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**THE HUGgers
 HOOSIER USERS GROUP**

FEBRUARY, 1985

THE HUGgers NEWSLETTER

VOLUME 2, NUMBER 11

THE OFFICER'S CORNER

Well, HUGgers, the "official" groundhog, Punxsutawney Phil, seen his shadow. However, Henrietta, the local groundhog didn't see her shadow. Who will be correct this year, Phil or Henrietta? My personal choice is Henrietta. I am anxiously looking forward to an end to this frigid weather!

The arrival of February also signals the formation of our Nominating Committee. The duties of the Nominating Committee are to present a list of nominees who would like to serve as officers for the 1985-86 year. If you would like to participate in the Nominating Committee, please see me at this meeting.

March will also be a busy month for our Users Group. On March 10th, the Indiana HamFest will be held at the Pavilion Building on the Indiana State Fairgrounds. Due to the poor meeting turnout on past HamFest days, our Monthly meeting will be postponed until the 3rd Sunday, March 17th.

At the past several meetings there have been many complaints of not being able to have access to the library. Effective, starting with this meeting, there will be an appointment sheet for library access. Appointments will be available from 2:30 to 4:30 and are 15 minutes in length. Access to the library can only be made through the appointment sheet. You can have only one appointment, so I suggest you copy a whole disk and go through the programs at your leisure. These library appointments are strictly on a first come basis and self policing.

See you at the Feb. 10th meeting! J. Steven Sims

THE NEXT MONTHLY MEETING WILL BE
 FEBRUARY 10, 1985
 STARTING AT 2:00 PM AT CREATIVE LOGIC!

WORKSHOPS: TECH TIME
 HINTS & KINKS ON BASIC

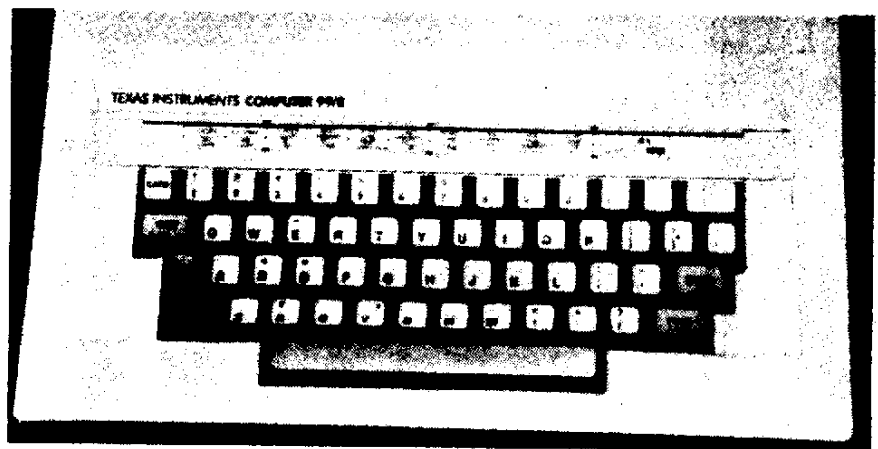
SOUTH REGIONAL MEETING

February 16, starting at 2:00 pm
 (Library Hour 1:00 to 2:00 pm)

FORTH MANUALS ARE IN!

The 99/8

Remember all of the rumors about a "new" computer TI was developing? Inside this Newsletter, read "At the Faire", which appeared in the December, 1984 issue of MICROpendium. Below is a picture of "The one that got away."



The one that got away

Pictured above is the TI99/8 home computer. Only 250 of the 64K RAM machines were produced before Texas Instruments made the decision to leave the home computer market. The machine features a built-in p-Code system, 64K of CPU RAM and 16K of VDP RAM. Program modules are loaded vertically into the top of the machine. (Photos courtesy of Dave Wakely)

HAPPY BIRTHDAY!

A Happy Birthday to these members who joined in February, 1984! John Barritt, Larry Carmer, David Espling, Leonard & Mary Eubank, Bruce Faucet, Dennis Graves, Richard & Evelyn Mears, Greg Polakoff, Pam & Dea Purdie, Doug Rogolla and Lee Tanzer.

WELCOME!

The Hoosier Users Group welcomes these new members who joined the group in the past month: Carl Walters, Jim Felton, John Cornwell, Brian Beasley, Michael Lyons, Sam Hatcher, and Michael Brown.

WELCOME BACK!

We would also like to welcome back these renewing HUGgers: Wendell Bunting, Bill Cagle, Mark Weis, Charley Trotter, Bob Sobek, Lew Bartley, and Gary Rhodes.

SOUTH REGIONAL NEWS

by Dennis Sherfy

Our next meeting will be Saturday, Feb. 16th. The Library hour will begin at 1 P.M. and the regular meeting will start at 2 P.M. Anyone with questions or needing directions to the location can call me at 881-5918.

We anticipate that we will spend some time working with the new TE3 in the library.

During our January meeting, members spent quite a bit of time with the new library entries, and there was some discussion on Multiplan. If anyone has a topic of interest for our regional meetings, please contact me.

