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The CIN-DAY NEWS

MAY 1988

Dateline: Ohio

All the news.

and then some. . .



CINCINNATI CHAPTER
 CIN/DAY USER GROUP
 APRIL 16, 1988

THE MEETING WAS OPENED AT NOON BY PRESIDENT SAM MOON OF THE CINCINNATI CHAPTER. OTHER OFFICERS PRESENT WERE TREASURER KEN CARPENTER AND SECRETARY LIBRARIAN JOHN CONNOLLY. AFTER THE GROUP DISCLAIMER WAS READ AND THANKS GIVEN TO THE LIBRARY FOR THE USE OF THEIR FACILITY, SAM DEMONSTRATED A VERY FINE GRAPHICS AND SPEECH PROGRAM NAMED "ERNIE BERT".

ITEMS OF OLD BUSINESS WERE NEXT DISCUSSED, PRIMARILY THE LIMA OHIO MULTI-USER GROUP CONFERENCE ON SAT. MAY 21 AT THE LIMA CAMPUS OF O.S.U. THE HOURS ARE 10 A.M. TO 6 P.M. WITH FREE ADMISSION. DIRECTIONS TO FOLLOW IN THE NEXT NEWSLETTER. ALSO OF INTREST IS THE HAM-VENTION ON APRIL 29/30 AND MAY 1 IN DAYTON OHIO AND A FAIR AT THE SPRINGFIELD OHIO HIGH SCHOOL ON MAY 28.

A DISCUSSION OF THE DATE OF THE NEXT OFFICERS MEETING WAS HELD BUT NOT RESOLVED DUE TO IT BEING ON A WEEK DAY. THE NEXT REGULAR MEETINGS WILL BE HELD ON MAY 14.

THE COLLECTION FOR THE AUTHORS OF FUNLWEB WAS ANNOUNCED AT \$198.50 AND THIS AMOUNT WILL BE SENT TO THEM FOR ONE OF THE VERY BEST PROGRAMS OUT FOR THE T.I. THE COLLECTION THIS MONTH IS FOR JIM SWEDLOW, AUTHOR OF XB TOOLS AND SIDEPRINT.

HANDOUTS THIS MONTH WERE FROM;

- (1) TEXAMENTS-PRIMARILY TI-ARTIST AND C.S.G.D. SOFTWARE AND SEVERAL HARDWARE ITEMS INCLUDING A HARD/FLOPPY DISK CONTROLLER AT \$309.95
- (2) QUALITY 99 SOFTWARE-MANY SOFTWARE ITEM ALL ON SALE.
- (3) TEX-COMP-"PRINTING TO GO" FOR THE GRAPHX PACKAGE
- (4) DELPHI-TI/NET IS AN INFORMATION SERVICE SIMILAR TO COMPUSERVE AND APPEARS TO BE WELL WORTH THE PRICE. (\$29.95 FOR TI USERS)
- (5) ALSO RECIEVED BY SEVERAL MEMBERS WAS THE TRITON SPRING CATALOG.
- (6) INSTRUCTIONS FOR DOM #23 24 GAMEPACKS BY DAVE ROSE

OF INTREST IN THE APRIL ISSUE OF COMPUTER SHOPPER WERE:

- (1) PG.406 -A SPECIAL SIGNUP OFFER BY DELPHI FOR COMPUTER SHOPPER

SUBSCRIBERS FOR \$19.95.

(2) PG.225 -MENDELSON ELECTRONICS IN DAYTON OHIO(1-800-422-3525) 5 1/4 DSDD \$85.00 AND DS/QD \$89.00

(3) PG.206-THE GENEVE 9640 FROM MYARC

(4) PG.366-TI-FORUM -SEVERAL VERY INTRESTING ARTICLES

FROM THE MARCH ISSUE OF MICRO-PENDIUM:

(1) PG.5-FROM TENEX A STAR COLOR PRINTER \$269.95

(2) PG.12-SIGNED NUMBERS BY "REGENA"

(3) PG.17-TEX-COMP GRAPHX CLIP ART-4 DISKS FOR \$9.95

(4) PG.20-C99 FOG INDEX(GRADE LEVEL OF 100 WORDS)

(5) PG.26-UNIVERSAL FILE READER

(6) PG.33-MYARC HARD FLOPPY CONTROLLER (UP TO FOUR 5 1-4 3 1/2 DRIVES AND 400 MEG STORAGE

(7) PG.35-REVIEW OF TELCO TERMINAL PKG. AT \$20.00

(8) PG.37-REVIEW OF "STRING MASTER"

(9) PG.38-EPSON LX 800 PRINTER (\$200-250)

FOLLOWING WERE DEMOS OF THE FAIRWARE, DISK OF THE MONTH AND PROGRAMS FROM THE I.U.G. HARD COPY LIBRARY.

(1) FAIRWARE #20-PLUS! A VERY USEFUL COMPANION FOR THE TI-WRITER, IT DEALT PRIMARILY WITH TRANSLITERATION COMMANDS FOR THE WRITER. IN ADDITION THERE ARE SEVERAL PRINTER UTILITIES.

(2) FAIRWARE #19-PILOT 99 A PROGRAMING LANGUAGE WRITTEN BY OUR TOM WEITHOFER(DECEASED).

(3) D.O.M. #34-SORGAN A VERY GOOD ORGAN PROGRAM FROM THE EASY TO REQUIRING A BASIC KNOWLEDGE OF MUSICAL TERMS.

(4) CIN/DAY-I.U.G.-#2 GAMES A VARIETY OF GAMES INCLUDING GOLF, BLACK-JACK, YAHTZEE, KRAZYKAOLA, MONEYMAN, ETC. THESE WERE MADE AVAILABLE ON DISK THRU THE EFFORTS OF JOHN NEESS AND JOHN CONNOLLY WHO TRANSFERRED THEM FROM HARD COPY TO DISK.

FOLLOWING THE DEMOS A SHORT BREAK WAS TAKEN, FOLLOWED BY A RAFFLE OF POST-IT NOTE PADS AND PRINTER PAPER.

THE MEETING ADJOURNED AT 3:15. THERE WERE ABOUT 10 MEMBERS PRESENT.

SUBMITTED BY

JOHN CONNOLLY
CINCY SEC/LIBR

A VERY HANDY HINT: CHECKSUM DISK MODIFICATION

Allen Rogers, a member of our group and a contributor to the newsletter, recently sent in this very handy modification to the CHECKSUM disk in our library. His letter goes in part:

"The CHECKSUM program is very helpful when typing in a program from text. In using your loader I have found that when the CHECKSUM EDITOR is loaded, your 'LOAD' program remains and I have to type NEW to get rid of it. On page 8 of the February 1988 'MICROpendium' I found a remedy. If you add this CALL LOAD in line 240 before the STOP, the 'LOAD' program is erased from memory and you are ready to start as soon as the CHECKSUM EDITOR is loaded."

```
240 CALL INIT :: CALL LOAD("
DSK1.CHECK"):: CALL LINK("CU
RSOR"):: CALL LOAD(-31952,25
5,231,255,231):: STOP
```



Thank you Allen for this great tip. If you already have CHECKSUM, make this simple change. If you don't have CHECKSUM yet...Well pick one up, it's been updated! What are you waiting for, this is a great utility program disk, just ask Allen.

TI-99/4A HARDWARE AND SOFTWARE FOR SALE

1. P CODE CARD PHP 1270 VER 4.0

USCD PASCAL MANUALS AND COMPILER
PASCAL PERSONAL TAX PLAN
MANY PASCAL DISKS (COMPILER, UTILITIES, ASS/LINKER, EDITOR/FILER, DEMO
DISKS, AND REMTALK).

2. FOUNDATION COMPUTING Z80 CARD

MANUAL AND DISKS
CABLE

3. NAVARONE WIDGET

4. SIGNALMAN MODEM

5. SCREEN IMAGE DUMP BY DAVE ROSE

6. C.S.G.D. BY DAVE ROSE

SUBJECT TO PRIOR SALE, I WILL HAVE THESE ITEMS AT
THE OHIO TI FAIR IN LIMA ON MAY 21ST.

