

CLEVELAND AREA TI-994/A USER GROUPS NEWSLETTER SEPTEMBER, 1989

OFFICERS	NORTHCOAST	TI-CHIPS	MEETING DATES
PRESIDENT		MATT ANDEL 676-9759	NORTHCOAST 1:30 P.M. TI-CHIPS 10 A.M.
V. PRESIDENT	MARTY SMOLEY 1-257-1661	GLENN BERNASEK 238-6335	EUCLIDIAN ROOM N.ROYALTON LIBRARY
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MEMBERSHIP	CHUCK POULIN 731-6475 361 E. 280TH ST. EUCLID, OH 44132	JOHN PARKEN 331-2830 4172 W. 217TH ST. FAIRVIEW PARK, OH 44126	THIRD SATURDAY THIRD SATURDAY
SECRETARY	CHUCK POULIN 731-6475	MARY PHILLIPS 582-5009	SEPTEMBER 16, 1989
LIBRARY(DISK)	MARTIN SMOLEY 1-257-1661	HARRY HOFFMAN 631-2354	OCTOBER 21, 1989
TAPE & MODS)	TOM NELLIS 475-4067	JOHN PARKEN 331-2830	NOVEMBER 18, 1989
HARD COPY)	DICK ALDEN 1-352-9172		DECEMBER 16, 1989
			JANUARY 20, 1990
			FEBRUARY 17, 1990

This is the first month in a long time we have had to borrow from other newsletters. I would encourage you to check with Matt Ansel at Chips and Dick Alden of Northcoast about reading the newsletters we get in exchange. There is a lot of information going around and we just cannot cover it all in our newsletter. This is where your officers get most of their news about what is going on in our little TI world, and there is no reason you can't be as knowledgeable as your leaders.

The TI-BASE articles will not be as involved for the next few months. Marty Smoley is working nights, seven days a week and has little TI time available. Northcoast people, check the Executive Notes and plan to help us out!

Got a letter from public relations people at TI and they are compiling an up-to-date list of user groups. This must mean that they are still getting enough enquiries to warrant this effort.

MICROpendium had a little note in July that we probably would not be getting anymore catalogs from TENEX for the TI. Then in August, they said they would probably devote a small area in catalog they were about to publish. Well, I got their catalog this past week...all IBM and compatibles. They had a little blurb for you to order their Commodore catalog, but no mention of our TI.

The LA newsletter had the notice of the death of Guy Stefan Romano who ran the Amnion Helpline and from whom we received a major portion of our library when we were exchanging programs with Youngstown.

I understand that Glenn Bernasek would still like to see the Cleveland groups sponsor the User Group Conference next spring. It doesn't involve a lot of people, but those who would be willing to volunteer would have to be dedicated to making it a success. Lima would like to know if we are

serious about hosting the conference before the Chicago TI Faire as this is where they make a lot of their contacts for the Lima Conference. Get in contact with Glenn about your feelings on this so that a decision can be made, and we can get back to the Lima people either way.

The FREE-NET has gone over to its updated version, with several more lines available. If you have a modem and never gotten involved because you could never "connect", you might want to try again. The TI section has been pretty dead. The Sysops can't do it all. It also takes interaction from the people who call. Don't you have a tip, or bit of news, or something that you can contribute when you call? Right now we only have one sysop and one substitute. We could use more sysops if there are any volunteers.

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EXECUTIVE NOTES - TI-CHIPS
MARY PHILLIPS, SECRETARY

Many TI-Chips members were off on vacation during July and August, and we missed them at meetings. Hopefully this article will bring all up-to-date on what has happened during the summer.

Harry Hoffman distributed a survey in July to be completed by each member. If you received yours in the mail, please fill it out and return it to him. Your ideas about future demonstrations are essential.

New commercial software and some programs from the disk library were demonstrated by Harry, Matt Andel and Ron of Ranchoed Computers. The emphasis of most of the demos this time were games. Harry's demo of disk KK6 would benefit students especially.

Les Kee presented more Extended Basic routines. In July we learned about MIN and MAX. August's features were the DISPLAY, DISPLAY AT, and DISPLAY AT USING routines.

Our own programmer, Glenn Bernasek gave everyone a sneak preview of his newest version of SHORT SHEET. He has completed improvements on the original program and has sent a copy to MICROpendium for their review. Glenn has also written a series of two-line utility programs which do all kinds of things. He has placed them on a disk for the club library (GB/2LINERS).

In addition to the disks, cassettes and cartridges available for loan from the club, there is a growing collection of videotapes. Most of them are of previous TI conferences. Thanks go to Jack Koryta for making video tape copies for the club. A suggestion was made by John Parken that videos be produced with explanations of the various cartridges. Any volunteers?

Thanks also go to Carolyn Shaw and Ron (Ranchoed Computers) for providing two computer consoles to donate to the North Royalton Library. The previous units have been used heavily and are in need of extensive repairs. The two new computers were presented to the children's librarian for the library.

We are still considering the possibility of holding a TI-Users conference in 1990. The advice of Charles Good of Lima is KISS (Keep IT Simple Stupid)! We will discuss this project further at future meetings. See you then!

EXECUTIVE NOTES - NORTHCOAST 99ERS
DEANNA SHERIDAN

Many thanks to Ken Gladyszewski for filling in and conducting the meeting this month. (Ken looked right at home. Perhaps we could get him to fill THAT blank spot we have in our officers' list). Our V-PREZ, Marty Smoley, is working nights, seven days a week, for the next 3 or 4 months, and we are on our own, literally. This is when we see if we have what it takes to keep our club going. So, anyone, anywhere, who would like to volunteer to conduct a meeting, give a demo, or generally help us stick together, please speak up!

Our attendance was about average for the summer months. Those who were there enjoyed Wes Richardson's demo of several of his favorite programs from the "BLUEGRASS"

series. These are programs and articles authored by Wes while he was a member of the Lexington, KY group. There are 8 of these disks and they have been donated to the Cleveland Libraries. However, they had never made it further than a shoebox in the corner of my bedroom where I stick the "to be cataloged" disks I receive for the library. Harry Hoffman kindly took these and will do the necessary writeups so that we can get them into the library and everyone can enjoy them.

Wes will also be doing the September demo which will feature the same program written in several languages, i.e., Basic, Xbasic, Forth, Fortran, Assembly, c99, and I am not sure how many more. If enough interest is shown, Wes would be glad to elaborate more on any of the languages at a later date.

Harry Hoffman tentatively volunteered to give the October demo on a new graphics program he had gotten off GENIE. However, in previewing it at the Graphics SIG, it may not be worth the effort. If not, perhaps we can get Harry to do the PAGE PRO99 demo for Northcoast that he recently did for TI-CHIPS.

I did not learn until after the meeting that our Chuck Poulin's wife passed away in July. I am sure that I can speak for the entire membership in expressing our sympathy to Chuck.

THUMBNAIL SKETCHES OF GB/TWO-LINERS
by Glenn Bernasek
TI-Chips Cleveland, Ohio

If there is one thing I've learned while programming for the TI-99/4A, is how to wring the most out of each and every line of code. It occurred to me that if I'm getting the most out of each line anyways, I might as well see if I can create whole "meaningful" routines within a two (2) line format. This gave rise to a start of my Two-Liners, and the small collection of two line programs that I've written and given to the Cleveland Area User Groups' libraries (ask for the disk GB/2LINERS). They were fun to create, and more fun to run!

