, CAUTION must be observed. This is not intended as a beginners do-it-yourself type project.

Printed on a PROWRITER 8510A set to bold command, text prepared using TI-Writer/Word Processor.





TIPS FROM THE TIGERCUB No. 14

Distributed by Tigercub Software to users groups for promotional purposes and in exchange for their newsletters.

Tigercub Software, 156 Collingwood Ave., Columbus OHIO 43213, has over 130 original programs available at only \$3.00 each. My catalog is available for \$1.00 which may be deducted from your first order.

It has come to my attention that the members of some users groups have never heard of my kitchen-table enterprise, although their group has been receiving my newsletter for several months. It appears that many users groups have no method of making available to their members the information from newsletters which they receive in exchange.

My software business is a failure, and my Tips are a complete failure as a promotional effort. During the month of July I received a total of 31 requests for my catalog, of which only 9 were the result of newsletter publicity. I do not want to discontinue these Tips, because of the many interesting newsletters that I receive in exchange. However, I can no longer afford to distribute them to those groups which never give any indication that my Tips are reaching their members.

You may have observed that the Tigercub now possesses a Gemini 10X printer. The only fault I could find with it was that it wouldn't print Chinese, so I remedied that defect with this little program.

```
100 !THIS ROUTINE INITIALIZE
S THE GEMINI 10X TO PRINT 'C
HINESE' UNTIL IT IS TURNED O
FF - by Jim Peterson
110 OPEN #1:"PIO"
```

```
120 PRINT #1:CHR$(27);CHR$(4
2);CHR$(10);: : CALL CLEAR
130 FOR CH=65 TO 90 : : PRINT
"WORKING..." : : FOR J=1 TO
7 : : FOR L=1 TO 9 : : RANDOMI
ZE : : IF (INT(30*RD*(1)<3)+((
L)))*(D(J,L-1))>0)THEN 150
140 D(J,L).D(J,10-L)=(1+ABS(
J))^(J)
150 NEXT L
160 NEXT J
170 FOR L=1 TO 9 : : FOR J=1
TO 7 : : X(L)=X(L)+D(J,L): : N
EXT J : : NEXT L
180 PRINT #1:CHR$(27);CHR$(4
2);CHR$(1);CHR$(CH);CHR$(1);
CHR$(X(1));CHR$(X(2));CHR$(X
(3));CHR$(X(4));CHR$(X(5));C
HR$(X(6));CHR$(X(7));CHR$(X(
8));CHR$(X(9))
190 FOR J=1 TO 7 : : FOR L=1
TO 9 : : D(J,L)=0 : : NEXT L :
: NEXT J
200 FOR L=1 TO 9 : : X(L)=0 :
: NEXT L : : NEXT CH
210 PRINT #1:CHR$(27);CHR$(3
6);CHR$(1);
220 PRINT #1:CHR$(27);CHR$(18
7);CHR$(1)
230 PRINT #1:CHR$(27);CHR$(17
1)
240 STOP
```

Now, without turning off the printer, type LIST "PIO" or run any program that puts out text to the printer. It won't fool a Chinaman but it might impress your friends.

