

BITS, BYTES & PIXELS

LIMA 99/4A USERS GROUP



JUNE 1991

Volume 7, #6

VIDEO TAPES OF THE 1991 LIMA MUG CONFERENCE ARE AVAILABLE TO THE TI COMMUNITY

At the May 18, 1991 Lima Multi User Group Conference a very complete video record was made of all formal presentations as well as most of the display and sales tables in the exhibit area. The entire record is on 3 VHS tapes and includes more than 16 hours of viewing. We are pleased to make these video tapes available to the TI community at a nominal cost.

ANY USER GROUP (including those not attending the conference), or any paid MEMBER of the Lima Ohio User Group, or any EXHIBITOR at the MUG Conference can order these videos from us at P.O. Box 447, Vanedonia OH 45894. Send either three blank VHS videos and a check for \$3.75 (for return postage and wear and tear on the machines we use to make the copies), OR a check for \$15 (\$18US if the destination is Canada). or those sending money only we purchase the blank tapes for you. This offer is not made to individuals. However, we do invite individuals interested in obtaining these videos to write inquiring about out of area membership in the Lima Ohio User Group.

LIMA TI MULTI USER GROUP CONFERENCE
May 18- 1991 Lima Ohio

-----VIDEO TAPE #1-----
Tape Counter SPEAKER/TOPIC

75 MIKE SEALY MICKEY SCHMITT
NORM ROAKKE/ Software from
MS EXPRESS.

1025 EUNICE SPOONER & CHRIS BEDARD/
The OAKLAND COMPUTER CLUB,
an elementary school user
group.

2110 IRWIN HOTT/ Current status of
the newsletter article
clearing house BBS.

2770 The "MUG CONFERENCE" a
meeting of user group
officers.

3685 MIKE WRIGHT/ Bits and
pieces of TI history
including a demo of the
99/2 computer.

4235 GARY BOMBER/ Hardware
products of O.P.A.

5070 BEERY MILLER/ Software
from 9640 news.

LIMA TI MULTI USER GROUP CONFERENCE
May 18- 1991 Lima Ohio

-----VIDEO TAPE #2-----
Tape Counter SPEAKER/TOPIC

100 CHARLES GOOD/ Preview of
FUNNELWEB v4.32 with support
for DSU file comments.

1175 BRUCE HARRISON/ Demo of "GOLF
SCORE ANALYZER" "HARRISON
WORD PROCESSOR" and classic-
al music disks.

2165 BARRY TRAVER/ Programs that
write other assembly and
XB programs.

3090 CHRIS BOBBITT/ Demo of "SCREEN
PREVIEW" "LINK" "CLASSIC
CHECKERS" "VIDEO TRACKER"
"LINE EDITOR" and "SWG CHAR
SET EDITOR" from ASGARD.

3900 DON O'NEAL/ An accelerator mod
for the 99/4A based on the
99105 CPU chip.

4200 BUD MILLS/ On screen demos of
MEMEX MEMORY EXPANSION
P-GRAM and the HORIZON
RAMDISK.

4900 BARRY TRAVER/ Genie and GENIAL

LIMA TI MULTI USER GROUP CONFERENCE
May 18- 1991 Lima Ohio

-----VIDEO TAPE #3-----
Tape Counter SPEAKER/TOPIC

100 JOE ROSS/ Demo of C-SHELL 99

2010 CHRIS BOBBITT/ ASGARD software
support for PAGE PRO 99

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2730 E.M. SMITH/Owner of "NEWSLETTER PRINTER" software by Art Gibson for formatting and printing newsletters.

3765 Interview with MIKE MAKSIMIK about his MIDI INTERFACE for the 99/4A and Geneve.

3925 Video of displays and interviews with people in the exhibit area.

DONE

MY IMPRESSIONS OF THE MAY 18 1991 LIMA TI MUG CONFERENCE by Charles Good Lima Ohio User Group

It was great! I loved it. There was so much to see, so much to buy, and so many interesting personalities to talk to. If you weren't there or you didn't get to see all the formal presentations that interested you, you can still view the video tapes we made: 16 hours of viewing. Details are elsewhere in this newsletter.

We used regular 215 name tags, not including local Lima UG members who had special colored name tags. I saw lots of people walking around without name tags. I estimate total attendance at 300. Since the event was free and people could walk in and out at will without bothering to sign our registration sheet and obtain a name tag, there is no way to accurately determine attendance. At least as many attended as last year, probably more. It is nice to know that there is still life in the o'l TI community. We had guests from the far corners of the United States (Maine, California, Florida, Georgia, New York state), as well as from many locations in Canada. The large number of Canadian guests was in part due to the fact that the MUG Conference date fell within a three day Canadian holiday weekend.

