

Chicago Times

Newsletter of the Chicago TI-99/4A Users Group

May – June, 2000

Editor: Ernest Pergrem



The Prez Sez...

by Vic Steerup

You have all seen him on television, the little monkey who disturbingly morphs into a human, while the voice-over narration says "he will give up food, sleep, even sex for it. What is "it?" His computer, of course. Must be a TI user. I know I sure burn the midnight oil on mine. It is hard to explain when my wife sticks her head in the office, and asks "what are you DOING in there all this time?" and the only thing on the screen are lines of code, the enjoyment and satisfaction of writing a well running program, or editing an existing one to my satisfaction.

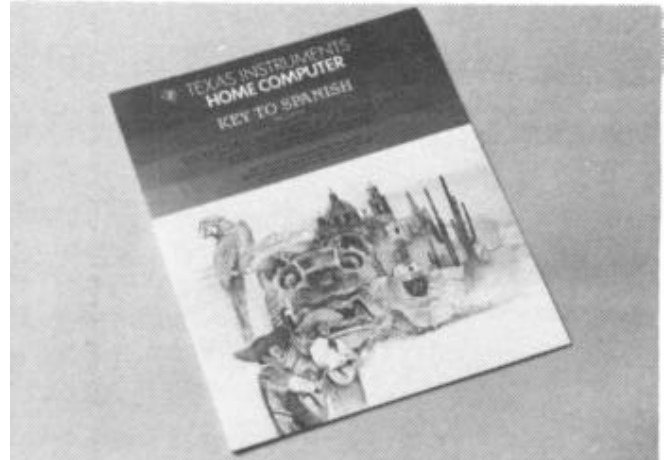
Two cases. Micropendium published a nice, 3-column disk catalog label-printing program. For some reason, it had rem'ed out printer control statements. Curious, I enabled them one at a time, discovering that they set the printer to pica, elite, condensed, NLQ, single and double strike modes. (great for that ribbon that is turning gray!) As if found constantly editing, then running, the program was cumbersome, I set up a simple "menu" routine to call each mode at will. Now I could easily go from mode to mode. If you do something once-OK. But if you have to do it twice or more, THAT'S THE COMPUTERS JOB.

The second case involves Infocom text-adventure games. These will load out of DSK1 by default, and offer no way to change the load path. Trying to start the program from DSK2, or a RAM disk is futile, as the DSK1 light will come on, and the program asks for the disk. Noticing the drive light comes on after I

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Key To Spanish Users Manual

Never Released TI-Software Uncovered

By Charles Good, Lima Ohio User Group

In 1989 and 1990 I wrote a series of newsletter articles about TI vaporware; products that were announced and/or developed but never sold. And now more official TI vaporware has surfaced thanks to the efforts of Bryan Roppolo. He surfs the Internet looking for old TI 99/4A employees and personalities and he has come up with some interesting stuff. He recently sent me a GRAM Kracker dump of TI's Key to Spanish 1 module. Until now no one has ever seen this product. Mike Wright, one of the most knowledgeable 99/4A archivers and historians told me when I showed it to him, "I was absolutely convinced I would never see this product. You really made my day!"

Here is what the official TI newsletter sent to registered 99/4a owners says about Key To Spanish, quoted from the July 1983 issue: "The first language teaching software package for the TI-99/4A is scheduled to be available this summer. The package, Key To Spanish, is designed to teach vacation travelers and business people Spanish as it is spoken in Central and South America. "Emphasis on words and phrases most common to day-to-day Spanish usage make this package ideal for the occasional traveler. You finish typing in a command and hit ENTER. An introductory lesson and six subsequent

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The Prez Sez...

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realized these programs put a lot of mileage on the drives. This is necessary, as once the program is in memory, it must always look up data. Using a sector editor, I found the reference, in ASCII, in the file GAME2. Using a copy of the disk, I edited these to read DSKD, the available logical disk in my RAM disk. Viola! It worked like a charm! Infocom games not only load quickly, but also instantly respond to the ENTER key. Now the biggest delay is the game player staring at the screen, trying to figure out what to do next.

These two are examples out of many as to why I love my TI.

