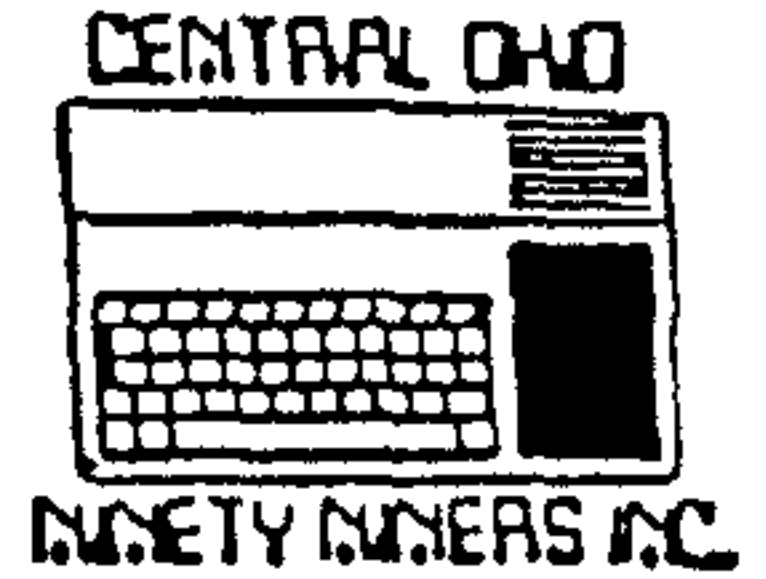


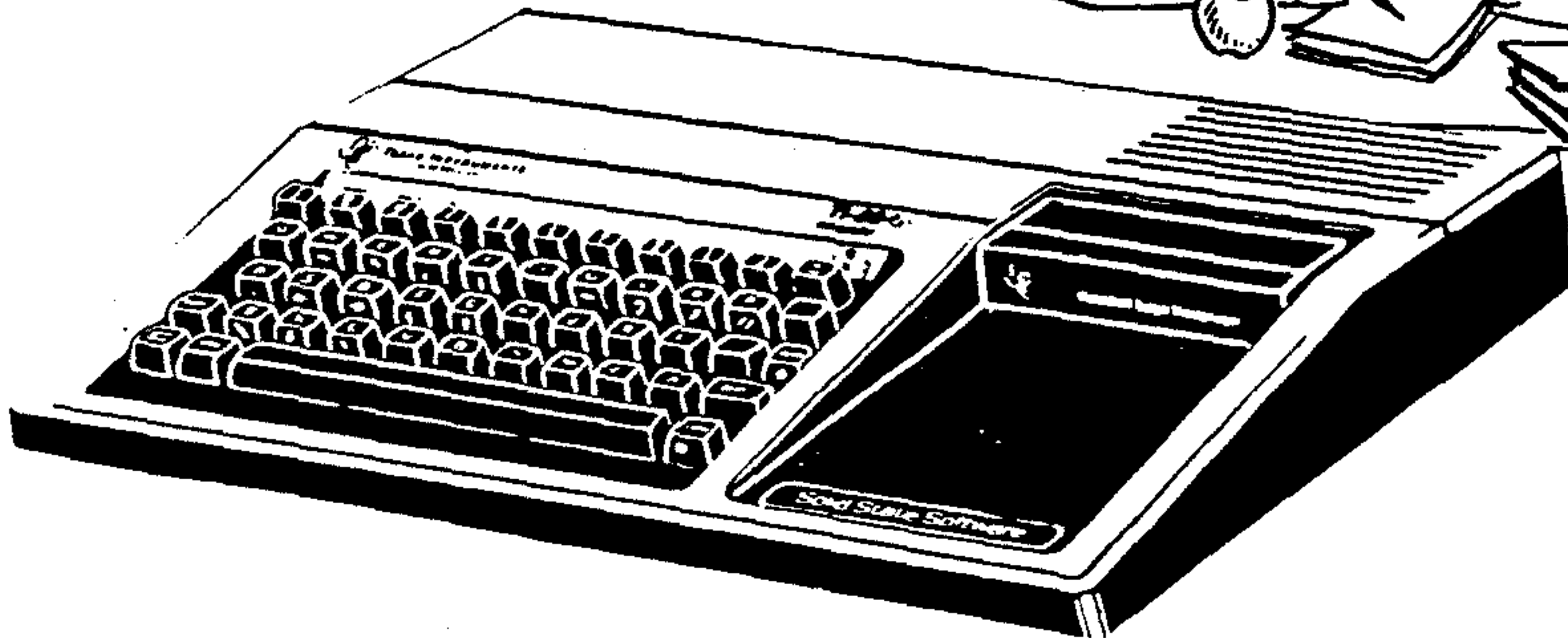
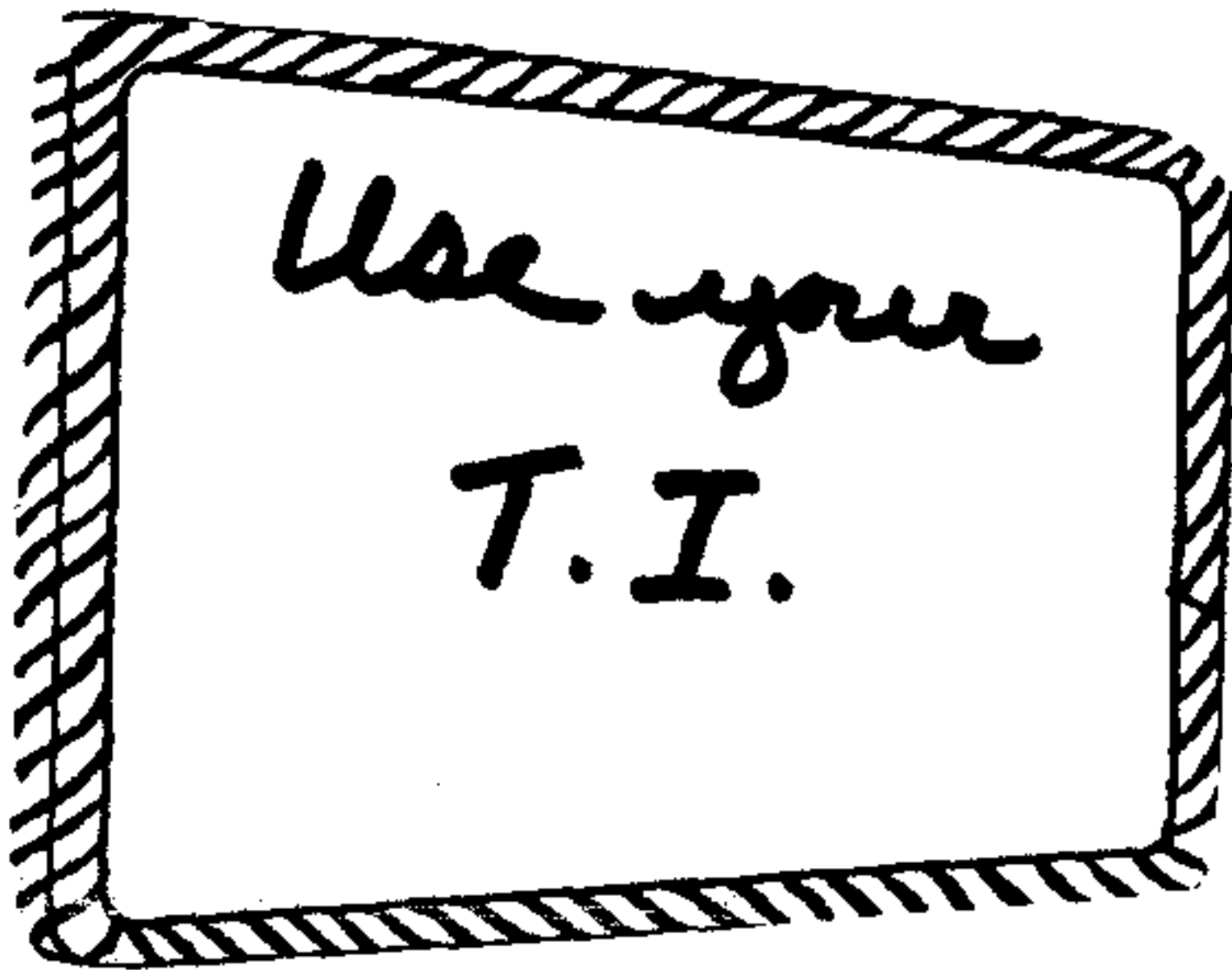
Texas Instrument 99/4A and Myarc 9640 Computers

Spirit of 99



THE OFFICIAL NEWSLETTER OF THE CENTRAL OHIO NINETY-NINERS INC.

