

**THE CLEVELAND AREA 99/4A USERS GROUPS  
NEWSLETTER**

**OCTOBER, 1984**

**NORTHCOAST**

**SOLON**

**NORTH ROYALTON**

**GOLDEN CRESCENT**

**EXECUTIVE NOTES -- SOLON**

If you were at the Solon meeting in September, you saw Frank Jenkins present an informative demonstration of the TI word processing software, TI Writer. Thank you, Frank Jenkins.

For October, we will have a sprite presentation -- that meeting on Saturday October 13, 1984. For November, we will have a presentation on the Mini-Memory Command Module -- that meeting on Saturday, November 10, 1984.

Hope to see you there.

Walter Ryder  
President

**OCTOBER MEETING**

Saturday, October 12, 1984

Solon Public Library -- Inwood Drive off SOM Center  
10:30 am -- Education Session 11:30 am -- Membership Meeting

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**NOVEMBER MEETING**

Saturday, November 10, 1984

Solon Public Library  
10:30 am -- Education Session 11:30 -- Membership Meeting

**FOR SALE:**

Unopened extra TI Multiplan \$70  
Unopened Editor/Assembler Manual  
(TI suggested reference for use  
with Mini-Memory) \$10

Ken (357-7274) after 6 or weekends

## BOLDEN CRESCENT

### OFFICERS

PRESIDENT:CHUCK MARENO 324-4388  
VICE PRESIDENT:DICK BURGER 967-1317  
TREASUER:DALE SCHIEFERSTEIN 988-5050  
SECRETARY:OPEN (NEED ONE BADLY)  
LIBRARY:JUDY HAYDEN 988-5597

MEETING PLACE:AMHERST FIRE STATION

CHURCH STREET

AMHERST,OHIO

TIME 2PM. TO 3:30PM.

4TH SATURDAY OF EACH MONTH

NEXT MEETING: OCTOBER,27TH,1984

### EXECUTIVE NOTES

Summer is almost over.The nip of Fall is in the air. Summer picnics are a thing of the past. They are now pleasant memories. Our thoughts now turn to....What else!,our trusty computers.,tucked away in a dusty corner of the closet waiting for summers end. NO!!, You say, You've been with it all summer and now you are really ready to go!. Fine. Then lets get started.

As some of you may know,our summer attendance was very low during the last three meetings. We had a Picnic in July which was not supported by the membership. If this is going to be the case in the future, it is very possible that we will simply cancel the June, July, and August Meetings next year.

In any case, I'm looking forward to an exciting year for the Club.However, to make this possible we need a lot more help from our members. I know, you have heard this before, and read it in the Newsletter, time after time,but the fact remains,if our group is to be successful,continue to grow and develop, we need a lot more input from our members then we have received in the past.

I'm sure,each and every one of you has something to share with others,some bit of information,a tip you have found useful,a better way to do something,a problem you have solved,a program you have written or modified to run better,anything,you can share with others in the group. Thats what a users group is all about.

If you have read something in a magazine or book that was interesting to you, then it will be interesting to others. Let us know about it,or, better yet, write it up and submit it to the NEWSLETTER.(and by the way,we still are looking for an EDITOR). so come on and join in on the fun, you'll be glad you did and we will all benefit.

### !!!!CONTEST!!!!

OUR SECTION OF THE NEWSLETTER NEEDS A UNIQUE IDENTITY!

We need to develop a masthead and a name for our section of the NEWSLETTER, something that will make us stand out and be our own, therefore,we will be accepting Ideas from our membership and will award a prize to the winner. A trip to EUROPE or a GIFT CERTIFICATE for a thousand dollars has been suggested, needless to say they were turned down, However, we will be offering an exciting piece of softwear to the lucky winner. Members may submit as many entries as they like. SO, lets see what you can come up with to make our section of the NEWSLETTER super exciting.

## EXECUTIVE NOTES -- TI CHIPS

In place of an August meeting, the Ti Chips held their First Annual Picnic. Fun was had by all who attended.

