

# CLEVELAND AREA TI-994/A USER GROUPS NEWSLETTER

## APRIL, 1989

OFFICERS	NORTHCOAST	TI-CHIPS	MEETING DATES
PRESIDENT	ERNIE MALNAR 289-7742	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
TREASURER	FRANK JENKINS 283-8526	LIN SHAN 235-3912	EUCLID SQUARE MALL STATE RD & RT 82
MEMBERSHIP	CHUCK POULIN 731-6475 361 E. 280TH ST. EUCLID, OH 44132	JOHN PARKEN 331-2830 4172 N. 217TH ST. FAIRVIEW PARK, OH 44126	THIRD SATURDAY THIRD SATURDAY
SECRETARY	CHUCK POULIN 731-6475	MARY PHILLIPS 582-5009	APRIL 22, 1989 APRIL 15, 1989
LIBRARY(DISK)	MARTIN SMOLEY 1-257-1661	MARK MCCAULEY 235-8888	NO MEETING !!!!! MAY 13, 1989
(TAPE & MODS)	TOM NELLIS 475-4067	JOHN PARKEN 331-2830	JUNE 17, 1989
(HARD COPY)	DICK ALDEN 1-352-9172		JULY 15, 1989
			AUGUST 19, 1989

If you are a creature of habit, you may be in for a shock or two the next couple of months. Please Note, The April NorthCoast meeting will be on April 22, not April 15. The meeting room was not available that weekend when we signed up last winter. If you need a TI fix that day and can't wait until the following Saturday, I am sure you will be welcome at CHIPS.

The following month there will be NO official NorthCoast meeting. That month the CHIPS meeting will be moved ahead one week to May 13 and NorthCoast has been invited to join them on that day. This is being done so that as many as possible from both groups can go to Lima on May 20. See the map Matt Andel has drawn for us on the back page of this newsletter.

It looks like there will be a nice mix of user groups, vendors and TI celebs at Lima. Take a few minutes at the April meetings to set up some car pools, etc. This worked very well last year.

Following is a listing of confirmations published in the April Lima newsletter of those planning to attend:

-CIN-DAY UG; GREAT LAKES UG; BUD MILLS SERVICES (selling Horizon Ramdisks and P-GRAM cards); ST. LOUIS 99ERS (Selling SUPER BASIC); TIGERCUB SOFTWARE (Jim Peterson); C.D.N.W.I. (Columbus, OH UG). COMPUSERVE (Jim Horn, TI sysop); signing people up for this national information service. GENIAL COMPUTERWARE. Barry Traver, the well known TI columnist for Computer Shopper.

ASGARD SOFTWARE (Chris Bobbitt); Hopefully Press will be ready by the time of the Lima meeting. Our own CLEVELAND AREA UG - We will have TI-BASE for sale and Rodger Merritt's various graphic printing programs, plus programs by our own locals. OH-MI/TI (Toledo); L.L. CONNER ENTERPRISES (hardware and software sales. Exclusive dealer for Turbo Pascal99). P&A SOFTWARE (Paul Scheidemantle); FORT UG (Ft. Wayne, IN).

DEMONSTRATIONS IN THE CONFERENCE ROOMS (Note: These demonstratins will be videotaped and made available to any user group for the cost of a blank tape and postage):

PAUL SCHEIDEMANTLE, HOW TO CONVERT FROM ONE "ARTIST" FORMAT TO ANOTHER. BUD MILLS, THE LATEST ABOUT HORIZON RAMDISKS AND THE P-GRAM CARD. STEVE KARASET, SUPER BASIC V2. IRVIN HOTT, HOW THE BLIND USE SPEECH. BARRY TRAYER,

RECENT SOFTWARE FROM GENIAL COMPUTERWARE. BARRY TRAYER, LINKING XB TO ASSEMBLY LANGUAGE VIA "CALL LINK".

CHRIS BOBBITT, THE LATEST RELEASES FROM ASGARD SOFTWARE. MARTIN SMOLEY, TI-BASE TUTORIAL.