JOHN CONNOLLY
5002 FORESTWOOD CT.
CINCINNATI OHIO 45244
(513)528-4722
CIN/DAY USER GROUP

INDEX OF PILOT COMMANDS FOR THE TI-99/4A
Prepared by Bill Harms & Rick Kellogg

COMMANDS	SUMMARY Pg #	DETAIL Pg #	NOTES
REGULAR COMMANDS			
A:	~	15	A: [variable] 80 characters
AS:	7	16	AS: [variable] 1 character
C:	7	18	C: N Variable <- Numeric exp.
CH:	7	21	CH: cTears screen, homes cursor
CS:	7	23	CS: \$-variable <- \$-expression
E:	7	27	E: end of subroutine or prog
J:	7	35	J: label
JM:	7	36	JM: label[,label...]
M:	7	39	M: char-#[,char-#...]
MJ:	7	40	MJ: match-#[,match-#...]
PP:	8	43	PP: marks a problem - like REM
R:	8	44	R: use like REM statement
T:	8	59	T: characters (with CR)
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CHARACTER GRAPHICS COMMANDS			
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HC:	9	32	HC: row,column,char-code, rept.
IT:	9	34	IT: 24 rows x 32 columns
SN:	9	53	SN: color
TC:	9	60	TC: row,column
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SPRITE COMMANDS			
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SG:	10	51	SG: deletes all sprites
SH:	10	52	SH: sprite#,sprite#
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IG:	11	33	IG: split screen->bit map/text
TG:	11	61	TG: graph-row,graph-col,chars
PP:	11	42	PP: dot-row,dot,column
UP:	11	65	UP: dot-row,dot-column
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RF:	12	46	RF: [record]
WA:	12	67	WA: writes answer to data file
WR:	12	69	WR: characters
MISCELLANEDUS			
FB:	13	29	FB: detects fire button press
JS:	13	37	JS: joystick#,x,y
BW:	13	17	BW: beginning of a WHILE LOOP
WH:	13	68	WH: expression
LP:	13	38	LP: count
EPL:	13	38	EPL: end of a LOOP
S:	13	47	S: duration,freq,volumn,voice
ERROR MESSAGES			
FILE I/O ERROR	14	14	



PILOT language for the 99/4A by the late Tom Weithofer. This version of PILOT takes full advantage of TI's sound, speech and graphics. This is the simplest language to program for the 4A. It was originally designed as a CAI development language for educators/teachers, but can be used in many applications. It is written in Forth and is very fast. The program is Fairware and since the author died, the most appropriate contribution would be to the Cystic Fibrosis Society in his name.

PRBASE BUG REPORT by Bill Warren (author of PRBASE).

NOTE: John Parken of Chips received the following from Bill Warren when he sent in his contribution. Some of us may have had these problems and discovered fixes by now, and some of us may not have. Deanna Sheridan, the editor for the Cleveland Area 99ers newsletter (April, 1988), sent a copy to the United Database SIG/Johnson Space Center TI 99/4 UG, 2321 Coryell Street, League City TX 77573. [And the result is that I am retyping it - Jim Susco.]

OUTPUT DEVICE NAME

Many users have experienced a printer error # when attempting to print with PIO or a legal disk file name. Most of the development work for version 2.0 was done with existing databases from version 1.2 in order to ensure upward compatibility. Also, I must have designed 50 different databases to test the code changes, but still failed to catch this bug until after release.

As you may already know, if you have already assigned a default output device name when designing a data screen with CREATE, this output device name will appear as the default whenever you edit or change your data screen. The problem is that on the first design, the old default is displayed as well, even though no former default existed. Hence, when using a freshly, initialized diskette and designing a new database for this disk, when the program asks for "Output Device Name:", it presents you with a field full of [ASCII] character 229s (>E5), which is what the format disk routine leaves all the disk sectors filled with. Since character 229 does not have any character definition in the character pattern table, it shows up looking just like a space character, with nothing visible at all. If you try to output to a common device name like 'PIO', you are actually trying to output to a device name like 'PIOxxxxxxxxxxxx' where the x's are the >E5s.

A lot of folks have mistakenly tried to work around this by using output device names such as 'PIO.CR'. Anytime you place a period in the output device names such as PIO or RS232, the RDM code just scans for the first two characters following the period and then looks for another period (or sometimes an equal sign). Hence, RS232.BA=4800 and RS232.BAUDRATE=4800 and even RS232.BADBOYS=4800 are all equivalent to the system. Anyway, you probably won't have any problem with the >E5s if you are using RS232 as an output device, as most folks have SOME kind of software switches set when using a serial printer (did TI really think folks would normally use 300 bps as the default to drive a printer?)

Anyway, using PIO.CR causes all the >E5s to be ignored, but also sets a software switch, suppressing the carriage return/line-feed pair that is normally sent at the end of each line of text. Not sending the CR-LF pair requires that you space-fill each printer line (send out a full 80 characters on an 80-column printer) to cause the printer to move on the next line. This need for space filling will totally mess up your column alignment. I suspect that a lot of folks who are using this method are just getting along with the P command screen dumps, and aren't taking advantage of PRBASE's tabular report capabilities.

The fix is simple: when you have finished designing or editing data screens, and have advanced to where CREATE asks "output Device Name:", press FCTN-3, ERASE (DEL LINE), and enter your usual device name. Complete the other fields (except the defaults). After entering the last field, the change will be saved, and you shouldn't have any more trouble with the printing error appearing when attempting to print or output to disk file.

DISK FORMAT --- DOUBLE-SIDED

Some folks run into trouble when the disk initialization routines used by CREATE attempt to verify sectors 361-720 on TI controllers. The disk initialization routines in the TI controller apparently vary in some manner that

I was never able to determine. The CorComp selection appears to work fine as either single- or double-sided. The TI selection appears to work without fail on single-sided disks, but fails on some units with the double-sided option.

I don't have a fix for this within PRBASE/CREATE, but you can easily avoid the problem altogether (if you are even having it) by just initializing your data disk prior to it's first use with some other disk manager problem, just like old PRBASE 1.2.

MIS-ALIGNMENT OF COLUMNS IN TAB REPORTS

Some folks have written about problems with the underlining of the column header of the [tabular] reports. The first thing to check is the output device name (see above). If this is all squared away and you are still having problems with your header, try using CREATE to work your way through the design of the problem report until it brings up your old header for changes. Retype the header, taking care to use the space bar to pass through all the white space in the column header. Don't use the right arrow key (FCTN-D)!!!! Using the space bar fills the header field, whereas using the right arrow will sometimes leave nulls (ASCII 0's), which are subsequently ignored by the printer, and as such, foul up your header alignment. Serves me right for clearing the screen with nuls instead of spaces.

FUTURE OF PRBASE

It's not news to many folks, but I am no longer working on any updates to PRBASE. I do still write a lot of letters answering questions on its use, and just servicing the program in general. If a user needs help, I will try to provide it. This still includes having the user send a problem data disk for my examination.

A couple of folks have received the source code from me, and have undertaken some revisions. Mike Dodd of Oliver Springs, TN has gotten as far as to release version 2.1, which I understand will allow you to use standard TI I/O to access the data disk. Mike's address:

Mike Dodd
116 Richards Drive
Oliver Springs, TN 37840

My hat is off to Mike, for working through my source code and sector madness.

Also, Barry Traver expressed some interest in revising the program so that it could run on the MYARC 9640. I understood that he and Peter Hoddie would be doing the work, but haven't heard how they are doing. Barry can be contacted at:

Barry Traver
835 Green Valley Drive
Philadelphia, PA 19128, or:

as a sysop of the TI Forum on Compuserve. His ID is 70436,373.

Thanks to:

Deanna Sheridan, editor
Cleveland Area User Groups
20311 Lake Road
Rocky River, OH 44116

TIPS FOR THE BEGINNER
By Frank N. Zik - West Penn 99ers

Much controversy surrounds the merits of the PRBASE program written by William Warren. Part of the dilemma stems from the problems found when trying to load the program or print out the data. I have concluded that most of these problems don't exist when using an unaltered copy of the original program, provided you follow the instructions. But, still you say, I am having trouble with it. Well, it seems there are a number of altered copies floating around that are not correct or complete. So let's first of all begin with the most recent version, 2.0. This program allows for use of double-sided disks. It should contain files named PRBULT/BAS and PRBUTL/DOC. On the modified working copy that I have, I added a CALL KEY program that is a loader for the Utility Program. The LOAD program was found in the Dec. 1986 issue of BYTE-LINE. [Who got from the Cin-Day UG and Bill Zaebst.]

Now, let's start separating the apples from the oranges. First, let's give due credit to Mr. Warren for his novel approach to a long-standing and difficult problem, that of authoring a really good Data Base program. He has indeed done this and more. The program is functional, versatile and fast (written in Assembly Language). It is written in a very unique manner that places all the header files in just the first ten sectors, thus leaving the rest of the sectors open for data storage. Data disks developed in this manner cannot be read using the Disk Manager cartridge, so mark them carefully. Then too, the sorting ability of the program is outstanding, recognizing both upper and lowercase characters.