Here's a little something for you who own the Terminal Emulator II and the Speech Synthesizer. Maybe our Congressmen could use it to help them discuss the national debt.

```
100 CALL CLEAR
110 PRINT TAB(7);"NUMBER SPE
AKER": : "by Jim Peterson":
" of Tigercub Software"
: : :
120 PRINT " This program wil
l print any": " number of les
s than 67": "digits in number
s and in"
130 PRINT "words, and will s
peak the": "words.": : : " R
equires Terminal Emulator":
II and Speech Synthesizer.":
: :
140 CALL CHAR(39,"0000000000
301020")
```

```
150 OPEN #1:"SPEECH";OUTPUT
160 DIM HIGH$(21),NN$(23)
170 DATA ONE,TWO,THREE,FOUR,
FIVE,SIX,SEVEN,EIGHT,NINE
180 DATA TEN,ELEVEN,TWELVE,T
HIRTEEN,FOURTEEN,FIFTEEN,SIX
TEEN,SEVENTEEN,EIGHTEEN,NINE
TEEN
190 DATA TWENTY,THIRTY,FORTY
,FIFTY,SIXTY,SEVENTY,EIGHTY,
NINETY
200 DATA THOUSAND,MILLION,BI
LLION,TRILLION,QUADRILLION,Q
UINTILLION,SEXTILLION,SEPTIL
LION,OCTILLION,NONILLION
210 DATA DECILLION,UNDECILLI
ON,DUODECILLION,TREDECILLION
,QUATTORDECILLION,QUINDECIL
LION,SEXTEDECILLION
220 DATA SEPTENDECILLION,OCT
ODECILLION,NOVENDECILLION,VI
GINTILLION
230 FOR J=1 TO 9
240 READ ONE$(J)
250 NEXT J
260 FOR J=1 TO 10
270 READ TEEN$(J)
280 NEXT J
290 FOR J=1 TO 8
300 READ TEN$(J)
310 NEXT J
320 FOR J=1 TO 21
330 READ HIGH$(J)
340 NEXT J
350 PRINT : : :
360 PRINT #1:"NUMBER"
370 INPUT "NUMBER? ":N#
380 L=LEN(N#)
390 FOR J=1 TO L
400 IF POS("0123456789",SE6$(
N#,J,1),1)=0 THEN 360
410 NEXT J
420 IF (VAL(N#)<1)+(VAL(N#)<
>INT(VAL(N#)))THEN 360
430 IF L<67 THEN 470
440 PRINT "HEY! I CAN ONLY C
OUNT TO A": "VIGINTILLION!":
:
450 PRINT #1:"MAY I CAN ONLY
COUNT TO A VIGINTILLION"
460 GOTO 360
470 IF VAL(N#)>0 THEN 510
480 PRINT : : "ZERO": :
490 PRINT #1:"ZERO"
500 GOTO 360
510 IF L/3=INT(L/3)THEN 540
520 N#="0"LN#
530 GOTO 380
540 X=L/3
550 FOR J=1 TO L STEP 3
560 JJ=JJ+1
570 NNS(JJ)=SE6$(N#,J,3)
```

```

500 IF J>1 THEN 610
590 P$=STR$(VAL(MN$(JJ)))
600 GOTO 620
610 P$=P$&" "MN$(JJ)
620 NEXT J
630 PRINT : : P$ : :
640 FOR J=1 TO X
650 GOSUB 670
660 GOTO 1150
670 IF VAL(MN$(J))(>0) THEN 7
10
680 A$=""
690 FLAG=1
700 GOTO 1140
710 FLAG=0
720 H=VAL(SEE$(MN$(J),1,1))
730 T=VAL(SEE$(MN$(J),2,2))
740 TT=VAL(SEE$(MN$(J),2,1))
-1
750 VV=VAL(SEE$(MN$(J),3,1))
760 IF T=0 THEN 1000
770 IF T>9 THEN 810
780 A$=ONE$(T)
790 SP$=A$
800 GOTO 1000
810 IF T>19 THEN 880
820 A$=TEEN$(T-9)
830 IF T(>19) THEN 860
840 SP$="NINE TEEN"
850 GOTO 1000
860 SP$=A$
870 GOTO 1000
880 IF VV(>0) THEN 950
890 A$=TEN$(TT)
900 IF TT(>8) THEN 930
910 SP$="NINE TEE"
920 GOTO 1000
930 SP$=A$
940 GOTO 1000
950 A$=TEN$(TT)&" "&ONE$(VV)
960 IF TT(>8) THEN 990
970 SP$="NINE TEE"&ONE$(VV)
980 GOTO 1000
990 SP$=A$
1000 IF H=0 THEN 1080
1010 IF T=0 THEN 1050
1020 A$=ONE$(H)&" HUNDRED &
%A$
1030 SP$=ONE$(H)&" HUNDRED &
"ESP$
1040 GOTO 1140
1050 A$=ONE$(H)&" HUNDRED"
1060 SP$=A$
1070 GOTO 1140
1080 IF (J(X)+1T=0)+(VAL(MN$)
<100) THEN 1140
1090 A$=" & "EA$
1100 IF (TT(>8) & (T(>19) THEN
1130
1110 SP$=" & "ESP$
1120 GOTO 1140
1130 SP$=A$