Set up time starts at 8 a.m. Scheduled events from from 9 a.m. to 5 p.m. The Lima Holiday Inn has offered conference guests its "corporate rate" which is about \$5 less than the regular rate. One person in a standard bed is \$55 and a big size bed is \$60 for one person. The per person rate is less if several share a room. Call the Inn directly at 419-222-0004 for reservations. Don't use the Holiday national 800 reservation number. Next to the Holiday Inn is a MOTEL 6. Their regular rates for one person is \$21.95 and each additional adult is \$6. This is a very nice, simple, motel with 97 units. Tehir phone is 419-228-0456. To get to either of these motels, exit 175 at exit 125 (state highway 309) Go EAST on 309 about 200 yards and turn right at the first street which is next to the Bob Evans restaurant sign.

If you were confused by the References in Paul Newmeyer's PLUS article last month, it may help to read this month's and then go and reread last month's. The newsletter editor reversed the articles.

### CONTENTS

:NORTHCOAST EXECUTIVE NOTES.....	2:
:TI-CHIPS EXECUTIVE NOTES.....	2:
:TI SHORT SHEET UPDATE - GLENN BERNASEK - TI-CHIPS....	3:
:AN "AUTO-RATE" MAINTENANCE ROUTINE - GLENN BERNASEK...	3:
:DATE 890305 - WES RICHARDSON - NC.....	4:
:STAR WX1000 FIX - WES RICHARDSON - NC.....	4:
:CHARCODES - WES RICHARDSON - NC.....	4:
:FUNNELWEB/TIW2 - MARTY SMOLEY - NC.....	5:
:GRAPHICS COMPATABILITY - COURTESY BLUEGRASS 99ERS....	6:
:GRAPHICS CHART WITH PRIOR ARTICLE.....	7:
:DRAWING WITH PLUS - PART I - PAUL NEUMEYER - NC.....	8:
:FAVORITE PLUS TEMPLATE OF HARRY HOFFMAN - NC & CHIPS.	9:
:TI-BASE TUTORIAL - MARTY SMOLEY - NC.....	10:
:MAP TO TI-CHIPS.....	12:

## EXECUTIVE NOTES - NorthCoast 99er's 03/18/89

There was quite a bit of activity at the meeting even though it was cold, rainy, and generally nasty outside. We had about thirty members and half a dozen guests attend. The discussion centered around our next two meetings. Our next meeting is April 22. This must be noted because it is the fourth Saturday in April and not our normal meeting weekend. It is the same time and place as usual. The following meeting (5/20/89) is more or less being cancelled. As far as I know, all of the people who I normally find indispensable to put on our meeting (including myself), will be going to the LIMA MULTI USERS GROUP CONFERENCE. We will still have our normal meeting room reserved for that day, but I have not arranged to have a meeting in my absence because I can't figure out how to do it. We, the members of NorthCoast have been invited by Matt Andel, the President of TI-Chips, to attend their meeting in May as guests. In order to sidestep the Lima meet TI-Chips has scheduled their May meeting on May 13, which is the Saturday before the Lima Conference. I understand that there should be complete instructions in this newsletter on how to get to the North Royalton Public Library for the Chips meeting.

### DISK LIBRARY NEWS

I am presently attempting to improve the printed sheets which cover the freeware or fairware section of the library. I am attempting to reprint the masters of this section to produce a more readable copy for catalog users. As it has been pointed out to me in the recent past, many disk numbers are hard to read. Also, some numbers are duplicated like MH3 and VV3, plus there are problems identifying DS/SD disks which are mixed in with the standard SS/SD type. I am attempting to work on all of these problems as fast as possible. I hope to have much of it done by the next meeting. I'd like to thank everyone (near and far) who has taken the time to point out problems with the disk library. It is not possible for a librarian to go through and check every program for problems. This means we must rely on members to tell us when there is a problem. Please continue to inform me when you encounter problems with software we have supplied.