My purpose in writing this article is to give some hints on how we can all better load and use this program. So, first print out, then read the DOCS (PRBASE and Utilities) included on the disk, several times and you're ready to experiment with, perhaps the best database program written for the TI computer. An important new proposal has been announced that would seem to add great importance to the value of the PRBASE program. A group called the Johnson Space Center Users Group in Texas has plans to start a nationwide news article reference publication. They would catalog user group newsletter articles thus providing us with a quick reference to previously written articles. With this listing, you could find information on just about any subject, just so long as it was published in a participating user's newsletter. They will start with listings for January, 1987. Both our PUG and WEST PENN 99'ers will be included in the first 30 groups represented. Aren't we lucky to have forward thinking officers in both our user's clubs? The Texas group has already sent out a sample disk of instructions along with a printed exhibit of how they would like the information prepared. They are asking that everyone that participates should use the PRBASE as the standard.

Continuing, first use the Create portion of the program to set up your desired format. It offers plenty of flexibility provided you stay within the parameters set forth in the documentation. Once you have made up the format desired, this section is not need again until you want to make up a different format for your next project. A printed copy of your arrangement is made by using FCTN-6. Note here that the hard copy will be shown twice. The first pinout will have numbered rows and columns. The second will have the same numbered designations and also a (+) in all the non-used areas. This clever layout will help you should you want to modify this same format, or for a variation of it in your next layout. It should also be noted that any fancy border that you designed will appear with Asterisks in place of the fancy border you created. The data section allows you to insert all your important records, in areas called fields (32 maximum). While in this mode, you can edit to your heart's content, using up to a maximum of 255 characters. So that this article is not too long, I'll give some short hints: (1) Name all Data disks PRBASE (important); (2) Calling up the initial data file is done by inserting the No.

after DSK and replacing the (.) with a (?). Subsequent files are called up by simply depressing the enter key; (3) Using a Super Extended Basic cartridge doesn't load the Utility program since the space bar is used to bypass the normal load feature on a disk; (4) there is no continuous erase or move function (FCTN S or D). Release and press the keys for each move desired. In this case, this restriction, looks like a good limiting condition; (5) to load the Utility portion of the disk, when the main computer title screen first comes on with No. 1 Basic and No. 2, Extended Basic, hold down the space bar before pressing No. 2 and continue holding it down until you see the utility screen come up.

Check the listings presented for the functions they can provide; (6) All program loadings are in XB; (7) the letter H is used to bring up the HELP screen, COMMAND SUMMARY. When selecting a Command Option, press the desired key twice. The first press selects and the second press executes the command. Give the program a try, it is very good.



SOME MORE PRBASE TIPS by Jim Susco, editor of Cin-Day News.

1. When I installed the PRBASE file maintenance section on my FUNNELWEB diskette I discovered I had to rename the diskette to PRBASE. The stub of a file that comes with the FUNNELWEB program has to be first unprotected and then replaced with the assembly file of your choice (there are two). Since you mainly do file maintenance it made sense to install that one. If you have room on your diskette, you could have all of the program files on the disk. you could load the XB loader from the initial XB User List or on one of the assembly environment User Lists as a UTIL1. Note, that if you don't rename the diskette,, there won't be a complete character set loaded and you lose the graphic characters.

2. In an accompanying article, Bill Warren mentions deleting the fields initially with FCTN-3 to clear the entire line. If you plan to print the reports to disk, you cannot have predetermined printer settings being sent along with the file to the diskette, so clear the printer codes when designing the tabular reports - just to be on the safe side.

(The printer can be set up through the C (control codes.)

3. I don't believe you can write over an existing file on the diskette, so use different names for a filename.

4. Star printers, and several other printers, print in 136 columns instead of the 132 that is the maximum width that PRBASE can handle - so you can put a tab or left margin of a few characters on the left side so that you can hole-punch the report.

5. The tabular reports have a two line header that one is the default (which looks like it can be changed although I haven't) and the second line where you might put the date, time or reason for the report.

6. It is easy to sort again on the Zip Code as an Index so that you can pre-sort your mail for the post office (would you believe it, the new rates for non-profit mailing went from 8.3 to 8.4 cents a letter - try figuring out change!!!!).

7. I just received the first two diskettes from the Johnson Space Center TI UG yesterday and with it was the shareware program REDISKIT. The program works with PRBASE, as well as other programs, as a fast copying program. It takes about 45 seconds to copy a single-sided diskette.

8. You can change your prompts on the screen for the input of data as long as you keep the fields the same length and in the same order. For example, if you wish to add the words Subscription Date:, all you have to do is put those words on the screen someplace when you re-create the screen design. I wonder if you can grab the indexing number from the corner of the screen, I believe Rick Kellogg did that on one of his tabular report formats.

I've included a sample of a format that I use. It is only a suggested guide, I would add another line on the bottom for more information and I wouldn't have the No. separate from the Street address.


```

0 0123456789012345678901234567890123456789
40 *****
80 #Members File#
120 *****
160
200 Last Name: ( )
240 First Name: ( )
280
320 No.:( ) Street:( )
360 City:( )
400 State:[ ] Zip:( )
440
480
520 Area Code:( ) Home Telephone:( )
560 Bus. Telephone:( )
600
640
680 Subscription:[ ]
720
760 Added Notes:( )
800
840
880 *****840
0 0123456789012345678901234567890123456789
40 *****
80 *****#Members#Files*****
120 *****
160 *****
200 #Last#Name:#+*****#)###
240 #First#Name:#+*****#)###
280 *****
320 No.:(+###)+Street:(+*****+)###
360 *****City:#+*****#)###
400 *****State:[+###]+Zip:(+*****+)###
440 *****
480 *****
520 #Area#Code:(+###)#Home#Telephone:(+*****)+
560 *****Bus.#Telephone:(+*****)+
600 *****
640 *****
680 *****Subscription:[+*****+]###
720 *****
760 *****Added#Notes:(+*****+)###
800 *****
840 *****
880 *****840

```

New UG Addresses
 by Jim Susco, editor of the
 Cin-Day News.

I've received several letters from various user groups this month.

1. From the Chicago UG, the gentleman who had been reviewing the newsletters as the exchange chairman had been sick several months before anyone had noticed that he had been doing it by himself. There is a new exchange chairman. His name is Nick Iacovelli, Jr. So, please have patience until he catches up with the backlog.

2. We've add the TI-99er Groep, TI-Randstad-Holland, c/o J. Schuller, v.Blankenburgerstraat 13f, 2517XL DenHaag, HOLLAND to our mailing list at their request.

3. Jean Hall is the current editor of the Spirit of 99, the newsletter for C.O.N.N.I. Users Group in Columbus and Central Ohio. The groups address for newsletter exchange is : C.O.N.N.I., 181 Heischman Avenue, Worthington OH 43085. And she wrote a very, nice letter that I appreciated.

4. The New 99er Users Co-op has a new address: c/o Ron Warfield, 216-10th Avenue, New Westminster, British Columbia, Canada V3L 2B2. They have a PUBBS data line (604)526-3389.

5. Jackson County 99ers are back, with a new editor. Doug Gootee, Jackson County 99ers, 4711 Northern Avenue, Kansas City, Missouri, 64133-2219.

6. Magnetic User Group, c/o Joyce Corker, editor; 30 middlesex Circle, Waltham, Ma. 02154 is a new address.

7. I also received an Address Correction (as requested under our return address) for the San Diego TI-SIG, P.O. Box 5263, San Diego CA 92105.

Report Format Design

#	Location	Size	#	Location	Size
1	212	25	17		
2	252	12	18		
3	324	6	19		
4	338	22	20		
5	372	28	21		
6	411	3	22		
7	422	10	23		
8	531	3	24		
9	551	8	25		
10	591	8	26		
11	700	20	27		
12	780	20	28		
13			29		
14			30		
15			31		
16			32		

LIMA TI MULTI USER GROUP CONFERENCE
SATURDAY MAY 21, 1988

UPDATED MAILING April 14, 1988

The Lima Ohio user group is pleased to announce the following list of user groups and suppliers of TI software, hardware, and other goodies that have made plans to be at the conference. We still have others that are interested, but have not made their reservations. GET THEM IN AS SOON AS POSSIBLE.

