

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

**JUNE, 1984**

**NORTHCOAST**

**OLON**

**NORTH ROYALTON**

**GOLDEN CRESCENT**

**EXECUTIVE NOTES -- SOLON**

Regrettably, Jon Lucas has had to resign. I would like to say for everyone, THANKS! You gave much of yourself and we appreciated it. It is good to know you will be close, by. We can use your help.

Thanks to Susan and Rusty for our May presentation. Rusty and Susan showed us, with the help of the Storymaker Command Module, that fences can dance.

Moving on to June, I personally extend an invitation to see the 3M Corporation's DISC Presentation.

Walter Ryder

President

**JUNE MEETING:**

**Saturday, June 9, 1984**

**11:30 am to 1:30 pm**

**SOLON PUBLIC LIBRARY**

**Inwood Drive off SOM Center Road**

## EXECUTIVE NOTES -- NORTH ROYALTON

On Saturday, May 26, 1984 the North Royalton Users Group conducted its monthly meeting. Despite the fair weather and holiday weekend, attendance was good.

Due to the active interest of our members, the Executive Committee has decided to continue the monthly meetings through the summer months. We look forward to some lively, informative discussions in June, July, and August.

Our Library Committee reports a steady growth in catalogue materials. Rick Polivka has undertaken an extensive project to catalogue journals and periodicals. Any assistance with this project would be appreciated. Volunteers are still needed to copy the 40 new disks that have been made available through the Solon Users Group. The committee has approved the establishment of a 25-cent "borrower's" fee for club tapes. Money collected will be applied to purchase of additional disks and tapes for library usage.

"Back to Basics" was the substance of our Education Committee's briefing. New users and old hackers alike were afforded the opportunity to brush up on commands such as "OLD CS1", "SAVE", "RESequence" and "REMark". The presentation outlined use of these commands within the Extended BASIC program.

Our friends from Edu-Comp broadened our knowledge on the latest hardware development compatible with the TI-99/4A, the RS232 Interface System. This system is a free standing unit which allows the use of a printer and modem without the peripheral expansion box. The report highlighted the obvious advantages to such a system.

What's in a name? We'd sure like to know! A "Name the Club" Contest is currently underway. Competition rules encourage letting your imagination soar. One fortunate winner will be awarded a special prize. For further details plan to attend the June meeting.

Help! Volunteers are needed the first Saturday of each month to assist with the Newsletter mailings. Please contact Bernie Gallagher for more information on how you can spread the word. Your participation and assistance is always welcomed. Members having suggestions for future club activities or needing additional information may contact these committee chairpersons:

Executive Committee -- Bernie Gallagher	351-1265
Education Committee -- Rick Polivka	238-3971
Equipment Committee -- Mark McCauley	888-1119
Library Committee -- Barbara Hegele	234-3282
Membership Committee -- Jan Domzal	582-3645

Home Computer readers don't despair! The second issue of Home Computer Magazine is now available on your newstand and our grapevine tells us that a third issue will follow within the next couple of weeks.

Our thanks to all who made the May meeting an informative one. The next meeting will be held Saturday, June 16, 1984 at 10:00 a.m. in the North Royalton Public Library. See you there!

## EXECUTIVE NOTES -- NORTHCOAST

May has turned out to be another great month for our group. We have picked up 7 new members this month and we have made several group purchases giving substantial savings to our members. This is something I hope we will be able to expand on.

Because the newsletter deadline was before our June 2 meeting, I would like to thank Walt Ryder of the Solon group and Ginius Macys of Software City in advance for their demonstrations at our meeting.

At our next meeting, Joe Corbett will be giving an overview of TI-FORTH. We will have several copies of STARTING FORTH by Leo Brodie available at the meeting, price to be determined.

For those who didn't make the meeting, we are going to have a group picnic for the members and their families in place of our July meeting. We will have details at the June 23rd meeting so be sure to be there. Contact myself or my wife, Kathy, for details if you can't make the meeting. This will give us a chance to get to know each other better outside of the meetings.