The GB/Two-Liner programs (GB/2LINERS) are multiple statement two (2) liners in Extended Basic; which are complete working utility or demonstration programs in themselves.

Please note, all Two-Liners on this disk are copyrighted by G.W. BERNASEK, and all rights are therefore reserved.

2LCAIC - This is a simple four(4) function calculator program (+, -, *, /); that quickly turns the TI-99/4A into a calculator for two (2) term formulas. Just type in the FIRST number and press <ENTER>, the math function and press <ENTER> and the SECOND number and press <ENTER>.

FINI - This is a menu program that asks if you want to return to the LOAD menu or not. It also has an error trap that will CLOSE channel #2.

IFACE/AC - This program will produce auto-centered

print-outs on a printer which is interfaced to the TI with a Centronics parallel interface in the I/O port of the TI-99/4A. (It won't work with a RS232 card!)

IFACE/LMST - This program will set the LEFT margin, to any selected input column, for the printer connected to the TI-99/4A with a Centronics parallel interface in the I/O port.
(This program will NOT work with the RS232 card!)

MICROLOTTO - A two-liner that randomly draws six(6) Lotto numbers, from 1 - 44, and tests for and rejects numbers that are repeated. The drawn numbers can either be shown on the screen or printed-out.

MINISORT - A demo program that randomly draws 25 numbers from 1 - 25, displays "AS DRAWN" and then does an ASCENDING sort and displays the "SORTED" results. (This is a demo of rapid INTEGER sorting by arrays.)

PRINTERSET - This utility enables the user to program commands to an Epson compatible printer, using <CTRL/(key)> key sequences as shown in the printer user manuals and the TI-99/4A User Guide Appendix. The displayed default values are: ESCAPE CHR\$(64) (Initialize the printer).
Note: <ESCAPE (CHR\$(27))>, is <CTRL/.,>.

(One useful application is that the Perforation Skip can be easily set without flipping DIP switches. (<CTRL/.,><N><"n">) ["n" is the number of lines to be skipped in ASCII.] eg. If "n"=6 then press <CTRL/F>, because ASCII for <CTRL/F>=6.)

RATEMAINT - You won't be able to see this routine do anything! Place it in a large X-Basic program, and RATEMAINT will help PREVENT operational rate slow down.

ROUNDING - A demo program which will display the effect of rounding numbers to DECREASING decimal places. You will be asked if you want to see more examples or not.

TEXTREAD1 - This is a SINGLE disk drive program which will read any DV80 text file (Type in the FULL file name: [DSK1.NAME].) to either the screen or a printer. It also has a HOLD/ RELEASE pause key routine. TEXTREAD1 will NOT return you to FINI at the END-OF-FILE .

TEXTREAD2 - The same as TEXTREAD1, but it is set for MULTIPLE disk drives and WILL call-up FINI at the END-OF-FILE.

TINYCRAWL1 - A textreader program for a SINGLE disk drive which will display a DV80 text file (Type in FULL

file name: [DSK1.NAME]) in a single line, crawling from RIGHT to LEFT, at the bottom of the screen. (TINYCRAWL1 will NOT return you to FINI at the END-OF-FILE.)

TINYCRAWL2 - The same as TINYCRAWL1, but it set for MULTIPLE disk drives and it WILL call-up FINI at END-OF-FILE.

TINYDUMP - Will dump the first 22 screen lines to a printer. Select TINYDUMP from the LOAD menu, and it will dump the LOAD menu to the printer.

TINYEDIT1 - A DV80 text editing program that will enable you to review, (Type in FULL file name: [DSK1.NAME]) accept or LINE EDIT, and save to a DV80 file. TINYEDIT1 is set for a SINGLE disk drive, and will NOT call-up FINI at its' conclusion. Hint: An "E" for Edit will be added to an existing file name. Therefore, use file names with 9 characters or less. After editing is completed, delete the ORIGINAL file and re-name the edited file, through a disk manager, with the original file name. This will prevent file confusion.

TINYEDIT2 - Operates the same as TINYEDIT1, but uses MULTIPLE disk drives, and WILL call-up FINI at conclusion.

TINYFILER1 - A SINGLE disk drive program that enables you to create and save to disk (called by a FULL file name: [DSK1.NAME]) as much 28 character/ line data as your soft-sectored floppy will hold! This version will NOT call-up FINI when you enter "E" alone to Exit. (The files are saved in an APPEND format.)

TINYFILER2 - Operates the same as TINYFILER1, but uses MULTIPLE disk drives and WILL call-up FINI on conclusion.

(NOTE: This article was composed on TINYFILER2.)

If you have any questions, please feel free to ask:

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13246 HARPER ROAD
STRONGSVILLE, OHIO 44136

MICROLOTTO

```
100 CALL CLEAR :: INPUT "ENTER: 0-SCREEN or 1-PRINTER ":P
:: CALL CLEAR :: DIM N(44):: OPEN #1:"PIO" :: PRINT #P:
"TI-LOTTO": : : : J=1 :: RANDOMIZE :: !"MICROLOTTO"
(C)1989 G.W.BERNASEK
110 D=INT(RND)+1 :: IF D=N(D) THEN 110 ELSE N(D)=D ::
IF J<7 THEN PRINT #P:N(D);" " :: J=J+1 :: GOTO 110 ELSE
PRINT : : : CLOSE #1 :: RUN "DSK1.FINI"
```

NORTH ROYALTON BRANCH



Cuyahoga County Public Library

8/21/89
To the members of the TI Chips
Computer Club,

I thank you so much for the two Texas Instrument Computers recently donated to the Children's Department at the North Royalton Library. Our old computers were heavily used and in constant need of repair. The children enjoy the computers and will be happy to have two that are reliable. Thank you, again.

Sincerely,
The Children's Staff
North Royalton Library

```

X X BBBB      Number 5      X X B B
X   BBBB      By
X X B B       Jim
X X BBBB      Swedlow

```

[This article originally appeared in the User Group of Orange County, California ROM]

TEACH YOURSELF EXTENDED BASIC: This was released by TI to support the XB cartridge. It is available from our Users Group Library for the standard \$2 fee.

A working knowledge of BASIC is necessary to understand this material. If you are new to XB or if you have not explored all of XB's features, this a a good tutorial. Even if you are an old hand you might learn something new (see next item!).

The material is clear and presents some information not in the XB book (although most is a repetition). It is primarily text but there are examples, especially for sprites.

On a scale of 0-10 (10 being best), I would rate this at 7.5 - well worth the \$2 and the time to go thru it.

LISTING TO DISK: In the XB book it suggests that you can list a program to a device but the material points you toward a printer. TEACH YOURSELF XB adds that you can list a program to disk. The command is:

```
LIST "DSK1.TEST"
```

The program is now saved on disk exactly as you last saw it on the screen. The file parameters are DISPLAY, VARIABLE 80.