Since I had a lot to do with organizing the event, I very much appreciated the cooperation and help I received from our out of town guests. The local membership of the Lima User Group is quite small, and it seemed at times that our manpower was stretched to the limits. Thus I really appreciated the help from out of town people who stopped by Friday evening to help set up tables, who volunteered to operate the video equipment in one of our seminar rooms, and who stayed late Saturday to help with cleanup. Thank you! The spirit of cooperation was marvelous.

I know of no other group of individuals in which the difference between "leaders" and "followers", between the "users" and "commercial dealers" is less distinct than in the TI community. Evidence of this "one big happy TI family" could be seen in the door prizes donated and awarded at the 1991 Lima MUG Conference. Door prizes were donated by most of the attending "commercial" exhibitors and some were even sent in by a "commercial" dealer (TM Direct Marketing) who could not attend. Other door prizes were donated by user groups and individuals. Since EVERYBODY, including "commercial" exhibitors, were encouraged to sign our registration sheet and receive a door prize ticket, we even ended up awarding one of our door prizes to a "commercial" person. Door prize registration was "self service". Guests tore their own door prize ticket from the roll of tickets at our usually unattended registration table. As far as I know nobody cheated by taking more than one ticket! The donated door prizes were, for the most part, really top quality material, and included a new Extended Basic with manual, a small monitor, some nice software, and a set of two Prostik joysticks (maybe the best ever made for the TI). Thanks to all who generously donated door prizes.

Apparently everyone was satisfied with the event. Most of the "commercial" people seemed satisfied with business. Those I spoke to said they would definitely be back next year. We received numerous compliments about how well the MUG Conference was organized. The OSHTI user group (Oshawa Ontario) awarded the Lima UG a plaque in appreciation of the Lima group's service to the TI community.

You wouldn't believe the prices on used hardware and software. Minimum disk systems (PE Box, 32K, TI controller, one DSSD drive) went for \$100. For \$200 you could get a PE box with RS232, 32K, TI controller, and two DSSD drives. I purchased a whole bunch of official TI software for only \$1 or \$2 per disk, cassette, or module. These \$1 and \$2 titles included such stuff as Bridge Bidding, Beginners BASIC Tutor, Electrical Engineering Library, and AC Circuit Analysis. I saw a half dozen TEII modules with manuals go for \$1 each!!!

A few quotes and announcements that especially caught my ear:

Bon O'Neal and Bud Mills announced a 99/4A console "accelerator" modification based on a new CPU, the 99105. Bud told me that this should be up and running within a FEW DAYS. They had hoped to have the thing running for the MUG Conference.

Chris Bobbitt said that the number of people buying from and programming for Asgard has NOT declined. He said that based on the telephone calls Asgard receives, there may be fewer members of user groups, but there seems to be an increase in the number of individuals who are not UG members expressing interest in Asgard's TI related products.

Gary Bowser said he has sold his company's 80 column device (known as TIM) at the rate of about 30 per month since February, and that all current orders had been shipped. In

my opinion, one of the most important 99/4A upgrades possible is an 80 column device.

One of the big thrills for local members of the Lima User Group was arranging to have Eunice Spooner attend and give a seminar. Eunice is one of this country's two foremost authorities on using the 99/4A as a tool in educating children. (Jack Sughrue is the other.) Her elementary school user group meets weekly 52 weeks of the year and has about 50 members. Eunice is physically handicapped, so we had to make special arrangements for her visit to Lima. Fortunately Ohio State University's Lima Campus is very "accessible" to those in wheel chairs. In addition to ramps all over the campus, all restrooms have wheel chair accessible stalls and entrances to all campus buildings have automatic door openers that can be activated by pushing a large button. Several handicapped guests at the MMS Conference told me how much they appreciate this "accessibility".

DONE

LETTER TO THE EDITOR ABOUT Y.A.P.P.

Asgard Software
P.O. Box 10306
Rockville MD 20849
703-255-3085
(letter received April 25, 1991)

Dear Charles,

Thank you for the review of Y.A.P.P. in the May 1991 issue of your User Group's newsletter. While I find myself in general agreement with your conclusions (and find your appreciation for the product gratifying), I would like to give my side of "the story", as it were, in a number of remarks you made.

Regarding the device drivers included with Y.A.P.P.: I agree, they were less than perfect. The joystick driver, as you indicated, was quite inadequate. In fact, I asked Alexander many times to write a better one before the product was released, and only included the first one en lieu of not including one at all (better something than nothing in my book). Fortunately, Alexander has produced a new one, and contrary to your statement, it has been included with all copies shipped since around late January.

While I placed it on the distribution disk, I did not formally announce it as an update for a simple reason - Alexander had indicated in October that another version of the program would be finished soon, and so rather than subject my customers to multiple updates within such a short period of time, I decided that one big update to take care of a bunch of little problems would be better. Every update costs time and money for everyone - and users have enough problems keeping track of the big updates such less the small

ones. I hear complaints all the time from FUNNELMED and TIPS users that they are always perpetually a few versions behind because it is updated so frequently.