Be sure to get your name tags at the next meeting. Make a special point to say "hi" to our visitors and make them feel welcome. You will know the visitors by the green colored name tags. See you at the next meeting.

### **NEXT MEETING:**

**Saturday, June 23, 1984**

**1:30 PM -- General Meeting**

**EUCLIDIAN ROOM -- EUCLID SQUARE MALL**

**Jim Cline -- President**

## PROGRAMMING CHALLENGE

Recently I received a call from an individual who was writing a financial program in Extended Basis using the IMAGE and PRINT USING statements. He inquired as to how to incorporate a comma in the dollar amounts. Can someone come up with a routine to accomplish this task and still preserve the use of the IMAGE and PRINT USING formatting? How about a floating "dollar sign" routine? Please submit solutions to the Newsletter and we will print those that work.

Jon Lucas

### PATTERNS (XBASIC) by Adam Simon

Note: To change pattern, press any key.

```
100 CALL CLEAR
110 F$="FFFFFFFF"
120 W=40 :: T=120
130 FOR Y=40 TO 120 STEP 8
140 CALL CHAR(Y,F$)
150 NEXT Y
160 FOR X=1 TO 23
170 FOR PLACE=1 TO 31 STEP 2
180 CALL HCHAR(X,PLACE,W)
190 CALL HCHAR(X,PLACE + 1,T)
200 W=W+8 :: IF W>120 THEN W=40
210 T=T-8 :: IF T<40 THEN T=120
220 NEXT PLACE
230 NEXT X
240 CALL SCREEN(16)
250 CC=2 :: DD=13
260 CALL COLOR(CC,INT(16*RND)+1,
  INT(16*RND)+1)
270 CALL KEY(O,K,S) :: IF S=0 THEN 270
280 CALL COLOR(DD,INT(16*RND)+1,
  INT(16*RND)+1)
290 CALL KEY(O,K,S) :: IF S=0 THEN 290
300 CC=INT(12*RND)+1 :: IF CC<1 THEN 300
310 DD=INT(12*RND)+1 :: IF DD<1 THEN 310
320 TT=INT(16*RND)+1 :: CALL SCREEN(TT)
330 CALL KEY(O,K,S) :: IF S=0 THEN 330
  ELSE 260
```

### HINTS

FROM "TIGERCUB SOFTWARE":

If you have set up your equipment, tried to load a program, and the screen prints out '210 CSI' or something else strange, don't panic! Unplug the cassette interface cable from the joystick port and plug it in where it belongs!

## NEW DISCOUNT SOFTWARE, ETC. SOURCE

**SOFTWARE CONNECTION** is located on Mayfield Road on the South Side of Eastgate Shopping Center. They carry software and supplies for the TI-99/4A and offer a discount to TI Users Groups Members. Show your membership card (IN GOOD STANDING, OF COURSE!) when you go in.

### DISK LIBRARY PROGRAMS

As of June 9, 1984, those who want copies of disk programs on disks the Users Group provides will be charged a total cost of \$2.00 per disk. The increase (of 25¢) will go to the treasury and make the change situation much easier to deal with.

### BULK DISKETTE PURCHASE

As announced at the last Solon meeting, we will continue to take names for a future order of bulk diskettes, the same as we just purchased. These are 10 generic Wabash, SS/SD in polybags with envelopes and label kits for \$14.50. As soon as we have enough interested to order, we will order again. This time, to make it go as quickly as possible, we will order for anyone in all 4 of the groups. Once we have close to enough for the order, you will have to get a check to Frank Jenkins and we will then be able to issue the required certified check. Each of the four groups will be credited with the purchases by their own members, and depending on the size of the orders, any overage will be distributed to the appropriate group.

### PASCAL USERS

A p-systems users' group called USUS, has a number of programs available and recently transferred their library to include the TI 99/4A disks. Their membership dues are \$25.00 a year. To get a membership form, their address is the UCSD P-system Users' Society, Box 1148, La Jolla, CA 92308.



## BOOKS FOR THE 99/4A

Here is a list of some of the newer and a few of the older books for the Home Computer.