Key To Spanish

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Lessons are included in Key To Spanish. Pronunciation and vocabulary building are major areas of concentration. The package consists of four cartridges and four cassette tapes, which are automatically controlled by the program cartridge. Uses of cassette tapes provide the user with a clear, distinct pronunciation of every word. Screen graphics illustrating words and phrases add to the teaching effectiveness of Key To Spanish. "Users will find that Key To Spanish can provide them with instruction similar to a beginning Spanish course. Users may control the learning pace of the software package by disconnecting the cassette player from the computer and operating it manually. "A 150 page instruction manual with supplementary exercises is included with the package. The manual contains a Spanish/English, English/Spanish glossary. "Key To Spanish has been developed by TI under license with Westinghouse Learning Corporation. The suggested retail price is \$149.95.

Similar information is published in 99er v2#5. Both articles show a picture of the cover of the Key To Spanish notebook binder. According to Mike Wright's CYC, TI assigned the product designation PHL7012 to Key To Spanish. PHL designations are given to "libraries" of command modules sold together in a single three ring binder. The CYC suggests the command modules may have been designated "PHM3126 Lingaphone I, II, II, IV (Spanish)" although it is not entirely clear if this is the same thing as Key To Spanish.

What is now available is only the first cartridge. Bryan tells me that he is able to acquire the other 3 cartridges. He does not have access to the audiotapes or printed materials.

Editor's Note: The complete article which contains a description of "Key To Spanish 1" can be found in the Articles Section of the Chicago TI-99/4A Users Group BBS.

TI Resources on the Net

It's doubtful that this newsletter could exist if I had to rely solely on the small number of user group newsletters for material. Almost all of the information that I now receive about the TI and Geneve comes to me electronically through my connection with the Internet. Even most of the TI software and hardware that I've purchased this past year has been ordered without putting one word to paper.

Fortunately a number of other TI'ers must feel the same way.

Bruce Harrison hosts "The TI Survivors Page". The page aptly titled "Dedicated To Your Survival" includes access to the TI Frequently Ask Questions, a list of User Groups and Vendors, along with other TI/Geneve related web sites. Bruce may no longer program for the TI, but he is an absolute madman with the HTML.

members.aol.com/~rotenecat1/survive.html.

Definitely not for the beginner is Thierry Nouspikel's "TI Tech Pages". Nouspikel himself includes this warning on the first page "To follow the discussion you'll need some knowledge of digital electronics and notions of assembly language programming". However if you've ever wondered how GROMS work or lusted over knowing the internals of the TMS9919 Sound Generator you'll eat this site up.

One of the really great things about the "TI Tech Pages" is that all of the html and program source code, which is located at the site, is available for download as a Zip file.

www.stanford.edu/~thierry1/ti99/titechpages.htm

Chicago TI-99/4A Users Group Officers

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Bulletin Board System

1 847 741-6213

300/2400/9600/14400 – 8N1 – 24 hours/7 days

Ernest Pergrem, SysOp
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PC99 - Stage 6 Released
CaDD's TI-99/4A Emulator For The PC

On April 17th, CaDD Electronics announced the release of PC99 Stage 6. All existing PC99 customers will be entitled to special upgrade pricing from Stage 5 to Stage 6. The upgrade price of \$9.94 includes shipping and handling to anywhere in the world. The offer is good until July 31, 2000. Customers who purchased PC99 on or after January 1, 2000 have been sent a free upgrade to Stage 6.

The main features of Stage 6 include:

- Multiple ROM banks, based on Michael Becker's HSGPL card.
- John Guion's ROMs for the TI DC and RS232 are supplied under agreement with the Guion family.
- TI-99/4A version 2.2 console ROM/GROMs are included. Thanks to Dan Eicher.
- Delay times can be set to deal with "fast" (> 500MHz) processors.
- A load interrupt command has been added.
- The AMS card emulation has been improved thanks to work done by Paul Schippnik.
- Both pc99 and pc99a (I) now respond to sound commands from >8400->84FE. This matches the TI hardware more accurately.
- Sound has been moderately improved so that "wrapping" takes place at higher frequencies than before.
- Some utilities have been improved; e.g. gstrip allows hex values on the command line.
- PC99 user documentation is now supplied as an Adobe Acrobat pdf file

The CaDD web site has been updated to reflect Stage 6 as the current product. In the announcement Mike Wright also stated "this will be the last DOS-based version of PC99. All future development will be under the Windows platform. There is no date projected for a wpc99 release".