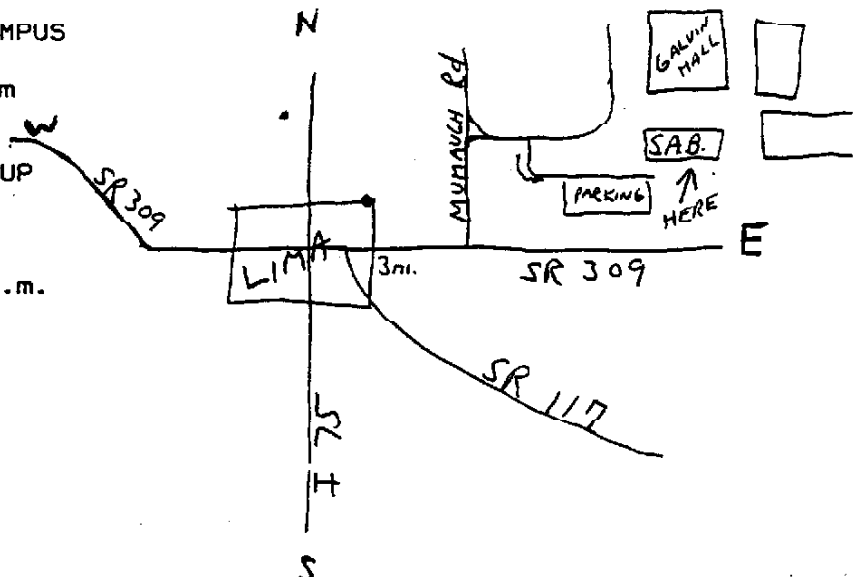
LIMA TI 99/4A USER GROUP
CIN-DAY USER GROUP
OH-MI. TI USER GROUP
NEW HORIZONS USER GROUP
GREAT LAKES COMPUTER GROUP
MICRO-SERVICE - Printers and repair service
HORIZON COMPUTER LIMITED - Bud Mills Horizon Ram Disk and console modifications

THE FORT USER GROUP
MR. JACK SUGHRUE - Author of many articles on the TI 99/4A computer
TIGER CUB SOFTWARE - Software and TIPS FROM TIGERCUB
GREAT LAKES SOFTWARE - Software
MR. IRWIN HOTT - demo on how the blind use the TI 99/4A
CARNATION CITY 99ers USER GROUP
C.O.N.N.I. USER GROUP
RAVE 99 - catalogs
GLIDDEN ELECTONICS - catalogs
L.L.CONNER ENTERPRISE - Hardware and software for TI 99/4A
ASGARD SOFTWARE at Jack Sughrue's table
GENIAL COMPUTERWARE by J.PETER HODDIE at Jack Sughrue's table
BARRY TRAVER'S GENIAL TRAVELER at Jack Sughrue's table

We still have tables and conference room time available for those of you that would like to participate in this event. This event is FREE. There is NO CHARGE FOR EXIBITION and NO ADMISSION CHARGE. If you plan on coming, there is still time to pre-register.

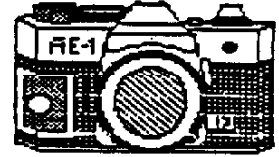
PLACE - OSU LIMA BRANCH CAMPUS
DATE - MAY 21, 1988
TIME - 11:00 am to 6:00 pm

LIMA AREA TI 99/4A USER GROUP
c/o Dave Szipp (president)
4 Poulston Place
Lima, Ohio 45805
(419) 228-7109 after 6:00 p.m.





PICTURE IT



by Rodger Merritt 1987

TI ARTIST INSTANCES - TI WRITER - BANNERS - XBasic

This month I am proud to announce a new product that I believe is a vast improvement over its predecessors. I am calling this product **PICTURE IT** as it is a collection of TI Artist Instance Conversions that can place those Artist pictures on Banners and in TI Writer documents. It can also display Instances on the screen and into an extended basic program.

TI ARTIST - My favorite artist program (version 2.01) is the most professionally done software the TI has. The enhancement mode allows one to put together artwork and fonts in seconds. With my collection of over 150 font styles and hundreds of instances, I put together the above header in thirty minutes. I wonder what Chris Faherty has been doing? Does anybody know?

TI WRITER - As you can see from this page header, the graphics made in TI Artist can be printed very nicely through the Formatter. In a previous article I mentioned Art Convert, a very good program that also converts instances. My program can now print four times faster and twice as dark making a very nice letterhead. You can convert one instance or convert and merge two instances giving you a full width page. Easy menus allow you to choose the page location and merge alignment of your instances.

SCREEN - This program displays the Instances on Screen in seconds and can then convert them to an XBasic merge program. At assembly language speed this whole process takes from less than 1 minute for a small (5*5) Instance to about 4 minutes for a large one (say 20 * 20) that is 400 characters. How can you get a 400 char graphic when you can only redefine 112 chars in XBasic? When you choose the display option each char is checked against previously defined chars and if it finds a match uses that one. If the Sprite option is picked then the picture is set up and saved to disk in 4 char blocks and with this you are limited to 112 chars or 28 sprites. When this is done you simply type "MERGE DSKn.NAME" and then "RUN" and the picture is displayed in the middle of your screen in your new XBasic program. If the Sprite option was selected then you may delete the last line of this program then type "MERGE DSKn.SPRITEMOVR" supplied on the disk. This will set this large Sprite in motion uniformly due to the special CALL LOADS it uses. The Sprite will smoothly go from side to side. Examples of these are used in the title screen. By the way you may just view the Instance on screen and return to the Menu without saving it in XBasic format.

BANNERS - Yes another Banner program but give it a try. The letters are 8 inches high and fully defined with no block effect. They print as fast as the printer can go at less than 1 minute a letter. This banner program also prints Instances up to 12 chars or half a screen high and a full 32 chars wide. If the char is greater than 12 high the top 12 chars will be printed. The conversion is rather time consuming I'm sorry to say but you may save the results to disk and print that the next time. That will be as fast as your printer since it is straight print code. You may choose the ASCII char of the printout and that and the tab are saved to the file. When you print a previously converted picture the char that it was saved in is displayed and you may change it for this printing. Each Instance is Auto Centered on the page. There is an option to change all your printers specs so this should work on any printer that can be put into Elite type. You may also opt to convert without printing.

CATALOGS - This has a Disk Cataloging Option that can produce a catalog in two ways. A straight catalog of all disk information with the help of F9 to abort or Space Bar to pause if there are many files on the disk. You may sort the files since Instances have an "I" the converted Banners have an "B" and the TI-WRITER converted graphic files are given an "W". This catalog sorts and displays only those files.

USES - The TI-WRITER graphics converter can produce easy letterheads, signature for your name using a script font for TI-ARTIST, or other pictures in your document. The Banners can add a special touch to that celebration and with all the Artwork out there for it you can display the corresponding pictures. Also once Instances are blown up to Banner size you don't need to buy coloring books for the kids anymore. My pictures of Odie, Garfield, Mickey, Donald and many more make great coloring pages. Finally putting that artwork into your XBasic programs is done for you in less than 4 minutes.

BOTTOM LINE - You may get **PICTURE IT** a two disk collection that includes many converted Banner Instances and many Instances for you to try from me.

Send \$10 to:

Rodger Merritt
1949 Evergreen Ave.
Fullerton, CA 92635



CIN-DAY USER GROUP
416 Pinewood Avenue
Piqua, Ohio 45356

XB to TI-ARTIST INSTANCE...

By Terry Atkinson

Reprinted from 9T9 Newsletter, TI Users Group of Toronto

NOTE.. Line 4 in Version 1 of this program is the filename that the screen will be saved as. Change it to whatever filename you wish.

These programs were created to ease the pain of converting TI EXTENDED BASIC screens to a DV/80 format which can be loaded by TI-Artist 2. At present I have 2 versions. Version 1 is used for XB. This takes about 25 minutes to convert a screen to disk, depending on how many characters are on the screen. The maximum sector size the program will take is 58 sectors. Version 2 takes only about 7 minutes to convert a screen and requires the CorComp disk controller, making use of the tool shed utilities built into it.

There are two ways to run the program: either as a sub-program merged within a program or as a program run from EX-Basic at the appropriate break point. Instructions are geared toward that end. To use this program, first run your program that contains the graphics you want to convert, when the screen is displayed that you want to convert, "BREAK" the program (FCTN 4) and lok at the breakpoint in the program, making sure it does not contain a FOR/NEXT loop. Replace this line with the statement "RUN DSK1.XB2ART" or whatever you have named the conversion program. In teh case of the FOR/NEXT loop, it would be better to select another line located before or after the breakpoint line. The resultant file obtained after running this program can be loaded directly into TI-Artist as an INSTANCE. After the INSTANCE is altered, you can save it as a TI-Artist program file.