PUBLISHED MONTHLY IN COLUMBUS OHIO



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C.O.N.N.I. meetings are held the 3rd Saturday of each month at Chemical Abstract, 2540 Olentangy River Road Columbus, OH. Meeting time is 8:30 AM til 2:30PM; Meetings are open to the public. Membership dues (\$20.00) are payable yearly to C.O.N.N.I. and cover the immediate family of the member. Please send check to our membership registrar and join C.O.N.N.I. Please address it to: Everett Wade

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Columbus, OH 43214

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REPLACE STRING
FUNNELWEB 5.0/80 COLUMNS

(Edited from SUDBURY 99'ers)

replaced by 7's, then you would enter it this way.

1 1 5 /6/7/

Jim McClaren of the Sudbury 99'ers had talked with Tom Jakabfy (Oshawa UG) about Replace String in the 80 column version of Funnelweb.

The first '1' says to ignore the very first occurrence of 6 and go on to the second and subsequent one. I think Jim probably thought that the 3 numbers should have gone AFTER the columns and not BEFORE; which is the case. I hope that clarifies this for Jim. It does work. I hope everyone remembers that you DO NOT HAVE WORDWRAP MODE turned on; use the 'HOLLOW' cursor (CTRL) (0) only. Otherwise everything will be reformatted. Sometimes you might want this, but most times NOT."

The following is from OSHTI March 1993 page 4 of the newsletter.

Jim added, remember that where you exit in your text file is where the Replace String will start. If you exit on line 10, then the Replace String will start from line 10 for its search. Also, if you scroll from the command line back to line 1 then Replace String will still start from line 10.

"Most of us would use REPLACESTRING without any numbers since we want the whole contents (all columns) to be searched. However, you can do a column search instead. For example, if you know that there will be numbers in the columns 1 to 5 then you could search just those columns to make numeric changes. The REPLACESTRING (RS) would look like this.

1 5 /6/7/

This means, search for occurrences of the number between column 1 and 5 and replace it by 7. However, if you only want the second and subsequent 6's

SEPTEMBER CALENDAR FOR CONNI

1993

SEPTEMBER

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Queen Anne Computer Shoppe, Seattle, Wa.

Tigercub Software
156 Collingwood Ave.
Columbus, OH 43213

My three Nuts & Bolts disks, each containing 100 or more subprograms, have been reduced to \$5.00 each. Documentation is supplied on disk.

My TI-PD library now has over 600 disks of fairware (by author's permission only) and public domain, all arranged by category and as full as possible, provided with loaders by full program name rather than filename. Basic programs converted to XBasic, etc. The price is just \$1.50 per disk(!), post paid if at least eight are ordered. TI-PD catalog #6 is available for \$1 which is deductible from the first order.

In Tip #68 I had a little routine to catalog my TI-PD disks which have a menu by full program name prepared with my Catwriter program. I forgot that I had written a new version 1.5 of Catwriter. If you have made any LOAD programs for your disks with Catwriter 1.5, this correction will enable you to catalog them.

```
1 OPEN #1:"DSK1.TI-PD/CAT",APPEND
2 DISPLAY AT(12,1)ERASE ALL:
"TI-PD?" :: ACCEPT AT(12,1)
0):N
20 FOR J=1 TO X-1 :: READ X#
:: PRINT #1:X#;TAB(30);N ::
NEXT J :: CLOSE #1 :: STOP
23 REM
```

MICROpendium has published some routines to output TRACE to a printer, by reading the traced numbers from the screen. This is not very practical, because the pro-

gram is apt to clear the screen or erase the trace numbers with text or graphics. The best method to dump TRACE to a printer is to use the Triton Super Extended Basic, which has that capability. If you do not have that module, here is another way. Save the program in MERGE format by DAVE DSKn.program, MERGE and then run this routine.

```
100 DISPLAY AT(17,1)ERASE ALL:
L:"Input filename?": "DSK" ::
DISPLAY AT(19,1): "Output filename?": "DSK"
110 ACCEPT AT(18,4):A# :: ACCEPT AT(20,4):B# :: OPEN #1:
"DSK"&A#,VARIABLE 163,INPUT
:: OPEN #2:"DSK"&B#,VARIABLE 163,OUTPUT
120 DISPLAY AT(22,1): "Trace from line to " :: ACCEPT AT(22,17)SIZE(4):A ::
ACCEPT AT(22,24):B
130 PRINT #2:CHR$(0)&CHR$(0)&CHR$(159)&CHR$(253)&CHR$(200)&CHR$(3)&"100"&CHR$(181)&CHR$(199)&CHR$(3)&"P10"&CHR$(0)
140 LINPUT #1:M# :: IF ASC(M#)=255 THEN 190 :: L=ASC(SEG$(M#,1,1))*256+ASC(SEG$(M#,2,1))
150 IF LEN(M#)>148 THEN DISPLAY AT(12,1)BEEP:"Line "&STR$(L)&" too long to trace" ::
GOTO 180
160 IF L<A OR L>B OR ASC(SEG$(M#,3,1))=147 THEN 180
170 M#=SEG$(M#,1,2)&CHR$(157)&CHR$(200)&CHR$(1)&"@"&CHR$(183)&CHR$(200)&CHR$(LEN(STR$(L)))&STR$(L)&CHR$(182)&CHR$(130)&SEG$(M#,3,255)
180 PRINT #2:M# :: IF EOF(1)<>1 THEN 140 ELSE CLOSE #1
190 PRINT #2:CHR$(127)&CHR$(240)&CHR$(200)&CHR$(4)&"!BP+"&CHR$(0)
200 M#=CHR$(127)&CHR$(241)&CHR$(161)&CHR$(200)&CHR$(1)&"@&CHR$(183)&"X"&CHR$(182)
210 PRINT #2:M#&CHR$(130)&CHR$(132)&"X"&CHR$(190)&"Y"&CHR$(176)&CHR$(167)&CHR$(129)&"Y"&CHR$(190)&"X"&CHR$(0)
220 PRINT #2:CHR$(127)&CHR$(244)&CHR$(156)&CHR$(253)&CHR
```

```
(200)&CHR$(3)&"100"&CHR$(181)&"X"&CHR$(180)&CHR$(0)
230 PRINT #2:CHR$(127)&CHR$(245)&CHR$(168)&CHR$(0):CHR$(255)&CHR$(255)
```

It will prompt you for the name of the merged program and an output filename, and will give you the option to trace only a selected range of line numbers - otherwise, just select 1 and 99999 or whatever. It will then rewrite the merged program by opening the printer in line 0, and adding a CALL at the beginning of each line, to a subprogram which prints the line number to the printer. If a line is too long to have the CALL added to it, you will be informed.

Then load the rewritten program by MERGE DSKn.altered filename, and RUN.

If you want to trace a program which does its own printer output, REB the rewritten program before running it to change that line 0 to 100 so you can get at it, and change the P10 to DSKn.whatever. After the program has run, enter CLOSE #100 in command mode to close the file, and dump it to the printer.

Now, here is a more useful application. Change line 130 to REM. Delete line 220 and add these lines -

```
220 PRINT #2:CHR$(127)&CHR$(242)&CHR$(162)&CHR$(240)&CHR$(183)&CHR$(200)&CHR$(1)&"1"&CHR$(179)&CHR$(200)&CHR$(1)&"1"&CHR$(182)&CHR$(181)&"X"&CHR$(180)&CHR$(0)
221 PRINT #2:CHR$(127)&CHR$(243)&CHR$(157)&CHR$(200)&CHR$(3)&"KEY"&CHR$(183)&CHR$(200)&CHR$(1)&"O"&CHR$(179)&"K"&CHR$(179)&"S"&CHR$(182)&CHR$(0)
222 PRINT #2:CHR$(127)&CHR$(244)&CHR$(132)&"S"&CHR$(190)&CHR$(200)&CHR$(1)&"O"&CHR$(176)&CHR$(201)&CHR$(127)&CHR
```

```
(243)&CHR$(0)
```

The rewritten program will now show the line number in the upper left corner of the screen, and wait for a key-press before continuing, so that you can follow the execution line by line against a printout of the program.