**CONVERT ATARI GAME ON DISK TO RUN
WITHOUT SPECIAL LOADER**

By Tony Knerr

Editors note: This was recently posted on the Online TI-99/4A Users Group by the author. Though the information is a few years old it fits nicely with Vic's recent demonstration of the Extended BASIC GPL loader.

Do you have the disk or disks with the Atari games that load from Extended Basic? If you do, I'm sure you're not really pleased with that loader (it seems to take about an hour and a half to load that object code!) Well, hope is in sight, those files can be converted rather easily to work from Editor/Assembler option 5 or any other similar program image loader like FUNNELWEB or XBOPT5. The game files are already in program

image format; they just don't contain the necessary file header information on where to load and where to start execution. The loader decides where to load the game and where to begin execution. Fortunately the first few bytes of each game file are not used by any of the programs and we can change them to the necessary file header information. (For those who are interested, the first 20 or 30 bytes are the Cartridge headers left over from when the games were in Cartridge form.) To make the changes use a sector editor or file editor (Disk Utilities works real well) to edit the beginning bytes of each file as listed in the chart below. You'll find that the files usually start with something like AAFF 0000 0000 or AA01 0000 0000 or AA01 0100 0000. If you see that sort of information, you'll know you're at the start of the file. Replace the string at the start of the file with the string from the chart, and write the sector back to the disk. For two-file games, you need to change both files. Please do not use your original disk to make the changes, copy the files to another disk and work with the copy disk in case you make a mistake! After the changes are made, you can load the games from Editor/Assembler option 5 (or equivalent) by running the file ending with a 1. For example, type "DSK1.DK1" <enter> from the "File Name?" prompt to run "DONKEY KONG" after selecting 5 from the Editor/Assembler menu. The games load and run now without the need of the special loader. We also

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THE CHICAGO TI-99/4A USERS GROUP

Presents the

**18th Annual
Chicago TI International
World Faire**

Supporting the TI99/4A and 9640

November 11, 2000 - 9:30 a.m. - 4:30 p.m.

Evanston Public Library
1703 Orrington at Church
Evanston, Illinois

**Vendors-Demonstrations-Seminars-User Groups
Door Prize Drawings**

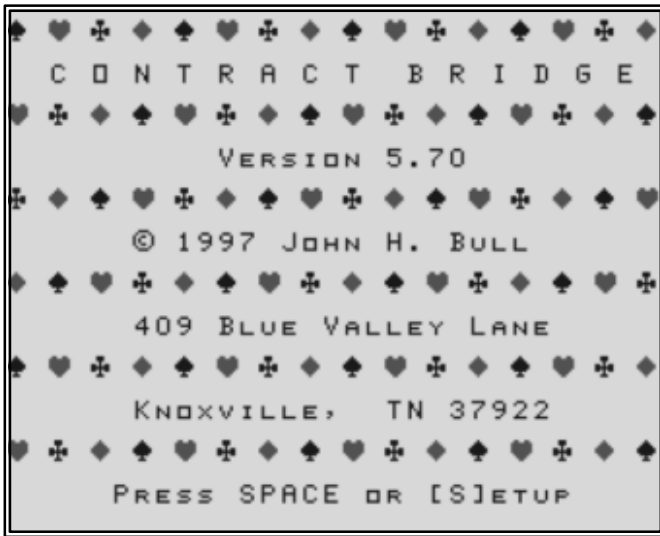
For further information contact:
Hal Shanafield (847) 864-8644
hals@shark.dls.net

Contract Bridge, Ver. 5.7

John Bull

BULLJH@delphi.com

409 Blue Valley Lane, Knoxville, TN 37922



Version 3 of Contract Bridge was originally reviewed in both the February and March, 1990 issues of MICROpendium. Since then John has continued to tweak and polish his “baby”. One evidence of this is that while I was in the process of doing this review on version 5.7, John was busy releasing version 6.

I would like to say that I approached this review with a full and complete knowledge of Bridge, but the reality is that I’m an absolute novice when it comes to this card game.