FOR SALE

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

Call 291-3995

TI-99/4A Computer \$45.00

TI Joysticks \$10.00

TI Speech Synthesizer \$30.00

Realistic Minisette-9 Cassette Recorder \$35.00

TI-Writer Word Processor \$50.00

TI Editor/Assembler (cartridge, diskette and manual) \$35.00

TI Cartridges: Parsec \$10.00.

Munch-Man, Early Learning Fun, Reading Fun,

Alligator Mix, Video Graphs, \$5.00 each.

Call Dave West at 842-5927 (home) or

875-1867 (office)

TI 4A Console, Extended Basic, P-Box, Disk Controller, Disk Drive, 32K Memory Card, All Manuals and cables. \$750 All. Will separate.

Chip Wilson 831-5918

SPREAD THE WORD!

by Barb Uhrig, Secretary

As part of the attempt to increase membership, I have sent announcements to the following radio and television stations. You can support the club in this endeavor by listening to and watching the stations giving us support, spreading the word yourself, and passing along suggestions for other places in which I should place announcements. There are approximately 25 radio stations in Indianapolis. I will be contacting more as time goes by.

Indianapolis Cablevision Viewers: Watch Channel 13, the Swap Shop channel, for our announcement regarding meetings and the HUGbbs.

Radio listeners: The Community Bulletin Boards of the following radio stations will be promoting our February meeting:

WIBC 1070 AM

WZPL 99.5 FM

WMLF 1310 AM

WAJC 104.5 FM

WICR 88.7 FM

WATI 107.1 FM

FROM THE HUGbbs.....

.....AN EDITORIAL.....

.....BY TI TIPS

Our users group seems to be going off into almost as many different directions as there are members. There are people in our organization that are exploring nearly every aspect of the little TI computer.

We try to present things of common interest at monthly meetings but I think the glue that really binds us is the little tidbits of information that we collect and share with one another. On this board I see evidence of an undercurrent of activity among very different kinds of people. One gets information on Pascal from another who is working with Forth. Another is picking up valuable information from an assembly programmer that he uses in Forth. At the swap table at the last meeting, there was a flurry of activity among many of the members. Because of our newsletter, we have a reputation around the country as one of the top 5 groups in the U.S.

Unfortunately, more and more people are abandoning their TI's as the date of last production fades farther into the past. One group published an estimate stating that 1000 TI's were being thrown in the closet each week. That only means that we will all have to work that much harder.

Not to keep the TI alive, it will die in time despite our best efforts, but to use it for what we bought it for. LEARN, that's what you got a computer for. And share it with others. You joined a group for just those reasons. Participate !!

LIBRARY BITS

by Dennis Sherfy

Someone asked me if I was the "official" librarian with respect to writing articles about HUG library programs. Certainly not. I have a copy of the library available to me on the south side, and I enjoy writing the articles. I hope they can generate more interest in using and contributing library programs. However, anyone is welcome and encouraged to contribute articles about our programs. This is especially true for Assembly, Forth, Mini-Mem, Pascal; Speech Synthesizer, and Logo, where I lack the hardware and/or knowledge to write about our programs.

In recent months, our library has been expanded by several disks. The additions are:

Basic-11	Texas-3 (Superbugger)
Basic-12	Texas-4 (FORTH source code A)
Extended Basic-6	Texas-5 (FORTH source code B)
Extended Basic-7	Texas-6 (updated versions of TI-Writer & Multiplan)
Speech Synthesizer-1	Terminal Emulator Programs
Mini-Memory-1	Forth Demo
Logo-1	Fast Forth
Pascal-1	Forth 3-pass copier
Editor-Assembler-1	Forth, Version II (Runs with Ed-Asm, Extended Basic, Mini-Mem, and TI-Writer)

The Forth 3-1/4 pass Copier, by Greg Goodwin, should be of special interest to library users. Once loaded with the Editor-Assembler cartridge, it allows you to copy any disk in 3-1/4 passes. It is convenient to copy entire disks from our library, then evaluate the programs at leisure at your home, saving permanently those programs of interest to you, then re-use your copy disk(s) next time you get access to our library. (A disk system and 32-K is required to use this program.)

THE FORTH PAGE

A look at Forth's Inner Interpreter.

by Greg Goodwin

Although there is a lot of information that could be covered on the interpretation of a word we will look only at the actual execution of the 'word'. The Inner Interpreter is located at addresses 832e to 8346 on the TI. Address 833c is the DOEXEC routine. It is used by Forth words, and is called by Execute. For example the col definition of ZZ.

```
: ZZ ." Example 1" CR ;
```

```
  ^ ZZ CFA EXECUTE
  ^   ^   ^
FIND CODE EXECUTE WORD.
```

If we wanted to do the same thing in Forth Assembly we could enter:

```
CODE EXEC ^ EXECUTE 2() B,
( OR )
CODE EXEC *SP+ W MOV, 833C 2() B,
```