On Saturday, September 15, the TI Chips had its monthly meeting at the North Royalton Library.

Our Library Committee announced that our Periodical Library is now ready to start loaning material. Donations of magazines by members would be appreciated. Instead of throwing them away when you've finished, by donating them you can share them with all our club members.

Thanks to our Education Committee, we had a very interesting meeting last month. Tom Thalner of Edu-Comp, with the help of his children, gave a demonstration of the Sketch Pad by Personal Peripherals. While pictures cannot be printed out, they can be put on tape (not disk) and this seems like a really fun piece of equipment with some fine features, such as color selection, filling in solid areas, and line rays. Thanks, Tom and Family.

A special thanks also to Don Schmidt of Compro who brought in a printer called "the yellow Banana" by the Leading Edge for us to examine.

Steve Latza and Mark McCauley took apart a TI console to demonstrate how to clean the contacts. They pointed out that the computer was still working after they put it back together. Some of us were holding our breaths, but we'll never doubt you again, fellas.

Daryl Saylor gave an informative presentation about how to use the CALL CHARacter subprogram for redefining characters.

After the meeting, a "debugging" session was held. About 8 or 9 members attended and worked on a program on files. There will be another debugging session at the October meeting. Members are invited to bring in problem programs or just come to watch or help.

Although this was a really great meeting, our officers would like to top it, if possible, this month and every month. They want your suggestions on what you want to see or learn about.

Our next meeting will be on Saturday, October 20 at the North Royalton Public Library at 10:00 am. See you all there. Bring a friend!

Jan Fedor  
Secretary

## EXECUTIVE NOTES - NORTHCOAST

Although it was a gorgeous day outside, our September meeting was well attended. Those present got to see the insides of the computer as well as a demo of TE-1200, a terminal emulator program.

Thanks to Don Schmidt of Compro Systems for demonstrating the Leading Edge Gorilla Banana printer, a real bargain of a printer at \$150.00.

Congratulations to the winners of the door prizes, Maria Stavanja and Phil D'Apice. Maria won a mail list program and Phil won a space game. There will be at least two door prizes at the next meeting so be sure and be there.

At our October meeting Judy and Tom Thalner of EDU-COMP will be present to demonstrate a sketch pad for the TI call "SUPER SKETCH" from Personal Peripherals, INC. I was really impressed with it. I also will have several Forth programs to copy.

Plans should be finalized by next meeting for the TI-Writer Seminar to be headed up by Robert Van Etten. If you are interested, please let me know before the next meeting.

For those who do not get Home Computer (when it comes), there will be a few extra copies of the Home Computer Digest at the next meeting.

Looking ahead-- Teresa Leeders of DAK, a computer supply company will be present at our November meeting to show what is available from them and will be bringing some extra goodies along to give out.

### NEXT MEETING

WHEN: October 27th  
WHERE: Euclidian Room  
Euclid Square Mall  
TIME: 12:45 - Programming and Debugging Session  
1:30 - Regular Meeting

Jim Cline  
261-2463



## CASSETTE TO DISK -- TOO LONG

When transferring long basic programs from cassette to disk, a problem can occur because of the disk controller card using up some RAM. There is a way to overcome this problem, provided the program can run in Extended BASIC (character sets 15 & 16 not used) and expansion memory's available.

Here is the procedure: Turn on the computer without first turning on the peripheral box, select BASIC, and load in the program. Now edit out the last half of the program using function erase and the arrow key alternately. Now save the remaining first half to another cassette. Reload the original program, delete the first half and save this to other side of the cassette. Now, shut off the computer, turn on the peripheral box and turn back on the computer this time selecting Extended BASIC. Reload first half and save to disk using the Merge option. Now reload the second half and merge with first half, then resave to disk -- not fast but it sure saves re-typing the entire program.