```

```

1140 RETURN
1150 PRINT A$
1160 IF FLAG=1 THEN 1200
1170 PRINT #1:GP$
1180 PRINT HIGH$(X-J)
1190 PRINT #1:HIGH$(X-J)
1200 GOSUB 670
1210 NEXT J
1220 PRINT B$
1230 A$=""
1240 JJ=0
1250 B$=""
1260 P$=""
1270 FOR D=1 TO 500
1280 NEXT D
1290 GOTO 350

```

I hope you noticed that all those zeros were neatly slashed so that you wouldn't mistake them for 0's. Here's a little routine that will set up your printer to slash the 0's until you turn it off.

```

100 OPEN #1:"PIO"
110 PRINT #1:CHR$(27);CHR$(4
2);CHR$(0);
120 PRINT #1:CHR$(27);CHR$(4
2);CHR$(1);CHR$(40);CHR$(0);
CHR$(92);CHR$(34);CHR$(81);C
HR$(8);CHR$(69);CHR$(2);CHR$
(65);CHR$(34);CHR$(28)
130 PRINT #1:CHR$(27);CHR$(13
6);CHR$(1)
140 STOP

```

And, somebody might get mad if I don't include a little music -

```

100 REM - BELL MUSIC program
med by Jim Peterson
110 CALL CLEAR :: CALL SCREE
N(5):: RANDOMIZE
120 FOR CH=96 TO 136 STEP 4
:: FOR L=1 TO 4 :: X$=SEE$(
"0018243C425A667E8199A5BDC3DB
E7FF",INT(16#RND+1)*2-1,2)::
B$=B$&X$ :: C$=X$&C$ :: NEX
T L
130 D$=B$&C$ :: Z$=RPT$(D$,4
)
140 CALL CHAR(CH,Z$):: B$,C$
,Z$=NULL$ :: CALL MAGNIFY(4):
: CALL SPRITE(0CH/4-23,CH,IN
T(15#RND+2),255,255):: NEXT
CH
142 FOR J=1 TO 10 STEP 2 ::
X=9#RND-9#RND :: Y=9#RND-9#R
ND :: CALL MOTION(#J,X,Y,#J+
1,X,Y):: NEXT J
150 FOR J=1 TO 20

```

```

155 CALL COLUK(0INT(10#RND+1
),INT(15#RND+2))
160 FOR V=0 TO 16 STEP 4
170 ON J GOSUB 250,270,290,3
10,330,350,370,390,410,430,4
10,390,370,350,330,310,290,2
70,250,270,290,310,330,350
180 NEXT V
190 READ X
200 FOR D=1 TO X#5
210 NEXT D
220 NEXT J
230 RESTORE
240 GOTO 150
250 CALL SOUND(-999,131,V,52
3,V,131/2,30,-4,V)
260 RETURN
270 CALL SOUND(-999,165,V,16
7,V)
280 RETURN
290 CALL SOUND(-999,196,V,19
9,V)
300 RETURN
310 CALL SOUND(-999,262,V,26
5,V)
320 RETURN
330 CALL SOUND(-999,330,V,33
3,V)
340 RETURN
350 CALL SOUND(-999,392,V,39
4,V)
360 RETURN
370 CALL SOUND(-999,523,V,39
2,V,330,V)
380 RETURN
390 CALL SOUND(-999,659,V,66
6,V)
400 RETURN
410 CALL SOUND(-999,784,V,79
2,V)
420 RETURN
430 CALL SOUND(-999,1047,V,1
057,V)
440 RETURN
450 DATA 16,16,2,16,8,16,4,4
,16,2,16,4,16,8,8,16,2,2,16,
4,2,8,16

```

Just about MEMORY FULL, so
Happy hackin'

Jim Peterson

SPEAK UP!

Editors Note: The following article was copied from the October, 1984 issue of MicroCompendium.

Sometimes solutions to problems can be so obvious that one never sees them. Anyone who has ever used a cassette player to load data knows how long it can take to locate a particular program or file. Of course, we're supposed to use tape counters and write down the location of each program. But, nobody's perfect.

Here's a tip from the Nine T Nine Users Group of Toronto, Ontario, that may be of use to those who neglect to put things in writing: Put it in speech. That is, before you start recording a file or program onto cassette, record its name using your voice. Doing so, you can hear your voice through the television or monitor speaker when you're searching the tape for the desired program. (Oh, yes, remove the microphone jack from the recorder to record your voice and replace the jack before recording or loading your program.)