Since those are the parameters for a TI WRITER file you can load the file onto TI WRITER. Why? Well, it could be helpfull when doing a newsletter. Also, the FIND STRING command could help you locate something in a long program. Mainly, however, just to see what you could do.

I have not found a way to get the file back to program status. If you could do that there might be some interesting possibilities.

NB: This also works in BASIC. Also, some symbols may cause strange things to happen when you run it thru the Text Formatter.

DISK MENU PROGRAM: This month's program will read your disk and display a menu on the screen. After you choose a program, it is loaded and ran. If you save this on your disk as LOAD, it will auto boot when you opt for XB.

This program requires one disk drive and the memory expansion. In a month or so, I'll do a disk menu program that does not require memory expansion.

When you enter this program, save it to disk BEFORE running it. If you make an error in line 220 or 230, the system could lock up and the program would be lost.

LINES 100-150 comprise the header. This program is based on one published in the Pomona Users Group newsletter.

LINES 160-190 read the programs on the disk and display them on the screen.

LINES 200-210 wait for the user to select a program and then validates the user's selection.

LINES 220-240 change line 240 to have the selected program name rather than "1234567890" and then run that program.

After you get this working, try entering BREAK 240 before running it. When the program stops, LIST 240 to see the change.

INPUT NEEDED!!!! I have been writing about what is of interest to me or what I am working on at at the time. This may not be what you are interested in. Questions, compliments, suggestions or even criticisms are welcome. Otherwise, I'll just keep going my own way.

```

100 ! DISK MENU PROGRAM
110 ! VERSION XB.1.2
120 ! 29 DEC 84
130 ! FROM THE POMONA (CA)
    99 U6
140 ! MODIFIED BY J. SWEDLOW
150 !
160 DIM A$(18):: OPEN #1:"DS
K1.",RELATIVE,INPUT ,INTERNA
L :: INPUT #1:D$,A,B,C :: DI
SPLAY AT(1,1)ERASE ALL:"DISK
";D$;" * FREE";C: : "Press F
or"
170 INPUT #1:D$,A,B,C :: IF
D$="" THEN 190 ELSE IF ABS(A
)<>5 OR D$="LOAD" THEN 170
180 S=S+1 :: A$(S)=D$ :: IF
S<18 THEN DISPLAY AT(S+4,3):
CHR$(S+64);" ";D$ :: GOTO
170 ELSE DISPLAY AT(22,3):"R
To Continue"
190 DISPLAY AT(24,1)BEEP:"Pr
ess <ERASE> to stop"
200 CALL KEY(3,A,B):: IF A=7
THEN CLOSE #1 :: STOP ELSE
IF A<65 OR A>64+S THEN 200 E
LSE A=A-64
210 IF A=18 AND D$<>"" THEN
CALL HCHAR(3,1,32,32*22):: S
=0 :: GOTO 180 ELSE D$="DSK1
EEP:"Loading ";A$(A):: CLOSE
#1
220 CALL INIT :: CALL PEEK(-
31952,A,B):: CALL PEEK(A*256
+B-65534,A,B):: C=A*256+B-65
534 :: CALL LOAD(C,LEN(D$))
230 FOR I=1 TO LEN(D$):: CAL
L LOAD(C+I,ASC(SEG$(D$,I,1))
I):: NEXT I :: CALL LOAD(C+I,
0)
240 RUN "DSKX.1234567890"

```

TI-BASE - From INSCEBOT
TUTORIAL 11.1.1 By Martin Smoley
NorthCoast 99'ers - July 10, 1989
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I am reserving the copyright on this material, but I will allow the copying of this material by anyone under the following conditions. (1) It must be copied in its entirety with no changes. (2) If it is retyped, credit must be given to myself and the NorthCoast 99ers, as above. (3) The last major condition is that there may not be any profit directly involved in the copying or transfer of this material. In other words, Clubs can use it in their newsletters and you can give a copy to your friend as long as its free.

```
* Reverse-Print File RPF1/C
CLOSE ALL
LOCAL SEETOP N 3
LOCAL LINE C 75
SET RECNUM OFF
SET SPACES=2
PRINT (E)
USE LSTFRST
TOP
REPLACE SEETOP WITH ANYTHING
BOTTOM
PRINT
SET HEADING OFF
MOVE -1
WHILE (ANYTHING<>SEETOP)
REPLACE LINE WITH ANYTHING ; "
; LAND_DEAL ; " " ; COST ; " ";
; SALEPRICE ; " " ; PROF'LOSS
PRINT LINE
MOVE -1
ENDWHILE
REPLACE LINE WITH ANYTHING ; "
; LAND_DEAL ; " " ; COST ; " ";
; SALEPRICE ; " " ; PROF'LOSS
PRINT LINE
SET RECNUM ON
SET HEADING ON
CLOSE ALL
RETURN
```

DB	LSTFRST	Sort off	ANYTHING	LAND_DEAL	COST	SALEPRICE	PROF'LOSS
0000	1		Parcel#28		34456.00	39671.00	5215.00
0001	2		Parcel#84		74246.00	91342.00	17096.00
0002	6		Parcel#21		29876.00	28235.00	-1641.00
0003	44		Parcel#18		123965.00	189913.00	65948.00
0004	99		Parcel#237		49156.00	63945.00	14789.00
0005	33		Parcel#84		44232.00	89491.00	45259.00

DB	LSTFRST	Sort on	ANYTHING	LAND_DEAL	COST	SALEPRICE	PROF'LOSS
0002	6	PROF'LOSS	Parcel#21		29876.00	28235.00	-1641.00
0000	1		Parcel#28		34456.00	39671.00	5215.00
0004	99		Parcel#237		49156.00	63945.00	14789.00
0001	2		Parcel#84		74246.00	91342.00	17096.00
0005	33		Parcel#84		44232.00	89491.00	45259.00
0003	44		Parcel#18		123965.00	189913.00	65948.00

ANYTHING	LAND_DEAL	COST	SALEPRICE	PROF'LOSS
44	Parcel#18	123965.00	189913.00	65948.
33	Parcel#84	44232.00	89491.00	45259.0
2	Parcel#84	74246.00	91342.00	17096.0
99	Parcel#237	49156.00	63945.00	1478.
1	Parcel#28	34456.00	39671.00	5215.00
6	Parcel#21	29876.00	28235.00	-1641.00

```
* Reverse-Print File II RPF2/C
CLOSE ALL
LOCAL SEETOP N 3
REPLACE SEETOP WITH -1
LOCAL SAVETOP N 3
LOCAL LINE C 75
SET RECNUM OFF
SET SPACES=2
PRINT (E)
USE LSTFRST
TOP
REPLACE SAVETOP WITH ANYTHING
REPLACE ANYTHING WITH SEETOP
BOTTOM
PRINT
SET HEADING OFF
MOVE -1
WHILE (ANYTHING<>SEETOP)
REPLACE LINE WITH ANYTHING ; "
; LAND_DEAL ; " " ; COST ; " ";
; SALEPRICE ; " " ; PROF'LOSS
PRINT LINE
"; MOVE -1
ENDWHILE
REPLACE ANYTHING WITH SAVETOP
REPLACE LINE WITH ANYTHING ; "
; LAND_DEAL ; " " ; COST ; " ";
; SALEPRICE ; " " ; PROF'LOSS
"; PRINT LINE
SET RECNUM ON
SET HEADING ON
CLOSE ALL
RETURN
```

I received a question asking how to print down a page in descending order when TIB sorts everything in ascending order? This is a quick demo of reverse file printing. The size and shape of the DB doesn't matter, and the sorted item can be numbers or names, the CF will still work. RPF1 goes to the TOP of the file and saves a unique item which it will look for as it moves back up the file. Then it goes to the BOTTOM of the file, prints a record, moves up one record, prints that record, etc. until it finds the record it has saved from the top of the file. where it stops. This theory works fine if you have a field with unique (one of a kind) items. If not, RPF2 gives you an idea on how to handle that problem. It goes to the TOP of the file and saves whatever it finds there. It replaces the item with an item I know is unique and then proceeds in the same manner as RPF1. When it finds the top of the file it replaces the item it switched ear with the original item, prints that record and stops. If this is a little confusing remember, I am always looking for more questions. So write me and ask.