For any advice, contact the author, Terry Atkinson.

EXTENDED BASIC VERSION

```
1! Terry Atkinson 28 Savona
Court Dartmouth, NS B2W4R1 (
voice) 1-902-434-1346
2! This program may be freel
y distributed. Please do not
remove the authors name
3 DATA 1,24,1,32
4 DATA DSK1.SCREEN
5 READ SROW,EROW,SCOL,ECOL,0
UT$ :: IF POS(OUT$,"_I",1)=0
THEN OUT$=OUT$+"_I"
6 IF SEG$(OUT$,1,3)="DSK" AN
D LEN(OUT$)<16 THEN 8
7 CALL CLEAR :: PRINT "Pleas
e check filename in DATA sta
tement in program" :: END
8 FOR E=0 TO 14 :: CALL COLO
R(E,2,9):: NEXT E :: CALL DE
LSPRITE(ALL):: CALL MAGNIFY(
1):: CALL SCREEN(8) :: CALL
SPRITE(#1,32,16,1,1)
```

```
9 B$="123456789ABCDEDED" :: OP
EN #1:OUT$
10 PRINT #1:STR$(ECOL+SCOL+1
)&","&STR$(EROW-SROW+1):: FO
R F=SROW TO EROW::FOR G=SCOL
TO ECOL::CALL GCHAR(F,G,H)
;:IF H>32 THEN I=H ELSE I=95
11 CALL LOCATE(#1,F*8-7,G*8-
7):: CALL PATTERN(#1,I):: CA
LL CHARPAT(H+ABS(H=31),C$)::
GOSUB 13 :: NEXT G:: NEXT F
:: CLOSE#1
12 CALL SOUND(4000,400,1)::
CALL CLEAR :: END
13 FOR E=1 TO 15 STEP 2 :: D
$=SEG$(C$,E,2):: E$=E$&STR$(
POS(B$,SEG$(D$,1,1),1)+PO
S(B$,SEG$(D$,2,1,1)))&"," ::
NEXT E
14 E$=SEG$(E$,1,LEN(E$)-1)::
PRINT #1:E$ :: E$="" :: RETU
RN
```

From the St. Louis Computer Bridge April, 1987

```
*****
*
*           A STUDENT'S SATELLITE COMPUTER           *
*
*           Dr. Roy T. Tamashiro                     *
*
*****
```

Terrilyn Morris has become a "star" in her eighth grade class. She brings a computer to school everyday. No, it is not the TI-99/4a, which she has loved using for school work in the last several years. She especially relies on the TI for doing her writing assignments. She seems so attached to her TI that she probably would not part with it for anything...except maybe if she could get Bruce Springsteen's autograph.

The computer Terri carries around with her is a Tandy Model 102 Portable Computer. It is about the size of a small notebook and fits easily in her backpack. It runs on batteries, but she also carries a power adapter to use when she can plug it in because that will keep the batteries from dying sooner. The Model 102 has 24K of RAM, and that is just enough to store a day's worth of notes she takes in class and in the library.

Terri's teachers and her classmates are really impressed when she takes out the Model 102 in the social studies class or the biology class, and she starts typing as the teacher is explaining some new material on the board. She can take just as much notes on it as the other students writing on paper. Actually she seems to write more quickly than the others, even though she is not a fast typist. This is because the word processor built into the computer allows her to do things like "copy text" and cutting and pasting very quickly and neatly.

Mr. and Mrs. Morris, Terri's parents, are pleased, but they were not sure it would turn out like this. They were worried that Terri's classmates would cast her as a snob or an "egghead" by taking notes on a computer. They were worried too about a school rule that electronic equipment like Walkmans and boom boxes were not allowed. So before they permitted Terri to take the computer to school they phoned the school, and discussed their concerns with the principal and the teacher. Both the principal and the teacher were reassuring. They said it was fine for Terri to bring the computer to school and that they would observe what happened and inform them if any problems came up.

When Terri gets home, she connects the Model 102 to her TI using an RS-232 cable and sends all her notes to a disk in the TI. Later she loads her notes into the TI-Writer word processor and does all the editing she needs to do. She "merges" the days notes with the notes she took on previous days, organizes them according to the study units and saves them back to the TI disk. From time to time she gets a printout of her notes. She uses the printout to study for tests. She says it is much easier to study from typed notes than from handwritten notes.

Some of Terri's friends also think it is easier to read and study from printout notes. Several have secretly offered to pay her a dollar for a copy of her printed out unit notes. Terri is not sure this is right, so she hasn't collected money from them, but she has let them study from her notes when she's not using them.

Terri is most thrilled about how much time she saves when she does research reports. When she goes to the library, she types information from her sources like reference materials, books and magazines into her Model 102. When she gets home, she transfers the file onto TI-Writer like she did with class notes. She now has the information ready to create her report. She need not retype the notes she took at the library as her classmates must do. Even her friends who have word processors at home, must take notes by hand in the library, then retype their notes into the word processor. Terri is a step ahead of them too.

In the last month, two other students in Terri's school have started to bring Model 102 portable computers to school. Terri, her teachers, and her parents are delighted to have stimulated a new approach to studying in the school.

If you would like to set up a satellite computer system like Terri did, or if you would like to help a student do so, you will need the following equipment: TI-99/4a Computer with 32K Memory Expansion, RS-232, at least one disk drive, printer and cable, Radio Shack/Tandy Model 100, 102 or 200 portable computer, and a standard DB-25 RS-232-C cable. The necessary software (word processor and communications) for the Model 100/102/200 is built-in the computer. For the TI, a communications software, such as Terminal Emulator II, Fast-Term or 4A-Talk, and a word processor like TI-Writer are required. To transfer files between the Model 100/102/200 and the TI, connect them with the RS-232 Cable, watch the parameters on both communications software and use the normal commands for uploading and downloading text (ASCII) files on the two computers.

 * TWO-WAY COMMUNICATIONS FOR X-BASIC *
 * Dr. Roy T. Tamashiro *

Have you ever tried to use BASIC or Extended BASIC to communicate with another computer? If so, you soon discover that you can send and receive data (using PRINT # and INPUT # or LINPUT # instructions), but there are no instructions which allow simultaneous two-way communications. This "chat" mode is not available in the ordinary BASICs because you say not interrupt the PRINT # and (L)INPUT # instructions which are waiting for carriage returns. This is like having a walkie-talkie conversation in which each person must say "OVER" and release a switch before the other person can talk.

The "COMMUNICATIONS TERMINAL" program (See listing below and footnote) allows simultaneous two-way interaction. To use the program, you must have Extended BASIC, 32-K Memory Expansion, and an RS-232 Interface connected to a modem and phone line or direct wire to another computer. Type the program and SAVE it to your disk or cassette.

When you RUN the program, the screen clears, and whatever you type appears on your screen and is sent to the remote computer at 300 Baud. Whatever the remote computer sends to your computer appears on your screen also. When you or the remote computer sends a carriage return i.e. (Enter), a new line begins. The (left-arrow) key (CHR\$(8)) acts as a Backspace on the screen.