I Speak Basic To My 99/4A - Jones - \$9.75  
Hayden Books

The Last Word On The TI-99/4A - Schreiber  
\$11.50 TAB Books

Terrific Games For The TI-99/4A - Renko-  
Edwards \$5.95 Addison-Wesley

Fundamentals of TI-99/4A Assembly Language  
Morley \$11.50 TAB Books

TI-99/4A BASIC Reference Manual - Cascia-  
to-Horsfall \$17.95 SAM

Programmer's Reference Guide to the TI-  
9/4A - C. Regena \$14.95 Compute Books

Compute's First Book of TI Games - \$12.95  
Compute Books

Texas Instruments 99/4A BASIC Guide - Gi-  
arratano \$9.95 Computex

Clappers - Having Fun Programming and  
Playing 23 Games For The TI-99/4A - Mul-  
lish-Kruger \$9.95 Simon & Schuster

TI BASIC Computer Programs For The Home -  
Sternberg \$14.95 Hayden Books

TI Games For Kids - Ingalls \$12.95  
Compute Books

The Tool Kit Series: TI-99/4A Edition -  
Dusthimmer/Buchholz \$8.95 Sams

Learning TI-99/4A Home Computer Assembly  
Language Programming - McComic \$13.95  
Prentice-Hall

Easy Programming With The TI 99/4A - Gue-  
nette-Vogel \$10.95 Birkhauser Boston

The Elementary TI-99/4A - Sanders \$14.95  
Datamost

32 BASIC Programs For The TI-99/4A - Rugg-  
feldman-Alen \$19.95 Dilithium Press

Games TI's Play - Singer/Bartels - \$14.95  
Reston Publishing

Programs For The TI Home Computer - Davis  
\$14.95 Steve Davis Publishing

Stimulating Simulations For The TI-99/4A  
Hayden Books

Data And File Management For The TI-99/4A  
Grillo/Robertson \$15.95

Art And Graphics With The TI-99/4A -  
Thompson \$12.95 Hayden Books

Fun And Games With The TI-99/4A - Muncy  
\$12.95 Hayden Books

Creating Arcade Games With The TI-99/4A  
\$12.95 Compute Books

For all your TI needs -



**EDU-COMP**

North Ridgeville, Ohio 44039

1-216-327-6579

TI Hardware & Software

Cor Comp Hardware

Printers & Modems

## TRITON

If you haven't received a catalogue from Triton Products, you can write for their catalogue or call them toll free.

Triton Products Company  
P.O. Box 8123  
San Francisco, CA 94128  
1-800-227-6900

TI has turned over all their retailing to this company. They feature a full line of TI manufactured software and some third party accessories and peripherals. Although they charge full retail price, there are some special offers.

Editor's Note: A WARNING:  
(This is quoted from the LA 99ers COMPUTER GROUP NEWSLETTER.)

"A Tale of Deception  
TRITON, if you notice everything TI told us was not available suddenly shows up at full retail price in Triton's Catalog. Strange happening, something smells here. Triton is most likely a front for out of business TI. I strongly suggest we give them a wide berth, BOYCOTT. Support those who are and have been offering us discounted prices via Mail-Order. Tex-Comp, Elek-Tek, Unisource, etc. These dealers offer catalogs and carry a wide range of TI and third party peripherals. Support those who support us fairly. TI and Triton do not fit into the "fairly" category."

### RUNAWAY CAR

This was written by a young user named Barrie Clark of Sussex, England and was printed in the TI\*MES Newsletter.

```
10 CALL CLEAR
20 CALL CHAR(126,"0000FOFFFFF0000")
30 CALL CHAR(127,"1898FF3D3C3CE404")
40 FOR Y=1 TO 4
50 FOR X=30 TO 2 STEP -1
60 CALL SOUND(-100,110+Y+4,X,220+Y*4,X,
330+Y*4,X)
70 CALL HCHAR(4,3,127)
80 CALL HCHAR(4,X+2,32)
90 CALL HCHAR(4,X+1,126)
100 NEXT X
110 CALL SOUND(-100,-5,0)
120 NEXT Y
```

## Adventurers — TAKE NOTE

For those experienced adventurers looking for a new and exciting challenge, INFOCOM, INC. who had announced they were pulling out of the TI market is back at it again. Here is a listing of the classic Infocom adventures being put out for the TI-99/4A.