Continued Next Month.



LOGO PRIMITIVES AND VALUES, NORTHCOAST 99ERS, JULY, 1989

LOGO PRIMITIVES	JOY	RIGHT	PM
	ERASE	RT	LOOPMUSIC
BACK	LAST	SAVE	PLAYNOTE
BK	LESS	SENTENCE	BIG
BACKGROUND	<	SE	SMALL
BG	LOOKLIKE	SETCOLOR	SIZE
BEEP	CARRY	SC	REVERSE
BOTH	(SETHEADING	ROTATE
BUTLAST	LPUT	SH	LENGTH
BL	LEFT	SETSPEED	TRUE
BUTFIRST	LT	SS	FALSE
BF	MAKE	SV	.HELP
NOBEEP	MAKESHAPE	SX	.GC
CALL	MS	SY	.NODES
COLORBACKGROUND	MAKECHAR	SHAPE	PRINTOUT
CB	MC	SHOWTURTLE	<hr/>
PT	YOURNUMBER	ST	
PUTTILE	YN	SPEED	
CHARNUM	NOT	SPRITE	
CN	NUMBEROF	STOP	
COLOR	NUMBER?	SXV	
;	NOTURTLE	SYV	
CONTENTS	OUTPUT	SXY	LOGO DEFINITIONS
CONTINUE	OP	SUM	
CLEARSCREEN	PENDOWN	+	"BOX IS 5
CS	PD	TELL	"BALL IS 4
DEBUG	PENERASE	TEST	"ROCKET IS 3
DEFINE	PE	TEXT	"TRUCK IS 2
DE	PENREVERSE	THAW	"PLANE IS 1
DIFFERENCE	PR	THEN	"WEST IS 270
-	PENUP	THING	"SOUTH IS 180
EACH	PU	TILE	"EAST IS 90
EDIT	PO	THING?	"NORTH IS 0
EITHER	PA	TO	"WHITE IS 15
ELSE	PN	TURTLE	"GRAY IS 14
END	PP	TRACEBACK	"PURPLE IS 13
IS	DOT	TB	"OLIVE IS 12
=	TYPE	WAIT	"LEMON IS 11
FIRST	PRINTCHAR	WHO	"YELLOW IS 10
F	PC	WORD	"ORANGE IS 9
FORWARD	PRINT	XCOR	"RUST IS 8
FD	PRODUCT	YCOR	"CYAN IS 7
FPUT	*	XVEL	"RED IS 6
FREEZE	WORD?	YVEL	"SKY IS 5
GO	QUOTIENT	SETVOICE	"BLUE IS 4
BYE	/	SETVOLUME	"LIME IS 3
GREATER	RC?	SETTEMPO	"GREEN IS 2
>	READCHAR	STACCATO	"BLACK IS 1
HEADING	RC	LEGATO	"CLEAR IS 0
WHERE	READLINE	CHROMATIC	"ALL IS [1 2 3
HIDETURTLE	RL	MAJOR	4 5 6 7 8 9
HT	REPEAT	NOTE	10 11 12 13 14 15
HOME)	MUSIC	16 17 18 19 20 21
IF	RANDOM	DRUM	22 23 24 25 26 27
IFF	RECALL	REST	28 29 30 31 32]
IFT	RUN	PLAYMUSIC	<hr/>

890617WR

Professional Graphs

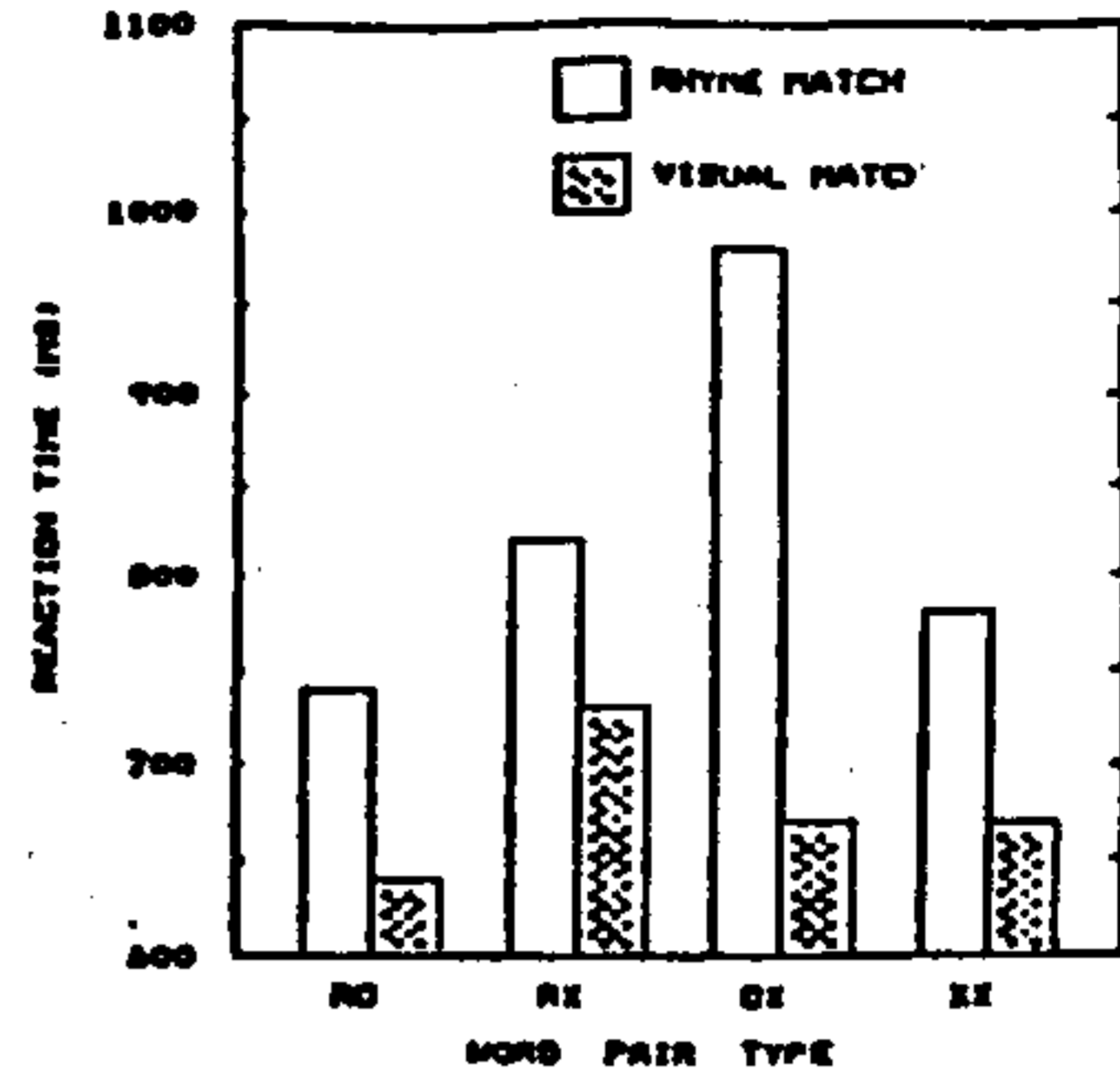
Have you ever wanted to make a professional-looking graph (like the one pictured) for some project, but were unable to find appropriate software to do the job? Graph-X and TI-Artist? I've never been satisfied with their limited work-space and inferior lettering. I've also had a hard time getting perfectly spaced horizontal lines on the bars using Graph-X. If only TI-Writer could do the job....