To exit the routine, press [FCTN-9]. The remote computer can also allow you to exit the terminal send a [Control-O] or CHR\$(15). To return to the terminal, type CALL LINK("START") and press (Enter).

```

100 !*****
110 !# COMMUNICATIONS #
120 !# TERMINAL #
130 !*****
140 !AUTHOR:ROY TAMASHIRO
150 !FEBRUARY 1987,X-BASIC.
MEMORY EXPANSION & RS232
160 CALL INIT :: CALL LOAD(8
196,63,248):: CALL LOAD(1637
6,83,84,85,82,84,32,48,0)
170 CALL LOAD(12288,2,224,50
,114,4,192,2,1,96,0,4,32,32,
32,5,128,2,128,3,0,22,250,2,
0)
180 CALL LOAD(12312,15,128,2
,1,50,98,2,2,0,16,4,32,32,36
,2,6,15,137,200,6,131,86,4,3
2)
190 CALL LOAD(12336,49,118,0
,8,4,192,2,12,19,64,31,21,22
,14,4,32,48,174,192,32,50,14
6,152,32)
200 CALL LOAD(12360,50,178,5
0,181,22,8,4,224,131,124,2,2
24,131,224,4,96,0,112,4,196,
216,4,131,124)
210 CALL LOAD(12384,4,32,32,
28,216,32,131,124,131,124,19
,229,208,96,131,117,152,1,50
,181,19,236,6,160)
220 CALL LOAD(12408,48,206,1
93,0,2,0,16,0,4,32,32,32,2,0
,15,128,2,1,3,0,4,32,32,32)
230 CALL LOAD(12432,2,0,15,1
33,2,1,1,0,4,32,32,32,2,6,15
,137,200,6,131,86,4,32,49,11
8)
240 CALL LOAD(12456,0,8,192,
4,16,214,50,146,48,178,192,3
2,50,114,2,12,19,64,31,21,22
,252,54,32)
250 CALL LOAD(12480,50,178,2
08,96,50,178,29,18,6,160,48,

```

```

206,3,128,132,1,50,180,22,3,
2,64,255,224)
260 CALL LOAD(12504,2,32,0,3
2,16,17,152,1,50,193,22,5,2,
128,0,0,19,37,4,0,16,35,216,
1)
270 CALL LOAD(12528,50,182,2
,33,96,0,4,32,32,32,208,96,5
0,182,5,128,2,128,3,0,17,23,
2,0)
280 CALL LOAD(12552,0,32,2,1
,50,184,2,2,2,224,4,32,32,44
,4,192,4,32,32,36,2,0,2,224)
290 CALL LOAD(12576,2,1,96,0
,4,32,32,32,5,128,2,128,3,0,
22,250,2,0,2,224,4,91,0,0)
300 CALL LOAD(12600,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,0)
310 CALL LOAD(12624,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0)
320 CALL LOAD(12648,0,0,0,0,
0,0,0,0,100,32,0,46,170,49
,68,49,122,193,126,83,224,49
114)
330 CALL LOAD(12672,192,32,1
31,86,194,64,2,41,253,248,4,
32,32,40,208,193,9,131,7,4,2
,2,49,100)
340 CALL LOAD(12696,5,128,5,
132,128,196,19,6,4,32,32,40,
220,129,152,1,49,116,22,246,
193,4,19,82)
350 CALL LOAD(12720,2,132,0,
7,21,79,4,224,131,208,200,4,
131,84,200,4,49,62,0,132,168
,4,131,86)
360 CALL LOAD(12744,200,32,1
31,86,49,64,2,224,131,224,4,
193,2,12,15,0,195,12,19,1,30
,0,2,44)
370 CALL LOAD(12768,1,0,4,22
4,131,208,2,440,32,0,19,50,2
00,12,131,208,29,0,2,2,64,0,
152,18)
380 CALL LOAD(12792,49,117,2
2,238,160,160,49,78,16,3,192
,160,131,210,29,0,192,146,19
230,200,2,131,210)
390 CALL LOAD(12816,5,194,19
4,114,209,96,131,85,19,9,156

```

```

,133,22,242,9,133,2,6,49,100
,158,182,22,237)
400 CALL LOAD(12840,6,5,22,2
52,5,129,200,1,49,64,200,9,4
9,60,200,12,49,59,6,153,16,2
26,30,0)
410 CALL LOAD(12864,2,224,49
,68,192,9,4,32,32,40,9,209,2
2,4,3,129,2,224,49,68,4,193,
6,193)
420 CALL LOAD(12888,215,65,2
43,224,49,114,3,128,0,0,16,0
,40,0,0,0,6,82,83,50,51,50
46)
430 CALL LOAD(12912,50,46,47
,188,5,136,152,56,53,30,19,6
,6,8,16,4,4,224,47,186,2,9,5
5,6)
440 CALL LOAD(12936,7,32,47,
184,2,12,41,172,200,12,52,16
,168,12,52,10,2,12,41,252,13
1,32,52,10)
450 CALL LOAD(12960,17,5,200
,32,52,16,52,19,5,160,47,174
,6,12,200,12,52,14,0,0,13,15
0,8)
460 CALL LOAD(12984,19,52,6,
8,152,36,47,182,19,13,8,8,6,
160,53,44,195,78,5,141,6,8,1
52,56)
470 CALL LINK("START")
480 END

```

If your line out of the RS-232 interface has a Y-cable and you are using port 2, insert the following line to run the program via RS232/2:

```

465 CALL LOAD(12321,18):: CA
LL LOAD(12345,128):: CALL LO
AD(12905,81):: CALL LOAD(1291
1,47):: CALL LOAD(12473,129)

```

NOTE: The program is adapted from notes published by Texas Instruments Inc. on "9902 Asynchronous Communications Controller" and "DSRLNK Routine for XB".

COMPUTING CALORIES

I'm indebted to an amateur computer-users' group for a tongue-in-cheek estimate of the calories you can burn per hour with the following activities:

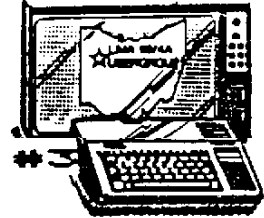
- Deciphering unfriendly software manuals/150
- Making back-up copies/50
- Finding the cause of a glitch/300

To which I would add: Listening to computer jargon from dedicated users/500!



BITS, BYTES & PIXELS

LIMA AREA 99/4A USER GROUP



MARCH 1988

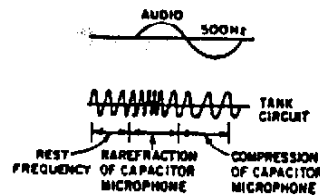
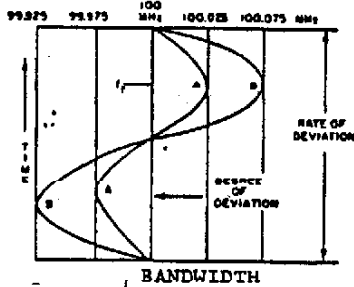
VOLUME 4 #3

MONITORS

OR WHY A TV SET ISN'T GOOD ENOUGH FOR 80 COLUMNS

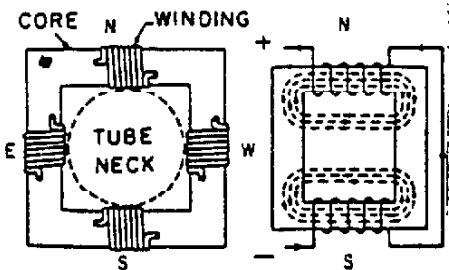
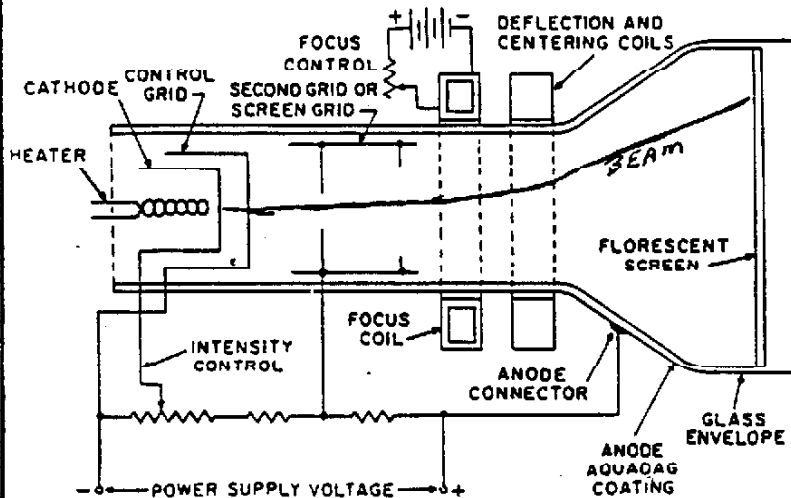
Tom Morrison

FIRST, WE HAVE TO GO INTO A LITTLE BIT ABOUT BANDWIDTH. IF YOU WANT TO COMMUNICATE, YOU CAN USE YOUR VOICE. IT WILL TRAVEL ABOUT A MILE WITH PERFECT CONDITIONS. WHEN YOU WISH TO SEND INFORMATION A LONGER DISTANCE, YOU MUST TRANSMIT IT ON A WIRE OR WITH ELECTROMAGNETIC WAVES. THE PHONE WIRES ARE BUILT TO HANDLE VOICE FREQUENCIES (ABOUT 400 TO 15,000 CYCLES PERSECOND). RADIO WAVES, SAY FM RADIO, USES A CARRIER FREQUENCY OF 90 MILLION CYCLES PERSECOND. IT IS OBVIOUS WE CAN NOT HEAR THAT FREQUENCY, SO WE HAVE TO PRESS OUR VOICE ON IT SOME WAY. THIS IS DONE BY ADDING AND SUBTRACTING THE VOICE FREQUENCY TO THE CARRIER. THIS, OF COURSE, WILL MAKE THE CARRIER DEVIATE IN FREQUENCY AT THE RATE OF THE VOICE INFORMATION, AND IT WILL TAKE UP 90 MEGACYCLES PLUS AND MINUS THE 15,000 CYCLES OF THE INFORMATION. THIS IS THE BAND WIDTH. FOR REALLY GOOD RECEPTION, THE 1,000 CYCLES MAY DEVIATE THE ORIGINAL 90 MILLION CYCLES BY MORE THAN JUST 1,000 CYCLES. THIS MEANS THAT THE BANDWIDTH MAY BE 10 MILLION CYCLES ALTOGETHER. YOU MUST REMEMBER THAT THERE IS A RECEIVER THAT MUST PICK OFF THE AUDIO OR NOONE CAN HEAR THE INFORMATION. IT IS EASIER TO SEE AND RETRIEVE A LARGER SWING OF THE CARRIER THAN A SMALL ONE.