A look at the code for Execute should help you to see that both examples do the same thing. Here is a full example.

```
BASE->R HEX < EXEC-ASM DEMO >
: ZZ CR ." Assembler Code Example." CR ;
CODE EXEC *SP+ W MOV, 833C 2() B, CODE DING 3A06 2() BLWP, 0034 , NEXT,
: EXAMPLE < Execute Forth Word in Code Word > ^ ZZ CFA EXEC DING ; R->BASE
```

Initialize disks with FORTH (double sided too) by Bill Jones, Indy ok

Have you ever wondered what would happen if you didn't have your disk manager cartridge? Mine came with a warning that said it could be destroyed by static. Without it, disks cannot be initialized and that means that the disks you have are all you can use. For me, the answer is FORTH. FORTH can do the system call that will initialize the disk, if your drives are single sided. Formatting the disk is only half the story though. A disk to be used in BASIC or other regular cartridges must also have initialization information written on it. (By the way, TI calls this the DX10 disk system.) FORTH can do this too, with special programming.

Working on this, I went one step further. The FORTH screens listed here can fully initialize a new disk either single or double sided without using the disk manager. Since FORTH can now be loaded by four different cartridges, most people with a complete system can use this program as an alternative way to initialize their disks. To use this program, the word FORMAT will format a disk when you use it in the form: n FORMAT, where 'n' is the disk number (beginning with zero). To initialize for BASIC, use the word INIT the same way. Both words operate on the assumption that the new disk will be made the same way as the system is currently configured. If DISK_SIZE is greater than 90, a double-sided disk will be created, otherwise it will be formatted and initialized as single-sided. You must be careful not to initialize a disk as double-sided if it was formatted as single-sided. INIT does not check boundaries to see if you gave it the right information. One last thing, these screens have to be loaded after -COPY since a word created there is used. I make sure this is done by patching in my code in place of the original FORMAT-DISK screen.

UNSWCH

SCR #90

```
0 ( ONE/TWO SIDE DISK FORMATTER                                WMJ 25-JAN-85)
1                                                                BASE->R DECIMAL
2      -31923 CONSTANT TRACK# ( FAC ADR OF TRACKS )
3      -31919 CONSTANT SIDES ( FAC ADR OF SIDES )
4
5 : DSK-SIDES DISK_SIZE @ 90 > IF 2 ELSE 1 ENDIF ;
6 : TRACKS 40 TRACK# C! ;
7 : SIDE DSK-SIDES SIDES C! ;
8 : HOW-BIG DSK-SIDES 2 = IF ." 2 SIDES"
9           ELSE ." 1 SIDED" ENDIF ;
10 : EXPLAIN CR 14 14 GOTOXY ;
11 : TALK 16 SYSTEM 10 12 GOTOXY
12      ." FORMATTING DISK" EXPLAIN HOW-BIG ;
13 : UNTALK 16 SYSTEM 7 0 GOTOXY ." FORMATTING FINISHED " ;
14 : FORMAT ( disk _____ )
15      TALK TRACKS SIDE 1+ 18 SYSTEM UNTALK ; R->BASE
```

UNSWCH

SCR #91

```
0 ( SETUP FOR DISK INIT *LOAD AFTER -COPY* WMJ 23-JAN-85 )
1 BASE->R HEX
2
3 ( MAP OF DISK HEADER INFORMATION )
4 0 CONSTANT NAME!
5 A CONSTANT SIZE!
6 C CONSTANT SEC/TRK!
7 D CONSTANT TAG!
8 10 CONSTANT PROTECT!
9 11 CONSTANT TRACKS!
10 12 CONSTANT SIDES-DENS
11 38 CONSTANT MAP!
12
13 0 VARIABLE TOP
14 0 VARIABLE LO*
15 0 VARIABLE OFF* -->
```

SCR #92

```
0 ( DICTIONARY FOR INIT WMJ 23-JAN-85 )
1 : PUT> TOP @ + ! ;
2 : BYTE.PUT> TOP @ + C! ;
3 : FIND-BLOCK, DISK_SIZE @ * OFFSET ! 0 BLOCK TOP ! ;
4 : EMPTY-SECTORS. TOP @ DUP 200 0 FILL 200 + 200 E5 FILL ;
5 : ITS-NAME, TOP @ !" DISK " ;
6 : SEC/TRK, SEC/TRK! BYTE.PUT> ;
7 : THIS-SIZE, DISK_SIZE @ 4 * SIZE! PUT> ;
8 : THESE 3 MAP! BYTE.PUT> ;
9 : TRACKS-SIDE, TRACKS! BYTE.PUT> ;
10 : SIDES? DISK_SIZE @ 5A > IF 2 ELSE 1 ENDIF ;
11 : #SIDES, SIDES? 100 * 1+ SIDES-DENS PUT> ;
12 : UNPROTECT, 20 PROTECT! BYTE.PUT> ;
13 : "DSK", 44 TAG! BYTE.PUT> 534B TAG! 1+ PUT> ;
14 : TO-FILL DISK_SIZE @ 4 * 5A0 SWAP - 8 / ;
15 : START-USED DISK_SIZE @ 5A / 2D * MAP! + TOP @ + ; -->
```