As for the ASGARD MOUSE and its DIJIT system incompatibility - this is only partially true. The device works (though sometimes irregularly) on DIJIT systems with less than the current version of the EPROM software on the card. The DIJIT AVPC itself is incompatible with quite a few items, and works partially with many others. Since I don't own one, it is hard to keep track of what works with what - but I do apologize for misleading any DIJIT customers that bought it (about 3 so far that I know of). If you would like to use your Asgard mouse with it, however, I recommend purchasing the "Sun-of-a-Board" from OPA - which supposedly corrects most of the DIJIT's irregularities when used in conjunction with a special DIJIT eeprom Gary has developed. We still plan to work to make our mouse compatible with the system - however, in the TI world progress is often measured on a glacial time-scale on such things.

Regarding the manual - again, I have been aware of shortcomings since October, actually. Despite what you said, the product was released at the All-European TI Faire in Weisbaden, and not at Chicago. It was not "rushed" to that show by any means. It WAS somewhat rushed to Weisbaden, however.

It is not unusual for a manual of its size (48 pages of small type) to have some inconsistencies. But I think that overall the manual is clear and well laid-out. An illustration of each function icon is included with the section describing the use of the function, and the manual is laid out somewhere between a reference and a tutorial (the style most people who've bothered to comment have said they most prefer). The manual also has several illustrations, and extensive sections dealing with some very difficult to explain concepts (logic functions for instance). The manual is also in a professional-style binder with quite a bit of cover art-work. All in all, I do not apologize for the quality of the manual - particularly considering the program's low price tag (only \$5 more than TI ARTIST PLUS and considerably less than what NYART retailed for).

However, I do intend to correct its shortcomings. However, again, I prefer doing one big update rather than many small ones (for the reasons listed previously). Any major revision of the program will require a considerable re-write in the manual anyway - so why go to all the time and expense to do it twice?

Finally, regarding your miscellaneous comments: I wanted to call it "Paint Pro" for a simple reason - what is a "Y.A.P.P."? "Paint Pro" at least gives some impression that the program is a painting/drawing program. If you were to look at the acronym "Y.A.P.P." at a glance you couldn't guess that unless someone told you. Part of my job is marketing,

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and it is certainly easier to market a program when people know what it is. However, I deferred to the wishes of the author on this point (as I always do in such things). The confusion in the manual stems from the fact that I didn't catch all the references to the first name and replace them with the second - though I did catch about 98% of them.

Regarding the version number: Hey, I just sell it, I didn't write it. take THAT up with Alexander (I don't modify a program, even to remove an error like that, without talking to the author first).

Regarding the lack of Artist fonts with the package: they were removed from the package as an economy measure after its initial release (the third disk added to the cost and not much to the benefit of the package). Since it was never an advertised feature, and TI Artist fonts are as common as snowflakes in Greenland, I didn't think then, or now, that it was a big problem.

Regarding GIFFER1 - there IS such a program included with the package. It just has a different filename: GIF2EXE. I apologize for the confusion on this point.

Finally, regarding G99, that is probably the greatest error in the manual. I was under the impression (incorrectly) that it also did conversions. Since it doesn't run on a Geneve, and that is the only way I can run the program, I was never able to verify one way or the other. Later when I discovered otherwise I was more embarrassed than anything else. While this means there is no external GIF converter for TI-99/4A users, most of those users will be able to use the built in converter anyway (Supercarts are quite common). Geneve users can use the GIF2EXE program easily enough. This was also a misnomer, but fortunately not a big problem.

All in all, I stand by the package I delivered last October.

As mentioned above, some of the mistakes in the manual were not corrected because a major revision was due. This version, 1.1, is largely finished. As soon as the Asgard Mouse driver has been updated, a new version will be distributed that corrects all of the problems with the documentation and the program that you mentioned, as well as provides a number of important improvements.

Version 1.1 of Y.A.P.P. includes a somewhat improved GIF converter, and a new joystick driver (which really made its appearance earlier, as stated). The most profound improvement, however, is in printing. The HARDCOPY program has now been built into the program itself, and has been re-designed to be easier to use and more versatile. To print a picture with 1.1 you simply select the little icon from the icon menu, draw a box around the area you want to print with it, and then specify the printing options you want (size, quality, etc.). The program then prints that area out.

Thank you.
Chris Bobbitt

REPLY TO ABOVE: I have in hand Y.A.P.P. v1.1 and it is as Chris describes. The new HARDCOPY with v1.1 is a pleasure to use, much more convenient than the old version. You can now print part or all of a GIF or MYART picture while it is still displayed on the monitor. You don't have to save the picture to disk first before printing.

The revised documentation mentions and corrects all the major errors in the original documentation, as described in Chris's letter. There is, however, an error in the revised doc. Contrary to what is stated in the revised doc that accompanies v1.1, you cannot select double spacing (horizontal stretching) by pressing "S". "S" saves a dot pattern, as correctly stated in the doc. By experimentation, I determined that you turn on "double spacing" with "O" and turn it off with the space bar, both after pressing "M" to enter the magnification submenu of HARDCOPY.