### VOLUNTEERS

It has been a long time since I asked for volunteers in the newsletter. Well, I'm asking now. We need people to do meeting demos. If you have an interesting or educational program that you think the other members should know about, we'd like to hear from you. Your demo should be short, fifteen minutes to a half hour, and we can supply all the support you need. Please contact me on this, as I will temporarily be filling in for Steve Weinkamer.

### THE NEXT NORTHCOAST MEETING

Remember! The next meeting is on April 22. Go by the date and not which Saturday it falls on, and you won't get confused. At this minute I don't have a demo set up for April 22, but I will come up with something.

See you all at the next meeting. Marty

EXECUTIVE NOTES - TI-CHIPS  
MARY PHILLIPS - SECRETARY

Demonstrations in March were done by Harry Hoffman, Les Kee, Matt Andel, and John Parken. They ranged from locally-written programs to commercial software.

Les Kee ran an Extended Basic program he had written using sprites. He explained each part of the program listing.

Harry Hoffman showed the many features of "Plus". It uses the transliterate commands from TI-Writer to streamline word-processing projects. Harry distributed a handout of these commands which he keeps handy by his computer. He also adds them to each of his TI-Writer files for quick reference.

A similar program, "Form Shop", will be offered for sale at the May Lima conference. Matt demonstrated how the transliterate commands found in the TI-Writer Editor can be used to create graphics and combine them with text. Anyone who wants to buy this program should contact Matt.

John Parken talked about "Tinygrams", a Fairware program which can be used to print disk labels in two sizes. He also demonstrated "Valentine", also known as "Woodstock's Valentines Day", or "The Maze of Grog". It is also a fairware program available for \$5.00.

The upcoming Lima conference plans were discussed. Glenn Bernasek has updated versions of his programs which he will be selling. Since the conference date is the same as our regular meeting date, TI-CHIPS will meet on Saturday, May 13 at 10:00. All members of NorthCoast are invited to attend.

Mark McCauley is looking for someone who would be interested in becoming the disk librarian for TI-CHIPS. Contact Mark if you're interested.

Is your membership expiring soon -- or has it already died? Many memberships need renewing during these months. Please check the date on this newsletter to see when yours is due. See you in April.

\*\*\*\*\*  
JOINT MEETING  
TI-CHIPS AND NORTHCOAST  
MAY 13, 1989 10:00 A.M.

Go to a monthly computer sharing/learning time and still be able to go to Lima. Come to a meeting at the North Royalton Public Library on May 13, 1989. Go to the Lima Conference on May 20. The library is located on State Road (State Route 94), just south of Royalton Road (State Route 82). It is part of the North Royalton Memorial Park, on the west side of the highway. Start your Saturday with TI!

\*\*\*\*\*

Glenn Bernasek has updated his >TI-SHORT SHEET III< and has released VERSION 2.1. His press release states this version is operationally the same as 2.0; however >TI-SHORT SHEET III< has undergone further line compression and is now completely ERROR PROTECTED in ALL operational modes. In the event an input error occurs during either the Data Cell or the Formula input modes, the error protection will return you to EXACTLY WHERE YOU WERE so that entries can continue un-interrupted.

The most significant change has been in the inclusion of a routine which will automatically maintain the operational rate of >TI-SHORTSHEET III<. This means that this program will no longer experience time-to-time slowing down or sluggishness. Therefore, you will not have to call up the Save mode, and enter an erroneous device name in order to "clear-up" any sluggishness. You will notice a slight delay between the time the Data cell locators appear and when the ready prompt "\*" is displayed. This is due to a combination of ERROR TRAPPING commands and the "Auto-rate Maintenance" routine.

One additional Version 2.1 enhancement is that the title of a previously-saved spreadsheet will be displayed if you choose to change it. In previous versions, you were unable to see the title you were about to change.

However, as we all know, "You can't get something for nothing." In this instance, some working RAM must be sacrificed. The following are the "best case" to "worst case" >TI-SHORT SHEET III< (Version 2.1) / TI-99/4A operating environment scenarios!