SCR #93

```
0 ( INITIALIZE FORMATTED DISKETTE WMJ 23-JAN-85 )
1 : USED-SECTORS THESE START-USED TO-FILL FF FILL ;
2 : AND-FILL TOP @ EC + 14 FF FILL ;
3 ( SAVE SYSTEM VARIABLES )
4 : NOW, DISK_LO @ LO* ! OFFSET @ OFF* ! 0 DISK_LO ! ;
5 : -END- UPDATE FLUSH OFF* @ OFFSET ! LO* @ DISK_LO ! ;
6 : WRITE ;
7
8 DECIMAL
9
10 : INIT NOW, FIND-BLOCK, EMPTY-SECTORS. ( disk ____ )
11 WRITE ITS-NAME, "DSK", #SIDES, THIS-SIZE, UNPROTECT,
12 40 TRACKS-SIDE, 9 SEC/TRK, AND-FILL USED-SECTORS
13 -END- ; R->BASE
14
15
```

PERSONAL RECORD KEEPING & NAVARRONE'S DATA BASE MANAGEMENT

by Don Donlan

What I intend to accomplish in this article is a comparison that will give you some idea of the things to look for when deciding on a data base management tool for use in your record keeping. As most of you know I have been using the TI Personal Record Keeping cartridge for some time, but now Navarone Industries has come out with a new cartridge and diskette package called Data Base Management. Following are points of comparison to be considered if/when you want to invest in this kind of software for your needs.

PERSONAL RECORD KEEPING (PRK)

REQUIRED HARDWARE:

PRK works solely within the console's memory, more precisely using about 10K of memory to store your data.

DATA RECORD:

Maximum would be 15 fields of 15 characters each (165 bytes). Scientific notation may be used. Number of all records is determined by 10K divided by size of one record. Record definition is stored with data under one file name in PROGRAM format that can only be accessed after conversion.

Records retrieved by number only.

SORT FEATURES:

Sorts only one field at a time using BASIC routine that is very slow. It can perform mathematical transformations to calculate new data fields.

PRINTOUT OF DATABASE:

Report format or page(record) format are your only choices. No totals.

Personal Report Generator cartridge lets you define up to 127 characters per report line (compressed mode).

EASE OF USE:

PRK is fully menu driven, easy to use in a fixed screen display. The name of the field is used to prompt for the data. Field name is limited to 10 characters. No help prompts used. You can add new fields only with the use of Personal Report Generator. But only until 15 field maximum is reached.

DATA BASE MANAGEMENT (DBM)

DBM uses both console and 32K memory so you need to have both memory expansion and a disk drive. Data uses 24K.

Maximum of 255 characters; size/number of field(s) limited only by 255 record limit. Total number of records is determined by disk space available.

Separate SETUP and DATA files are used to define/store your records in a DISPLAY/FIXED format. Then other programs can easily read these records. Record key(s) must be chosen in SETUP.

May read up to 6 fields in single sort using an ASSEMBLY routine that is very fast by comparison. No transformation of data, even on printout can be done.

Records can be written with great deal flexibility; headings/totals possible. Maximum print width of 80 characters means that report lines are not as flexible to define.

DBM requires VERY CAREFUL reading of the user manual. There are multiple uses of FCTN keys which aren't obvious to a new user. Field prompts are not limited, except by screen size. Added help text available. New fields may be added without loss of data; new SETUP must be generated to access it.

I am very hard pressed to say which one is better because the plusses and minuses of both systems tend to balance one another out. The obvious choice is DBM for the large database user. For the occasional user, or one who keeps a lot of smaller lists, then PRK would be my recommendation; it doesn't require as much of the user. And, for me, the math transformations make PRK unique. DBM, on the other hand, would be best suited for the advanced or full-time data base user who is looking for a tool to streamline their recordkeeping requirements and provide them with an easy means of building data files that can be used in more advanced programming applications. Neither system meets my 'ideal', but both have some very useful features worth your consideration.

At the Faire

Nearly 1,500 turn out for exhibition in Chicago dedicated to the 'orphan' computer

By DAVID WAKELY

On Nov. 10, the Chicago TI99/4A Users Group held its second annual 99/4A Computer Faire at Triton College in River Grove, Illinois. Months of preparation for the Faire culminated when the doors opened at 10 a.m. and visitors were admitted to the large exhibit room which held displays by 21 vendors. In addition to being issued doorprize tickets, fairegoers were given free shopping bags with the message "Still Goin' Strong at the 2nd Chicago TI99/4A Users Group Computer Faire, Nov. 10, 1984" printed on the side.

While most of the vendors of TI and third party software and hardware were from the Chicago area, tables were also taken by companies from Michigan, Nebraska, Ohio and Texas. From a list gleaned from various magazines which cover the 99/4A, the Chicago group had mailed vendor applications to just over 100 companies which could be identified as carrying TI-compatible products. Former Chicago group president and Faire coordinator Sam Pincus said that the group was pleased with the 20 percent response rate.