Well, it can! In fact, this graph was done totally by TI-Writer. It takes just three steps and a little patience. Using the special 6x6 dot characters built into the Gemini (or compatible) printer, professional-looking graphs can be easily made.

As I said, making graphs is a three-step process: 1) creating the bars and axes, 2) writing the labels, and 3) printing 1) and 2) above. Making the bars and writing the labels must be done separately since the characters for each cannot be printed concurrently.

Step 1: Since the graphs will be composed of the 6x6 dot matrix characters (ASCII 224 to 254), the line feed must be reduced so that the characters "touch" each other vertically. This command, written in the first line of the file is ESC A "F". (To make the description of formatting codes more clear, I've developed a new convention: characters that need to be typed while in special character mode will be surrounded by quotation marks. E.g., "A" means that the sequence CTRL U, SHIFT A, CTRL U must be keyed. ESCape, which is CTRL U, FCTN R, CTRL U, will continue to be called ESC. Note that although spaces are shown between these characters, none should actually be included.) This sequence will adjust the line feed to 6/72". When doing graphs, it is advisable to make the printer print unidirectionally. This is accomplished by ESC U "A". We next need to enter the printer to print the 6x6 dot characters needed to draw the lines. Type ESC >. You may type all of the former formatting codes in sequence without any spaces between. Type a carriage return after all. After that last formatting command, you are now in a new dimension of typing. For your convenience, a listing of the 6x6 dot characters is provided at the end of this article.

Spaces will now no longer be printed as spaces— you must first fill the entire screen with ""'s (the backward apostrophe, or FCTN C). The easiest way to do this is to fill column 1 to column 80 with "" and then to Copy this line until it is 60 or 70 lines long. The entire screen MUST be filled with those apostrophes. Now you can start composing your graphs. First, place the axes in the appropriate place, taking into account where the labels will go. The Y-axis will be composed of "u"'s, with a "v" as the origin corner, and "q"'s composing the X-axis: if your Y-axis will run down (e.g.) column 35, go into command mode, type RS (Replace String), and type "35 35 /'U/'. The two 35's will make the computer Search for all ""'s in column 35 only and replace them with "u"'s as many times as you want (see p. 87 of your TI-Writer manual for this gem of an option. This eliminates the need to type a "u", cursor down one and back one, type "u", cursor down one and back one, and so on ad infinitum; it can be done extremely quickly.



For this, and all other RS suggestions in this article, it is absolutely necessary that you are out of word wrap mode. To exit word wrap, type CTRL O. The cursor will turn into an empty flashing rectangle.

Now that you have your axis, you can start with the graphs. It is wise to make a fairly precise graph by hand first to facilitate screen construction. The height and width of the bars is up to you, of course, but in the example, the width of each bar is four characters, including the lines. When considering how high your graph should be, it is important to keep in mind that it will be "shrunk" somewhat when printed. Therefore, you may want to make the graph "higher" than perhaps seems reasonable on the basis of what appears on the screen. The sample graph above was about 55 lines long. Experiment with various combinations of the special characters, and then print them out using the Editor's PF command. Unless you have a RAM disk, why go to the Formatter when Print File will do the same thing more quickly? Now save the file to disk (e.g. DSK1.BARS).

Step 2: First, delete the formatting codes that enabled the printing of the special characters (ESC >). Next, go to RS in command mode, and get rid of all the ""'s (type "/ / /" and hit the "All key when prompted - it will take a while). The screen will now look a bit more normal. Type in all of your labels and numbers in the appropriate places next to the axes that are still on the screen in the form of "u"'s and "q"'s. It is very important that you do not delete any lines to make your labels. The reasons for this will become clear later. Also, if you are writing anything that will be printed on consecutive lines, leave a blank line between them; otherwise the letters will be touching each other when printed. Labels for the Y-axis can be printed last by turning the page sideways in the printer. You can, however, print this label vertically if you leave a blank line between each letter.

After all of the labelling has been done, be sure to delete every remaining trace of the original graph (the "u"'s, etc.), leaving only your labels and numbers. Now save this file (e.g. DSK1.LABELS). While these instructions specify that you draw the graphs first and the labels second, it makes perfectly good sense to do it the other way around. All that is important is that they

(continued on page 7)

Desk Top Publishing - Part I

(This article will be one of several to follow in the coming months. The theme, "Desk Top Publishing". My congratulations to the fine PUNN User's Group.—Jim Luque.)

Because of our limited RAM capability a complete sophisticated Desk Top Publishing package seems unlikely; however we can come close to duplicating much of the same output as an IBM or MACINTOSH. Granted, we may not do everything they can do, and we may have to "jump" through a few more hoops to reach our goal, but we CAN accomplish much the same; and at a much lower cost!

My ultimate goal is to demonstrate how such products like TI-ARTIST, FONT-WRITER, GRAPHX, PICTURE-IT and others can be used separately or in union with one another to produce an attractive finished product.

For the first of my series, I will explain how I put together the BOOK REPORT form (see sample in reduced size—it really fills an 8 1/2 X 11 inch page). I use this form for my school class. A colleague of mine owns a MACINTOSH. He created an attractive book report form that impressed me. I quickly said to myself, "How can I do the same?" After some thought, I began duplicating (no, improving) his form. Our forms were identical in text, layout, and graphics, with the exception of the row of book ends at the top and bottom, and the horse graphic.

Here's how I started: The TMS (Toledo Middle School) books and book ends are actually TI-ARTIST fonts. The name of the font is BOOK F. It is on the TRIO+SOFTWARE Data 3 disk of fonts and graphics. I booted the font into TI-ARTIST, typed the special character for the front book end, then "TMS", and finally, the end book end. I saved the TMS message as an Instance.

For the "reading horse" graphic, I had to first convert it from an RLE picture to an Instance. To do this, I used the Artist Enhancement option. After saving my newly created Instance, I decided it was too large for my purpose, so I used ASGAR's ARTIST ENLARGER (which also has a reduction feature) to reduce the Instance. I now had two saved "horse" Instances; the original and the reduced one.