Operating Environment

Version 2.1 is:

Disk System W/ 32K Expansion	Fully Operational
Cassette System W/ 32K Expansion	Fully Operational
Cassette System W/O RAM Expansion	Operational with 50-cell limit
Disk System W/O RAM Expansion	Inoperable - (Insufficient Memory)

Order from GEE\*BEE BASICS, 13246 Harper Road, Strongsville, Ohio 44136

-----  
AN "AUTO-RATE" MAINTENANCE ROUTINE  
By Glenn Bernasek - TI-Chips - Cleveland

For a long time I've noticed a singular and troublesome "bug" in the TI-99/4A operating system. The "bug" I'm referring to, is located somewhere in the 8 bit Basic language interpreter. This "bug" causes the 99/4A to temporarily "forget" where it is supposed to go during a continuous loop routine.

In TI-Basic, the forgetfulness lasts about one or two seconds at the most. This is made apparent by a short delay (of one to two seconds) in a screen scroll of displayed messages. This, in itself, isn't too serious a problem, and can be easily overlooked.

However, the problem compounds itself as the routine becomes more complex, and the operating system is in Extended Basic. In this case, the whole operation will (depending on the complexity of the program) come to a slow and agonizing halt at the most inopportune time.

There are three (3) programing conditions which tend to precipitate this problem in both TI-Basic and Extended Basic environments. The routines contain a FOR-NEXT loop, a CALL KEY routine and IF-THEN-ELSE conditional tests of varying and increasingly complex structure. As I said, the more complex - the greater the effect.

Now before you say, "It's probably his computer. I've never seen this on my 99/4A." I just want you to know that I've experienced this phenomenon on every TI that I own and even the Northcoast 99'er's system during the Lima Conference last year. As a matter-of-fact, my observations at Lima made me think that there must be a way to correct (or at least avoid) this problem.

What I found was, that if I could somehow cause the TI to temporarily leave what it was doing and "return" to the job at hand with a FRESH start; then it could be possible to eliminate or avoid this "bug". The solution that worked for me was to break-out of the loop, and branch over to a SAVE-TO-CASSETTE routine. Then by entering an erroneous cassette name like "CS6", an error condition would be created. Using the ON ERROR trap in Extended Basic, I was able to keep the program running and return to the loop with a FRESH START. I found that this little trick re-adjusted the operating rate back to normal.

This was great, but I soon became tired of MANUALLY resetting the operational rate every time the program slowed down. I thought, "There MUST be a way the TI can do this for itself!" Well this seemingly innocent quest became an obsession of sorts. I couldn't let go until I cracked this puzzle!

Well I'm happy to report, and so is my lonely family, that I found a rather simple way to accomplish this. The whole answer is in a SIMPLE TWO (2) LINE routine. Actually, Extended Basic helped create this problem, and wouldn't you know, Extended Basic helped solve it. The following "generic" routine should be inserted just BEFORE a "loop, Call Key, If-Then" routine is initiated. This "AUTO-RATE MAINTENANCE" routine is therefore activated every time the loop is entered. The result is: NO SLOWING DOWN OR HESITATION!

```
XXX ON ERROR YYY :: OPEN #1:"CSn"  
YYY RETURN ZZZ  
ZZZ - Beginning of program "loop" and continuation  
of program.-
```

(A word of explanation: XXX, YYY and ZZZ are line numbers, and "n" is any number greater than 2.)

So if you have or do find that your screen display hesitates during a scroll or slows down to a seemingly complete halt, while in Extended Basic, then give the "Auto-rate Maintenance" routine a try. I think you'll be pleasantly surprised at the effect.

However there is one word of caution when using this routine. Setting the ON ERROR and Opening a channel to a erroneous device takes about a second. Therefore I'd recommend that this routine be placed in a position within the program where the apparent time delay would not be too noticeable. (By the way, this is (as you may have surmised) an Extended Basic fix only. Program simplification or "live-with-it" is the only thing available in TI-Basic.)