In a sense, preparations for the Faire could be said to have begun last year, when the group had put on the first such event. As it happened, the infamous "Black Friday," the day Texas Instruments announced it was dropping the 99/4A computer, had occurred just two weeks prior to the first Faire. As a result of that, the group was somewhat surprised when just over 1,000 persons, or about three times the number who belonged to the Chicago group at that time, attended the Faire and



Place: Chicago
Subject: TI99/4A
Attendance: 1,500
Exhibitors: 21
Highlights: Plenty

proceeded to strip vendor displays clean of TI software.

Hence, by the time of the second Faire, TI owners had been "orphans" for a year, and the need for a display of "TI power" seemed in order to once again demonstrate the fierce loyalty for which the TI user is known. Through aggressive advertising both in Chicago and over The Source and CompuServe, the Chicago group began drawing attention to the Faire, and TI users from all over began making inquiries as to the location of the site, Triton College. Several local motels were booked up on the evening before the Faire, and by the end of Saturday just under 1,500 persons were estimated to have passed through the doors.

While about 90 percent of the

membership of the Chicago 99/4A Users Group attended the Faire, visitors also came from other states. TI users from all over stopped by the Chicago group booth to say hello. Ed York from the Cin-Day Users Group checked up on our group newsletter; Chris Goodman from the DC group seemed to be enjoying the proceedings; and a small group from Coraopolis, Pennsylvania, stopped to say thanks for the directions to the college from O'Hare Field. The Chicago group booth was busy all day. Winners of three door prize drawings picked up their software packages. Hundreds of free copies of MICROpendium were given away, a top quality Zenith color monitor was awarded to a lucky winner and two arcade game contests drew small

(Please turn to Page 12)

crowds of supporters for their favorite "gamers."

All fairegoers experienced a demonstration that the TI Home Computer is indeed quite alive for those who have stayed active and involved. The Chicago TI Users' Group held a series of tutorial presentations during the day to show the continuing versatility and usefulness of the 99/4A. Seaborn Smith, whose TI-FORTH programs and newsletter column are becoming known to other TI groups, gave an interesting and well-attended introduction to this quite flexible program language. These tutorials were held in a separate room which could seat about 250, and which was usually filled for each presentation.

Between presentations, Faire attendees could observe TI myths of both the past and the future. At the Softmail Inc. booth, for example, was displayed the near-legendary TI 99/8. Don Bynum, former head of TI's Home Computer Division, stated that only 250 "8's" had been built, all of them going either to the design team, TI executives or the production line employees. The TI 99/8 was indeed the home computer hobbyist's dream. According to Bynum, the 99/8 featured 64K of CPU RAM and 16K of VDP RAM, compared to the 99/4A's 256 bytes of CPU RAM (also known as "scratchpad" RAM) and 16K of VDP. This never-released computer also featured a built-in p-Code system and a 10MHz TI-9995 CPU. The built-in BASIC was compatible with Extended BASIC and contained additional commands such as "LINE," "DRAW" and "FILL" for easy graphics generation. When booted up, the TI 99/8 offered several option screens, including choices of p-Code, BASIC or whatever module was plugged into the vertical cartridge port. In design, the 99/8 was reminiscent of the beige 99/4A consoles, yet was both wider and deeper, and featured a full "selectric" style keyboard layout. One of the option screens also offered both "FAST" and "SLOW" (the 99/4A 3 MHz) processor speeds, and did so before other choices. Hence, at one point a TI Invaders cartridge was selected in FAST mode with hilarious results less reminiscent of an invasion than of a blitzkrieg.

An elaborate, and obviously bit-mapped graphics demonstration ran on the TI 99/8 most of the day, and was later revealed as a 180-line BASIC program. When questioned as to why TI never brought the 99/8 to market, Bynum stated that some TI executives doubted that the public would be interested in a home computer with a suggested retail price of \$600. He also stated that he considers the possibility that TI will release the design to someone else as "practically nil," noting that TI would probably not want to see someone else make money on a product they never saw fit to market. On the other hand, during his guest talk late in the day Bynum exhibited a guarded optimism about the future of the 99/4A.

Other vendor booths featured either still available TI software, or new and sophisticated application packages for the 99/4A, ranging from graphic adventure games to useful system utilities. Unisource Electronics, by special arrangement with CorComp Inc., showed off the new 9900 Micro-Expansion system, a unit about the size of two speech synthesizers but packing the power of a "loaded" peripheral expansion box, with a double-density disk controller, RS232 and 32K memory all built in.

Between trips around the vendor tables, TI users could take in some of the other tutorials, such as Sam Pinco's presentation on control codes and TI Writer, or Len Rovner's introduction to Microsoft Multiplan. Traffic was heavy all day between the main room and the vendor area.

During the keynote speech to the largest audience of the day, Bynum, now the driving force behind Softmail Inc. and Texas Peripherals, stated unequivocally that 2.4 million 99/4A units were sold, making it by far the largest selling computer of any kind. The two concerns he reported were the belief that recently up to 1,000 99/4As per day were estimated to be "going into closets," and the rampant epidemic of software piracy. Of the latter, he stated his belief that these so-called "pirates" are actually criminals who are rapidly destroying the third-party marketplace. The possible outcome of this, according to Bynum, could be "less and less quality software" appearing for the 99/4A as programmers see their profits disappear.