ZORK I,II, & III  
THE WITNESS  
STARCROSS  
SUSPENDED  
PLANETFALL  
ENCHANTER  
INFIDEL

All are trademarks of INFOCOM, Inc.

### PLAYER/SCORE ROUTINE

Courtesy of LA 99ers, here is a routine to keep track of players' names or scores.

```
100 CALL CLEAR
110 INPUT "HOW MANY PLAYERS?":X
120 FOR PLAYER=1 TO X
130 INPUT "NAME ":PL$(PLAYER)
140 INPUT "POINTS ":PTS(PLOYER)
145 PRINT
150 NEXT PLAYER
160 REM***NOW ASK FOR PLAYER BY NUMBER
170 PRINT : : : "ENTER 0 TO QUIT": : :
180 INPUT "PLAYER #":N
190 PRINT "_____".
195 IF N=0 THEN 230
200 PRINT PL$(N),PTS(N)
210 PRINT : : :
220 GOTO 180
230 END
```

To use as a phone list (or birthdays) change:

```
140 INPUT "PHONE # ":PTS
```

### HINTS

FROM "ARIZONA 99 UG":

If you have a black and white TV, try this trick for a sharper picture. Add the following statement to the beginning of your program:

```
10 CALL SCREEN(15)
```

This will disable the color-generating circuit in the 99/4A and remove the pattern of vertical lines often seen on B&W TV's. It also increases the sharpness of characters.

# CorComp introduces double-density card, 2 expansion systems

CorComp's new peripheral expansion system, the 9900 Micro-Expansion System for the TI home computer, has arrived.

And so has the company's first component of its 99000 Expansion System.

The hardware available with the 9900 Micro-Expansion System includes an RS232 card, 32K memory card and disk controller card. This unit is about the size of two TI speech synthesizers placed side by side. The cards may be purchased separately or as a package. The RS232 card offers serial and parallel ports. The 32K card is compatible with all TI cartridges. The company says all hardware will include extensive documentation.

Prices on the 9900 Micro-Expansion System are: RS232 stand-alone unit (1 serial and 1 parallel port), \$149.95; RS232 stand-alone unit with 32K RAM and disk controller card, \$399.95; upgrade kit for second RS232 port, \$14.95; and upgrade kit for 32K RAM and disk controller, \$289.45.

Prices on the 9900 expansion cards for use with the TI Peripheral Expansion Box are: 32K RAM card, \$135.95; RS232 card (2 serial and 1 parallel port), \$117.95; disk controller card with disk manager software, \$199.95; and cable assembly for internal drive, \$18.85.

\* The disk controller card promises to be the greatest asset for those who already have a TI peripheral expansion

box. The card is capable of handling up to four double-sided, double-density 5.25-inch floppy disk drives. The TI card was designed for use with up to three drives.

Included with the CorComp card is a disk-based formatter that will do what TI's disk manager cartridge does and more, according to CorComp. The formatter will let TI users utilize double-density disks for the first time (provided they have double-density drives), essentially doubling the amount of storage they have had available to them using TI's disk controller card, which is designed for single-density use. A CorComp spokeswoman said the card will fit in any TI peripheral expansion box.

The CorComp disk manager program will permit users to load and run assembly language programs, such as TI Forth, without using the TI Editor/Assembler cartridge, the company says.

The disk controller card also provides several new commands not available previously on the TI card. CorComp says the card will allow users to peek and poke into CPU and VDP RAM, among other things.

The disk controller card also allows the user to set the head seek times for all four drives, permitting use of newer, faster drives with the system.

The company says the disk controller loads files 2-4 times faster than the TI disk controller.