Charles Good

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ANOTHER LETTER TO THE EDITOR

April 12, 1991

Dear Sir:

On reading your May '91 BB&P newsletter, I would like to comment on the letter from Mr. Cohen. In the second paragraph he comments on the speech synthesizer and side car peripherals and his 32K CorComp side car not working when he has the speech plugged in. He says this will not work when the 32K follows the speech unit. The speech unit has most leads from the input/output port running thru from side to side, but some of them pick up the speech components on the way. The console has +5 and -5 volts on the input/output fingers, but these are not present on the right side of the speech unit. Fingers 1 & 2 plus 43 & 44 on the right side of the speech unit are not connected to anything!

When you get into the flat cable in the PE box input system, all the cable leads are scrambled in relation to those in the console. For instance, lead 44 is now audio at the console and becomes 39 in the black flat cable. In the flat cable 42 & 44 carries the voltage to the +5 volt regulators at each end of the cable and at the fingers of the PE box are on fingers 1 & 2!! 4 other leads also disappear at the start of the black flat cable.

I can't find it right now, but somewhere in the early instructions for connecting up TI's own side car units is a statement that the 32K side car has to go first or it won't work. Mr. Cohen seems to think it is an error in the design of his CorComp 32K side car, but I think it was done deliberately as the console power supply is not very large and I doubt that it would support much beyond the console's needs.

Eugene T. Breer
1586 Rustic Trail
St. Louis MO 63138

BB&P EDITOR'S NOTE: Mr. Breer was kind enough to donate a set of TI's side car peripherals to the Lima U6, so he knows this equipment. The CorComp side car 32K does not have an independent power supply, so it must receive power from the console and ^{must} be attached before the speech unit. TI's own 32K side car peripheral has its own power supply. The documentation that accompanies TI's 32K side car states, "No more than six accessories can be attached in series to the port on the right side of the computer console. If a solid state speech synthesizer is attached to the computer, it must be connected to the console first, followed immediately by the memory expansion unit. Other accessories, a maximum of four, are connected in any order after the memory unit."

DONE

LETTER TO THE EDITOR

Tigercub Software
156 Collingwood Ave.
Columbus OH 43213
11 April 1991

Dear Charles,

I must agree with Andy Frueh [BB&P EDITOR'S NOTE: This refers to an article Andy published in the May 1991 issue of BB&P.] - if computer music isn't music, then neither is any other kind of electronic music. However, I do not share his enthusiasm for Music-Pro, and I wrote a somewhat critical review of it. I found it very frustrating to have to program the voices separately, and not to be able to test the results instantly as I went along. However, I thought that the lack of variety that was possible in musical effects was its greatest drawback.

Andy is apparently not familiar with Nora Sellers Music Preprocessor, which I consider to be far superior to Music-Pro. [EDITOR'S NOTE: Copyrighted 1986, version 1.2 of this fairware software package is on disk 151 of the Lima U6 software library.] It is much easier to program, and allows much greater variety. I would be interested to hear what he thinks of it.

Incidentally, Bruce Harrison has released his method of programming music, and has sent me the source code.

I still think that good old Extended Basic is as good a way as any to program the kind of music I like, and it is capable of a wide variety of effects. Just give a listen to my Tigercub Gospel disk [EDITOR'S NOTE: disk 372A in the Lima U6 software library] - and take a look at the compact simple programming that enabled me to put 25 songs on a disk, even though the lyrics took up half the space. Bruce Harrison just sent me an assembly routine to set up the frequency array in half a second, and I have written a program to easily translate sheet music into the numeric values for notes and durations. I'm writing a series of articles on the subject.

Jim Peterson

DONE

USING FUNNELWEB TO CREATE SCRIPTS FOR SLIDE SHOWS

By Harold Bingham, Ogden, Utah.

Many of you have varied uses for using word processor on your computer. My computer is a TI-99/4A and the word processor software is Funnelweb, an improved version of TI Writer. One of the uses that I use it for is to write scripts for Slide show productions. A unique thing about using a word processor is that it allows me to edit and make changes, move lines, or group of lines, meaning I can change the order of slides.

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I first decide on the subject that I want for my slide show. Then I research for information on the subject. I collect this information by either making notes when I take the pictures on location, and compile them with other information from books, magazines, newspapers, travel brochures, or anything that will help.

Next, I collect the slides needed from my files, or I go out and take the pictures. Then I arrange them in a story-telling order that they will be presented on a light table. I next load the slides in a projector tray and place the tray on a Kodak Caremate or a Bell & Howell Ringmaster projector and place it beside my computer.

