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THE HUGgers HOOSIER USERS GROUP People Helping People

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HOOSIER USERS GROUP HOOSIE

February 1987

THE HUGgers NEWSLETTER

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Volume 4, Number 11

#### OFFICER'S CORNER

Sunday, February 8 is the next HUG meeting at St. Ann's School, 2839 S. McClure. A map showing location of St. Ann's School is on the next to last page.

Due to many post-printing delays, last months newsletter was late being mailed out. Members that attended the meeting were able to "pick-up" their issue at the meeting. Special thanks to College Life's Printing Department, located at College Park Pyramids, 3500 West DePauw Indianapolis, IN (317) -Boulevard. 871-4324 for providing consistent, high -ouaility printing and delivery as scheduled by the Printing Department Manager, Bob Whirrett.

Elections of officers will be held at the April HUG meeting. Steve Sims has annouced he will be responsible for membership chairperson and will not be an officer.

Nominating committee needs appointed to organize the April elections of officers for the HUG. The Constitution of the HUG can be obtained from HUG library or one of the of the present officers. This is the document by which Texas Instruments recognized our users group. The Constitution of the HUG clearly defines the responsibities of the HUG officers and the nominating committee.

Twenty percent of the surveys have been returned. I have not received any survey from members without an expanded system. This survey was printed in the November 1986 issue of the newsletter. SURVEYS ARE DUE NOW!

Our library has always been operated on a NO COST base, you can obtain the latest non-commerical programs. Maybe it is time that we charge an auxillary fee for access to the library on a yearly base and offer discounts to members that give presentations or are contributors to the on-going of the user group as a whole. One exchange newsletter I read, the group charges \$2.00-\$8.00 per disk depending on the disk formating, plus \$1.00 if the group provided the disk. This was a smaller user group - and they were not in a major metropolitan area. Maybe we have been giving to such for the \$15.00 dues and one time \$5.00 annual registation fee to join. Members that started HUG will tell you there has been NO DUES increase since - the begining of HUG and approval of the Constitution.

VILLIAM M. LUCID

# 1987 HUG MEETING DATES \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

#July 19 January-11 February 8 August 9 \*March 15 September 13 \*April 19 October 11 #May 17 November 8 +June 14 December 13

\* Indicates meeting will be third sunday instead of the usual second sunday. . . . . . . . .

# LIBRARY BITS by Dennis Sherfy

I enjoy the game of Boggle. I was looking for a subject for a program, and thought that Boggle could be adapted to a computer quite easily. My results are contained on Extended 6, BOGGLE.

In BOGGLE, you are presented with a set of 16 letters. The object is to identify words by connecting adjacent letters together.

I wanted the computer version to exactly match the game you can buy in the store, so I set up arrays for each die in the game, using the same six letters printed on each of the dice in the actual game. Then, I allowed each "die" to appear in any of the i6 positions. To reprocuce the timer, I displayed numbers in the lower right-hand corner of the screen, starting at 10, counting down to zero. The count-down process takes about the same amount of time as the hour glass in my Boggle set.

For persons who are not familiar with the game of Boggle, instructions are included in the program which print on your screen. To play the game, you need paper and pencils, and two or more players.

Share the game with your friends. It's free!

On another subject, some programs in our library are stored in Internal, Variable format, (INT/VAR254). 254 These programs are EXTENDED BASIC programs which are very large. When they were saved, the computer operating system automatically stored them in INT/VAR254 format instead of PROGRAM. They will still load and run as other programs. In some cases, you may have to type CALL FILES(1) (ENTER) before loading and running these programs. This frees up memory space which has been automatically reserved by the computer, but not necessarily required for the program you are running.

Some time ago, I wrote about a disk version of the Editor/Assembler program which is in our library. I mentioned

that some assembly language programs would load and run with this program, and some would not. There is a new animal in the stable -- FUNLWRITER. This is a program which includes on one disk the equivalent of the EDITOR/ASSEMBLE cartridge, TI WRITER, and DM:000, an excellent disk manager Ιf you don't have the EDITOR/ASSEMBLER cartridge to load and of the assembly language SOBe programs in our library, try FUNLWRITER. Funlwriter requires disk, Extended Basic, and 32K expansion.