The 99000 Expansion System is designed to be compatible with the TI99/4A and CorComp's own new computer when it is ready for the market. It is priced at \$549.95. It is about one-half the size of TI's peripheral expansion box and utilizes a system motherboard. Two half-height drives can be installed in it or one full height drive. It features a flexible cable to link the expansion system to the TI99/4A, eliminating the bulky TI cable that links the TI PEB with the console.

Included with the CorComp 99000 Expansion System are an RS232 card with two TI-compatible serial ports and one Centronics parallel port, 32K memory card and a double-sided, double-density disk controller card. The controller has the same features as the card already described.

The motherboard provides locations for future auxiliary cards, the company says.

The new hardware products are being shipped to dealers during April, CorComp says.

The company is offering TI user groups a special price on a single CorComp product through its User Group Product Review Program. User groups are asked to provide a review of the product to CorComp in exchange for the price break.

For more information, write: CorComp Inc., 23461 Ridge Route Dr., Suite H, Laguna Hills, CA 92653.



# ARTICLE COURTESY OF 99'ERS USERS GROUP ASSOCIATION

Double Sided FORTH  
by JWVincent

So you have double sided disk drives on your TI 99/4A. When you got your copy of TI FORTH from the user group you immediately tried copying it to a double sided disk using Disk Manager II, didn't you? Didn't work so hot did it? Well this article will show you what to do to make TI FORTH work with your double sided drives.

TI FORTH uses direct sector addressing to read/write screens to disk. Each screen is 1024 bytes or four single density sectors long. To be compatible with the Disk Manager module and normal file I/O for initial loading of the FORTH program, the FORTH disk uses the standard disk header and directory sectors. Since there are only three files on the disk, this means sectors zero through four are allocated to this overhead operation. The first file, FORTH (actually just a short assembly language loader program) begins in sector 22 (hex) as usual. It is followed by the actual FORTH program file which is also handled via normal I/O routines and occupies up to sector 4C. SYS-SCRNS occupies all remaining sectors on the disk, for single sided that's 138 (hex). Thus the file SYS-SCRNS takes up not only the sectors from 4D to the end of the disk, but also has an extent that takes up sectors 5 to 21 (hex).

Now since TI FORTH uses direct sector addressing, it expects screen 3 (the boot screen) to be in sectors C thru F. If you use Disk Manager to copy these three files from a single sided disk to a double sided disk, the Disk Manager is able to put the whole SYS-SCRNS file on disk contiguously. No extents are required, thus what was at sector 5 to 21 is now at sector 168 to 184. Is it any wonder FORTH acts strange? The boot screen only contains garbage!

To remedy this situation we must copy a single sided disk, sector for sector, to a double sided one, and then doctor sectors zero and four to comply with the Disk Manager's standards. Then to use the extra capacity we will update a couple screens. Your first step however, must be to initialize a double sided disk using the Disk Mgr II. Next load FORTH and set DISK\_LD to zero. Load the -COPY screens and use the command FORTH-COPY to dupe your single sided FORTH to the double sided disk. If you don't have two drives, use Disk Manager to copy all three files but then use FORTH to copy screens 1 thru 9. Here's the technique:

n BLOCK UPDATE ( where n is screen number to be read from old disk)

FLUSH ( writes screen to new disk, move up to 5 screens at a time)

Now, edit screen 3 to add the following commands:

180 DISK\_SIZE ! ( supports double sided capacity per disk)

360 DISK\_HI ! ( supports two double sided drives)

Next time you boot FORTH it will recognize screen 175 as part of disk 1 and screen 185 as part of disk 2. Now let's fix the commands in the -COPY screens. Edit screen 39. The value 90 appears once in DTEST and twice in FORTH-COPY. Change all three occurrences to 180. Next edit screen 40 with the following:

Line #	Current Contents	New Contents
3	168	2D0
5	2000	2028
5	12 + 26	12 + 0201 SWAP ! DUP 14 + 24
10	165	2CD
13	4016	802C

Now let's make our FORTH disk compatible with Disk Mgr II. Here's the word you need to do it:

HEX

```
: DOUBLE-FORTH 0 BLOCK UPDATE DUP A + 2D0 SWAP !  
  DUP 10 + 2028 SWAP ! 12 + 0201 SWAP !  
  1 BLOCK UPDATE DUP E + 2A0 SWAP ! DUP 1C + 4D20 SWAP !  
  DUP 1E + 2B05 SWAP ! 20 + F029 SWAP ! FLUSH ;
```

DECIMAL DOUBLE-FORTH

Now that you have full use of your double sided drives I'd like to issue a couple of challenges.