I loaded my second horse Instance into TI-ARTIST, entered my font, and typed my title. I then saved this as a picture file. The two boxed in graphics were created and saved as ARTIST Instances. The fonts came from GENIAL FONT PACT #1 and #2. The fonts in this package are well suited for work like this, because of their size.

The borders came from ARTIST BORDERS #1

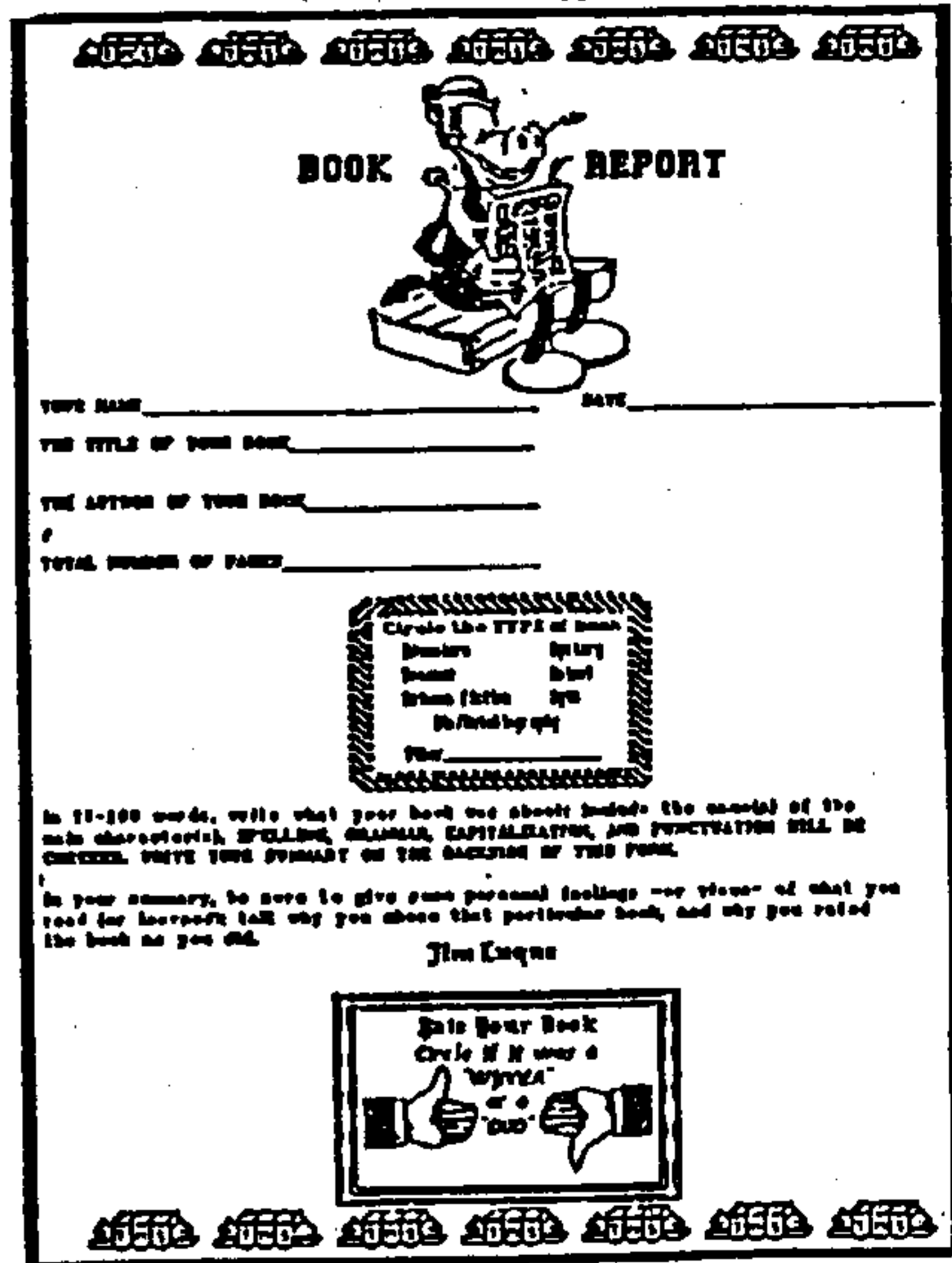
by ASGAR.

Now, here is how I put this all together. I created my TI-WRITER text file using the FONT-WRITER recognized dot commands. After saving this file, I ran it through the FONT-WRITER formatter. If you haven't used FONT-WRITER much, make sure all your files (text and graphics) are on the same disk. FONT-WRITER will now print everything for you. I know all this may sound like a round-about way of doing things, but it's not really that bad. The hardest part is knowing exactly what you want to do first!

As you study the actual TI-WRITER file, you can see that the heart of the entire form was the creation of one Artist picture and 5 Instance files. The last Instance file was a saved Instance of my name in script.

In the next article in this series I will show you how to use PICTURE IT, TI-ARTIST and TI-WRITER to produce a very professional looking document. Until then, HAPPY TI-ING!

—Jim Luque



(continued from page 6)
be done separately, that the correct format codes are in place, and that no lines are deleted in either file.

Step 3: Make a marking on the perforation strip (if you are using form-feed paper) right above the holder on the tractor unit (or make some other kind of reference marking). You will need to know exactly where you started printing. Next, print you label file (using PF). After this file has been printed, roll the paper backwards until the reference marking is in the same place. If you printed your graph first, be sure to turn your printer off before printing your labels. This initialized the printer to prevent it from continuing to print the special charac-

ters. You can also stop the special characters from printing using the format code ESC #. Now, LF (Load File) your bargraph, and print it out. Viola, you now have your professional looking bargraph. To make it darker, include the formatting codes ESC E and ESC G (for emphasized and doublestrike) along with the other format codes at the top of each file.

The 6x6 dot matrix special characters are:

Letters: . a b c d e f g h i j k l m n o

After ESC : - - - - -

Letters: p q r s t u v w x y z () ~

After ESC : - - - - -

(WordPlay wishes to thank Cal Oberg for typing in this article.)

TI ARTIST

TI ARTIST...for the beginner
Vol. 1 by Don McCalla and
Evelyn Pacinda (from the PUG
PERIPHERAL, FEBRUARY 1989)

If you are slipping TI ARTIST into disk drive #1 for the first time, you will probably want to do more than just draw squiggles on the monitor screen. Thank God TI ARTIST is X8 Autoload! Just press Enter at the Intro screen for the main menu. You will most likely want to PRINT something productive that says, "I did something!". To do that, you will need to know the difference between Fonts, Slides, Instances and Pictures.

A font is usually an Enhanced character set which is accessed by choosing #2 at the main menu-Enhancements. Slides and Instances are also accessed here, using the same option. Slides are usually portions of your working picture, not to be confused with a slide show. You define the slide. We'll discuss slides in more detail later (when we figure them out well enough). Instances are pre-made pictures which vary in size. There are plenty of these available on the market. We'll deal with them shortly. Pictures are pre-made pictures which are save in 2 portions; they are actually 2 programs which end in "_C" for the color portion and "_P" for the picture portion. Think of the picture as a backdrop for your smaller figures, which are Instances. Now to the nitty-gritty.