Then I power up the computer and load up my word processor "Funnelweb" and load the text editor. I place a formatted disk in drive #2 to save my text file. Then I begin writing the script for my slide show. I type the title on top line, then I type the comments that I wish to put on the first slide. I use any reference material as needed, but write my script specially tailored to fit my slides. With the projected slide by me, it is easy to elaborate on it the way I want. The beauty of this is I can write at my own pace, stop anywhere I want and resume another time. Before I turn the power off of my computer, I must save my file so it can be loaded again.

After I have finished writing the script, I save the file and print a copy out double spaced so I can edit the script. This procedure is done several times before I am satisfied with it. After editing each time, I load up Funnelweb and load up the text editor and go through the script making changes and editing it. A very handy tool for finding the word that I want to change is the "find string" feature. This can be found by pressing FCTN 9 then typing FS (find string). A / has to proceed the string followed by a slash. Example: /sample/ When pressing enter, the editor will find the first word in the script like the "sample". It is easy to make through the whole script in a few minutes and make the changes. Then I save the file again and print out another copy.

It is easy to find changes that you want several times. I recommend that you read aloud the script. After I am satisfied with my script, I read it several times aloud before I record it. My favorite recorder for making masters is still the 4 track reel to reel recorder. I use a 7" tape and the 7.5 IPS speed, recording the script on one channel. After recording, I rewind the tape and monitor the voice narration, while adding music or sound effects on the other channel with the use of an audio mixer. I now have a master tape of the script. I then make a cassette copy from the master tape on one side of the cassette. Then I place the cassette copy in the Ringmaster Bell and Howell projector, select slide #1, start the tape, then I add the sync signal to the tape. If I make the slide show for others who do not have sync capabilities, I put an audio signal, a beep on the master recording when I read the script.

Now I have my slide show made and it is ready for showing. If at any time I wish to remove some slides, or add additional slides, or merge more than one show together. I load my word processor and load my slide show file and merge other shows together using FCTN 9 then LF (load file), then I type the number of the line where I want to load my other slide show script and the filename followed by the disk device name example: 200 DSK2.ZIONS. After pressing enter, my file ZIONS is loaded on the file that is already loaded in my text editor and it will load it after line 200. Then I make the necessary editing changes, and presto, it is done. Then I save the file with a new filename.

The word processor has made the task of writing and editing the script a lot easier, and it can be edited and changed at any time. It sure is a lot better than typing the script on a typewriter every time I wanted to change something.

***DONE**

AND MORE VIDEO TAPES IN THE LIMA UG VIDEO LIBRARY

The following two video tapes of TI related material have been added to our group's video library. Paid out of area members of the Lima Ohio User Group can obtain copies by sending a blank VHS tape and \$1.25 OR \$5 for each tape desired to P.O. Box 647, Venedocia OH 45894. Local members can bring their blank tapes to the monthly meeting.

A complete catalog of our rather extensive video tape library is available to all local and out of area members by request.

---CHURCH BUDGET MANAGEMENT. Written by Art Gibson, this software can completely manage the finances of a church congregation. The video demo is by Joe Simmons.

---TI ARTIST v2.0 TUTORIAL. A video by Jeannie Brown of Springfield IL that takes you step by step through TI ARTIST. The title screen and music make this probably the MOST ENTERTAINING TI video in the Lima UG's video catalog.

***DONE**

WHEN IS A CC40 NOT A CC40?

by Mike Wright
45 Centerville Dr.
Salem NH 03079

Although TI pulled out of the Home Computer business in 1983, it did not drop its other computer lines. The TI Pro, an IBM compatible, survived for awhile before it too succumbed. The CC40 continued to be sold until at least 1988, BUT NOT BY TI!

Now the CC40 is a typical TI product - well built, well documented, and designed to handle that TI staple, the removable software module. But by 1988 it was showing its age with a 31 character one line display and should have been long gone.

One reason for its longevity may have been that TI had OEMed the CC40. OEM stands for Original Equipment Manufacturer. You can see many examples of the practice in Radio Shack calculators. TI or someone like Casio actually manufactures the calculator, and then puts the seller's name on it. So if you buy it at Radio Shack it's a Radio Shack calculator. Elsewhere it's a TI calculator. Except for the name, they are the same.

At the Lima Multi Group Conference in May 1991 I was shown two advertisements. The first was from MCC Powers, 2942 MacArthur Blvd., Northbrook IL 60062. In the Feb 85 issue of HEATING, PIPING, AND AIR CONDITIONING magazine, the company ran an ad titled "New Powers within your reach". An MCC Powers computer is shown in dramatic color alongside the text: "Now spec affordable energy management for buildings as small as 50,000 sq ft. Choose the system over 300 customers have already picked: the MCC Powers Stand alone Energy Management System." The computer pictured is simply a CC40 with the name "MCC Powers" in place of the standard TI logo. You can still see the a TI logo on the lower left of the "MCC Powers computer" illustrated in the ad. MCC supplied software to accomplish the stated task, but the module slot in the illustrated "MCC Powers Computer" is either blank, or else the module was black and did not have a label showing through the module window.