I designed a form to be used in my genealogy research, using the TI-Writer .TL transliteration commands to underline, do expanded print, etc. It was 61 lines long, so when I printed it through the Formatter it spilled onto a second page. The Formatter insists on skipping 5 lines at the top and 3 at the bottom so, even though a page will hold 66 lines in standard spacing, you can only have 58. John Owen came up with a way around this, but it involves letting the formatter have its 5 lines, and then rolling the paper backward. I thought I could do better, so I wrote this routine which reads .TL codes and performs exactly like formatter, but will let you have 66 lines on the page.

```
10 DISPLAY AT(3,5)ERASE ALL:
"TRANSLITERATOR": "" : "Works exactly like TI-Writer": "Formatter transliteration": "but slower) and allows 66": "lines per page"
20 OPEN #2:"P10",VARIABLE 254
100 DISPLAY AT(12,1): "Filename? DSK" :: ACCEPT AT(12,14) :F# :: DISPLAY AT(14,1): "How many copies? 1" :: ACCEPT AT(14,18)SIZE(-2):H
101 FOR K=1 TO H :: OPEN #1: "DSK"&F#,INPUT
110 LINPUT #1:M# :: IF SEG$(M#,1,4)<>".TL " THEN 500
120 M#=SEG$(M#,5,255) :: P=POB(M#,"",1) :: X=X+1 :: A#(X)=CHR$(VAL(SEG$(M#,1,P-1))) :: M#=SEG$(M#,P+1,255)&"."
130 P=POS(M#,"",1) :: B#(X)=B#(X)&CHR$(VAL(SEG$(M#,1,P-1
```

```

))): NO=SEG$(M$,P+1,255)::
IF LEN(M$)>0 THEN 130 ELSE 1
10
140 LINPUT #1:M$ :: IF ASC(M
$)>127 THEN 530
500 FOR J=1 TO X
510 P=POS(M$,M$(J),1):: IF P
<>0 THEN M$=SEG$(M$,1,P-1)&B
$(J)&SEG$(M$,P+1,255):: GOTO
510
520 NEXT J :: PRINT #2:M$ ::
IF EOF(1)<>1 THEN 140
530 CLOSE #1 :: PRINT #2:CHR
$(12):: NEXT K :: GOTO 100

```

I had a project for which I wanted to type lines up to 160 characters long in Funnelweb, and then print them as a single line in elite condensed type. Bruce Harrison suggested this method - put a line feed instead of a carriage return at the end of the line, and open the printer as P10.CR,VARIABLE 160.

So, I typed out the records, hitting Enter at the end of each to get a CR, as usual. Then I moved the cursor to the first line, FCTN 9, RB for Replace String, and /CTRL-U M CTRL-U /CTRL-U J CTRL-U / to replace all the CRs with LFs, which Funnelweb quickly did - and reformatted all my records into one solid block! So, I wrote this one to do it right.

```

100 DISPLAY AT(12,1)ERASE AL
L:"Input file? DSK" :: ACCEP
T AT(12,16):LNO
110 DISPLAY AT(14,1):"OUTPUT
FILE? DSK" :: ACCEPT AT(14,
17):OUT$
120 OPEN #1:"DSK"&LNO,INPUT
:: OPEN #2:"DSK"&OUT$,OUTPUT
130 LINPUT #1:M$ :: P=POS(M$,
CHR$(13),1):: IF P<>0 THEN
M$=SEG$(M$,1,P-1)&CHR$(10)
140 PRINT #2:M$ :: IF EOF(1)
<>1 THEN 130 ELSE CLOSE #1 :
: CLOSE #2

```

To print out the file, I wrote this little routine.

```

100 DISPLAY AT(12,1)ERASE AL

```

```

L:"Filename? DSK" :: ACCEPT
AT(12,14):F$
110 OPEN #1:"P10.CR",VARIABLE
160 :: OPEN #2:"DSK"&F$,IN
PUT
120 PRINT #1:CHR$(27)&"x1"&C
HR$(27)&"M"&CHR$(15);
130 LINPUT #2:M$ :: PRINT #1
:M$ :: IF EOF(2)<>1 THEN 130
ELSE CLOSE #2

```

But, I wanted to sort the file into alphabetic sequence, and Funnelweb won't let me save a DV160 file to disk, so I wrote this routine to convert the DV80 file to DV160.

```

90 DISPLAY AT(12,1)ERASE ALL
:"Input file? DSK" :: ACCEP
T AT(12,16):LNO
95 DISPLAY AT(14,1):"Output
file? DSK" :: ACCEPT AT(14,1
7):OUT$
100 OPEN #1:"DSK"&LNO,INPUT
:: OPEN #2:"DSK"&OUT$,VARIABLE
160,OUTPUT
110 LINPUT #1:M$ :: IF ASC(M
$)>127 THEN 140
120 IF POS(M$,CHR$(10),1)=0
THEN LINPUT #1:M2$ :: M$=M$&
" " &M2$
130 PRINT #2:M$ :: IF EOF(1)
<>1 THEN 110
140 CLOSE #1 :: CLOSE #2

```

I ran that sorted file through Dennis Faherty's T1-SORT, which will sort a file of any record length. Then I used this routine to print it.

```

100 DISPLAY AT(12,1)ERASE AL
L:"Filename? DSK" :: ACCEPT
AT(12,14):F$
110 OPEN #1:"P10.CR",VARIABLE
160 :: OPEN #2:"DSK"&F$,IN
PUT
120 PRINT #1:CHR$(27)&"x1"&C
HR$(27)&"M"&CHR$(15);
130 LINPUT #2:M$ :: PRINT #1
:M$ :: IF EOF(2)<>1 THEN 130
ELSE CLOSE #2

```

If I need to get it back to DV80 so I can edit it in Funnelweb, this will do the trick.

```

100 DISPLAY AT(12,1)ERASE AL
L:"Input file? DSK" :: ACCEP
T AT(12,16):LNO
110 DISPLAY AT(14,1):"Output
file? DSK" :: ACCEPT AT(14,
17):OUT$
120 OPEN #1:"DSK"&LNO,VARIABLE
160,INPUT :: OPEN #2:"DSK
"&OUT$,OUTPUT
130 IF EOF(1)=1 THEN CLOSE #
1 :: CLOSE #2 :: STOP
140 LINPUT #1:M$ :: IF LEN(M
$)=0 THEN 130 ELSE IF LEN(M$
)<81 THEN PRINT #2:M$ :: GOT
O 130 ELSE P=80
150 IF SEG$(M$,P,1)=" " THEN
PRINT #2:SEG$(M$,1,P):SEG$(
M$,P+1,255):: GOTO 130 ELSE
P=P-1 :: GOTO 150

```

I have been writing more such DV160 files and merging them into the first one with this little appender.

```

100 DISPLAY AT(12,1)ERASE AL
L:"First file? DSK" :: ACCEP
T AT(12,16):F$
110 DISPLAY AT(14,1):"File t
o be appended?" : "DSK" :: ACC
EPT AT(15,4):A$
120 OPEN #1:"DSK"&F$,VARIABLE
160,APPEND :: OPEN #2:"DSK
"&A$,VARIABLE 160,INPUT
130 LINPUT #2:M$ :: PRINT #1
:M$ :: IF EOF(2)<>1 THEN 130
140 CLOSE #1 :: CLOSE #2

```

This is why I am sticking to my T1. I can make it do what I want it to do, rather than being stuck with what some programmer decided I should want!

This one is from the Dark Ages, about 10 years ago. I don't know who wrote it, but it does a lot in a little.

```

100 CALL CLEAR :: CALL SCREE
N(2):: CALL COLOR(1,2,16)::
CALL HCHAR(10,1,33,160):: CA
LL HCHAR(12,15,32,2)
110 CALL CHAR(32,"FOFOFOFOFO
FOFOFOFOFOFOFOFOFOFO")
120 CALL CHAR(32,"OFOFOFOFO
FOFOFOFOFOFOFOFOFOFO")
130 GOTO 110

```

This one is easier on the eyes.

```

100 CALL CLEAR :: CALL SCREE
N(2):: FOR CH=40 TO 136 STEP
8 :: CALL CHAR(CH,RPT$( "A$
",8)):: NEXT CH | AURORA by J
im Paterson
110 DATA 7,9,14,10,11,12,15,
16,8,6,5
115 DIM F(12):: FOR J=2 TO 1
2 :: READ F(J):: NEXT J
120 FOR SET=2 TO 12 :: CALL
COLOR(SET,F(SET),2):: NEXT S
ET
130 CH=40 :: FOR R=3 TO 23 B
TEP 2 :: CALL HCHAR(R,1,CH,6
4):: CH=CH+8 :: NEXT R
135 Y$(1)=RPT$( "5A",8):: Y$(
2)=RPT$( "A5",8):: Y$(3)=RPT$
("A55A",4):: M=1
140 FOR B=INT(5*RND+3)TO INT
(9*RND+8):: FOR SET=INT(4*RND
0+2)TO INT(6*RND+7):: CALL C
OLOR(SET,F(SET),B):: NEXT SE
T :: NEXT B
150 FOR J=1 TO INT(5*RND+1):
: FOR CH=INT(6*RND)*8+40 TO
INT(6*RND)*8+96 STEP 8 :: CA
LL CHAR(CH,Y$(M)):: NEXT CH
:: M=M+1+(M=3)*3 :: NEXT J :
: GOTO 140