To load Fonts, use option #2 (Enhancements) at the Main menu. You will next see a set of boxes with electronic squiggles bordering the screen-these are slides. Ignore them for the moment. Go to Alpha Numeric Entry, using Joystick #1 or by typing the letter "A". The next menu requires an input "1" to load character Font. Pressing "1" will cause the cursor to move to the bottom of the screen, at: Load Filename DSK2.____. Input the filename wanted (for Fonts, it is a DV80 file which ends in "_F". Ignore the "_F" when typing in the filename. DSK2. is accessed, the font set is loaded into memory, and you must press "2" for "Type Text on Screen". The next prompt is "Should Characters Be Outlined? "N" is the default, press "Y" if you just want the outline of the character on the screen, press or leave "N" if you want the whole letter to be present. If you're only using one drive, or if you don't have an extra disk of character fonts, you'll have to access "DSK1."

You can only enter up to one line of text at a time, sometimes even less if you have loaded a large character font. You will then see a blank screen with a flashing box which is self-centered, this is your text! Press "T" to test the placement of your text. It is moveable using the arrow keys or Joystick #1. Be careful using the joystick, because fire button (or enter on the

keyboard) will set your text in place. The blinking box reappears so that you may re-enter the same text a number of times.

To enter another text string, use spacebar and reload thru the Alpha Numeric screen. At the Enhancements screen, you can hit the spacebar to see your working picture. You can access your picture in this manner thru most of the menu screens, even after hitting FCTN Quit to return to the TI ARTIST Main Menu (BOOT) screen.

Now that we have text, we can load something to surround it. To load an Instance, access Slides box (letter "S" or move cursor to spot with Joystick #1). The Slides menu has 7 options; #6 loads an Instance. An Instance is a DV80 file ending in "_I". Add disk # and filename at bottom of screen-don't add "_I" when prompted. Beware: if you mis-spell the filename, the screen says "Device Error! Task Aborted". It's not the computer, just the user! Once the Instance is obtained, a blinking box appears on the screen the approximate size of the loaded Instance. Joystick #1 or arrow keys will move the box around the screen to the chosen spot. Again, "T" will test placement, and Fire or Enter will lock in place. Unlike the Fonts, an Instance must be reloaded each time it is used. It can be duplicated using other options which we will discuss in later segments. To Print your picture,

press FCTN Quit to return to main Boot menu. Option #1 takes you to the TI ARTIST Function screen (the pretty one with all the little boxes and letters). Use Joystick #1 or press "C" for Hard Copy. Next, choose the appropriate printer type. Epson works with the Star printers. At prompt, enter printer device name: PIO.CR.LF is default. Density factor controls width of picture, not just darkness of print, so try "1", which is the default, first. Magnification factor controls the size of the picture, with "1" being the default. Increasing the number increases the size of the picture. Line spacing controls the height of the picture, as in vertical characters per inch. "8" is the default, so try that first. After you get your first picture, play around with the print options-combinations can be very interesting, although not necessarily desirable.

That's all for this month. Next month we'll delve into Slides, and explain some of the Function menu options.

The above article was copied from the TACOMA INFORMER March 1989. It should be of help to those of you struggling to get started with TI-ARTIST. I'm waiting for next month's tutorial on "SLIDES". It hasn't surfaced yet.....Ed.

These changes are recommended for ALL HORIZON RAMdisks and are compatible for use with the TI99/4a or Geneve.

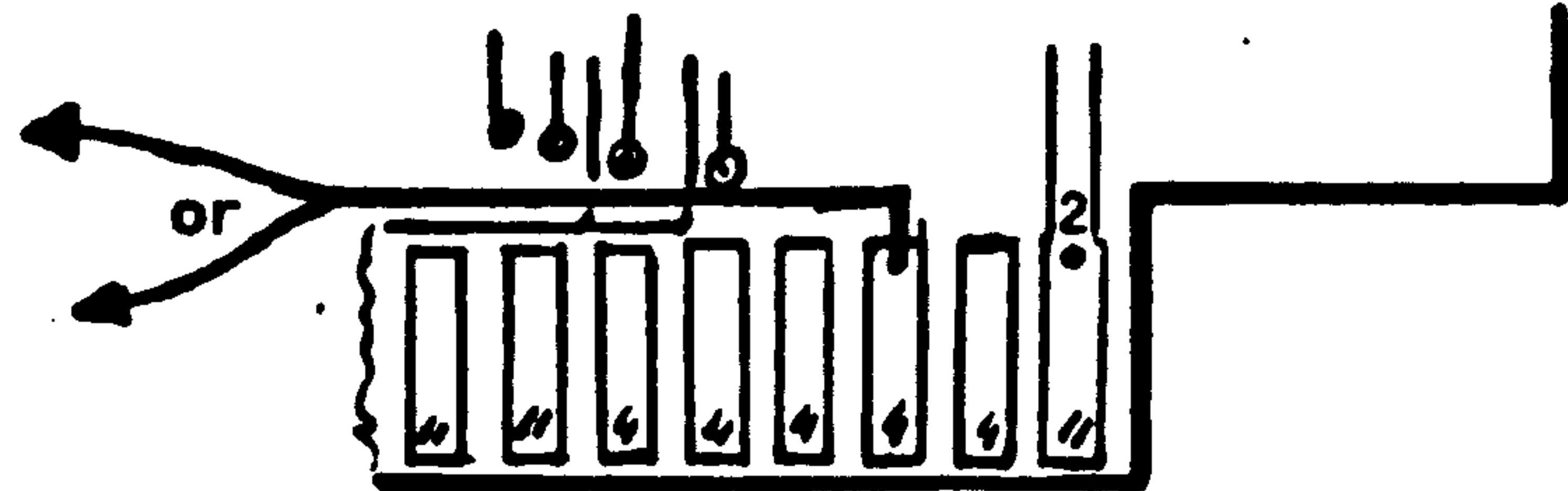
1. RESET on power-up

This change allows the computer to reset the HORIZON during the CPU power up cycle. The reset feature, as TI designed it, does provide a reliable method to hold the HORIZON in the shut-off state until the PE-Box voltage has been on long enough to stabilize.

The modification consists of the removal of one diode, one resistor and one capacitor. These parts are replaced by one wire from pin 6 of the card-edge connector (bottom edge of ramdisk card) to the positive side of the capacitor location.

HORIZON serial numbers below 100:
Remove C8, CR2 and R2. Connect wire to front (or left) hole of C8 location.

HORIZON serial numbers above 100:
Remove C1, CR3 and R5. Connect wire to + (positive) side of C1 location.



Connect other end of wire to pin 6 of card-edge, .i.e., the 3rd lead from the right on the COMPONENT side of the PC board.