On a more positive note, Bynum noted some excellent resources for the TI user, including the International User Group, MICROpendium and especially the new TEXNET service (of which Bynum is the TI Sysop). This new TEXNET will feature an online TI magazine, information about TI user groups, TI news and an active software exchange. In fact, Bynum noted that, despite the few upgrades to TEXNET over the past year, the

TI program exchange is still the Number 3 database on the Source in terms of use. TEXNET will also feature credit-card purchasing of new, inexpensive (\$4.95-\$9.95), downloadable software, and Bynum stated that programmers will be offered 20 percent royalties for their work if selected for inclusion in this service.

Source subscribers who have dropped their membership may be reinstated by contacting the Source and giving the appropriate credit card number.

Bynum fielded questions on the future of TI's support for the 99/4A.

He noted that with other consumer products TI has given up to five years of exchange service, and, while making occasional disparaging or humorous comments about TI's marketing philosophy, he described their corporate integrity as "incredible."

(NOTE: The talk with question-and-answer session was more than 90 minutes long, and user groups or other interested parties may obtain a VHS-format tape of the session by sending \$25 to the Chicago TI 99/4A User's Group, P.O. Box 578341, Chicago, IL 60657.

And what of the future for the TI user and TI user groups? Was there

must indication that there would still be interest in the 99/4A in, say, another year? The Chicago group signed up more than 40 new 1985 members at the Faire, and, when asked if another such event could possibly be in the plans for next year, Chicago group president Dave Wakely commented, "You bet, and next year we go for TWO days!"

Ed: Wakely is an officer in the Chicago 99/4A Users Group which hosted the Faire.

TIPS FROM THE TIGERCUB

#16

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TIGERCUB SOFTWARE
156 Collingwood Ave.,
Columbus OH 43213

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These Tips are being mailed, together with my new catalog #5, to every Users Group that I know of. I hope that you will make both the Tips and the catalog available to your membership. I am sorry that I cannot take out paid ads in your newsletters, but to advertise in each one of them would cost me more than I have made in the past 6 months, and I would not get enough business to break even.

If you would like to continue receiving these Tips, put me on the mailing list for your newsletter, and give me some indication that my Tips are really reaching your members and not going into someone's private file. If I receive enough business from this mailing to pay for its cost, I will then continue to send you my Tips. If not, this will be the last issue of the Tips from the Tigercub.

Copies of my catalog are available for \$1.00, which is deductible from your first order. I have over 130 absolutely original quality programs in Basic, many of them now also available in XBasic, on cassette or disk for only \$3.00 each plus \$1.50 per order for cassette, package and postage, or \$3.00 for diskette, package and postage (higher overseas). I give one-day service, I give bonuses for repeat orders, I give bonus programs on diskette orders.

In addition, any User's Group member who mentions his/her users' group when sending me an order before 1 Jan. 1985 may deduct 10% from the cost of the programs.

Tips from the Tigercub #1 thru #14 are now available, with more added, as a diskfull of 50 programs, routines and files for only \$15 postpaid.

I have also now completed my NUTS & BOLTS disk of 100 XBasic utility subprograms in MERGE format, ready to merge into your own programs, for just \$19.95 postpaid.

In The last Tips, I mentioned that I wished I knew who to credit for that remarkable routine to redefine the cursor. Dave Peden has written me that credit should be given to Terry L. Atkinson of 28 Savona Ct., Dartmouth, NS B2W 4R1 CANADA.

And I would like to strongly recommend that you support the 99'ers Users Group Association, 3535 So. H st., #93, Bakersfield CA 93304. They are a strictly non-profit group, devoting a lot of time and effort to helping us all, and they publish a great newsletter..

Every Tips must include a bit of music, and my grandson has requested that I pass this one on to all other two-year olds.

```
100 !ALPHABET SONG - by Jim Peterson
110 DIM M(21)
120 CALL MAJORSCALE("C",N())
130 CALL SCREEN(5):: DISPLAY
  AT(24,1)ERASE ALL:"READY -
  TYPE THE ALPHABET" :: CALL M
  AGNIFY(2)
140 CALL KEY(3,K,ST):: IF (S
  T(1)+(K<65)+(K>90)THEN 140 :
  : CALL SPRITE(#1,K,16,96,120
  ):: IF K=87 THEN GOSUB 220 E
  LSE GOSUB 200
150 IF (K=90)$(FLAG=0)THEN 1
  60 ELSE 140
160 FLAG=1 : M$="C115566B5C
  443322D1" :: T=150
165 FOR J=1 TO 18 :: CALL SP
```

```
RITE(#J,64+J,INT(118RND+6),9
6,128,J45,J85)
170 X=ASC(SE6$(M$,J,1)):: IF
X>50 THEN T=150*(X-64):: GO
TO 190
180 X=X-48 :: CALL SOUND(T,N
(X),0)
190 NEXT J :: FLAG=0 :: CALL
DELSprite(ALL):: GOTO 140
200 Y=VAL(SEE$(("115566544332
22215543325332",K-64,1))
210 CALL SOUND(500,N(Y),0)::
RETURN
220 CALL SOUND(500,N(5),0)::
CALL SOUND(500,N(5),5):: CA
LL SOUND(500,N(4),0):: RETUR
N
230 SUB MAJORSCALE(K$,N())
240 F=VAL(SEE$(("110123131147
165175196",POS("ABCDEF",K$,
1)43-2,3))
250 C$="10101101010110101101
0101101011010101"
260 FOR J=1 TO 36 :: IF SEE$(
C$,J,1)="0" THEN 280
270 X=X+1 :: N(X)=F#1.059463
094*(J-1)
280 NEXT J :: SUBEND
```