```

And one more oldie to fill this up.

```

100 CALL CLEAR :: CALL CHARS
ET :: CALL DELSPRITE(ALL)::
CALL SOUND(225,220,0):: PRIM
T "ERROR 4 IN LINE 150" ::
PRINT "BUGS IN PROGRAM"
110 CALL SCREEN(8):: FOR A=1
TO 500 :: NEXT A
120 CALL CHAR(96,"997E3CFF3C
7EB099"):: RANDOMIZE :: FOR
A=1 TO 20 :: CALL MAGNIFY(2)
130 CALL SPRITE(8A,96,2,92,1
24,A*INT(RND*4.5)-2.25+A/2*8
6N(RND-.5),A*INT(RND*4.5)-2.
25*SGN(RND-.5)):: NEXT A ::
GOTO 120

```

MEMORY FULL! Jim Paterson

LASERS AND THE TI
by Deanna Sheridan
(via the Hoosier NL May 1993 and
The Mid-South NL Aug 1993)

With the cost of laser printers falling almost daily, you may want to investigate the feasibility of using one with your TI. I have looked for a comprehensive review of laser printers in newsletters for the past two or three years, and not one article has appeared.

You have all seen what Martin Smoley can do with his laser printer and the TI, but most of us WOULD NOT go through what Marty does to get his printouts. Since none of the TI software has built in printer commands for lasers, Marty has to write his own.

I just purchased a HP Laserjet IIip and thought that my experience might help someone else decide if there might be a laser in their future also. I knew that you could print text from the TI through funnelweb, but was concerned that I would not be able to use my graphic programs. The laser prints at 300 dots per inch, while most dot matrix printers use under 200 dots per inch. Thus, all you would get is garbage.

If you read the advertisements for lasers, you will see that many of them have several printer emulations. That means that if it is emulating a Diabolo 630, or an Epson FX, or an IBM Proprinter, that the printer commands for those printers will be accepted by the laser and printed as though they were that machine.

Many of the newer dot matrix printers have a variety of fonts built in. My XR-1000 has Courier, TW Light, San Serif, Cinema, and several more that I can choose from the front panel of my printer. Even though most laser printers advertise 14 basic fonts, they will not be different fonts that you are used to with your dot matrix. These 14 fonts are basically variations of one

font... Courier, is courier 10 pt, 12 pt, 16 pt (condensed as we know it), in regular, bold, italic etc. Thus, this is the only font you will get when you are in said Epson, Diablo, Proprinter, etc. mode. The commands for condensed, enhanced, double wide, etc. will be interpreted and printed as you usually expect.

Thus, when considering a laser, the first thing that you will want to know is whether it has built in Epson emulation or whether a separate card can be purchased to emulate an Epson. With this feature, you can use PAGE PRO, TIPS, etc. without any modifications to the program.

There are several laser printers advertised between \$600 and \$900 range, but the cheapest in price may not be the last costly in the long run. If the Epson emulation is not built in, the cartridge will cost about \$100. A lot of these low-end printers only have 512k memory.

A laser printer is a "page printer". All of the data necessary to print an entire page is sent to the printer before it prints anything. Thus, if there is not enough memory in the printer to hold the whole page, not all of it will print. When reading articles on lasers, they say you should have at least 1 meg in order to print a full page of graphics. I don't know how many of us would be printing a page of high density graphics and nothing else. But it is something you should consider.

The cost of laser memory varies widely from printer to printer. You can add a meg to your PC for about \$50, but it will cost you two to three times that for your printer, depending on the make.

Another cost to consider is the imaging process the laser uses. Some use a toner/drum combination which is standard in the HP laserjets. Others require you to replace the toner and drum separately. This is not done each and every time you need toner,

Cont' Page 15

but every so many thousand copies. Some use the HP toners and others use their own brands which are not as plentiful or as cheap.

I seriously looked at the Epson Action Laser II. This is a very basic inexpensive printer. It had Epson emulation built in, and uses Hewlett Packard font cartridges (which you could use for text on the TI). The print speed on this machine is rated 6 pages per minute which is fast for a low-end printer. Standard memory is 412k and additional memory was about \$100 for one meg and \$150 for 2 megs. The second meg is sometimes cheaper because it goes on the same board as the first. However, I started to get second thoughts when I found out that the toner cartridges were about \$100 each and the drum had to be replaced at 130,000 (I may die before I reach that many though) at a cost of about \$150. The street price of this printer is a little over \$650.

Since I would be using my laser in both my TI, and on my DOX machine, I looked at a machine I probably would not have passed up if I only had my TI. This is a TI microlaser which was highly rated in a PC Magazine review. However when I went out to CompuADD, the only dealer in this area, they did not have one in and did not know when they would get one, and couldn't tell me how much an Epson font cartridge would cost or where I could get one. Guess you know they lost that sale in a couple of minutes.

Another machine I would definitely have considered if I were buying for only my TI, would be the Star Laser 4. This comes with Epson emulation, 1 meg of memory, uses HP standard toner cartridges and font cartridges. Most dealers are including a 25-font cartridge in the price which is about \$799. It is a 4 page a minute printer. However it uses something called RISC processing which sends the data out to the printer faster.

Because I intended to use my laser for business as well as pleasure, I chose the Laserjet IIip for that very reason. It is probably a little more expensive than most of you would feel free to spend, and you might choose instead the Laserjet Iip which has a street price about the same as as the Star Printer.

We are getting a Laserjet III at work and what I did at home would be compatible with what I do at work without any modifications. The only noticeable difference for me is the print speed. Of course, it is not nearly as large, with smaller paper trays, but I am finding it adequate for a home printer. The Laser III and up family supports scaleable typefaces, filled fonts, and most of the fancy tricks you see Marty do with his Canon laser. However, just as with Marty's printer, the software drivers for the popular DOS packages do not yet take advantage of these features. If I am to use them, I have to learn an entirely new language called PCL and have a software program that will let me insert my own printer codes. It comes with 1 meg of ram standard. I added a second meg and got the Epson cartridge which added about \$200 to the street price. Recently Micro Center advertised cartridges for the Iip and IIip at \$50. Just as diskettes and ribbons became cheaper when the volume of users increased, we should see toners decrease also. My toner cartridges are supposed to be good for 1,000 copies. After you get a couple of cartridges, you can always have them remanufactured. I am told that the cost for this is about \$40. When cartridges are selling for \$75 to \$100 this is a sizeable savings. I wrote this article using Art Gibson's Newsletter Printer program and the Epson Emulation cartridge on my HP Laserjet. I recently purchased a scanner and scanned the picture of a Laserjet from an ad in the Computer

THE FACTS ABOUT TI MEMORY SYSTEMS
AN EDITORIAL
A9CUG NEWSLETTER

Over the past six months there has been a lot of noise on the computer network and in user group newsletters on issues related to extended memory cards for the 99/4A. Some people have blatantly asked people to come out and choose sides on a very complex issue without understanding what they are choosing. In fact, what should be a pretty objective decision has been turned into an emotional gut-churner - a question decided by loyalties, pretty rivalries, lies and innuendo. Frankly, this is why we are in the situation we are in today - and why companies like Myarc and CorComp left the community. Everything technical debate gets turned into a personal vendetta, thinly disguised ambition is allowed to prevail over substance, and the community eats its young yet again.

When I set out almost 3 years ago with a really talented bunch of guys to put together a new kind of memory card for the 99/4A, I had believed that the community had finally outgrown that kind of thing. I was wrong. Seeing all of this stuff all over again has made me seriously consider throwing in the towel once and for all.

Why? Because everything we've done with these cards has either been ignored, mis-represented, or labeled as too "controversial" or "not ready for prime time".

For 8 months we've been mailing out press releases, articles and newsletters about our memory cards that apparently no one is reading, and user groups aren't reprinting or even reporting on. The only reference to what we've done that I ever see in print is usually in an article about our competitors, or in an editorial that simply says that there has been a "debate" and that it has gotten out of hand.

This is ridiculous.

This is the most important thing I've been involved with in the 10 years I've been in this community, and unless the community gives this a fair hearing, well, I guess it's finally time to cut my losses.

Here is my last attempt to get the unvarnished facts out in front of you, the reader.

1. The Asgard Memory System (AMS) is available NOW - it is NOT still in "development". We announced the product the day it was commercially available for sale, and in stock. In the last 8 months, we've been refining the product, writing software, and working on the next generation card. Our only competitor announced their product over a year ago, and have yet to release more than press notices (which all seem to be faithfully reprinted everywhere). It is pretty hard to compete against something that so far exist only on paper - especially when the unreleased product gets more press than the one that you can buy today!