The other company was Guhring Inc., 1455 Commerce Ave, Brookfield WI 53005. Their product was called "Guroguide I", which was a CC40 with their own module. I contacted the company and they were kind enough to send me their last color brochure. They stopped selling the Guroguide about two years ago.

According to their brochure: "The Guroguide I computer drill selector consists of a Texas Instruments hand held computer with a 32K EPROM cartridge containing the drill selection program. It contains all the data necessary for most drilling applications and, with minimum input from you selects the proper tool and presents you with a 3-digit

catalog number. It automatically calculates spindle speed (RPM), penetration rate (IPM), net drilling time, and required peck cycles."

The top of the computer illustrated in the brochure, from the left edge to the module port, was silkscreened in large letters to display GUROGUIDE. Guhring advertised the Guroguide in the Feb 88 issue of INDUSTRIAL MAINTENANCE PLANT OPERATORS magazine.

Given the above, my suggestion is that TI was able to establish an OEM market for the CC40. This is one reason why the machine was not dropped, like the 4A. In fact, software and some peripherals for the CC40 are still available directly from 1-800-TI-CARES.

DONE

**USING THE CC40 AS A PORTABLE DATA BANK:
A BASIC PROGRAM FOR THE CC40**
by Charles Good
Lima Ohio User Group

Have you seen those electronic "organizers" in the department stores? They are battery powered dedicated computers that look like large calculators. Marketed under names such as "THE BOSS" or "THE ORGANIZER", they are designed to store lists of names and addresses or hour by hour appointment calendars. With these devices it is easy anywhere and anytime to sort through a large data base for a particular name, address, or phone number. With many of these devices you can download their data to a desktop PC or print the information on a printer.

Well, you can do the same thing with a CC40. Since the CC40 has CMOS RAM, any BASIC program entered into the CC40 stays in memory even after the computer is turned "off". BASIC programs will remain in the CC40's memory for many months in the "computer is turned off" mode before the batteries finally need to be changed. Short appointment calendar notes or address lists can be stored in the CC40 as text that is displayed when any of the ten user programmable hot keys are pressed from command mode. Data can also be stored as part of a memory resident BASIC program, but there is a potential problem with this method. Although the CC40 retains a BASIC program in memory when it is turned "off", it does NOT retain any of the numeric or string variables generated by the BASIC program. There are CC40 programs in my software library that allow you to open a disk (or wafertape) file and read in a list of names addresses and phone numbers. When you do this and then later turn the CC40 "off" to conserve battery power, the BASIC program remains in memory. However, the data read in from disk and stored in strings is GONE! There is certainly no advantage to the CC40's portability if you have to go to a disk or tape drive every time you want to look up someone's phone number! The

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New Powers within your reach.

See Mike Wright's article
on page 7 for a discussion
of this 1985 advertisement.
What you see here is a CC40
with another name on it.

Now spec affordable energy management for buildings as small as 50,000 sq. ft. Choose the system over 300 customers have already picked: the MCC Powers Stand-alone Energy Management System.

This new system features Stand-alone Control Units (SCUs)... intelligent panels that function independently or as a true network for building-wide control without a costly front-end computer.

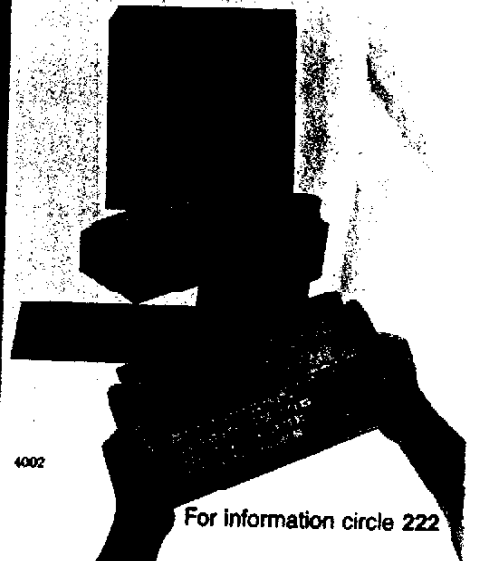
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solution to this problem is to store your information as an actual part of the BASIC program, in line numbers with REM remarks or DATA statements. When stored this way, your data is retained in the CC40's memory even when the CC40 is "off".