DATE 890305

by WESLEY R. RICHARDSON  
NORTHCOAST 99ERS - CLEVELAND, OH

There are many conventions used to represent the date, but I have found one to be more useful for computer applications. The format which I use is YYYYDD, such as 890305 for March 5, 1989. Below are some of the ways to represent this date:

March 5, 1989  
Mar. 5, 1989  
5 Mar 89  
3-5-89  
3/5/89  
890305

The March 5, 1989 format has the least possible confusion over meaning, but is also the least efficient for use by a computer. The length of the notation depends upon the specific date, for example December 31, 1989 takes more characters than March 5, 1989. With the format 890305, there are always six characters for the date. The input can be read as either a numeric field or as an alphanumeric (string) field. When sorted, the dates will be in proper date sequence. If you sort a format such as 3-5-89, then the month and day sort properly, but there is a problem with 12-22-88 coming after 3-5-89 instead of before. Some programs get around this by changing the representation of the date internally for calculations, but then presenting the date in a format such as 5 MAR 89 for the user.

I am sure you will continue to use the date format which is most convenient for your particular application, but now you have at least one more format to consider, and one which I find useful for computer applications.

-----  
STAR NX1000 FIX  
by WESLEY R. RICHARDSON  
NORTHCOAST 99ER'S - CLEVELAND, OH

If you have a Star NX-1000 printer, and you cannot get the printer to print using a TI-99/4A, then I may have a solution for you. First run the short version of the system test. At the top left of the print-out it will say something like VER 1.2, VER 1.3, or VER 1.4. If you are using a TI RS232 card, then you need VER 1.5 TI. A call to Star's service center at 800-537-8270 will get you a replacement ROM chip at no charge, as long as you return the chip which you take out. The chip comes with instructions on how to do the replacement.

The Star NX-1000 printer has many features, and this technical support indicates that Star does want the TI community business.

```
100 REM CHARCODES
110 REM WESLEY R. RICHARDSON, MARCH 1989
120 REM TI-99/4A EXTENDED BASIC
130 REM NORTHCOAST 99ERS, CLEVELAND, OH
140 REM PRINTS CHARACTER CODES FOR CHARACTERS 32 TO 127
150 DS="DSK1.CHARCODE-H" ! OR USE DS="PIO"
160 OPEN #1:DS
170 FOR I=32 TO 63
180 CALL CHARPAT(I,AS)
182 CALL CHARPAT(I+32,BS)
185 CALL CHARPAT(I+64,CS)
190 PRINT #1:TAB(10);CHR$(I);" ";AS;
200 PRINT #1:TAB(33);CHR$(I+32);" ";BS;
205 PRINT #1:TAB(56);CHR$(I+64);" ";CS
210 NEXT I
220 CLOSE #1
230 END
```

```
0000000000000000 @ 0038445C545C4038 0000201008000000
! 0010101010100010 A 003844447C444444 a 00000038447C4444
" 0028282800000000 B 0078242438242478 b 0000007824382478
# 0028287C287C2828 C 0038444040404438 c 0000003C4040403C
$ 0038545038145438 D 0078242424242478 d 0000007824242478
% 0060640810204C0C E 007C40407840407C e 0000007C4078407C
& 0020505020544834 F 007C404078404040 f 0000007C4078407C
' 0008081000000000 G 003C40405C444438 g 0000003C405C4438
( 0008102020201008 H 004444447C444444 h 00000044447C4444
) 0020100808081020 I 0038101010101038 i 0000003810101038
* 000028107C102800 J 0004040404044438 j 0000000808084830
+ 000010107C101000 K 0044485060504844 k 0000002428302824
, 000000000301020 L 004040404040407C l 000000404040407C
- 000000007C000000 M 00446C5454444444 m 000000446C544444
. 0000000000003030 N 004464645444C4C4 n 00000044645444C4
/ 0000040810204000 O 007C44444444447C o 0000007C4444447C
0 0038444444444438 P 0078444478404040 p 0000007844784040
1 0010301010101038 Q 0038444444544834 q 0000003844544834
2 003844040810207C R 0078444478504844 r 0000007844784844
3 0038440418044438 S 0038444038044438 s 0000003C40380478
4 00081828487C0808 T 007C101010101010 t 0000007C10101010
5 007C407804044438 U 0044444444444438 u 0000004444444438
6 0018204078444438 V 0044444428281010 v 0000004444282810
7 007C040810202020 W 0044444454545428 w 0000004444545428
8 0038444438444438 X 0044442810284444 x 0000004428102844
9 003844443C040830 Y 0044442810101010 y 0000004428101010
: 0000303000303000 Z 007C04081020407C z 0000007C0810207C
; 0000303000301020 [ 0038202020202038 { 0018202040202018
< 0008102040201008 \ 0000402010080400 ; 0010101000101010
= 0000007C007C0000 ] 0038080808080838 } 0030080804080830
> 0020100804081020 ^ 0000102844000000 ~ 0000205408000000
? 0038440408100010 _ 000000000000007C 2020202020202020
```