Many of you are showing some interest in the Character Sets and Graphic Design programs (CSGD) and the User Disks which contain type fonts that can be used with TI ARTIST. The three CSGD sets, and the four User Disks contain 102 DIFFERENT TYPE FONTS. All of these fonts can be converted for use with TI ARTIST. Once converted for TI ARTIST, they can be printed in three sizes, in normal or outline form. This is like having 6x102 fonts available! If you can't do it with your TI....YOU CAN'T DO IT.



#### SOUTH REGIONAL MEETING

The next South Regional meeting will be held on Wednesday, Feb. 11, 1987. For additional information call 881-5918.

# THIS AND THAT

VAST 9 Sample

# DOUBLE YOUR DISK CAPACITY

This article may be old news, to many of you, but I have encountered quite a few people lately who haven't discovered "flippy" disks. If you are still using the original equipment single sided disk drive that tame with your expansion box, you have the option of modifying your disks su you can use both sides of them. In order to read the backside you must flip the disk over, thus the 'flippy" name.

The only tool necessary for this project is a hole punch. It would be advisable to use one that has a

hinged holder to catch the pieces as you punch the holes, otherwise they could fall into the disk jacket.

In the illustration, we have a disk that is nodified to be a flippy. At point A is a square notch. This is the read/write protect notch. At point B is a hole with a matching one on the back side. If you turn the

disk carefully in the jacket, you will see a small hole in the disk nere. This is an index hole for the disk drive. To make use of the back side of your disk, you simply make holes on the left side of the jacket to match those on the right. additional holes are shown by points C in the illustration. I know, the read/write notch is square. The disk drive doesn't care if it's round or square. If you insist on having a square hole, I've seen tools advertised that will cut a square hole and they cost about 15 bucks. The round punch is about \$2. Don't rry about making that hole too deep , ther. You would have to punch a hole almost a half inch deep to cut the disk inside (you wouldn't cut it that deep would you?).

The best way I have found to mark the disk for punching is to lay another disk upside down over the intended victim. If you turn the disk so the index hole is showing, you can mark the jacket of the bottom disk through it. Point of caution here! You only want a hole in the jacket, not the disk. You'll have to mark both sides of the jacket at the index hole and slip your hole punch into the jacket. I use a piece of label backing to protect the disk from scratches when I do this part. If you have a disk that's no good you can use the jacket for a template by removing the disk. It's a lot easier the index hole this way. to mark

Otherwise you can only make a small mark on the jacket though the index hole in the upper disk.

One other thing I might mention here just so you can be forewarned. Theoretically, what you are doing is a no-no. When you turn the disk over, you're turning it backwards in the drive. The lining in the jacket is there to catch

dust etc. and keep it off the disk. When you turn it backwards, you are putting dust on the disk. In actual practice, however, I've never heard of anyone having a problem. Many people do this, including software manufacturers. It isn't necessary to purchase double sided disks either. Although single sided disks are only quaranteed on one side, I've yet to see one that was bad on the back. If you should have a bad sector, it will be flaged when you initialize the disk if you verify the sectors and then when the computer writes to that disk, those flagged sectors are just skipped.

Gerry Kennedy

# MANASOTA USERS GROUP

The following article appeared in the AUG86 issue of the Lehigh 99'er. They had reprinted it courtesy of the Lima 99/4A Users.

# LOADING FROM DISK ...

Although the information in this article is probably old hat to many of you veteran TI users, I still get many questions at club meetings concerning how to load files and programs. "There is a name on the disk directory, but I can't seem to get it to load. What do I do?" If this is sometimes your problem, this article is for you.

Disk files that can be loaded directly into the computer are in the following forms:

PROGRAM INT/UAR 254 DIS/UAR 163 DIS/VAR 80 DIS/FIX 80

Any other file format represents a data file which can be loaded from within a program already in the computer. Examples are INT/FIX 108, INT/VAR 128 and DIS/VAR 64.

PROGRAM These files are the most common and the vast majority represent TI basic or Extended Basic programs. Many TI Basic programs load and run correctly from Extended Basic (but not visa versa). However, if after loading the PROGRAM file into Extended Basic you get a BAD VALUE IN XXX error when you attempt to RUN the program, you need to reload the program into TI Basic. The Bad VALUE error is caused by the use of chars above 143, which isn't allowed in Extended Basic.