NOW THAT YOU HAVE SOME IDEA OF WHAT THE TERM BANDWIDTH MEANS, WE CAN DISCUSS THE TELEVISION THAT A LOT OF TI USERS HOOK UP AS MONITORS. THE RF MODULATOR ACTUALLY DOES MODULATE THE VIDEO AND AUDIO ONTO CHANNEL 3 OR 4. WHAT GOES INTO THE SET IS JUST LIKE A TV SIGNAL. A TELEVISION IS DESIGNED TO RECEIVE SIGNALS SENT OUT TO BE DISPLAYED AS PICTURES. IT DOESN'T HANDLE 80 COLUMNS VERY WELL DUE TO THE TECHNICAL LIMITATIONS.

THE SET HAS A PICTURE TUBE WITH THE SCREEN COATED WITH PHOSPHOROUS. REMEMBER TURNING OFF THE OLD BLACK & WHITE AND WATCHING IT SHRINK TO A DOT IN THE MIDDLE? THAT WAS DUE TO THE DEFLECTION GOING AWAY BEFORE THE BEAM DIED OUT. WITHOUT MAGNETS TO DEFLECT THE ELECTRON BEAM, ALL YOU GET IS A DOT RIGHT IN THE CENTER. THE COILS ON THE NECK OF THE TUBE CAN PUT THE DOT JUST ABOUT ANYWHERE ON THE SCREEN AND CAUSE THE PHOSPHORS TO GLOW. COLOR HAS THREE DISTINCT PHOSPHORS AND THREE BEAMS TO HIT EACH ONE. WE CAN STAY AWAY FROM COLOR FOR THIS ARTICLE SO I WILL.

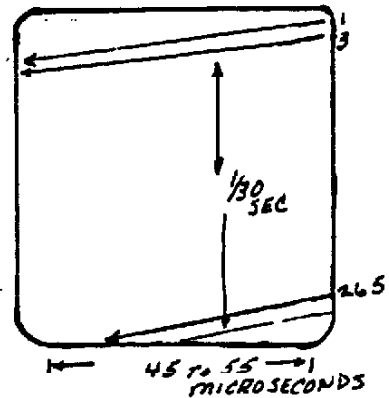


PHYSICAL PRESENTATION SCHEMATIC REPRESENTATION

NEXT PAGE

THE BEAM IS SCANNED ACROSS THE SCREEN FROM LEFT TO RIGHT, AND THEN IT IS QUICKLY MOVED BACK TO THE LEFT SIDE. IT DOESN'T GO STRAIGHT ACROSS, BUT ANGLES DOWN A LITTLE ON ITS WAY ACROSS THE SCREEN. THE NEXT SCAN IS JUST UNDER THE FIRST. THIS CONTINUES UNTIL THE WHOLE SCREEN IS COVERED TOP TO BOTTOM. WHEN THE BOTTOM IS REACHED, THE BEAM IS JUMPED UP TO THE TOP TO START ALL OVER AGAIN, BUT THE NEXT SCAN IS IN BETWEEN THE FIRST. THERE ARE 262 LINES MADE ON EACH JOURNEY THAT IS TECHNICALLY CALLED A RASTER. YOU CAN SEE THIS BY TURNING ON THE SET WITHOUT ANY INPUT SIGNAL. ALL YOU SEE IS THE SWEEP WITHOUT ANY VIDEO INFORMATION ON IT. THIS TRACE ACROSS THE SCREEN TAKES 65 MICROSECONDS. THAT IS .000065

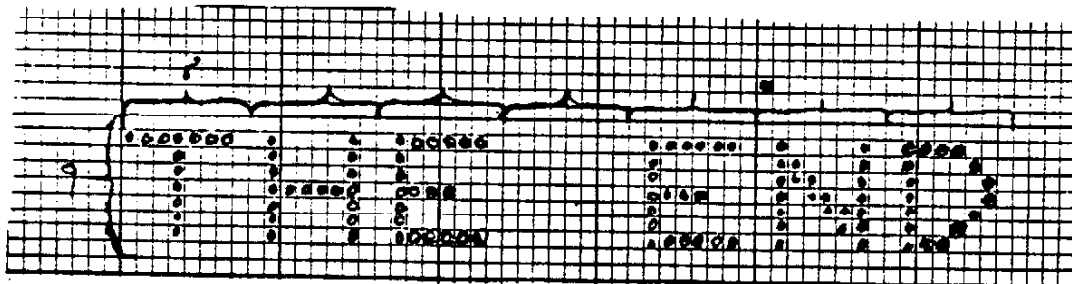
OF A SECOND. NEAR TO CONFUSION? THIS OUGHT TO GET YOU THERE. THERE ARE 525 LINES! THE FIRST SCAN DOES THE ODD LINES AND THE NEXT SCAN DOES THE EVEN LINES. EACH PASS IS CALLED A FIELD AND TWO FIELDS MAKE A FRAME. YOU GET 30 FRAMES AND 60 FIELDS EVERY SECOND. HENCE NO FLICKER. REMEMBER WATCHING "MY FRIEND FLICKER"? YOUR EYE CAN NOT SEE THINGS CHANGE AT THAT RATE, SO YOU SEE MOTION. COMPUTERS DO NOT USE THIS INTERLACE, IT IS DONE IN THE TV SET. AS THE BEAM MOVES ACROSS THE SCREEN IT IS INTENSIFIED TO MAKE THE PHOSPHOR GLOW. THIS IS CONTROLLED BY THE VIDEO SIGNAL. WHERE IT DOES NOT INTENSIFY, THE SCREEN STAYS BLANK. ALONG WITH THIS VIDEO IS AUDIO, AND SYNCHRONIZING SIGNALS. THESE SYNCHRONIZERS TELL THE BEAM TO GO BACK TO THE TOP AND START A NEW FIELD, AND THE TELL THE BEAM TO GO BACK TO THE START OF A NEW LINE. THE FIRST IS THE VERTICAL SYNC SIGNAL. THE SECOND IS CALLED THE HORIZONTAL SYNC SIGNAL. COMPUTERS TURN PIXELS ON OR OFF. WHEN TEXT IS DENSER THAN 40 COLUMNS, THE TV JUST DOES NOT HAVE THE RESOLUTION TO DISPLAY IT VERY WELL.



IF YOU CHECK OUT A CLONE MONOCHROME CIRCUIT, YOU FIND THE SPECIFICATIONS ARE: 18.5 KILOHERTZ--THAT IS ABOUT 53 MICROSECONDS PER TRACE LINE WITH 350 LINES IN A FRAME. THERE ARE 52 FRAMES PER SECOND WITHOUT ANY INTERLACE. IT WILL DISPLAY 720 DOTS ON EVERY LINE FOR A TOTAL OF 25 LINES OF 80 CHARACTERS. EACH CHARACTER IS 9 DOTS WIDE AND 14 HIGH.