1. Figure out how to alter the FORTH command FORMAT-Disk to format a double sided disk.
2. Alter FORTH to support CorComp's double density controller.

Good Luck !



\*\*\* MASTER DISK FILE \*\*\*

PROGRAMS

NORTHCOAST ADDITIONS -- MAY

FILENAME	SIZ	TYPE	P	DISKNAME	FILENAME	SIZ	TYPE	P	DISKNAME
24HOUR/X	18	PROGRAM	15	NCLIB/ADD5	AAIRCRAFT	26	PROGRAM	16	NCLIB/ADD2
ACEY/DUCEY	36	PROGRAM	16	NCLIB/ADD2	ALIEN/X	22	PROGRAM	15	NCLIB/ADD5
AMERICANSX	20	PROGRAM	20	NCLIB/ADD3	ANIMALS/X	20	PROGRAM	20	NCLIB/ADD3
ART/WRIT/X	20	PROGRAM	20	NCLIB/ADD3	ASPIC	45	PROGRAM	20	NCLIB/ADD2
ASTROTERM	20	PROGRAM	20	NCLIB/ADD3	AT/RACES/X	24	PROGRAM	17	NCLIB/ADD3
AWARI	30	PROGRAM	14	NCLIB/ADD3	BABY/BOOMX	15	PROGRAM	15	NCLIB/ADD5
BATTLE@SEA	45	PROGRAM	16	NCLIB/ADD2	BATTLSTARX	21	PROGRAM	17	NCLIB/ADD2
BELL/LEM	41	PROGRAM	14	NCLIB/ADD5	CHKBAL	11	PROGRAM	18	NCLIB/ADD2
CHUCKALUCK	26	PROGRAM	16	NCLIB/ADD2	CIRCUITS	5	PROGRAM	20	NCLIB/ADD2
CLONES	40	PROGRAM	14	NCLIB/ADD3	COMFIGHT/J	42	PROGRAM	16	NCLIB/ADD3
CONVERSII	39	PROGRAM	10	NCLIB/ADD2	COOTIEII/X	47	PROGRAM	15	NCLIB/ADD5
COUNTING	31	PROGRAM	20	NCLIB/ADD3	CROSSWORDX	42	PROGRAM	17	NCLIB/ADD3
CURRENCY/X	19	PROGRAM	20	NCLIB/ADD3	D/OHELL/X	40	PROGRAM	15	NCLIB/ADD5
DRAWPOKERX	36	PROGRAM	17	NCLIB/ADD2	EDDY/CLOWN	38	PROGRAM	10	NCLIB/ADD5
ELECTRONIC	27	PROGRAM	20	NCLIB/ADD2	ELECTSOLVE	19	PROGRAM	10	NCLIB/ADD2
EXPJOUR/XM	53	INT/VAR	25418	NCLIB/ADD5	FISHES/X	20	PROGRAM	20	NCLIB/ADD3
FLASH	15	PROGRAM	14	NCLIB/ADD5	FORCE1/X	32	PROGRAM	17	NCLIB/ADD2
FORMSGEN	28	PROGRAM	6	NCLIB/ADD5	FRUIT/VEGX	20	PROGRAM	20	NCLIB/ADD3
GHOSTCHS/J	15	PROGRAM	14	NCLIB/ADD5	HANDROID/X	19	PROGRAM	17	NCLIB/ADD4
RESPLT/X	7	PROGRAM	19	NCLIB/ADD2	INVESTORXM	55	INT/VAR	25418	NCLIB/ADD5
JACKPOT/X	39	PROGRAM	15	NCLIB/ADD5	JOURNAL/X	13	PROGRAM	19	NCLIB/ADD2