If you attempt to load an Extended Basic program into TI Basic it will seem to load properly. However, when you RUN the program, you will probably get a FOR-NEXT ERROR IN XXX message. Attempting to list line XXX gives a screen of nonsense. You cannot use TI Basic to work with Extended Basic programs.

If a program file occupies more than 45 disk sectors and won't load in either version of Basic you have to open up extra memory. Do this by typing the following: CALL FILES(1) enter NEW enter OLD DSK1.FILENAME enter

The program will now probably load.

Occasionally, a PROGRAM file will not load from either version of Basic, giving an I/O ERROR 30 when you attempt to do so. These files are likely to be assembly language programs that need the EDITOR/ASSEMBLER module to load. Press "2" for EDITOR/ASSEMBLER. Then press "5" for RUN PROGRAM FILE. When prompted, type DSK1.FILENAME, hit enter and the program should load and start running. Some assembly language programs of this type can also be loaded from the TI-WRITER option #3, UTILITY.

## MANASOTA USERS GROUP

Finally, some specialized PROGRAM files can only be loaded from the ADVENTURE, PERSONAL RECORD KEEPING, STATISTICS, or other specialized module. These files are actually data bases that can only be used with their particular module.

INT/UAR 254 These files are normally long Extended Basic programs that OLD and RUN in a normal way if the memory expansion is connected to the system. They usually exceed 45 sectors in length and do not require CALL FILES(1) to load. Once loaded, these long programs cannot usually be saved to tape (SAVE CS1) without special techniques. You cannot OLD any INT/VAR 254 program from TI Basic.

Subroutine in MERGE format. They can be merged into a program already in memory. To load such files, type MERGE DSK1.FILENAME and hit enter. You must do this even if there is no other program in memory. You cannot use DLD with files of this type. To save a program in MERGE format, type SAVE DSK1.FILENAME, MERGE. The MERGE option is not available from TI BASIC.

DIS/UAR 80 These are text files which can be read from the screen, edited, and printed to a printer via TI-Writer, either by using the module or one of our Extended Basic loaders such as FUNLWRITER. The Editor/Assembler will also read, edit, and print these files from E/A option #1: "TO EDIT". Many of our more complicated programs will have documentation files on the same disk as the program. These files usually have the program name followed by the letters DOC.

DIS/FIX 80 These are assembly language programs which must be loaded via Editor/Assembler or Mini Memory modules. Press #2 to load Editor/Assembler or #3 to load Mini Memory. Then press the number corresponding to the prompt LOAD AND RUN. When asked for a FILENAME type DSK1.FILENAME and hit enter. The DIS/FIX 80 file will load and may start running. If it doesn't start running, press enter at the next FILENAME prompt. Then at the PROGRAM NAME prompt, type the name that gets the program going, and press enter. Sometimes this name is START or the program name or a variation of it. The correct startup name can often be found in the program docs, which may exist on the disk as a DIS/VAR 80 file.

FINAL NOTES Any of the above file types may also be used as a data file to be loaded only from another program. This means the file cannot be loaded directly by Extended Basic. The computer will recognize that the data in the file is not similar to a long Exteded Basic program.

```
*****************************
 Analog Joystick Interface to TI-ARTIST Version 2.0
    Utilizing the MBP Clock/ADC Card
 By: Chris Schram
     1317 Cassland Ct.
     San Jose, CA 95131
     May 1986
* This program and hardware description are hereby placed it the *
* public domain. They are provided for the pleasure and
* education of TI-99/4A users, and are never to be sold for
* profitable gain.
* There is no implied endorsement of this product by
* MBP, Inscebot Inc., or any other party.
* The source code must be assembled in compressed format
* using the "R" and "C" options.
* The resistors and analog joystick used in the circuit
* below can be most any value. Keep in mind the current
* limitations of the MBP card and try to use values over
* 10K ohms.
Analos-Joy Stick
                                         + 5 Volts
       REF
           A
                                     CH
       REF
       REF
           FIRE
                                  Space
       REF
           SPACE
       REF
           XMIN
       REF
           XMAX
       REF
            YMIN
                                       All resistances areater
       REF
            YMAX
                                       than 10,000 ohms.
       REF
            200M
                                                 Ver.
            ZOOM2
       REF
                        SELECT CHANNEL 0 )SW-0) AND START CONVERN
       MOVB 0>8690,R2
                        SETUP ~100 MICROSECOND LOOP
       LI
            R1,24
                        TO ALLOW ADC TIME TO WORK
DLY@
       DEC
           R1
       JNE
           DLY0
       CLR
           R2
       MOVB 0>86A0,R2
                        GET THE READING FOR CHANNEL 0
       SWPB R2
       CI
            R2,127
                        JUMP IF SW-0 WAS NOT PRESSED
       JLT
            PRES00
       MOV asp.asp
                        WAS BUTTON HELD DOWN ?
       JNE
            PRESØ1
                        IF SO, JUMP
       SETO aSP
       SETO OSPACE
       JMP
            SWI
PRESØØ CLR GSP
```