Another tip is that I use cassette tape to backup my disks. I reserve my disks for my favorite programs and put everything else on 90 minute cassettes -- yes, they're thin and can stretch, but I seldom read anything from them and they're inexpensive and can hold four single sided disks worth. The method in the first discussion can be used with slight procedure modifications to backup long disk programs to disk. If anyone reading this article knows of a simpler way to transfer programs, please write to me in care of this group.

Ken Gladyszewski

## AN EDIT ROUTINE FOR YOUR TI (Submitted by Tony Kozak)

Ever make an error entering data into an input statement and mess up accumulated totals and/or data you had been printing and/or saving? The two lines below can provide you with a limited ability to edit data entered through input or accept statements. These two lines give you a "second chance" to correct data before it is accumulated into totals and printed or saved.

```
XXX INPUT "CORRECT? ('ENTER' OR  
'NO')":A$  
YYY IF A$="NO" THEN CCC
```

If ENTER is pressed, the program moves on. If NO is typed, the program goes back to the first line in the input sequence. These two lines should be placed so that they come before any instructions to add data to totals and/or print or save the data. If NO is typed, the corrections can be made before erroneous data messes up the record you are creating.

The short program below illustrates how this edit routine works. 5 numbers are to be input and the sum totaled. After each input, a "second chance" to review the number input is given. If NO is typed, the number input is not added to the sum nor is it counted in the for/next loop cycle. Only the first 5 input entries where ENTER is pressed are counted in the loop. Make up a problem and try it. It works in console or extended basic.

```
100 CALL CLEAR  
110 LET SUM=0  
120 FOR X=1 TO 5  
130 INPUT Y  
140 INPUT "CORRECT? ('ENTER'  
OR 'NO')":A$  
150 IF A$="NO" THEN 130  
160 PRINT  
170 SUM=SUM+Y  
180 NEXT X  
190 PRINT  
200 PRINT "TOTAL: ":SUM  
210 END
```

### TIPS AND TRICKS

From: Judy Thalner, gleaned from various T.I. boards accross the country.

#### BRINGS UP THE TITLE SCREEN:

CALL PEEK(2,A,B)  
CALL LOAD(-31804,A,B)

#### LOOKS FOR A PBM CALLED LOAD:

CALL LOAD(-31962,255)

#### ACCESS THE SOUND REGISTER:

CALL LOAD(-31740,NN,NN)  
TRY DIFFERENT NUMBERS AND SEE WHAT YOU CAN GET.

### A REVIEW

FAST COPYer (tm)  
by QUALITY 99 SOFTWARE  
1884 Columbia Road. Number 500  
Washington, D.C. 20009

I received a notice in the mail the other day from this firm regarding a product that will copy disks in TWO passes or less. Needless to say I was very interested as the price of 19.95 seemed right to me. Better yet, until the 30th. of September they were offering it for 20 percent off the list price. I ordered it. Several days later it arrived in the mail. I am very pleased to report that it does everything the firm said it will do and more. I used it with the mini-memory and it worked great. It sucks up a master disk in two great big gulps and spits it out to the copy disk in only one or two passes. A full disk will require two passes. Fantastic!!!, If you are looking for a utility that will help you in copying disks then this is the Product for you. The only thing wrong is that the Co. does not offer quantity discounts to groups. Also, by the time you read this the 20 percent offer will be over. I rate this a 8 and that is because this product did not appear to work with the new CorCom card. Chuck Mareno

#### REPORTS OF MY DEATH GREATLY EXAGGERATED DEPARTMENT.

Some time back, we reported the possibility that the "SMART PROGRAMMER" by Miller Graphics may have ceased publication. This is NOT the case and I am happy to report issues of the news letter will be forthcoming. This information comes from Judy Thalner of EDU-COMP, 327-6579. If you would like to obtain a copy of this most interesting Newsletter, give Judy a call.

#### TI SOFTWARE RELEASES

We now have on hand updates for TI WRITER and MULTIPLAN. One of the TI WRITER files eliminates the "Famous form feed while using the Formatter" which has annoyed us for so long. This routine alone makes this package invaluable to owners of this excellent software package. Any member interested in obtaining these updates can contact Chuck Mareno at 324-4388.