Unlike Joe Simmons, who wrote one of the earlier reviews, I am not a Bridge player. Until I decided to do this look at John’s program my only exposure to the game was a casual glance at the Bridge column in the daily paper and in all honestly this was only because it was in the comics section.

Of course to really enjoy the program I had to actually make the attempt to learn Bridge.

I found the Tutorial option to be of great help, but due to the use of several terms that weren’t explained in the program I enlisted the aid of an Internet web site to fill in the blanks. It was also convenient having some fellow workers whom were Bridge players.

It took me a couple of hours to really feel comfortable with the Tutorial before I moved onto the second option, which is “Rubber”. Rubber, which is the casual version of Bridge, is simply means, “best two out of three” and describes the method in which the final winners are determined.

This option allows you to practice your bidding, and play strategies while the TI serves as both your partner and opponent. After the hands are dealt and the bids are complete you have the option to redo the bidding; dealing or just plain quit.

Once the hands have all been played you are given the option to look at how the hands were initially dealt and even shift the hands so that you can replay the round with an opponent’s hand.

Once you feel ready to compare your skills to a real person you can move onto the third option which is “Duplicate”. This presents you with 50 boards, which John has already played. You won’t be playing against John, but instead attempting to best the scores that he achieved on each board. Because you can save boards in both Duplicate and Rubber, you can share them with your other TI Bridge playing buddies to see who can achieve the highest scores.

Options are also available to print the documentation, change paths, and examine the boards and a number of other things.

I’ve not had the chance to look at any of the previous versions of this program, but John’s love of the game really shines though in this version. For the would-be Bridge player John has provided a class environment in which to learn and develop your skills.

You may obtain a copy of Contract Bridge 6.0 by sending John an email or letter. Although John isn’t asking for compensation, my recommendation is to enclose a dollar or two to help defray postage and media costs.

Interview: John Bull

Editors Note: While reviewing Contract Bridge I took the opportunity to ask John a few questions about the program and himself. He was kind enough to respond to my email with the following information.

ELP: *Can you give me a brief history of Contract Bridge?*

JHB: Starting about 1985, there has been at least a dozen versions of Contract Bridge. It just happened that in 1997 I decided to apply for a copyright. In the winter of 1989-90 Version 3.00 was released as fairware with a suggested price of \$20. It was reviewed in MICROpendium by Harry Brashear in Feb. 1990 and Joe Simmons in March 1990. As a result, I sold 25 or 30 copies of V.3.00. More recently I have released it as freeware and given away about 15 copies of V.5.60, the one you have. I keep tinkering, making it a little smarter - the latest is V.5.70. I am mailing you a copy.

ELP: *Why did you decide to write a Bridge program?*

JHB: Bridge has been a life-long hobby - my parents taught me to play - and TI programming became a hobby as soon as I got a TI-99/4a in 1983. The first

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John Bull

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version of Contract Bridge (V1.00 ?) was in Extended Basic only but I found that a random deal of the hands took almost a minute in X/B. With Mini Memory and its line-by-line Assembler, after a few months of learning A/L and picking the brains of people like Mike Dodd and Art Gibson, I came up with a program that would deal fast, kept on a cassette recorder. Gradually I have added a PEB, floppy drives, HRD, etc. and have kept working with Contract Bridge, primarily for the fun of programming and playing the game. Not until 1990 did it occur to me that others might enjoy it.

ELP: *I'm always curious as to the background of the programmer. What's yours?*

JHB: I am a retired Episcopal Minister who once wanted to be a mathematician and worked as a Chemical Engineer for 8 years before I entered the ministry. At age 82 I suspect that I have developed Contract Bridge as far as I can. RUBBER uses all but 540 bytes of the 24K of available program memory. I play and tinker almost every evening. At 82, I have decided to stick with the TI, although my wife surfs the net with a modern PC only 8 feet away

Atari Games

(Continued from page 3)

have the added bonus in that the games will still run from the special loader, the changes do not affect the operation of the loader. Happy game playing!