PRESØ1 CLR OSPACE

```
ŠWI
                         SELECT CHANNEL ! (SW-1) AND START CONVERN
      MOVB 0>8692.R2
                         SETUP ~100 MICROSECOND LOOP
            R1.24
      LI
                         TO ALLOW ADC TIME TO WORK
DLYI
       DEC RI
       JNE DLY1
       CLR R2
       MOVB @>86A0,R2
                         GET THE READING FOR CHANNEL 1
                         MOVE THE READING TO THE RIGHT BYTE
       SWPB R2
       CI
            R2,127
                         JUMP IF SW-1 WAS NOT PRESSED
       JLT PRESIO
       MOV R14,R14
       JEQ
           PRESI 1
                         WAS BUTTON HELD DOWN?
       MOV OFR.OFR
       JNE PRES12
                         IF SO. JUMP
PRESII SETO OFR
       SETO OFIRE
       JMP PADØ
PRESIG CLR GFR
PRES12 CLR OFIRE
PADØ
       MOVB 9>8694,R2
                         SELECT CHANNEL 2 (PADDLE #0) AND START CONVERSION
                         SETUP ~100 MICROSECOND LOOP
            R1,24
       LI
                         TO ALLOW ADC TIME TO WORK
DLY2
       DEC
           R1
       JNE
           DLY2
       CLR R2
                         GET THE READING FOR CHANNEL 2
       MOVB 3>86A0,R2
                         MOVE THE READING TO THE RIGHT BYTE
       SWPB R2
            R1,191
       LΙ
                         START FUDGING FOR ASPECT RATIO OF SCREEN (191/255)
       MPY R2,R1
                         Ri=(POSITION OF PADDLE #0)*191/255
            R9,255
       LI
       D1V R9,R1
       MOV R1.R3
                         SELECT CHANNEL 3 (PADDLE #1) AND START CONVERSION
       MOVB 3>8696,R2
                         SETUP ~100 MICROSECOND LOOP
       LI
            R1.24
                         TO ALLOW ADC TIME TO WORK
DLY3
       DEC
           R1
       JNE DLY3
       CLR R2
       MOVB 0>86A0.R2
                         GET THE READING FOR CHANNEL 3
                         MOVE THE READING TO THE RIGHT BYTE
       SWPB R2
                              IGNORE ZOOM?
       MOV
            9Z00M2,9Z00M2
       JLT
            NOZOOM
       MOV 9200M, 9200M
                              ZOOM ON?
       JEO NOZOOM
                         DIVIDE BY 4 (ZOOM FACTOR)
       SRL
           R2,2
                         DIVIDE BY 4 (ZOOM FACTOR)
       SRL
            R3.2
NOZOOM MOV
            R2,0A(R15)
       MOV
            R3.0B(R15)
       RT
                          HOOSIER USERS GROUP
                                                 HUGger
                          Editor's comment: This program requires special
SP
       DATA 0
                          hardware for the TI Expansion System (P-Box).
FR
       DATA Ø
                          Check with L. L. Conner Enterprise (317)
                                                                     742-8146
```

for the P-Box.