#### MIDWEST COMPUTER FEST

The CIN-DAY USERS GROUP has cancelled a proposed Midwest Computer Fest scheduled for this Fall. An announcement of the event was carried in the Grapevine Column in the last issue of Home Computer Magazine.



**TIPS FROM  
THE  
TIGERCUB  
No. 14**

Distributed by Tigercub Software to users groups for promotional purposes and in exchange for their newsletters.

Tigercub Software, 156 Collinwood Ave., Columbus OHIO 43213, has over 130 original programs available at only \$3.00 each. My catalog is available for \$1.00 which may be deducted from your first order.

It has come to my attention that the members of some users groups have never heard of my kitchen-table enterprise, although their group has been receiving my newsletter for several months. It appears that many users groups have no method of making available to their members the information from newsletters which they receive in exchange.

My software business is a failure, and my Tips are a complete failure as a promotional effort. During the month of July I received a total of 31 requests for my catalog, of which only 9 were the result of newsletter publicity. I do not want to discontinue these Tips, because of the many interesting newsletters that I receive in exchange. However, I can no longer afford to distribute them to those groups which never give any indication that my Tips are reaching their members.

You may have observed that the Tigercub now possesses a Gemini 10X printer. The only fault I could find with it was that it wouldn't print Chinese, so I remedied that defect with this little program.

100 !THIS ROUTINE INITIALIZE  
S THE GEMINI 10X TO PRINT 'C  
HINESE' UNTIL IT IS TURNED O  
FF - by Jim Peterson  
110 OPEN #1:"PIO"

```
120 PRINT #1:CHR$(27);CHR$(4
2);CHR$(0);: CALL CLEAR
130 FOR CH=65 TO 90 :: PRINT
"WORKING..." :: FOR J=1 TO
7 :: FOR L=1 TO 9 :: RANDOMI
ZE :: IF (INT(30RND+1)<3)+((
L>1)*(D(J,L-1)>0))THEN 150
140 D(J,L),D(J,10-L)=(1+ABS(
J>1))^J
150 NEXT L
160 NEXT J
170 FOR L=1 TO 9 :: FOR J=1
TO 7 :: X(L)=X(L)+D(J,L):: M
EXT J :: NEXT L
180 PRINT #1:CHR$(27);CHR$(4
2);CHR$(1);CHR$(CH);CHR$(1);
CHR$(X(1));CHR$(X(2));CHR$(X
(3));CHR$(X(4));CHR$(X(5));C
HR$(X(6));CHR$(X(7));CHR$(X(
8));CHR$(X(9))
190 FOR J=1 TO 7 :: FOR L=1
TO 9 :: D(J,L)=0 :: NEXT L :
: NEXT J
200 FOR L=1 TO 9 :: X(L)=0 :
: NEXT L :: NEXT CH
210 PRINT #1:CHR$(27);CHR$(3
6);CHR$(1);
220 PRINT #1:CHR$(27);CHR$(8
7);CHR$(1)
230 PRINT #1:CHR$(27);CHR$(7
1)
240 STOP
```

Now, without turning off the printer, type LIST "PIO" or run any program that puts out text to the printer. It won't fool a Chinaman but it might impress your friends.