2. We started AMS almost 3 years ago - long before there ever was a "National Committee for TI Standards." This so-called committee has never met more than once, doesn't include most of the TI hardware or software developers in the U.S., much less the rest of the world, and has produced a specification for memory systems without any real debate. Which endorses our competitor's plans. Before we had a chance to object, it was the declared "standard". Can you say "rail-roaded"?

3. Our memory system was designed to the only standard TI ever made for extended memory on the 99/4A - the one used in the TI-99/8. In fact, the guy who DESIGNED the TI-99/8 said our design was identical to the one TI specified.

4. Because our design was built to TI's specifications, it doesn't conflict with any other card in the P-BOX - except a 32K card. You can plug it in and your Horizon RAM-disk, Myarc HFDC, or anything else you have will still work fine.

5. Our design uses standard, off-the-shelf components. EVERY other extended memory design uses lots of custom ICs, and even more custom programming (as in a big DSR). Custom parts not only drive up the development time, they also drive up the cost, and guarantee that the design remains proprietary. By using off-the-shelf parts, we keep the price down, and guarantee competition. Remember how much TI used to charge for the 32K card when they were the only one making them?

6. Our system is tried and tested. We use the exact same "memory mapper" (the chip that controls the computers use of memory) that TI used in their 99/8, their 9900 minicomputers, and that IBM used in the very first IBM PC's. This component has been available for 10 years - all "bugs" in it have long been removed.

7. Everything about our system is "open",. Anyone can write a program for it or enhance it - the hardware and software specifications are available free of charge. Heck, the 5-disk development system we've spent the last 18 months writing is even fairware - and posted on the bulletin boards.

8. The AMS is very fast. It can switch pages over 10 times faster than any competitor, and with little program code (even in Assembly). Why is speed important? If you are sorting 512K of data, or loading 512K of pictures, you'll notice the speed - in fact, you'll notice the other system is less than half the speed.

9. Our system doesn't have its software in a DSR - and we are proud of it! Why?

A. We found that putting the operating software in a DSR makes it run much slower than if it was in RAM - and really doesn't give any benefit to the programmer or the user.

B. Any DSR increases the chance for compatibility problems - who wants to waste time finding problems with Myarc cards?

C. A DSR is "fixed". If you find a bug in it, the only way to correct it is to replace it. Consider all the pain Myarc users have gone through with EPROM upgrades of the HFDC and Geneve.

D. If programs are written to work around a DSR bug, they may not work when the DSR is fixed.

E. If the software to use the card is built into each program, then the only thing we have to do to correct a bug is issue an upgrade. Old programs written for either versions of our operating system software would continue to work fine, and new programs could take advantage of new features without worrying about hardware compatibility problems - since the operating system isn't in hardware.

F. Why do you think Microsoft and Apple load their operating systems from disk, and not from ROM chips?

10. We have a complete set of development tools available NOW. Even if our competitors released their card today, it would be a year before they had a system that was as easy as ours for programmers. Because our software was designed before our hardware, we were able to design a "programmer friendly" system that is far easier to program than any other extended memory system. This is important - as so many people have said, who wants a memory card there are no programs for?

A PLUG FOR THE LIMA FAIR

Lima is quickly becoming the MAIN faire of the TI community. For several reasons..it is FREE, and it is in late spring, when firms are ready to release new products developed and tested over the winter and early spring months. And it is friendly, plenty of cheap, clean lodging nearby, and lots of friends. No hassle, no banquets, no formal mish-mash which I LOATHE! Some people live for the formal, expensive, glamorous life. And they can afford \$70.00+ for a display table. Honestly, I have asked around (not just the TI community, but at work, to friends and colleagues who frequent conventions, faires, trade shows, etc) and \$70.00 for a table is OUTRAGEOUS. I am ashamed that many TI vendors find it hard to

In the last 8 months since we released our first AMS card we've released 2 software packages that take advantage of the card (including the word processor FIRST DRAFT), and software from other people has started to appear. Around 20 AMS cards are in the hands of developers around the world.

Is any of this news? Apparently not - I've seen few of the facts above in print anywhere, even though we've put them in a half-dozen articles.

The facts, on their own merit, should be compelling enough for people to put aside their differences and really weigh the benefits of what we've done - instead of consigning it as some "curiosity", or ignoring it.

We wanted to put together something that was cheap enough to build that every TI user could have one, and yet was simple enough to write programs for that every TI programmer could do so. I think we've done that if the TI world isn't interested at this point, doesn't care, or wants to keep waiting for fantasies, well, I can take a hint.

Thank you.

Chris Bobbitt
July 2, 1993

We designed our system to the "KISS" method - "Keep it Simple, Sam".

attend Chicago for our faire, due to table cost. I think the average price of a table is about \$35.00 no matter what type of show, for the kind of people we attract. Lima has a great idea. FREE tables, no frills, no hassles, and the atmosphere is RELAXED! AND, it is JUST TI'ers around...the omnipresent, unwanted public eye is blind to Lima..and I hope it stays that way. Lima is for TI'ers, no one else! Each year, it becomes more popular, and is always packed! When you look at the alternatives this year...Salt Lake City (bombed!) Northeast (who's going? not me!)...and \$\$\$Chicago\$\$\$, well, Lima is probably the most attractive to vendors and attendees...for real!

GOVERNMENT BULLETIN BOARDS
from BYTE-LINE

These are open boards in the Washington, D.C. area. No pre-registrations are required.

WORLD BANK (Northwest Washington, D.C.)

-- Information, Technology and Facility Development.
data: (202) 676-0902
voice: (202) 473-3076
Sysop: Ashok Daswani, Miguel Cuadra
public access: no limitations specified.

EXPORT-IMPORT BANK (S-E Washington, D.C.)

-- Exporter's BBS.
data: (202) 566-4602
data: (202) 566-8180
voice: (202) 566-4690
Sysop: Bob Hughes, Joel Kahn
public access: 24 hrs/day; 7 d/week.

DEPARTMENT OF COMMERCE

-- Economic News (Washington, Dwn) (Office of Economic Affairs)

data: (202) 377-3870

data: (202) 377-0433

voice: (202) 377-4450

Sysop: Ken Rogers

public access: may brows; charges fees for full access

-- Office Automation (Suitland, MD.)

(Bureau of the Census

data: (301) 763-4576

voice: (301) 763-7448

Sysop: Nevins Frankel

public access: 24 hrs/day; 7d/week

-- Personnel (Suitland, MD.)

(Bureau of the Census)

data: (301) 763-4574

voice: (301) 763-7448

Sysop: Nevins Frankel

public access: 24 hrs/day; 7 d/week

-- Microcomputer Electronic Information Center (Gaithersburg, MD.)

data: (301) 948-5717

data: (301) 948-5718

voice: (301) 975-3359

Sysop: Ted Lamberg, Lisa Carnahan

public access: 24 hrs/day; 7 d/week

-- Data Management Information Exchange (Gaithersburg, MD.) (National Bureau of Standards)

data: (301) 948-2048
voice: no voice line indicated
Sysop: not listed
public access 24 hrs/day; 7 d/week

-- Information Technology Exchange (Kensington, MD.) (National Oceanic and Atmospheric Administration)

data: (301) 770-0069

voice: (301) 377-2949

Sysop: Rich Kissel

public access: 24 hrs/day; 7 d/week

-- Planning and Budget (Washington, Downtown) (Office of the Secretary)

data: (202) 377-1423

voice: (202) 377-2949

Sysop: John O'Connor, Pat Spencer, Kathy Cooper

Appropriations data: Sharon Davis

Budget Bulletins: Beth Mack

public access: 24 hrs/day; 7 d/week

DEPARTMENT OF THE NAVY

-- Naval Aviation News Computer Information (NANCI) (Washington)

data: (202) 475-1973--avn: 288-1973

voice: (202) 433-4407--avn: 288-4407

Sysop: Commander John A. Norton

public access: 24 hrs/day; 7 d/week

-- Naval Weapons Engineering Support (NAVWESA) (Washington, S.E.)

data: (202) 433-6639--avn: 288-6639

data: (202) 433-2171

voice: (202) 433-4836

Sysop: Bill Walsh

public access: 4pm - 7am weekdays; 24 hrs weekends/holidays

-- Judge Advocate General (Alexandria/Arlington)

data: (202) 325-0748--avn: 221-xxxx

voice: (202) 325-8312

Sysop: Ens. John Sawyer,

Lcdr. Chris Buechler

public access: 24 hrs/day; 7 d/week

-- Naval Observatory (Washington Dwn) (Washington Dwn)

data: (202) 653-1079

voice: (202) 653-1522

Sysop: M. Miranian

public access: no limitat'ns specfd;

enter @TCO cmd for cmd directory

DEPARTMENT OF THE ARMY

-- Corps Engineering Planners (Mt. Vernon)

data: (202) 355-2098

voice: (202) 355-3087

Sysop: Michael Walsh
public access: 24 hrs/day; 7 d/week

-- Corps of Engineering (COE) Manpower (Washington, DC)

data: (202) 272-1514

voice: not listed

Sysop: Rich Courtney

public access: 24 hrs/day; 7 d/week

DEPARTMENT OF DEFENSE

-- Ada Information Database

data: (202) 694-0215 (DOD)

(301) 459-3865 (Hyattsv Md.)

voice: (703) 685-1477 (Alexandria, Arlington)

Sysop: none listed

public access: 24 hrs/day; 7 d/week

-- Defense Technology Security Administration Export Control

data: (202) 697-3632 (DOD)

voice: (202) 693-1148 (DOD)

Sysop: not listed

public access: exclusive use of exports of licensed items under provisions of U.S. Export Control Laws.