SLAST

END

or Disk Only Software for MBP eight channel analog-to-digital converter with real time clock

```
Analog Joystick Interface to TI-ARTIST Version 2.0
    Utilizing the MBP Clock/ADC Card
 By: Chris Schram
     1317 Cassland Ct.
     San Jose, CA 95131
     May 1986
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* MBP, Inscebot Inc., or any other party.
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* using the "R" and "C" options.
* The resistors and analog joystick used in the circuit
* below can be most any value. Keep in mind the current
* limitations of the MBP card and try to use values over
* 10K ohms.
Analos-Joy Stick
                                          + 5 Volts
       REF
                                      CH
       REF
       REF
           FIRE
                                   Space
       REF
            SPACE
       REF
           XMIN
       REF
            XMAX
       REF
            YMIN
                                        All resistances preater
       REF
            YMAX
                                        than 18,000 ohms.
            ZOOM
       REF
                                                  Ver. 2.0
            ZOOM2
       REF
                        SELECT CHANNEL 0 )SW-0) AND START CONVERN
       MOVB 3>8690,R2
                        SETUP ~100 MICROSECOND LOOP
       LI
            R1,24
                         TO ALLOW ADC TIME TO WORK
DLY@
       DEC
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           DLY0
       CLR
           R2
                         GET THE READING FOR CHANNEL 0
       MOVB 9>86A0,R2
       SWPB R2
       CI
            R2.127
                         JUMP IF SW-0 WAS NOT PRESSED
       JLT PRES00
       MOV asp.asp
                        WAS BUTTON HELD DOWN ?
       JNE
            PRESØ1
                         IF SO, JUMP
       SETO OSP
       SETO OSPACE
       JMP
            5W1
PRESØØ CLR @SP
```

PRESØ1 CLR @SPACE

#### OFFI CERS

President......Bieve Bins 631-7255 Vice-President...Bill Lucid 291-3995 Secretary......Greg Larson 783-4575 Treasurer.....

Newsletter Editor..William M. Lucid (317)-291-3995

Regional Center

South......Dennis Cherfy 001-5918

#### MONTHLY MEETING LOCATION

ST. Ann's School 2839 S. McClure Indianapolis, IN

## Meetings open at 2:00 PM

#### **NEWSLETTER EXCHANGE**

The HOOSIER USERS GROUP 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.

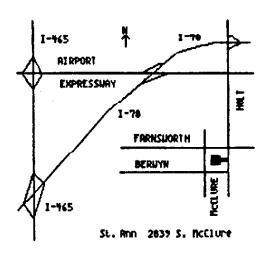
#### BACK ISSUES

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

#### **PRINTOUTS**

Library listings can be ordered for \$.25 6 X 9 self addressed envelope with \$.66 postage.

Please send orders to our P.O. Box. SORRY, PRINTOUTS WILL BE SENT TO ACTIVE MEMBERS ONLY.



#### HUGGES INFORMATION

#### 217-631-994A 200 baud only

The HUGbbs operates on a 24 hour basic.

business can sponsor the HUGbbs. For \$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.\*

#### ADVERTISING POLICIES

There will be no charge for advertisements subsitted 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 Saturaday 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

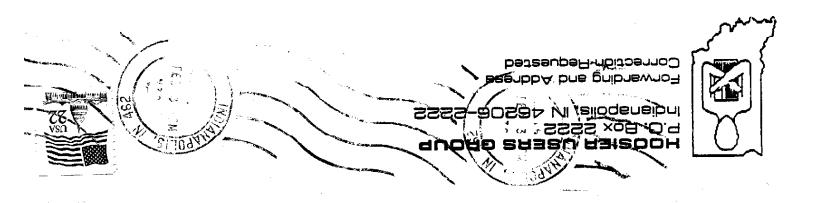
All Ads must be in ready to print condition. Advertisements must be in our P.O. Box berfore the 2nd Saturaday of the month to appear in the following month's Newsletter.\*

eMOTE: The officers of the HOOSIER USERS GROUP reserve final approval on all advertizements submitted for the HUGger Newsletter and the HUGbbs. The officers and the Newsletter committee are not responsible for typographical errors due to illegiable advertisements. All proceeds are accepted as donations to the HOOSIER USERS GROUP.

Dan Eicher 4410 Cardinal Drive Indianapolis, 1N 46237

30728 60\78

# Catac anit F8 YARUABA JAIRATAN



# APPLICATION FOR MEMBERSHIP

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.

Make check or money order payable to Hoosier Users Group. Send completed application to:

HOOSIER USERS GROUP P.O. Box 2222 Indianapolis, IN 46206-2222

	(Cut on dotted line)	,,		
Check One: Active Member	Name:	Today's Date:		
New: \$20 Renewal: 15 Subscribing Member	Address:	·		
New: \$10 Renewal: 7.50	City:	State:	Zip:	<b>–</b>
Amount Enclosed: \$	Phone: ()  Interests/Comments:			
s o				