I wrote the CC40 program below to deal with this situation. A somewhat similar CC40 program was published in Vol 1 #2 of ENTHUSIAST 99, but it doesn't work on many CC40's because it POKES to an absolute memory address. My program works! It stores a name/address/phone list as data statements. Only one person's data at a time is READ into string variables. Thus, the CC40's memory is not wasted storing the entire data bank twice, once in DATA statements and a second time in strings. From the running program you can view all the data or search for the data of one particular person by inputting the person's last name. I have REMed lines 130-150 that allow you to view all names because this feature will only rarely be used. To view all names it is just as quick to LIST the data statements to screen or printer. Because of the POS statement in line 200, you don't even have to spell the entire last name you are searching for correctly. All you need is a text string that is contained within the last name, such as inputting BUCK when searching for the last name ARBUCKLE. If the data base includes more than one person with the same last name the program will still find the information you want. All data for each person is displayed on a single 80 column line. You can scan left/right across this line of data at your leisure from the running program using the CC40's arrow keys.

You can store about 100 program lines of names, addresses, and "other information" as DATA statements with this program using a minimum 6K CC40. It takes just a few seconds to find the last of the 100 DATA statements in a name search. Editing is easy. From the CC40's command mode just bring up the appropriate line number containing the DATA statement and type over or add to the existing DATA of that line number. To add more names to the data bank, just create more BASIC line numbers for the additional DATA. To obtain a hard copy of the data you can LIST the program to a HexBus compatible printer. You can also use the HexBus RS232 peripheral to list the program (with all your DATA) to a non HexBus printer or dump the program (via a cable linking the HexBus RS232 to the 99/4A RS232) directly into a 99/4A.

A new or used CC40 (advertised for \$50 in the May 1991 issue of MICROPENDIUM) will cost less to purchase than most of the currently available electronic "organizers". Although you can't put a CC40 in your pocket as can be done with many modern electronic organizers, you can easily put the "smaller than most books" CC40 in a small briefcase or a purse. And you do so much more with the CC40! Unlike most of the modern "organizers", the vintage 1983 CC40 is a portable and truly flexible PROGRAMMABLE computer. "Modern" does not always mean "better".

Paid members of the Lima US who own CC40's with mass storage can send a quickdisk or wafertape and a paid return mailer to the newsletter address. I will be glad to copy the program onto your media and send it back to you.

```

100 REM CC40 BASIC
110 REM written by Charles Good, Lima Ohio User Group, June 1991
120 PRINT " --NAME/PHONE/ADDRESS FILE--":READALL=0:PAUSE 1
130 REM INPUT "READ ALL NAMES? Y/N ";YN$
140 REM IF YN$="Y" THEN READALL=1:GOTO 120
150 REM IF YN$="y" THEN READALL=1:GOTO 120
160 PRINT "USE UPPER CASE TO ":PAUSE .5
170 INPUT "ENTER DESIRED LAST NAME- ";INPUT$
180 READ FN$:IF FN$="END"THEN PRINT "END OF FILE":PAUSE 1:
RESTORE 1000:GOTO 120
190 READ LN$,REST$: IF READALL=1 THEN 250
200 IF POS(LN$,INPUT$,1)=0 THEN 180
210 INPUT "Is the person "&FN$&LN$"? ";YN$
220 IF YN$="Y" THEN 250
230 IF YN$="y" THEN 250
240 GOTO 180
250 PRINT FN$&" "&LN$&" "&REST$:PAUSE
260 IF READALL=1 THEN 180
270 RESTORE 1000:GOTO 120
970 REM FIRST NAME, LAST NAME, OTHER INFORMATION such as phone
number and address
980 REM Use ONLY UPPERCASE for first and last names. Commas
are required after
990 REM the first and last name. Use no commas in the OTHER
INFORMATION field.
1000 DATA BARBARA,GOOD,616-857-2256 11 LAKESHORE DR. DOUBLAS
MI 49406
1010 DATA IAN,GOOD,419-667-3131 15276 MAIN VENEDOCIA OH
45894
1020 DATA JACK,TURNER,CHESTNUT LANE DOUGLAS MI 49406
10000 DATA END

```

DONE

A MATH COPROCESSOR FOR THE 99/4A
 by Charles Good
 Lima Ohio User Group

A math coprocessor can do mathematics independent of a computer's main CPU. When using such a coprocessor the effect is similar to running two programs simultaneously. The coprocessor does its calculations while the main program continues to run uninterrupted. The results of the math coprocessor's calculations can then be fed into the main program. For example, have you ever used MULTIPLAN and wanted to recalculate one small part of the spreadsheet instead of waiting and waiting for MULTIPLAN to recalc the whole thing? Or have you ever been in the middle of an accounting program, such as one designed to balance your checkbook, and wanted to do a little quick calculating. In a

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BASIC program you can usually press CLEAR. Then from command mode type PRINT followed by your calculations. Pressing ENTER gives you your answer and then you can type CON to continue the program. This is rather cumbersome, and the program's screen display is disrupted. With an assembly language program you don't even have this option.

Well, let me introduce you to the TI-7000 math coprocessor. This inexpensive peripheral attaches to the 99/4A console just above the keyboard. It uses no extra power and is always available to do independent calculations which can then be fed into the main running program via the 99/4A's keyscan routine. Permanent or temporary installation can be done by anyone following the simple instructions that come with the installation kit, since no soldering is required. I paid \$4.93 for my TI-7000, and an additional small sum for the installation kit. Every serious 99/4A user should have one of these.