Here's a little something for you who own the Terminal Emulator II and the Speech Synthesizer. Maybe our Congressmen could use it to help them discuss the national debt.

```
100 CALL CLEAR
110 PRINT TAB(7);"NUMBER SPE
AKER": : : "by Jim Peterson":
" of Tigercub Software"
: : :
120 PRINT " This program wil
l print any": " number of les
s than 67": "digits in number
s and in"
130 PRINT "words, and will s
peak the": "words.": : : " R
equires Terminal Emulator": "
II and Speech Synthesizer.":
: :
140 CALL CHAR(39,"0000000000
301020")
```

```
150 OPEN #1:"SPEECH",OUTPUT
160 DIM HIGH$(21),NN$(23)
170 DATA ONE,TWO,THREE,FOUR,
FIVE,SIX,SEVEN,EIGHT,NINE
180 DATA TEN,ELEVEN,TWELVE,T
HIRTEEN,FOURTEEN,FIFTEEN,SIX
TEEN,SEVENTEEN,EIGHTEEN,NINE
TEEN
190 DATA TWENTY,THIRTY,FORTY
,FIFTY,SIXTY,SEVENTY,EIGHTY,
NINETY
200 DATA THOUSAND,MILLION,BI
LLION,TRILLION,QUADRILLION,Q
UINTILLION,SEXTILLION,SEPTIL
LION,OCTILLION,NONILLION
210 DATA DECILLION,UNDECILLI
ON,DUDECILLION,TREDECILLION
,QUATTORDECILLION,QUINDECIL
LION,SEXTEDECILLION
220 DATA SEPTENDECILLION,OCT
ODECILLION,NOVENDECILLION,VI
GINTILLION
230 FOR J=1 TO 9
240 READ ONE$(J)
250 NEXT J
260 FOR J=1 TO 10
270 READ TEEN$(J)
280 NEXT J
290 FOR J=1 TO 8
300 READ TEN$(J)
310 NEXT J
320 FOR J=1 TO 21
330 READ HIGH$(J)
340 NEXT J
350 PRINT : : :
360 PRINT #1:"NUMBER"
370 INPUT "NUMBER? ":N$
380 L=LEN(N$)
390 FOR J=1 TO L
400 IF POS("0123456789",SEG$
(N$,J,1),1)=0 THEN 360
410 NEXT J
420 IF (VAL(N$)<1)+(VAL(N$)<
>INT(VAL(N$)))THEN 360
430 IF L<67 THEN 470
440 PRINT "HEY! I CAN ONLY C
OUNT TO A": "VIGINTILLION!":
:
450 PRINT #1:"MAY I CAN ONLY
COUNT TO A VIGINTILLION"
460 GOTO 360
470 IF VAL(N$)>0 THEN 510
480 PRINT : : "ZERO": :
490 PRINT #1:"ZERO"
500 GOTO 360
510 IF L/3=INT(L/3)THEN 540
520 N$="0"&N$
530 GOTO 380
540 X=L/3
550 FOR J=1 TO L STEP 3
560 JJ=JJ+1
570 NN$(JJ)=SEG$(N$,J,3)
```



```

580 IF J>1 THEN 610
590 P$=STR$(VAL(MN$(JJ)))
600 GOTO 620
610 P$=P$&" "MN$(JJ)
620 NEXT J
630 PRINT : : P$ : :
640 FOR J=1 TO X
650 GOSUB 670
660 GOTO 1150
670 IF VAL(MN$(J))<>0 THEN 7
10
680 A$=""
690 FLAG=1
700 GOTO 1140
710 FLAG=0
720 H=VAL(SEE$(MN$(J),1,1))
730 T=VAL(SEE$(MN$(J),2,2))
740 TT=VAL(SEE$(MN$(J),2,1))
-1
750 VV=VAL(SEE$(MN$(J),3,1))
760 IF T=0 THEN 1000
770 IF T>9 THEN 810
780 A$=ONE$(T)
790 SP$=A$
800 GOTO 1000
810 IF T>19 THEN 680
820 A$=TEEN$(T-9)
830 IF T<>19 THEN 860
840 SP$="NINE TEEN"
850 GOTO 1000
860 SP$=A$
870 GOTO 1000
880 IF VV<>0 THEN 950
890 A$=TEN$(TT)
900 IF TT<>8 THEN 930
910 SP$="NINE TEE"
920 GOTO 1000
930 SP$=A$
940 GOTO 1000
950 A$=TEN$(TT)&"-ONE$(VV)
960 IF TT<>8 THEN 990
970 SP$="NINE TEE"&ONE$(VV)
980 GOTO 1000
990 SP$=A$
1000 IF H=0 THEN 1080
1010 IF T=0 THEN 1050
1020 A$=ONE$(H)&" HUNDRED &
"&A$
1030 SP$=ONE$(H)&" HUNDRED &
"&SP$
1040 GOTO 1140
1050 A$=ONE$(H)&" HUNDRED"
1060 SP$=A$
1070 GOTO 1140
1080 IF (J(X)+(T=0)+(VAL(N$)
<100) THEN 1140
1090 A$=" & "&A$
1100 IF (TT<>8)&(T<>19) THEN
1130
1110 SP$=" & "&SP$
1120 GOTO 1140
1130 SP$=A$