Game	File	Patch	to	Start	of	File
Centipede	CP1	0000	1FFA	A006	0460	A056
Dig-Dug	DD1	FFFF	1FFA	A006	0460	C03C
	DD2	0000	1FFA	C006		
Defender	DF1	0000	1FFA	A006	0460	A072
Donkey Kong	DK1	FFFF	1FFA	A006	0460	A086
	DK2	0000	0FFA	C006		
Jungle Hunt	JH1	FFFF	1FFA	C006	0460	C020
	JH2	0000	1FF4	E006		
Moon Patrol	MP1	FFFF	1FFA	C006	0460	C0FE
	MP2	0000	1FF4	E006		
Ms Pacman	MS1	FFFF	1FFA	C006	0460	E0AE
	MS2	0000	1FF4	E006		
Pacman	PM1	FFFF	1FFA	A006	0460	A052
	PM2	0000	0FFA	C006		
Pole Position	PP1	FFFF	1FFA	A006	0460	A060
	PP2	0000	1FFA	C006		
Protector 2	PT1	FFFF	1FFA	C006	0460	DE3A
	PT2	0000	1FF4	E006		
Shamus	SH1	FFFF	1FFA	A006	0460	CBDA
	SH2	0000	10FA	C006		

The Cyc

CaDD Electronics

45 Centerville Drive - Salem, NH 03079-2674

I wanted to do a dispassionate review of Mike Wright's Cyc project, I really did. However I was as overwhelmed in trying to decided how to do the article, as I was when I initially viewed the Cyc. I mean, how do you begin to explain something that contains such a massive amount of information?

One of my fellow employees suggested "I laughed, I cried". Well I did neither, but my eyes continue to light up every time I pop the CD into its drive.

The Cyc is Mike Wright's attempt to bring order to chaos. The Cyc itself is an alphabetical listing of phrases, titles, people and all things TI related.

If you were seeking information about GROMS a look at the Cyc would return the reference:

How They Work..... MP:4:1:24

You would then dig through your collection of MICROpendium, open Volume 4, Issue 1, turn to page 24 and everything that you ever wanted to know about GROMS would be revealed.

But as impressive as it is, the Cyc is really only a small part of what's on the CD.

Looking through the different directories I was amazed to find PC99 disk images for over 500 Plato and TI disk titles. There are GRAM images for modules from Asgard, Atari, Disney, Navarone, and a dozen other 3rd party vendors as well as Texas Instruments. All of these are usable with PC99 or can be ported to your 99/4A, and sector edited for use with a GRAM Kracker, P-Gram or similar GRAM device.

Ever wanted the complete On-Disk series from Emerald Publishing? You'll find all of them along with issues of 99er and Home Computer Magazine.

Want Monty Schmidt's "Technical Drive", Mickey Schmitt's "Getting The Most From Your Cassette System", or Bruce Harrison's complete "Art Of The Assembly" series? It's here, plus dozens of other manuals, books and references. There's even a 74 page listing of books that were published for the TI-99/4A.

Do I seem a bit effusive about this product? I'm sorry. I mean to sound a lot effusive. Putting together a work of this depth requires a huge amount of time, effort and dedication. Far more than Mike will ever realize a financial return for. Putting it bluntly, at \$24.95, this is a steal. If you don't already own it, and have access to a PC, buy it and give yourself an early Christmas present.

By the way. If you plan on printing any of it out, buy some extra printer ribbons because you're going to need them.

EASY "MBP" PROJECT

By Lew King

One of the things that keep our TIs useful and interesting after nearly twenty years, is the plethora of third party peripheral cards. One of the most interesting and useful of the cards, is the MBP clock card. The clock/calendar feature of the card is handy enough, but the real beauty lies in the eight analog inputs, with eight-bit analog to digital conversion. This may seem a little daunting to folks not familiar with electronics, but our little project will show how it is done. This is an easy digital thermometer implementation, which can be done by most everyone in less than an hour.