Lines 230-280 of that routine are an example of the kind of handy-dandy subprograms you will find on my Nuts & Bolts disk.

We haven't had a Tigercub Challenge for some time, so -

How can you store a hundred or more values of any size, positive or negative, integer or non-integer, even in exponential notation, without dimensioning an array or opening a file?

Now, how can you link your program to another by a RUN statement, thereby losing all data, and recover those values? Yes, I know you can save them on the screen and read them back, but can you find a better way?

Here's a little demo program of how action can be created by the repetitive redefinition of characters. I call it ETERNITY.

```
100 CALL CLEAR :: CALL SCREE
N(2):: CALL COLOR(1,16,1)::
CALL CHAR(33,"",34,"",35,"",
36,"")
120 FOR R=1 TO 12 :: CALL MC
```

```

HAR(R,R+4,33,26-R*2):: NEXT
R
150 FOR R=13 TO 24 :: CALL H
CHAR(R,29-R,34,(R-12)*2):: N
EXT R
180 FOR C=5 TO 16 :: CALL VL
HAR(C-4,C,35,34-C*2):: NEXT
C
210 FOR C=17 TO 28 :: CALL V
CHAR(29-C,C,36,C*2-33):: NEX
T C
225 FOR J=0 TO 7 :: A$(J+1),
B$(8-J)=SEB$("00000000000000
",1,2*J)*"FF" :: NEXT J
230 C$(1),D$(8)=RPT$("80",8)
:: C$(2),D$(7)=RPT$("40",8):
: C$(3),D$(6)=RPT$("20",8)::
: C$(4),D$(5)=RPT$("10",8)
240 C$(5),D$(4)=RPT$("08",8)
:: C$(6),D$(3)=RPT$("04",8):
: C$(7),D$(2)=RPT$("02",8)::
: C$(8),D$(1)=RPT$("81",8)
250 FOR C=2 TO 15 :: FOR J=1
TO B :: CALL CHAR(33,A$(J),
34,B$(J),35,C$(J),36,D$(J)):
: NEXT J :: CALL SCREEN(C)::
NEXT C :: GOTO 250

```

Next, I would like to share with you a gem of a "why didn't I think of that" routine which John Taylor sent me.

```

100 ! 28 COLUMN TEXT ROUTINE
IN EXTENDED BASIC (EASILY
CONVERTED TO BASIC) BY JULIE
PACK, B.U.G., P.O. BOX 1402
PALM BAY, FL 32906
110 ! ENHANCED BY JET
SMOALS 99'EMS, P.O. BOX 2928
MUSCLE SHOALS, AL 35662
120 CALL CHAR(64,"00282828")
130 ! PROGRAM TO COPY STARTS
HERE
140 CALL CLEAR :: X=-1
150 RESTORE
160 IF X>=21 THEN X=1 :: CAL
L WAIT
170 READ MESS$
180 IF MESS$="P" THEN DISPLA
Y AT(X+2,1):Z$ :: X=X+4 :: Z
$="" :: GOTO 160
190 IF MESS$="ZZZ" THEN DISP
LAY AT(X+2,1):Z$ :: CALL WAI
T :: END
200 IF LEN(Z$)>0 THEN MESS$=
Z$&"&MESS$
210 X=X+2
220 IF X>=21 THEN X=1 :: CAL
L WAIT