2. DISABLE SWITCH

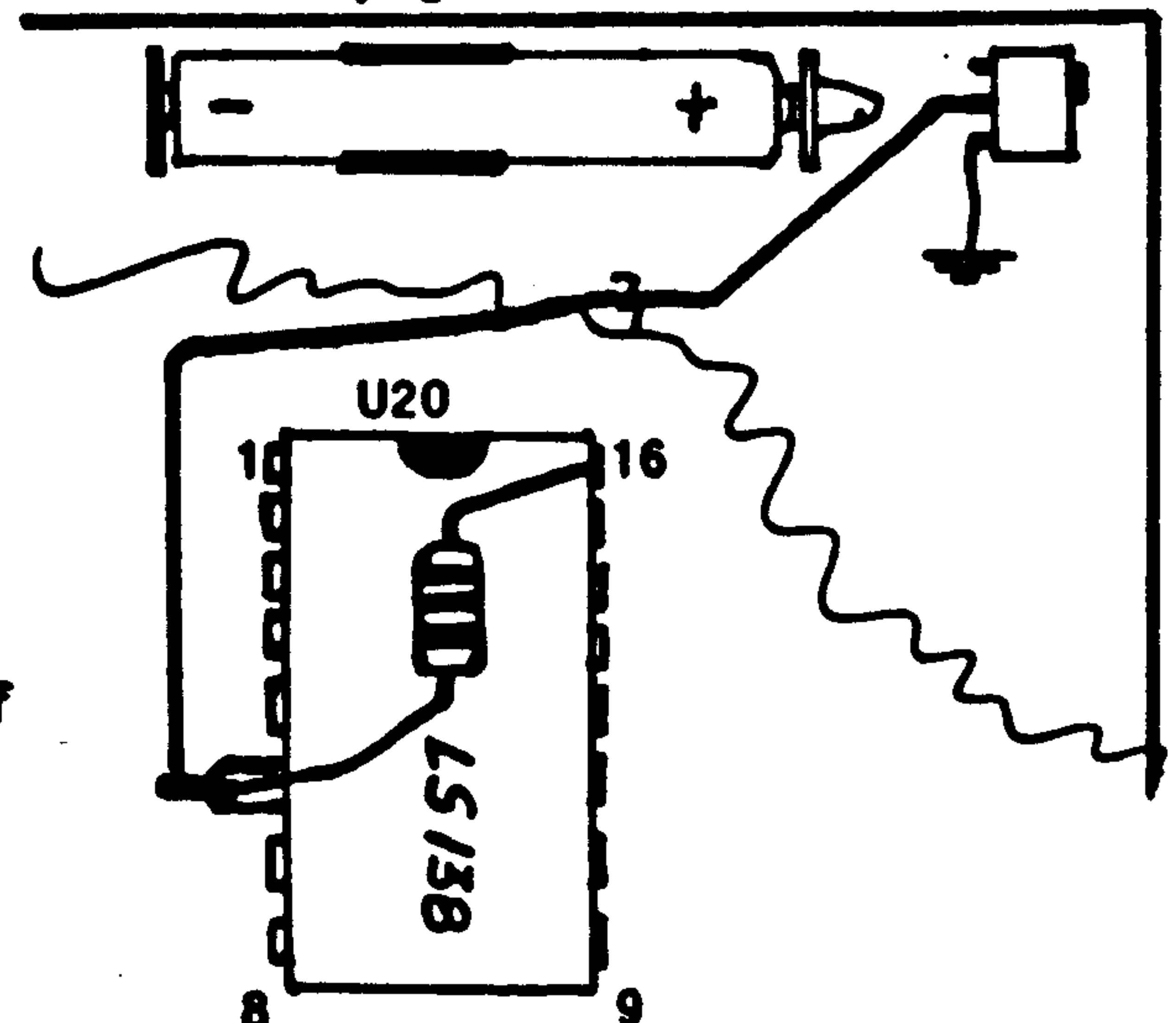
This modification provides a method to turn off (or hide) the HORIZON from the rest of the system. This switch allows you to turn off the ramdisk in the event of a system crash when the computer locks up. With the card turned off, you can power up the console and PE-Box, turn the card back on and proceed to re-load the operating system. No need to remove the batteries to erase the contents and in most cases the files may be recoverable. Other reasons for "hiding" the card could be a conflict between the ramdisk and a program you want to run - or you may wish to keep the kids out of it.

The mod is simple: We remove the voltage from pin 6 of U20 (serial 1999 and below) or U20A (HRD+, 2000 and up) and reconnect it via a resistor (1K-10K will do) thru a SPST switch to ground. Closing the switch pulls the pin low and shuts off the CRU access at U20.

Bend pin 6 of the chip out, attach enough wire to reach the switch and connect the resistor from this pin to pin 16 of the same chip. Run the other end of the wire to the switch.

NOTE: The HRD+ circuit board on cards with a serial number below 1999 required stacking of U20. Attach the wire and resistor to the top chip's pin 6 and cut off the bottom end.

Mount a miniature SPST at the top back edge. Run a lead from one pole to a nearby ground.



Errors. This part is about error corrections. I don't know about you but I am one of the words worst typists. On a normal typewriter I make so many typing errors it is pathetic. The ability to correct errors before the text is put to paper is one of the greatest assets of word processing. So let's talk about some of the ways to correct errors.

If you are typing along in T. I. Writer and you see that you entered the wrong letter just use Fctn S(←) and retype the correct letter. That's easy enough.

Sometimes you will notice an entire word misspelled. Just take the cursor back to the word and type over it correctly.

Sometimes you will leave out a letter or letters in a word or even a word or words in a sentence. This correction is a little more complicated but easy enough. Place the cursor one space after the place you want to start and then press Fctn 2 (Ins Char). You will see the line split and then type your insert correction. Now you want everthing closed up again and normal. You do this by pressing Ctrl 2 (Reformat). This will put everthing in order. Reformatting is very handy for adding words, phrases and even sentences. Try it out, you will find it very convenient.

You can remove letters or words by putting the cursor over the character to be removed and pressing Fctn 1 (Del

Char).

Sometimes you will not like a line of text. To correct this just press Fctn 3 (Del Line) and the entire line will be erased.

Another more complicated method of correcting errors or making changes is with the Search directive in Command Mode. To do this go to the Command Mode (Fctn 9) and press SH and then <enter>. You will now see "FindString or ReplaceString". Now press RS and <enter> and you will now see "Replace enter /old string/new string/:". Let us say you misspelled Brown as Brawn, to correct this enter "/Brawn/Brown/" and press <enter>. The cursor will then stop at the first instance of "Brawn" and you will see "REPLACE STRING (Yes,No,All, Stop)?". If you want this word replaced with "Brown" press "Y" and the cursor will go to the next instance and repeat as above. If you want all instances of "Brawn" replaced with "Brown" press "A". No and Stop are self explanatory.

T. I. Writer has what is known as a Screen Editor. Which means that any mistake can be corrected anywhere on the screen. Just get the cursor on the error anywhere on the screen and make the appropriate corrections. There are word processors that are only line editors. Which means that you can only correct one line at a time on the screen. I feel that a screen editor is more convenient.

Try these processes to correct errors and more next time.

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C/O DEANNA SHERIDAN
20311 LAKE ROAD
ROCKY RIVER, OH 44116



CHECK YOUR EXPIRATION DATE.
THIS MAY BE YOUR LAST ISSUE!

Exp Date: 90/07

!! TIME DATED MATERIAL !!