First we need a floppy disk cable, the type used for a 5.25" disk drive. A newer type PC cable will work, just ignore or cut off the end with the twisted wires. The end that goes to the drive will fit the MBP card edge connector. Make sure the connector does not have a key, that little strip of plastic that goes in a slot in the drive connector. The MBP connector does not have a slot, and trying to add one may damage the card. With the MBP card installed in the PE Box, the even numbered connectors are on your right, when facing the front of the box. That is the component side. The numbering starts at 2 at the bottom, and increments up by twos. Mark the end of the cable to be plugged to the card where position 2 is, and also to be on the safe side, mark the top. Next use an ohm meter or continuity tester, touch one lead to the connector that you marked 2, and locate the corresponding terminal on the smaller 314 position pin connector at the other end of the cable. Mark this 2 also. It may help to wrap masking tape around the plastic shell on the connectors so you can write on them with a pen. The bottom three positions, 2, 4, and 6, are grounds, or returns. The 12th position up or number 24 is the +5 volts. The other 8 positions In between are analog inputs, not in numerical order. Refer to appendix F of the MBP user manual.

The heart of our project is the National Semiconductor LM34DZ Fahrenheit, or LM35DZ Centigrade temperature sensor. This sensor comes in a small T092 package, and looks like an ordinary

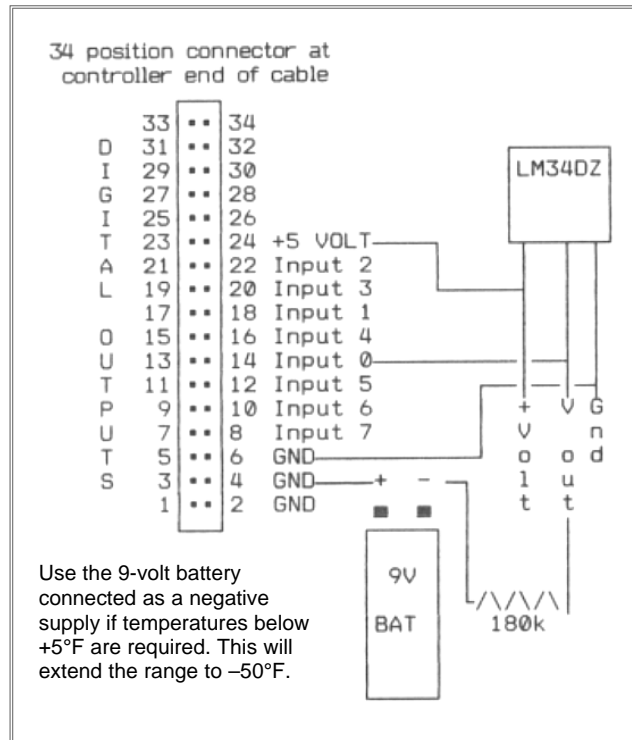
transistor. It will operate over a range of +5° to +300° F, with no other external components. Accuracy is guaranteed to 1.0° at 77°F, and $\pm 1\frac{1}{2}^\circ$ over the full range. Operating voltage is from 5 to 30 volts with a current draw of 75 μ A (0.000075) A. Output is .01 volt per degree, .70 volts would be 70°F. Suitability for remote applications is claimed, although no limit on wire length is specified. There should be no problem extending the leads 20 or 30 feet.

With the flat side of the sensor facing you, with the leads pointing down, they are labeled from left to right +5V, V out, GND. Solder a few inches of 22 gauge solid wire to each lead. Standard house telephone wire works well. Use the red for +5V, green for ground, and yellow for V out. Put short lengths of heat shrink tubing on each lead to insulate the bare wires. Push the red +5V wire into hole 24 of the cable, the green ground wire into 2, 14, or 6, and the yellow

V out into any one of the 8 inputs. Run the voltmeter program; select 4, continuous update on all channels. The channel you chose for input will read 0.70 volts, or whatever your room temperature may be. Warm it up with a hair dryer, and you will see the temperature go up. Put it on an ice cube and it will go down. Notice that the other channels are probably something over 1 volt. This is because the unused inputs are floating. Use 4.7K ohm resistors (value not critical) to tie all the unused inputs low to one of the ground pins. All the unused channels until then read zero.