```

```

1140 RETURN
1150 PRINT A$
1160 IF FLAG=1 THEN 1200
1170 PRINT @1:SP$
1180 PRINT HIGH$(X-J)
1190 PRINT @1:HIGH$(X-J)
1200 GOSUB 670
1210 NEXT J
1220 PRINT B$
1230 A$=""
1240 JJ=0
1250 B$=""
1260 P$=""
1270 FOR D=1 TO 500
1280 NEXT D
1290 GOTO 350

```

I hope you noticed that all those zeros were neatly slashed so that you wouldn't mistake them for D's. Here's a little routine that will set up your printer to slash the 0's until you turn it off.

```

100 OPEN #1:"PIO"
110 PRINT #1:CHR$(27);CHR$(4
2);CHR$(0);
120 PRINT #1:CHR$(27);CHR$(4
2);CHR$(1);CHR$(48);CHR$(0);
CHR$(92);CHR$(34);CHR$(81);C
HR$(8);CHR$(69);CHR$(2);CHR$
(65);CHR$(34);CHR$(28)
130 PRINT #1:CHR$(27);CHR$(3
6);CHR$(1)
140 STOP

```

And, somebody might get mad if I don't include a little music -

```

100 REM - BELL MUSIC program
med by Jim Peterson
110 CALL CLEAR :: CALL SCREE
N(5):: RANDOMIZE
120 FOR CH=96 TO 136 STEP 4
:: FOR L=1 TO 4 :: X$=SEE$(
"0018243C425A667E8199A5BDC3DB
E7FF",INT(168RND+1)*2-1,2)::
B$=B$&X$ :: C$=X$&C$ :: NEX
T L
130 D$=B$&C$ :: Z$=RPT$(D$,4
)
140 CALL CHAR(CH,Z$):: B$,C$
,Z$=NULL :: CALL MAGNIFY(4):
: CALL SPRITE(@CH/4-23,CH,IN
T(158RND+2),255,255):: NEXT
CH
142 FOR J=1 TO 10 STEP 2 ::
X=98RND-98RND :: Y=98RND-98R
ND :: CALL MOTION(@J,X,Y,@J+
1,X,Y):: NEXT J
150 FOR J=1 TO 20

```

```

155 CALL COLOR(@INT(108RND+1
),INT(158RND+2))
160 FOR V=0 TO 16 STEP 4
170 ON J GOSUB 250,270,290,3
10,330,350,370,390,410,430,4
10,390,370,350,330,310,290,2
70,250,270,290,310,330,350
180 NEXT V
190 READ X
200 FOR D=1 TO X#5
210 NEXT D
220 NEXT J
230 RESTORE
240 GOTO 150
250 CALL SOUND(-999,131,V,52
3,V,131/2,30,-4,V)
260 RETURN
270 CALL SOUND(-999,165,V,16
7,V)
280 RETURN
290 CALL SOUND(-999,196,V,19
9,V)
300 RETURN
310 CALL SOUND(-999,262,V,26
5,V)
320 RETURN
330 CALL SOUND(-999,330,V,33
3,V)
340 RETURN
350 CALL SOUND(-999,392,V,39
4,V)
360 RETURN
370 CALL SOUND(-999,523,V,39
2,V,330,V)
380 RETURN
390 CALL SOUND(-999,659,V,66
6,V)
400 RETURN
410 CALL SOUND(-999,784,V,79
2,V)
420 RETURN
430 CALL SOUND(-999,1047,V,1
057,V)
440 RETURN
450 DATA 16,16,2,16,8,16,4,4
,16,2,16,4,16,8,8,16,2,2,16,
4,2,8,16

```

Just about MEMORY FULL, so  
Happy hackin'

Jim Peterson



## COPYIT WITH FORTH

by S. LATZA

One of the rules of using disks is "Make Backup Copies", which can be done most of the time using the Disk Manager.