DEPARTMENT OF STATE

-- Agency for International Development (Arlington, VA.)

data: (703) 875-1465

voice: (703) 875-1369

Sysop: Jerry Galindo

public access: 24 hrs/day; 7 d/week

DEPARTMENT OF JUSTICE

-- Immigration and Naturalization Svc. (Washington, D.C.)

Budget and Finance

data: (202) 786-3640

voice: no voice line indicated

Sysop: not listed

public access: do not use in mid-day

DEPARTMENT OF TRANSPORTATION

-- Federal Highway Administration (Washington, Dwn) (Washington, Dwn)

data: (202) 426-2961

voice: (202) 366-4057

Sysop: not listed

public access: 24 hrs/day; 7 d/week

NAT AERONAUTICS and SPACE ADMN (NASA)

-- Information Technology Center (Washington, D.C.)

data: (202) 646-6197

voice: no voice line indicated

Sysop: Carlos Djeda, Maura Ennis

public access: 24 hrs/day; 7 d/week

-- National Space Science Data Center
(Greenbelt, MD.)
data: (301) 286-9000
voice: (301) 286-7251
Sysop: Bruce McLendon, Pat Sisson
public access: 24 hrs/day 7 d/week
Enter NSSDC (after
connect); when asked
for User, enter NSSDC
again.

-- Space Physics Analysis Network
(Greenbelt, MD.)
data: (301) 286-9000
voice: (301) 286-7251
Sysop: Bruce McLendon, Pat Sisson
public access: 24 hrs/day 7 d/week
Enter NSSDC (after
connect); when asked
for User, enter SPAN_
NIC

NATIONAL SCIENCE FOUNDATION

-- Science Resources Studies
(Washington, Dwntn)
data: (202) 634-1764
voice: (202) 634-4636
Sysop: Vanessa Richardson
public access: 24 hrs/day; 7 d/week

DEPARTMENT OF ENERGY

-- Energy Information Administration
(Washington, Dwntn)
data: (202) 586-8658 (use 7 stop,
even parity)
voice: (202) 586-1155
Sysop: T.C. Swann
public access: Mon-Fri 8am-11pm
wknds/hols 10am-6pm

-- Radioactive Waste Management
(Washington, Dwntn)
data: (202) 586-9359
voice: (202) 586-5722
Sysop: Glen Truitt
public access: 24 hrs/day; 7 d/week

FEDERAL DEPOSIT INSURANCE CORPORATION
(Washington, Dwntn)
data: (202) 737-7264
voice: (202) 898-7085
Sysop: R. Campbell, L. Rudolph
public access: 24 hrs/day; 7 d/week

SECURITIES & EXCHANGE COMMISSION

-- Information Systems Management
(Washington, Dwntn)
data: (202) 272-2835
voice: (202) 272-2823
Sysop: not listed
public access: Federal Government
use only

DEPARTMENT OF EDUCATION

-- Education Research and Improvement
(Washington, M.E.)
data: (202) 626-9853
voice: (202) 357-6524
Sysop: Tom Litkowski
public access: 24 hrs/day; 7 d/week

LIBRARY OF CONGRESS

-- Federal Library Committee
(Southwest Washington, D.C.)
data: (202) 287-9656
voice: (202) 287-1374
Sysop: Bruce Miller, Lee Power,
Steve Palinscae, Bill Stockey
public access: M-F 7:30am-5pm

GENERAL ACCOUNTING OFFICE

-- Information Technology
(Washington, Dwntn)
data: (202) 275-1050
voice: no voice line indicated
Sysop: Mark Stefan
public access: 24 hrs/day; 7 d/week

GENERAL SERVICES ADMINISTRATION

-- Information Resources Service Center
data: (202) 535-7661
voice: (202) 535-0825
Sysop: Steve Tursky, Suzanne Taxin

public access: 24 hrs/day; 7 d/week

VETERANS ADMINISTRATION

data: (202) 376-2184
voice: (202) 233-5571
Sysop: jAY D. Anderson, Alan Toense
public access: 24 hrs/day; 7 d/week

FEDERAL BUREAU OF PRISONS

-- Office of Information Systems
(Washington, Dwntn)
data: (202) 272-4545
voice: no voice line indicated
Sysop: Byron Trantham
public access: BOP and employees of
other government agencies

FAA/NWS/MITRE (Falls Church/McLean)

-- Washington Testbed for Automated
Flight Service Lab
Experimental weather briefing
data: (703) 790-1740
voice: (703) 883-600
Sysop: not listed
public access: no limitations specfd

FEDERAL COMMUNICATIONS COMMISSION

-- Public Access Link (Laurel, MD.)
data: (301) 725-1072
voice: not listed
Sysop: not listed
public access; 24 hrs/day
(5 min connect time)

DISTRICT OF COLUMBIA

-- Productivity Management Services
(Washington, Dwntn)
data: (202) 727-6668
voice: (202) 727-6665
Sysop: Danny Weiss
public access: 24 hrs/day

FILE 60V/BBS13

END

OUR 4/A UNIVERSITY

by Jack Sughrue
Box 459
E. Douglas MA 01516

originally appeared
BITYS, BITS & PIXELS
Lima, U.S.

83 DDCENTS

To Whom One Turns

You people up back, let's have your attention up here!

Save your questions until the end, as I'll probably answer them along the way, anyway.

First, make sure you have your notebooks open and pens at the ready. There are lots of important names and addresses I'll be giving out. Only once. So, if you miss them the first time, it's as the French say, "Zee tough cookie."

Second, in my hand I have a SOFTWARE EXCITEMENT Catalog. These \$2 catalogs are for the IBM compatibles, Amigas, Macs, Commodores, and Apples. They are typical of the user-supported shareware-type catalogs for those machines, most of which contain the same items no matter who publishes them. Let's look at what they have to offer for \$4 per PROGRAM! If you buy a dozen programs they go for \$3 each. 20 brings the price down to \$2.50. When you order more than 50 of these programs the price gets down to \$2 each. Plus shipping charges and a \$3 handling and packing fee. But there are only 30 educational programs total, pre-school through college, anyway, so you couldn't even order 50 educational programs if you wanted to. But one has to be careful, even if you have a dozen children from ages 3 to 23. AMENCMP (a memory game), for example, requires 640K (YES! 640!), a VGA or EGA monitor, AND a hard drive. Whew! Sure makes our little, very inexpensive, 32K TIs with single/single drives look puny, doesn't it? Or does it? What does this program do? You match up hidden pairs. It's a fancy variation of Concentration.

There is also a program called WORD GALLERY which helps children associate the printed word with the object it describes. (Doesn't that sound a bit like a few cartridges TI made about a decade ago?) There are also math programs that teach counting, addition, and subtraction through endless patience and some graphics and games. (More cartridge deja vu?) There's also French and Spanish tutorials. And so on.

Anyway, if you have a use for any such fanciness or even ALL of these 30 programs, they will cost you about \$70.

Now, we'll begin with THE important educational resources of today's American TI Community.

As I'm not reading from my full notes today, Class, I'm afraid I'll be leaving out a few important resources unintentionally. Consider checking this out and locating the missing sources as part of your assignment for next time.