Now, wasn't that just too obvious to mention?

THE FORTH PAGE.....

.....Assembly Forth Mixing

By Greg Goodwin

Here is a short program that will allow you to run Program files created with the Ed-Asm in Forth. Note: the routines must be positioned above here, if it is a small program around FFC0 will work fine.

The assembly programs must not use the Forth Ram stack 8300-83FF. Some parts of that block may be used but consult the cpu ram pad map in the Forth users manual first. To create a program file of your Assemble program use the save utility on the part b disk. Check Ed-Asm manual for details.

the program.....

```

BASE->R HEX 0 VARIABLE BUFX 400 ALLOT
460 BUFX 1400 FILE SAVEIT
CODE XASM 06A0 , 7118 , 045F ,
: ATTRIBUTES ( DO PAB )
  SAVEIT SET-PAB ;
: UMOVE 2000 LD 1402 PAD 4 UMBR
1406 PAD 2+ @ DUP DUP HERE SWAP > IF < XASM 2+ ! PAD @ UMBR XASM ELSE
CR ." Cannot load to address " . CR ENDIF ;
: RUN ATTRIBUTES F-D" DSK1.FILENAME" UMOVE ." **DONE**" CR ; R->BASE
( TO EXECUTE TYPE RUN )

```

RUMORS.....

.....RUMORS.....

.....RUMORS

IUG UPDATE

The Hoosier Users Group was contacted by the Atlanta U.G. vice president about their problem with LaFara's organization. Rumors have been flying for several months regarding his lawsuits. According to Atlanta U.P. Gary Matthews, LaFara's lawsuit with the "group out west" was actually a dispute settled out of court involving a Torrence, CA. youth who was making and distributing copies of IUG programs and descriptions. As for the Atlanta group, so far there have only been threats which Atlanta's lawyer says will not hold water in court. The IUG's financial posture is said to be so bad now that LaFara seems to be using any means he can find to bolster it.

WORDSEARCH ANSWERS

(Finally!)

Editor's Note: A Wordsearch puzzle appeared in the August issue of the HUGger Newsletter. Due to the fact that I had "too many irons in the fire" I forgot to publish the answers in the September and October issues. I know that everybody has been patiently (or impatiently) waiting for the answers to be published, soooo here they are!

COMPUTER...CLOSE.....D.

.....G.....C.....I.

.....O.....TUPNI.....S.

.....S...P.....S...K.

.T...U.....R.....A...D.

..I.B.....I.....B...R.

...G.....N.EMULATOR...I.

...E.....T.....V.

R...R.....E.

A.....C.....TUPTUO.....

N.....U.....

D...S...B.....TXEN.

O..A...Y.....R.....E....

M.U.....T.....COMPUTER....

IE.....E.....F....M....

Z.....S...E.....I....

E.....T...M...N....

.....A...U..A....

..ASSEMBLY...D...N.L....

.....P.....

..INTERNAL.....U.....

.....CLEAR.....

.....

.....ROTCE..APPEND...CAGLE

WORD LIST

TIGERCUB

CAGLE

BYTES

SAVE

DISKDRIVE

INPUT

COMPUTER

SECTOR

RANDOMIZE

PRINT

FOR

NEXT

TERMINAL

ASSEMBLY

EMULATOR

BASIC

GOSUB

CLEAR

CLOSE

OUTPUT

INTERNAL

UPDATE

APPEND

NUM

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NOVEMBER 1 1984

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CINCH CONNECTOR 9 PIN THAT WE USED TO MAKE CASSETTE CABLES OR JOY STICKS \$2.95	

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HOOSIER USERS GROUP DIRECTORY

HOOSIER USERS GROUP OFFICERS

President.....Steve Sims 631-7255
 Vice-President.....Bill Cagle
 Secretary.....Barb Uhrig 357-8268
 Treasurer.....Bill Jones

HUGbbs INFORMATION

317-631-994A

The HUGbbs operates on a 24 hour basis.