```

```

230 IF LEN(MESS$)<29 THEN DI
SPLAY AT(X,1):MESS$ :: Z$=""
:: GOTO 160
240 FOR A=1 TO 29
250 I=POS(MESS$," " ,A)
260 IF (I=0 OR I>29)AND A=1
THEN A,J=29 :: GOTO 290
270 IF I=0 OR I>29 THEN A=29
:: GOTO 290
280 J,A=I
290 NEXT A
300 IF X>=21 THEN DISPLAY AT
(X,1):SEG$(MESS$,1,J-1):: X=
-1 :: CALL WAIT :: GOTO 320
310 DISPLAY AT(X,1):SEG$(MES
S$,1,J-1)
320 IF SEG$(MESS$,J,1)=" " T
HEN I=1 ELSE I=0
330 Z$=SEG$(MESS$,J+1,163)::
MESS$=Z$ :: IF LEN(Z$)>28 T
HEN X=X+2 :: GOTO 240
340 GOTO 160
350 DATA "THIS SHORT ROUTINE
WILL ENABLE YOU TO WRITE LO
NG TEXT MATERIAL IN YOUR DAT
A STATEMENTS SO YOU WON'T H
AVE TO WORRY ABOUT COUNTING"
360 DATA "THE LENGTH OF YOUR
SENTENCES ALL THE TIME. TH
IS ROUTINE WILL AUTOMATICALL
Y EDIT YOUR TEXT TO FIT A 28
COLUMN SCREEN."
370 DATA "A SUGGESTION- IT I
S A GOOD IDEA TO PUT A QUOTE
AT THE BEGINNING AND END OF
THE DATA STATEMENTS SO YOU
WON'T HAVE TO WORRY ABOUT"
380 DATA "COMMAS LIKE THIS ,
, AND THEY WILL REMAIN IN Y
OUR TEXT PROPERLY."
390 DATA "THIS ROUTINE WILL
ALSO CLEAR THE SCREEN (WHEN
FILLED) AND CONTINUE READING
YOUR DATA AND DISPLAYING YO
UR TEXT ON THE NEXT SCREEN."
400 DATA P
410 DATA " TO START A NEW P
ARAGRAPH ENTER THE LETTER @
@ AS A SEPERATE DATA STATEME
NT, THEN INDENT YOUR TEXT ON
YOUR NEXT NEXT DATA"
420 DATA "STATEMENT 2 OR 3
PAGES (IF DESIRED).",P,"TO S
KIP LINES,",P,"JUST ENTER @P
@",P,"WHERE EVER YOU WANT TO
",P,"SKIP."
430 DATA P."MAKE SURE THAT Y
OUR VERY LAST DATA STATEMENT

```

```

IS @ZZZ. AND JUST REPLACE
THESE DATA STATEMENTS WITH"
440 DATA "YOUR OWN.",P,"YOU'
LL ALSO FIND THIS ROUTINE IS
MOST USEFUL WHEN CONCATENAT
ING STRINGS, E.G., @ELIZAE T
YPE PROGRAMS-",P
450 DATA "AN EXAMPLE:",P,"@#
=@JACK AND JILL WENT UP@", "B
$=@THE HILL TO FETCH A@", "C$
=@PAIL OF WATER.@", "D$=A@B$
&C$&D$", "PRINT D$",P
460 DATA "JACK AND JILL WENT
UP THE HILL TO FETCH A PAIL
OF WATER.",P,P,P,"HAPPY PRO
GRAMMING!"
470 DATA ZZZ
480 SUB WAIT
490 DISPLAY AT(24,8):"PRESS
ANY KEY"
500 CALL KEY(0,K,S):: IF S=0
THEN 500 ELSE CALL CLEAR
510 SUBEND

```

Thank you, Julie and John. This is becoming one of the most useful routines on my utility disk. I was preparing a disk of PD programs for our Ub library. Some of them needed extra instructions, so I typed them out on Ti-Writer, so that people could run them off on their printer. Then I remembered that some folks don't have printers. So -

```

50 CALL CLEAR :: INPUT "FILE
NAME? DSK1.":F$
60 DIM B$(150):: OPEN #1:"DS
K1."&F$,INPUT, DISPLAY ,VAR
IABLE 80
70 A=A+1 :: LINPUT #1:B$(A)
80 IF EOF(1)=1 THEN B$(A+1)=
"ZZZ" ELSE 70
and change line 170 to -
170 @=@+1 :: MESS$=B$(@)

```

And there you have a quickie program to check out those DIS/VAR 80 files that show up on your disks under filenames that you can't remember using.

MEMORY FULL IN LINE 32767

John P.

HOOSIER USERS GROUP DIRECTORY

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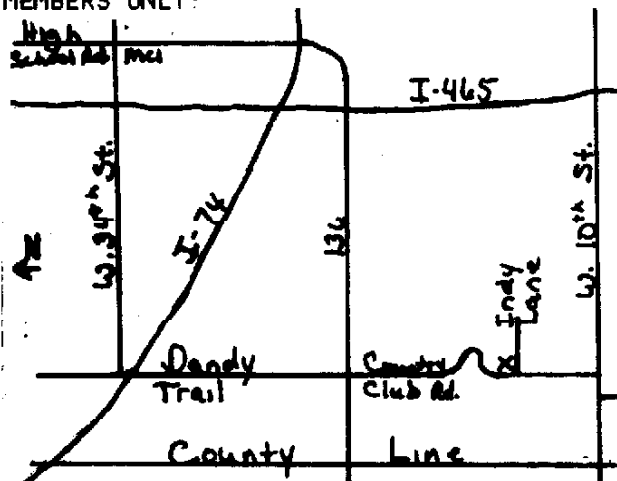
(About 1800 North Country Club Road)

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!



HUGbbs INFORMATION

317-631-994A

The HUGbbs operates on a 24 hour basis.

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
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- 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.

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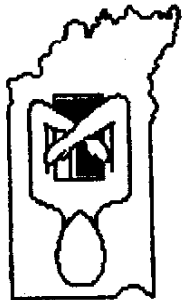
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Make check or money order payable to HOOSIER USERS GROUP. Send completed application to:

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P. O. Box 2222
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