Meanwhile, let me start with some comparisons to this \$2 shareware catalog in my hand. There's a wonderful programmer and writer in Columbus by the name of Jim Peterson. He has a one-man company which has no equal for any other computer in the country. It's called TIGERCUB SOFTWARE (156 Collingwood Ave., Whitehall, OH 43213) and offers disks at \$1.50 each (postpaid for 8 or more). Disks! Not programs. And he has over 550 different disks! Jam-packed full of the best authors in the TI World, arranged by category and auto-loaded from a super menu. We're talking THOUSANDS of Public Domain and Shareware programs. Let's look under education, for example, where, along with the games sections, you can find not 30 but THOUSANDS of programs, various Concentrations just being a smidgeon of these. For example, there are three disks full of programs just for Vocabulary & Reading and 15 DISKS! just for math (to name a couple). Here are the programs from just ONE of these Vocabulary & Reading disks: Adjective to Adverb, Noun to Adjective, Learning to 'ing' It, Plural Endings, Animal Multitudes, Doctor Who, Vocabulary, Vocabulary Quiz, Syllables, Reading Practice, Speed Reading, Tense Time, Synonyms & Antonyms, Read-Fast, and Vocabulary II. 15 educational programs for \$1.50! Or, in this case, just 10 CENTS A PROGRAM! (Or, put another way, about 30 programs for \$3, instead of \$70, as is the case with the "other" computer.) In addition to some neat graphics, some of these programs have real speech! All for a dime. Nothing's been a dime since Nixon took us off the gold standard: not a pack of gum, not a comic book, not a candy bar. But now, thanks to Jim Peterson and TIGERCUB, the dimey has returned to those fortunate enough to own a TI-99/4A. Top quality for wonderful prices. To get his catalog (\$1 deductible on first order) is like rolling Chanukah, Kwanzaa, Christmas, Druidic Solstice, and 55 Birthdays all into one computing event.

I tell you, Class, it'll make your mouth water.

But where was I?

Oh, yes, TI resources for educational goodies. Er, tools. Educational tools and materials.

Obviously, if you own a disk drive, TIGERCUB is an enormous resource.

The next best resource is an active user group. Makes no difference if you live in East Douglas or Venedocia (if there really are such places), you can make the connection by joining by mail. I belong to a few user groups. In addition to monthly newsletters, which keep me very informed and up to date on TI matters of importance, I am also afforded the opportunity of participating in the treasure chests called Club Libraries. I'll use the Lima, Ohio, group as an example. (Lima U6, P.O. Box 647, Venedocia, Ohio, 45894). For my \$15 dollars a year I receive a MONTHLY newsletter of original articles, reviews, advice, programs, you-name-its. Also I automatically receive important updates of FUNNELWEB, the most used piece of software in the TI disk world. I have access to a zillion world-wide newsletters and other pieces of textware, not to mention the expertise of a truly sharing collection of hard-working, friendly 99ers. I am also entitled to the free library of cassettes and disks put together by this small, dedicated contingent of TI goodfellas (and gals). This means that I can look over the immense LIMA catalog at my home in Massachusetts and send cassettes and postage or disks and postage and get ANYTHING I want for nada, zilch, zero,

cribbage 19, nothing. Beat that one, Kiddos!

Oops! As I was saying, we must look into our educational resources. There are many other user groups, too, Class. My local M.U.M.C.H. (560 Lincoln Street, P.O. Box 7193, Worcester, MA 01605) is probably my best personal resource, as I attend our monthly meetings and fairs and so on. We do lots of demos and hands-on type things and help each other whenever possible. Anyway, Class, if you can find a local group you can go to for meetings, that's another great resource, but at least join one by mail if there are no locals.

And attend at least one TI Faire somewhere once a year, even if (as I do) you have to travel over 800 miles. It's worth it for all the...

If you'd hold the talking down back there, it would be greatly appreciated. We're running out of time, and I did want to...

Okay, Mr. Shakespeare, what is the question? I suppose that's the only way I can get you to stop waving your hand.

Listen up, Class! Listen up! Mr. Shakespeare over by the window wants to know about some of the educational software. He says he has a nephew in junior high who is having trouble reading and two granddaughters who are 8 and 4, respectively, and wants to know what the TI can do for him.

Yes, yes, Ms. Bronte, I'm AM going to tell you about educational software for people our age, too, but we won't be able to get into too much of that for a few sessions.

Right now, though, I'd just like to tell you about a few people who had some visions. It might help.

Terrie Masters, who used to be president of the Los Angeles group, spoke to me a few years ago about doing some educational networking with our TI educators. I've also discussed that same thing more than once with Charlie Good (Lima UG). And Sister Pat Taylor (1050 Carmel Drive #456, Dubuque, Iowa, 52001). And John Willforth (RFD #1, Box 73A, Jeannette, PA 15644). And Janet Ryan and her daughter Jennifer (10 Jolly Road, Ellington, CT 06029). And Mickey Schmitt (196 Broadway Ave., Lower Burrell, PA 15068). And Mike Wright (45 Centerville Drive, Salem, NH 03079). And Jim Horn [EXTENSIVELY] (P.O. Box 244, Lorton, VA 22079). And Rodger Merritt (1949 Evergreen Ave., Fullerton, CA 92635). And fellow elementary teacher Phil Townsend (c.o. Kawartha 99ers, 224 Woodward Ave., Peterborough, Ontario, Canada, K9L 1J7). And

Eunice Spooner (Webb Rd., Box 3720, Waterville, ME 04901). And Barry Traver (835 Green Valley Dr., Philadelphia, PA 19128). And OFTEN with Jim Peterson. And, once with educational programmer Don Shorock (P.O. Box 501, Great Bend, KS 67530). And very often with Chris Bobbitt even before he founded ASGARD (P.O. Box 10306, Rockville, MD 20850). And piles of teachers and interested parents and grandparents.

An educational network has been a hot topic for many years in our community. As a matter of fact, Terrie mentioned a teacher by the name of Joy Warner (Box 518, Mt. Baldy, CA 91759, whose daughter is a pilot and was in the recent winter olympics as a "lugist," one of those incredible sledders) who was bent on getting a network going. This past year Joy flew all over America trying to help Terrie's dream come true by meeting with as many Tiers as she could meet during her whirlwind tour.

She discovered, as I did, that there is already much of that network in place and ready to connect. Jim Peterson has his TIGERCUB marvel. Charlie has been testing (with his own wonderful tykes) all kinds of marvelous and rare TI educational programs from Milliken, Scholastic, Disney, and so on. Mike and Charlie, along with Gary Taylor from Pittsburgh have been competing for ownership of the ultimate TI Collection (in fable known as the TI Grail). Eunice Spooner not only runs the only all-kids TI user group in America but has the best LOGO video and disk program money (\$10) can buy. Bill Gaskill and Ron Albright have been (to our 99 history) the best thing to happen to us. Bill still is. Dick Altman's wonderful Fairware List is now in the capable hands of Ida McCargar of the Southwest 99ers (P.O. Box 17831, Tucson, AZ 85730).

Oh, sorry, Ms. Bronte, I didn't notice the time. Anyway, keep this list. It's important when it comes time for the final. Guaranteed this material will be on it.

Did I mention NOTUNE? Or Tex-Coop? Or COMPRODINE? Or MICROpendium?

Or Regena? I didn't mention Regena? Quick. Write down REGENA, 918 Cedar Knolls West, Cedar City, UT 84720.

Ciao!

(Now let's see. Who did I leave off this list? And where does the time go?)

COMMENT:

I recently configured a disk with FW 4.4 and the 5.0 editor. For some reason I automatically get a double spaced printout with the formatter (I don't know about a PF from the editor yet ???). I can print the same file with my FW 4.3i with no trouble with spacing... any ideas on where this setting might be and how I can change it??? I would like to start using the new editor, but it is frustrating until I can get the spacing how I want it..

RESPONSE:

I think that the new FW formatter inserts linefeeds automatically, because it defaults to double spacing (this is true if you get a properly formatted page(s), with top and bottom margins, and the lines are double spaced.) Otherwise, if instead of one, single spaced page, you get two double spaced pages, with a missing bottom margin on the first page and a missing top margin on the second page, then you have the PID setup wrong . . . chose the device name PID.LF to remove line feeds and PID.CR to remove carriage returns and line feeds.

COMMENT:

The program, "PC Transfer" only supports certain chip sets. What unsupported chipset is on the Myarc HFDC which is not supported by "PC Transfer?"

RESPONSE:

PC Transfer will operate on Western Digital chips (1770, 1772, 1773, 2793) in the CorComp Floppy Controller Card and the Myarc Floppy Controller card. The HFDC uses the SMC (Standard Microsystems Corporation) HDC 9234 Universal floppy and hard disk controller. This chip, combined with the RS-422 line drivers and receivers, the FDC9216(b) and delay logic, allow the HFDC to interface to hard disks and floppies on virtually the same circuit. Internally, the 9234 scales it's operational speed so that it works with the proper disk media density. The 9234 has PC/AT standard format

built-in, for hard disk and floppy disk. And, it has on-card RAM, which operates in DMA mode (Direct Memory Access) This allows the controller to read from the disk while the host computer does something else. By periodically testing the interrupt (done) line, the host computer (in this case, the 9900 or 9995) can then read the data from the on-board RAM. The design is radically different from the current floppy controllers (yet a generation more sophisticated).