COMMITTEE CHAIRPERSONS

Regional Centers:

South.....Dennis Sherfy 881-5918

Documents.....Don Donlan 882-4544

Membership.....Pam Sims 631-7255

Newsletter.....Pam Sims 631-7255

MEETING LOCATION

Creative Logic
 8240 Indy Lane
 Indianapolis, IN 46224

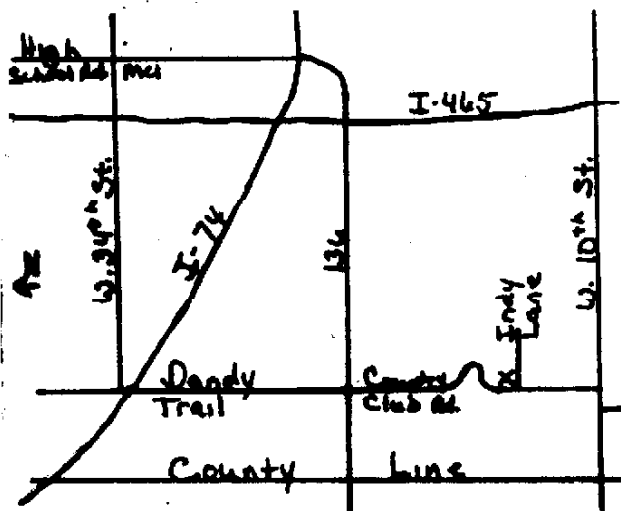
(About 1800 North Country Club Road)

NEWSLETTER EXCHANGE

The Hoosier Users is participating in a Newsletter Exchange program with other TI Users Groups. This offer is made with the understanding that, with proper credit, your Users Group can reprint articles from the Hoosier Users Group Newsletter, and with proper credit, we can reprint articles from other TI Users Groups Newsletters.

PRINTOUTS

Printouts of library listings can be ordered for \$.25 & a self addressed envelope with \$.37 postage. Printouts of the HUGbbs Reference Guide can be ordered for \$.50 and a self addressed envelope with \$.20 postage. Please send orders to our P.O. Box. SORRY, PRINTOUTS WILL BE SENT TO ACTIVE MEMBERS ONLY!



SPONSOR THE HUGbbs: Any member or retail business can sponsor the HUGbbs. For a \$5.00 donation, you get 5 (40 column) lines on the Log-On Title Screen for a week (or for a \$10.00 donation, you get 10 (40 column) lines) plus a 24 line by 40 character ad in the Sales option of the File Module. To sponsor the HUGbbs, send a check or money order to our P.O. Box (or turn in at our Monthly Meeting) specifying how many weeks (and how many lines) you want to sponsor, your name (or company name), address, phone, what you want to say, and the week (and an alternate week) you want the ad to appear.*

BACK ISSUES

Back Issues purchased at the monthly meeting is \$1.00 each. Mail order price is \$1.50 per Newsletter (postage included). Orders will be filled within 3 weeks of receipt by the Documents Committee.

ADVERTISING POLICIES

There will be no charge for advertisements submitted to the HUGger Newsletter by members (for private sale only). Format for the advertisements is 45 characters wide by 10 lines long. The Ad should be typed or hand printed exactly how it is to appear in the Newsletter. Deadline for an ad to appear in next month's Newsletter is the 2nd Saturday of the month.*

For companies who wish to advertise in the HUGger Newsletter, our rates are as follows:

- Pre-Printed Inserts (one page) \$20.00
- One Full Page (one sided) Ad: \$25.00
- One Half Page Ad: \$13.00
- One Quarter Page Ad: \$7.00

All ads must be in a ready to print condition. Advertisements must be in our P.O. Box before the 2nd Saturday of the month to appear in the following month's Newsletter.*

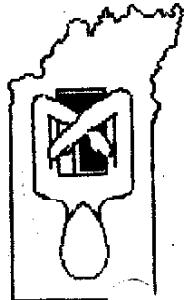
*NOTE: The Officers of the Hoosier Users Group reserve final approval on all advertisements submitted for the HUGger Newsletter and the HUGbbs. The Officers and the Newsletter committee are not responsible for typographical errors due to illegible advertisements. All proceeds are accepted as donations to the Hoosier Users Group.

NOV. 5 1984

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Below you will find an application for membership to the Hoosier Users Group. Active membership entitles you to the Newsletter, up and download on the HUGbbs, attendance and voting rights at regular club meetings, access to the HUGger Library of Programs, special club activities and special guest speakers for one year. Subscribing members will receive the NEWSLETTER only.

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