Now with the help of TI FORTH you can make backup copies of your disks without using the Disk Manager, saving you the worry and hassles of having to get a replacement of a program when something goes wrong.

If you have 2 disk drives, the chapter on SYNONYMS in the TI FORTH manual explains how to copy the entire contents of the disk in drive 2 onto the disk in drive 1 using the word FORTH-COPY.

If you have only one disk drive, the following program will allow you to make a backup copy without using the Disk Manager.

First boot in your TI FORTH disk. When the menu comes up select the editor by typing -EDITOR. Type in 6 CLEAR then 6 EDIT. Now on SCREEN 6 type in the following program. After you have finished the program, press FCTN 9 (back) to exit the editor.

You can save the program on a blank formatted disk by typing in FLUSH.

When you want to run the program boot in TI FORTH, type -GRAPH, then insert the disk you saved the program on and type 6 LOAD. After the program is loaded, type in COPYIT and the program will start running. Then just follow the instructions that come up on the screen. Be sure that the disk you are using to copy onto is blank and formatted, as this program will write over anything on the copy disk.

After you have finished using the program, type in FORGET ANYKEY to erase this program from memory.

The program expects that you want to backup the whole disk, not just part of it.

```
SCR #6
0 ( PROGRAM TO COPY A DISK WITH 1 DRIVE ) BASE->R DECIMAL
1 0 DISK_LO 1 EMPTY-BUFFERS
2
3 : ANYKEY CR ." and PRESS ANY KEY. " BEEP KEY DROP ;
4 : BU BLOCK UPDATE ;
5
6 : PAGE 0 0 GOTOXY CLS ;
7 : MD PAGE ." Insert MASTER DISK in drive 1 " ANYKEY CR CR ;
8
9 : CD 0 5 GOTOXY ." Insert COPY DISK in drive 1 " ANYKEY CR ;
10 : FCD CD FLUSH ;
11
12 : COPYIT MD 90 0 DO I BU I 1+ 5 MOD 0= IF FCD MD THEN LOOP
13 1 5 GOTOXY ." COPYIT command complete remove disk. " ;
14
15 R->BASE
```

VISA & MC ACCEPTED  
967-1317  
(216)

**NEW SUMMER HOURS**  
11-7 Weekdays  
12-5 Weekends

Book of hints for Adventure Games

Amdack Color 1 + Monitors  
Gorilla Banana & other Printers

Popoye - Frogger - Qbert  
Jawbreaker II  
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Milliken Math Series  
Editor Assemblers  
Terminal Emulators  
Speech Synthesizers

**NEW ARRIVALS!**

Vermillion, Ohio

2907 Liberty Ave.

Computer Systems



**PJM Enterprises**

RR Caboose 1890s  
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Buy Rate



03/85

!!! TIME DATED MATERIAL !!!

**FOR SALE**

PFB Expansion Box  
Disk drive/disk manager II  
Disk controller card  
RS232 card  
32K memory expansion card  
PFB card and flex cable  
Assorted programs on disk  
.....\$ 475.00

Printer cable (parallel) 20.00  
Terminal emulator 20.00  
TI Writer word processor 50.00  
Editor Assembler cartridge 25.00  
Assorted cartridges each 10.00

(Centipede-household management-  
chess-touch typing-video graphs-  
tombstone city)  
Teach Yourself Basic and Extended  
Basic on Tapes.

Interested Parties, please call:  
Tony Nortaro - 951-8818 (eves)

CLEVELAND AREA 99/4A USERS GROUPS  
P.O. BOX 391101  
OLON, OH 44139