The 9234 will accommodate all existing floppy formats except for the ultra-high density 1.0 megabit/second rate. The problem with PC transfer is that it only interfaces to the byte-oriented Western digital chips. These chips transfer a byte at a time, not the whole sector at once.

COMMENT:

This SMC HDC 9234 chip sounds like one bad mother!!! It is clear that Lou Phillips was definitely ahead of his time with his forward thinking. It would therefore be nice if the important programs which we have in our community could be adapted to his vision rather than the other way around which would be a step backwards....

ANSWER:

I am aware that for a time, Lou was considering other chip designs and companies, but the SMC chipset offered the best compatibility and high density disk support. BTW...Don Walden has discovered a simple, harmless modification to the HFDC (a single jumper on an otherwise unconnected CRU bit) which when a hard disk is connected, but not on, or no hard drive connected, the system will immediately go to floppy. When a hard disk is connected, and on, though, there is no difference in current operation. In my opinion, this connection is actually a design oversight..it most likely was in the original plan for the HFDC but was overlooked in the final board design, which work was being done on other circuits on the board (the CRU bit involved, an input bit, is documented in the HFDC manual, technical section, but it ISN't connected to ANYTHING now!)

GENEVE COLD BOOT

PROBLEM:

Here's a question for you "techies". I was having this problem with the Geneve.

Cold boot - got message "bad CPU".... Ran MEMTEST and had two columns showing white: 20-3F. Normally, the first four or so columns are green. pulled the card, and pulled the CPU chip and re-seated it. BTW, the battery is a new one. Now when I boot up, the system stops at the date (which is a correct one as well as correct time) and prompts me to enter the correct date and time. WHAT GIVES? Also, the LED is on at initial boot, but after a minute or so it goes out.

SOLUTION:

Gate array problem. The gate array handles the decoding of the clock The LED is connected to power. When there is power to the board, the LED comes on. Looks like you could be getting thermal shutdown on one side of the board. 5 volts are getting to the CPU, VDP, and the gate array and memory. The LED is connected to the regulator which powers memory (I believe.) if you are getting the LED at first, then there is just enough time to power up the thing, then the VR goes into thermal shutdown (or, it is just plain going bad) and the DRAM gets no power. solution: Have the board checked by Cecure, then put it on a PC power supply. It is silly to have to struggle with voltage regulator problems. Let the entire geneve (and all other cards) get smooth, constant, noise-free clean power from a single switching supply. While you are at it, mount the whole card cage in a tower case!

USE OF THE "CARET"

I have used MDMV on the BBS file areas, and to date, there are no filenames with Caret symbols in the filename. The Caret is really only used in two places I know of, other than this "archive" file designator (Of which I recommend the at sign (@) instead): In TI Writer/My word, etc. files, the Caret is used as the "required space" character. It is printed as a space, when character spacing and alignment is critical, and where otherwise, the TI Writer Formatter would screw things

up... The other, is Pascal programs involving pointer operations. The Caret is used in Pascal as a method of indirection..It is used to reference the data that a pointer points to. The pointer contains an address, the pointer plus the caret symbol contains the actual data stored at the address stored in the pointer. That is another reason why I stopped publishing my Pascal programs in the newsletter. The editor would transfer my text (already formatted) through the formatter, and print it. The formatter would strip the caret symbols from the Pascal source code, and the resulting code couldn't run..and I would have hoardes of programmers with knives at my throat, after giving them bad source code! The formatter also creates problems with C code, especially when it sees brace symbols, brackets, Vertical bars (Or logic), ampersands (AND logic),

HFDC PROBLEM from a GENEVE user

There are a few things which prevent me from using my HFDC alone..

- 1) MDOS does not yet fully support the device (1.44 meg, booting MDOS from floppy)
- 2) PC transfer does not work with it
- 3) Hyper copy does not work with it.

Other than these three reasons, I will move to complete HFDC soon. to solve (1), MDOS is being put on a chip. Once MDOS is loaded from EPROM, it can load MDOS from any device, if necessary. MDOS

on a chip means that a floppy controller is no longer necessary of the hard drive goes out to lunch.. to solve (2), I plan on doing my own version of an MS-DOS file transfer program, and disk editor, supporting all existing disk formats. To solve (3), I plan on also doing a fast track copier for the HFDC, which will be part of UniManager.

There are some other good reasons. Two of my floppies are 1.44 meg drives, and I would like to take advantage of the extra storage when it becomes available. Also, did you know that the HFDC does NOT use video ram for data transfers in MDOS? When copying files between HFDC-floppies, it is FAST! even in 720k mode...the data transfer is at least 5 times that of the ayarc floppy controller (7 times faster than corcomp)

The only other incompatibility with the HFDC is that the corcomp single density format sometimes screws up the HFDCthe gap values used on the corcomp with single density is WRONG,if formatted on a TI. I believe corcomp had to do this because of timing problems on the TI. In fact, I have seen some corcomp's which couldn't read their own disks! The HFDC is actually a universal disk controller, not just used on the HFDC is the 9234, but in PC's and Mac's. The HFDC-only system (or HFDC/SCSI system) will be up to 5 times faster at floppy transfers than a floppy & HFDC and SCSI system, for disk transfers which use CPU RAM instead of VDP RAM. I plan on using SCSI for other non-floppy non-MFM devices (scanners, CD-ROM,Tape and SCSI hard disks, but not floppy drives) to supple-

ment the storage of my computer. In programming the HFDC to control the tape drive, I have found that is so many way it is superior to all existing floppy controllers on the market today.....even PC's!

HARD DRIVE REPAIRS

Here is a source for all types of hard drives (MFM, SCSI, etc). This will do repairs, reconditioning,and they sell new media also.. It is JBL Technologies, 5105 Maureen Lane, Moorpark, CA 93021. Standard rates for all drive repairs, based on capacity (not drive type)

10-19 meg....	\$35
20-29 meg....	\$59
30-39 meg....	\$69
40-49 meg....	\$89
50-85 meg....	\$119

Rates up to repairing 700 meg drives, regardless of interface format. 180 day warranty on all repairs..Tech support....(805) 529-0908. Drive repairs require RMA number. Visa/MC/Discover... COD, personal checks accepted. Also, will repair floppy drives. (this was from an Ad in the Feb. computer shopper, pages 528-529.) This company also buys used hard drives...in exchange for credit towards upgrade drives. Here are a few good ones: SCSI hard drive (20 meg) ..\$115 45 meg SCSI drive (Rodime)..... \$199...70 meg SCSI (Miniscribe)...\$295. Some great deals on MFM drives too... \$325 for 80 meg seagate ST4096...Smaller drives/prices also available.

END

Shopper. I converted the scanned image to a Mac file and sent it over to the TI where I converted it to an instance. I used TI-Artist to add text above and below the picture.

That sounds like a lot of work when I could have just printed it in two columns from Word Perfect with high resolution

graphics and a fancy font. We all know that Word Perfect can do a decent job of desktop publishing, but not everyone knows the TI is no slouch considering it's age and lack of memory and sophistication.

**MEETING DATES
FOR
1993**

C.O.N.N.I. BOARD MEMBERS

3RD SATURDAY

- 18 SEP 1993
- 16 OCT 1993
- 20 NOV 1993
- 18 DEC 1993
- 15 JAN 1994
- 19 FEB 1994
- 19 MAR 1994
- 16 APR 1994

- Pres. - John Parkins 614/891-4965
- Vice Pres. - Chuck Grimes 614/268-8821
- Treas - Bill Sheppard 614/881-5742
- Sec/Sat - Jim Peterson 614/235-3545
- Sec/Wed - Dick Beery 614/459-3597
- Membership - Everett Wade 614/262-6346
- Librarian - Ken Marshall 614/875-1670
- Disk - Dick Beery 614/459-3597
- Cassette - Harley Ryan 614/231-1497
- Cartridge - Ken Marshall 614/875-1670
- NL Exchange - Jean Hall 614-885-4223
- TIABS BBS 614/851-0708
- Spirit of 99 BBS 614/263-3412
- Irwin Hott 614/263-5319
- Dick Beery 614/459-3597
- Co-Editors/Spirit of 99 NL
- Jean Hall 614/885-4223
- Bob DeVilbiss 614/891-0566

4TH WEDNESDAY

- 22 SEP 1993
- 27 OCT 1993
- 24 NOV 1993
- 22 DEC 1993

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