The Texas Instruments TI-7000 is a credit card sized solar powered calculator. No battery is ever needed. It can be permanently mounted to the flat area above the 99/4A's keyboard with super glue, or can be temporarily attached using double sticky tape. It's nice rubberized keys give a tactile response when they are pressed, and the LED display is easy to read. It has + - * / and % keys and includes one memory. I bought mine at WAL-MART. Output from the TI-7000 is entered into the 99/4A via the keyboard, which is of course detected with the 99/4A's keyscan assembly routine.

Now about a battery backed clock/calendar for the 99/4A? CorCoop's TRIPLE TECH card is conveniently hidden in the PE box and provides this function. But you can't get the thing to automatically time/date stamp your disk files. A used TRIPLE TECH usually sells for \$75. I found an equally convenient device in the automobile section of WAL-MART for only \$2.95 complete with installation kit. I mounted this small battery clock/calendar next to my math coprocessor. You can also use the double sticky tape that comes with it to mount this clock on the dashboard of your car. As with the TRIPLE TECH card, I can now always get a display of the current time, month, and day of the month as I sit typing newsletter articles. Also like the TRIPLE TECH, I can't time/date stamp my disk files with this device.

****DONE****

Dice Roller Program
By: Andy Frueh, Lisa UG

There are a lot of public domain programs out there to aid in the play of role playing games, usually Dungeons and Dragons. However, there are a lot of other similar, but not identical, games. The D&D aids are hard to use with these other games. For this reason, I created the Dice Roller. Originally, it started as a simple dice roller written by one

of my friends on his Adam computer. It was limited in that numbers could not be printed, the smallest number was always one, a random number "seed" always had to be entered (any random number works. There was no RANDOMIZE on the Adam, and if the maximum was 2, then values OUTSIDE of the 1-2 range could be created. Dice Roller can take care of all that.

Dice Roller can simulate practically any type of dice roll, or any kind of random numbers. As written, it accepts any one to three digit number, from 0 to 999. If you need more digits, or need to exclude certain values, the places to do that are lines 20 and 30. I won't go into details of the change, since that is within most users limits. However, if you REALLY want the values changed and can't do it, I'll be glad to help if you drop me a line describing what you need. When the program is run, you first set a minimum value. There is a default of 1. Next comes the maximum, set at 6. If you need to roll "two dice", then you could set the max to 12. If the max is smaller than the minimum or vice versa, you must enter both values again. When everything is done, a number between and including the max and min is generated. You then get a menu of three options. With these, you can roll again with the same max and min, change those values, or end the program. Each time you use the same conditions to roll, a "Roll #" counter increases by one. When the max and min values are reset, EVEN IF TO THEIR PREVIOUS VALUES, then the Roll counter is reset. If you need these numbers printed to a printer (PID default, or you can enter a disk filename), then add the extra lines at the end.

```

10 RANDOMIZE :: DISPLAY AT(1,8)ERASE ALL:"Dice roller" ::
DISPLAY AT(4,8):"Assumes that there is one maximum and
minimum value and that all numbers fall between these two
values."
20 RO=0 :: DISPLAY AT(13,1):"Minimum value? 1" :: ACCEPT
AT(13,17)SIZE(-3)VALID ATE(DIGIT):MI :: DISPLAY
AT(15,1):"Maximum value? 6" :: ACCEPT AT(15,17):SIZE(-3
)VALIDATE(DIGIT):MX
30 IF MI>MX OR MX<MI THEN 20 :: IF MX=MI THEN 20 ::
X=INT(RND*(MX-MI+1))+MI :: IF X<MI OR X>MX THEN 30 :: DISPLAY
AT(19,23):"Roll #"
40 RO=RO+1 :: DISPLAY AT(17,13):X :: DISPLAY AT(20,1):"1)
Repeat roll 2) New conditions 3) End";
50 DISPLAY AT(24,5):"1" :: DISPLAY AT(21,24):RO :: ACCEPT
AT(24,5)SIZE(-1)VALIDATE("123"):R$ :: IF R$="1" THEN 30 ::
IF R$="2" THEN 20 ELSE CALL CLEAR :: END
    
```

Add these lines if you want printer and screen output.

```

5 DISPLAY AT(13,1)ERASE ALL:"Printer name? PID" :: ACCEPT
AT(13,16)SIZE(-15):D$ :: OPEN #1:D$
25 PRINT #1;TAB(6);"Min: ";MI;" Max:
";MX;CHR$(27);CHR$(41);CHR$(27);CHR$(60)
35 PRINT #1:"! Roll ";RO;" ! ";X;"
!";CHR$(27);CHR$(41);CHR$(27);CHR$(60)
    
```

****DONE****