KISMET/X	36	PROGRAM	15	NCLIB/ADD5	LASVEGAS/X	33	PROGRAM	17	NCLIB/ADD4
LET/NUMB/X	30	PROGRAM	10	NCLIB/ADD5	LETWRITERX	45	PROGRAM	19	NCLIB/ADD5
LIFETITANX	29	PROGRAM	17	NCLIB/ADD4	LOAN/CALC	4	PROGRAM	18	NCLIB/ADD2
MATCHEM/X	14	PROGRAM	15	NCLIB/ADD5	MATHTALKTS	43	PROGRAM	10	NCLIB/ADD2
MAZE	47	PROGRAM	16	NCLIB/ADD3	MEDRESPL/X	7	PROGRAM	17	NCLIB/ADD2
MEMCHIPXMC	46	PROGRAM	17	NCLIB/ADD3	MEMFUN/X	37	PROGRAM	15	NCLIB/ADD5
METRC/CONX	12	PROGRAM	10	NCLIB/ADD2	METRIC/CON	25	PROGRAM	10	NCLIB/ADD5
MISSNSTR/X	40	PROGRAM	17	NCLIB/ADD4	MLIST	45	PROGRAM	19	NCLIB/ADD2
MLIST/CND	18	PROGRAM	19	NCLIB/ADD2	MLIST/INT	10	PROGRAM	19	NCLIB/ADD2
MLIST/RFT	33	PROGRAM	19	NCLIB/ADD2	MLIST/SCH	12	PROGRAM	19	NCLIB/ADD2
MLIST/SRT	12	PROGRAM	19	NCLIB/ADD2	MOV/NUMB/J	13	PROGRAM	14	NCLIB/ADD3
MY/BANK/X	31	PROGRAM	18	NCLIB/ADD2	MYTHOLOGYX	20	PROGRAM	20	NCLIB/ADD4
NICKNAMESX	19	PROGRAM	20	NCLIB/ADD4	NITEBLOCK	42	PROGRAM	14	NCLIB/ADD4
OH/HELL/XM	45	PROGRAM	17	NCLIB/ADD3	PORT/ANALX	13	PROGRAM	18	NCLIB/ADD5
PORTFOLIO	40	PROGRAM	3	NCLIB/ADD5	PROFTEAMSX	20	PROGRAM	20	NCLIB/ADD4
RAFFL/TICK	19	PROGRAM	19	NCLIB/ADD5	RIV/LAKESX	20	PROGRAM	20	NCLIB/ADD4
ROCKSGEMSX	19	PROGRAM	20	NCLIB/ADD4	ROULETTE	26	PROGRAM	16	NCLIB/ADD2
RULEOF78	24	PROGRAM	18	NCLIB/ADD3	SCIOTDOWNX	42	PROGRAM	17	NCLIB/ADD2
SNACMAN/XJ	14	PROGRAM	17	NCLIB/ADD3	SPACE/STA	29	PROGRAM	14	NCLIB/ADD3
SPACEATT	27	PROGRAM	14	NCLIB/ADD4	SPRITCHS/X	9	PROGRAM	17	NCLIB/ADD3
SPRITER/X	22	PROGRAM	19	NCLIB/ADD3	STOCKSTATX	12	PROGRAM	18	NCLIB/ADD5
STUMPER/TS	25	PROGRAM	20	NCLIB/ADD2	TEMP/CON	8	PROGRAM	20	NCLIB/ADD2
TI/PRINT/C	52	PROGRAM	19	NCLIB/ADD4	TYPING	25	PROGRAM	20	NCLIB/ADD3
UNWASHXJS	21	PROGRAM	17	NCLIB/ADD4	WORLDLDRSX	20	PROGRAM	20	NCLIB/ADD4

TOTALS: 4 DISKS. 90 PROGRAMS

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

!!TIME DATED MATERIAL!!