REMEMBER THAT LETTERS HAVE TO BE MADE OF DOTS(ON & OFF) AND YOU NEED A SPACE BETWEEN EACH WITH THE DOT TURNED OFF--THAT IS ON THE HORIZONTAL. THEN YOU NEED SCAN LINES WITH A TOTAL OF THE VERTICLE NUMBER OF DOTS YOU USE FOR THE LETTER AND ONE CLEAR LINE IN BETWEEN EACH VERTICLE LINE OF CHARACTERS. IF YOU FIGURE 80 CHARACTERS ON A LINE MADE UP OF 8 BY 9 DOTS YOU NEED 8 TIMES 80 OR 640 DOTS. THAT MEANS 320 ONS/OFFS PER LINE. THE TRACE WILL TAKE 65 MICROSECONDS, BUT 10 MICROSECONDS ON EACH SIDE ARE NOT USEABLE, LEAVES US 45 MICROSECONDS. WITH 320 ONS AND OFFS IN 45 MICROSECONDS WE HAVE 6.8 MILLION EVENTS EVERY SECOND. IF THERE WAS A 7 MEGACYCLE BANDWIDTH TV SET, ALL WOULD BE FINE, BUT THE AVERAGE TV HAS A BANDWIDTH OF 3.58 MEGACYCLES. THAT IS WHY IT CAN HANDLE 40 COLUMNS. BANDPASS EQUATES WITH RESOLUTION.

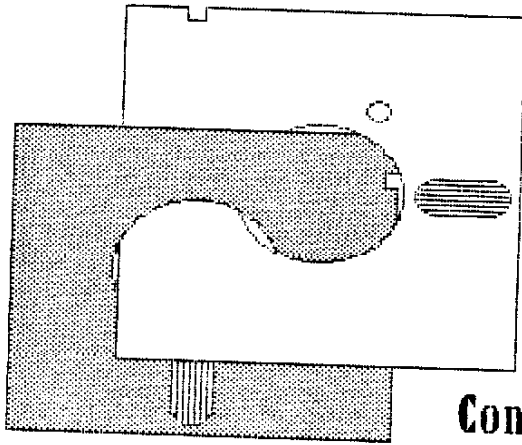
IF YOU GET AN 80 COLUMN CARD, BE SURE YOU HAVE A MONITOR TO HANDLE IT. THERE ARE A FEW OTHER ITEMS ABOUT MONITORS SUCH AS PERSISTANCE AND AUDIO RESPONSE JUST TO NAME A FEW, THAT SHOULD BE CHECKED BEFORE PURCHASE.



Editor's note

The author of this article, Tom Morrison, is one of the Lisa User Group's out of town members. He used to be a newsletter editor for a San Francisco area user group and currently resides at 741 S. Eddy, fort Scott KS 66701.

DONE



We might not be able to solve
 ALL of your problems. . .
 But we will give it a good try.

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The CEN-DAY USER GROUP



DAFFY DICTIONARY

The following originally appeared in the August '85 issue of the HOCU newsletter (from the Milwaukee Area User Group) where it was spotted by David L. Peden of El Cajon California who forwarded it to the Tacoma 99'ers Users' Group newsletter where we spotted it. Vive la grapevine! Your editor couldn't resist adding a few of his own too.

- AMPS.....Little creepy crawlies
- ARC.....Welding invented by Noah
- BUS BAR.....Mobile cocktail lounge
- CAPACITOR.....One who can hold his liquor
- COAXIAL.....2 engineers fired simultaneously
- COMMUTATOR.....One who drives to the city each day
- CONDENSOR.....Writer for Reader's Digest
- DEGAUSS.....To remove a bandage
- DETECTOR.....Private eye
- DETENT.....A small outdoor canvas shelter
- DIODE.....Eulogy in poetic form
- ELECTRODE.....Automated highway
- FARAD.....Deposed Egyptian ruler
- FOURIER.....Superseded by fiveier
- GAMMA.....Short for Grandmother
- GAUSS.....Singular for geese
- GERMANIUM.....Solid state pink flower
- HERTZ.....Medical term for pain; coincident with DEGAUSS
- IMPEDANCE.....Brat desperately needing bathroom break
- INFRA RED.....American spy in Moscow
- ION.....Device to remove wrinkles
- JOULE.....Gift from rich uncle
- KILOVOLT.....Only volt on the ten most wanted list
- LOAD LINES.....Monday morning wash
- LOGARITHM.....Dancing on logs
- MICROFARAD.....Son of deposed Egyptian ruler
- MHO.....Asking for seconds in Alabama
- NEGATIVE CHARGE.....Poor credit risk
- OHM.....House in England
- OUTLET.....Going away party for engineers

99'ER ONLINE

MAY 1987

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Cleaning of Disk Drives

To clean or not to clean?
That is the question!

By Art Byers

When asked by club members, my instinctive answer has been an immediate "NO"!!! - afterwards qualified by the old sage advice: "If it ain't broke don't fix it!". The quick reply is backed up by two things: a great deal of personal running time on two different brands of disk drives, and the advice of one of the most qualified and the most respected authorities on the 99/4A, Craig Miller of Miller's Graphics.

Personal: In two years of heavy use, I have yet to clean my PERCOM drive. It performs flawlessly. When I first got it, it was used 2 to 4 hours a day, five or six days a week, for a year. It was carried to club meetings and still is on occasion, used for copying the club library, and so forth. As long as it performs, I will not even THINK about cleaning it.

The TI drive in my new PE box has not had that kind of use as yet. I suspect that I probably use my computer more hours a week than any other club member. After many months of heavy use - the club newsletter is turned out on it etc. - I have not given a single moment's consideration to head cleaning because IT IS WORKING WELL.

Therefore I reprint, without comment, Craig Miller's advice from the May 1984 issue of the SMART PROGRAMMER: "My opinion on cleaning your disk drives with a head cleaning diskette is only to use it as a last resort!!."

If you have made sure that it's not the floppy, a bad connection or an improperly closed file, then run the destructive diskette test. If you have a lot of errors on a lot of different floppies then as a last resort use the head cleaner BUT follow the directions to the letter!! If they say 9 or 10 drops don't use 20 or 30 unless you want it all over the inside of your drive. If they say run the disk for 30 seconds, then don't run it any longer!

The reason I'm against these head cleaners is that they are ABRASIVE and if you use them too much you will wear out the read/write head in your drive. I know the head cleaning kit manufacturers say to clean your drive at least once a week and more often if they are used heavily, but nowhere on my kit does it guarantee NOT to hurt my drives. As a matter of fact, most of them have a disclaimer and they will only replace the cleaning kit if something goes wrong.

We use our computers between 6 and 15 hours a day, 6

to 7 days a week and we don't clean heads any more than ONCE or TWICE a year.* To which I say: Thank you Craig! Based on that, the average club member should not clean his drive more often than once every four or five years!!

To hammer home the "overtill" and more to the point, here is the Warranty copied from a cleaning kit for sale in a local store. It is typical of them all. My form of comment is to call your attention to certain parts by underlining them. As all such disclaimers are very similar, I have deleted the manufacturer's name.

*IMPORTANT NOTICE TO PURCHASER

The following is made in lieu of all warranties, implied or expressed: Manufacturer's and Seller's only all such obligation shall be to replace such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising out of the use of or the inability to use the product. Before using, user shall determine the suitability of the product for his intended use, and user assumes all risk and liability whatsoever in connection therewith. The foregoing may not be altered unless in writing signed by an officer of XXXXXX Corporation."

If reading that on the product does not make you think twice before using a disk head cleaner, you need your own head cleaner! The foregoing may not be "Well O.K." you may say after reading this, "but I have reached the last resort and am desperate enough to try a head cleaner.

How do I get the disk drive to run for the 30 seconds that most cleaning kits require?" - and you'd have a good point because the moment the head finds out there is no magnetic media in the disk jacket, but rather some wet fuzzy stuff, it will send out an error message and stop.)

Here is a program to take advantage of that error message to keep the disk running until you stop it:

*100 ! This extended basic program has appeared in many newsletters and magazines. Original source is not known-AJB

```
110 CALL CLEAR
120 PRINT "WORKING!!": : : :
130 PRINT "HOLD FCTN/4 TO STOP":
140 ON ERROR 160
150 RUN "DSK1.ZZZ"
160 GOTO 140
140 ON ERROR 160
150 RUN "DSK1.ZZZ"
160 GOTO 140
```

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THIS MONTH'S DAYTON MEETING: May 14th, 1988, 12:00 Noon
Coin Room, 5th floor Lazarus.

NEXT DAYTON MEETING: Coin Room, 5th flr Lazarus
12:00 Noon, June 11, 1988.

THIS MONTH'S CINCINNATI MEETING: May 14th, 1988.
Campbell County Library, 12:00 Noon

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12:00 Noon, June 11, 1988.

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75229

Don't forget Lisa on May 21st!