So far we haven't done anything terribly useful, but to illustrate the basic

operation of the temperature sensor and the MBP analog inputs. Now take another one and connect it like the first, except to another input. Put the second one in a wet cotton ball and blow a small fan, such as a CPU fan, on it. From the difference in temperature between the two, the relative humidity can be calculated. This is a modern digital version of the sling psychrometer. Concerned about heat failures inside the PE Box? Put another one in there to monitor the inside temperature. How about one in the freezer, or the furnace plenum, or anywhere else you would like to monitor the temperature. With a little thought a skilled Extended BASIC programmer could



(See Easy MBP Project on next page)

Meeting schedule for the remainder of 2000

May 6th June 3rd September 2nd October 7th December 2nd

All meetings are 12:30 PM to 4:30 PM - Evanston Public Library - 1702 Orrington - Evanston, IL

Application for Membership

Below you will find an application for membership in the Chicago TI-99/4A Users Group. Active membership entitles you Chicago Times subscription, access to the group's library of programs, attendance and special club activities for one year.

New memberships and renewals are \$21.00 per year. Make check or money order payable to Chicago TI Users Group. Send completed application to:

Chicago TI-99/4A Users Group
Attn: Membership
P.O. Box 7009
Evanston, IL 60204-7009

Name: _____
Address: _____
City _____ State _____ Zip _____ -- _____
Phone: _____ E-Mail: _____

Easy MBP Project

(Continued from previous page)

write a routine to log the temperatures to disk at regular intervals with the time and date.

Temp: Wet	Temp: Dry	%Rel Hmdy
40	50	10
45	50	65
50	60	50
55	60	75
60	70	55
65	70	75
70	80	60
75	80	78
80	90	65
85	90	82
90	100	70

This small chart is only an approximation of the relative humidity from the difference in temperature between the dry sensor and one in a wet cotton ball.

Editors Note: The original text of Lew's article, in TI-Writer format, is available in the Articles section of the Chicago TI-99/4A Users Group BBS. Callers may also download the VOLTMETER and TEMP programs as well as other MBP related material from the MBP file transfer area.

Bell Expands Support for Community

Richard Bell's Company has reached agreements with two TI vendors to assume service and marketing responsibilities for their various products.

Most Recently, Don O'Neil, of Western Horizon Technologies, made public his decision to transfer all matters related to the TI/Geneve SCSI project to Bell's company. O'Neil indicated that the growth of his primary business, which has resulted in less time to devote to the project and his desire to provide the community with quality service, led to his final decision. Effective with the announcement, Bell will be responsible for future development as well as all sales and service-related issues for the WHT SCSI Controller.

Earlier Bell had posted a notice to his Hidden Reef BBS indicating that he had secured rights to distribute Bill Shore's XB Module Expander kits. The kit, which was reviewed by Harry Brashear in the December 1990 issue of MICROpendium, has not been marketed for several years.

Kit availability and pricing can be obtained by contacting Richard Bell's Company at the address listed on the back of this newsletter. Pricing is also available, upon request, for fully assembled units.

Chicago TI-99/4A Users Group
PO Box 7009
Evanston, IL 60204-7009

PLACE FIRST
CLASS STAMP
HERE

ADDRESS CORRECTION REQUESTED

Mailing Address
Street Number and Name
City, State 98765-4321

TI-99/4A – Myarc 9640 Vendors

An abbreviated list of companies providing products and services to the TI/Geneve community

CaDD Electronics
45 Centerville Drive – Salem, NH 03079-2674
homepage - <http://pweb.netcom.com/~mjmw>
PC99 – Stage 6, The CYC

LL Conner Enterprise
1521 Ferry Street - Lafayette, IN 47901
homepage - <http://home1.gte.net/lconner>
New & Used Hardware, Software, Books

Richard Bell's Company
38 Bement Street – Staten Island, NY 10310
homepage - <http://hometown.aol.com/swim4home>
TI-99/4A, CC-40, Rave, Myarc, WHT SCSI Controllers

RamCharged Computers
6467 East Yancy Drive – Book Park, OH 44142
email – rmarkus847@aol.com
New & Used Hardware, Software, Asgard, Texaments

Coming Next Issue: Classifieds

Space where readers can let others know about TI/Geneve items they have for sale or want to buy. There's no cost but space is limited. Ads must be received by June 15, 2000 to be included in the July-August issue.

Please send submissions to: Ernest Pergrem
40 Cypress SQ.
Elgin, IL 60123-2723

Please note: This is only for newsletter related items. All other correspondence should be sent to the group's post office box.