**Phase Two!**

Last issue I gave you the basics on how to get into your FunnelWeb disk. If you have been using the disk for a while, you are probably ready for the information on this page. I copied the TIM Helper sheet from the QB Monitor newsletter because it was convenient, even though I was already using the commands from the original TI-Writer manual. If you are just getting started and you use wordprocessing a lot, you should try to pick up the original TIM manual. They are cheap and well worth the money. I am presently using FunnelWeb version 4.13, but I still use the TIM manual. FunnelWeb has many improvements over TIM which I use almost every time I write a letter. The most useful functions come with SD for Show Directory. To use SD press FCTN 9, then SD <ENTER>, and last the drive number desired. FunnelWeb will place a directory on the screen and allow you the use of the following commands.

<B>ack <V>iew PgCk(=) Mark(1-0)  
 <N>ext <P>Dir <O>ld <D>elf Exit<ent>

Only ten items are shown on the screen at one time. The current page or screen number and the total number of pages will be shown in the upper right corner of the screen. For example, Page 1 of 5, Page 2 of 5, etc. Pressing M will move you to the <N>ext page and pressing B will move you <B>ack one page. Pressing a number from 1 through 0 will mark that file with a dash (-). You can move the dash by pressing another number or retain a previously selected file by pressing 0 for <O>ld file. If you select a file (1-0) and then press enter, you will be returned to the letter you are currently editing. If you then utilize LF or SF, the selected name will appear as the Load or Save File selection. While using the Show Directory utility you can <V>iew or <D>elete a file from the selected disk drive or you can do a Program Check. If the (=) key is pressed for PrCk(=), FunnelWeb will again search the selected disk drive and attempt to identify the types of files on the disk. For example, EA for Editor Assembler, BX for Extended Basic, etc. The result of this search will not only be shown on screen but will print out if you press P for Print Directory. These functions will all work

le you are working on a letter, and if you do Load another File (LF), your current work will still be there when you are finished with the SD functions. Note: If you are in the SD mode with a directory on the screen and press FCTN 8, REDO, FN will immediately do another directory of the same drive. This is great for library work. **Good Luck. Marty.**

```

=====
EDITOR COMMAND :FCTN:CTRL: EDITOR COMMAND :FCTN:CTRL: EDITOR COMMAND :FCTN:CTRL
=====
Back tab      :      : T !Ins. blank line : B : 0 !Quit      : = :
Beginning/line :      : V !Insert character: 2 : 6 !Reformat   : :2orR
Command/Escape : 9 : C !Last paragraph : :6orH!Right arrow : 0 : 0
Delete character: 1 : F !Left arrow     : S : S !Roll down   : 4 : A
Del. end of line:      : K !Left margin rel.: : Y !Roll up     : 6 : B
Delete line    : 3 : N !New page       : :9orP!Screen color : : 3
Line #'s on/off : 0 : I !New paragraph : :8orH!Tab        : 7 : I
Down arrow     : X : X !Next paragraph : :4orJ!Up arrow   : E :
Duplicate line :      : 5 !Next window    : 5 : I !Word tab      : :7orW
Home cursor    :      : L !Dops!          : :1orZ!Word-wrap/fixed : : 0
=====
    
```

FunnelWeb UPPERCASE to lowercase (CTRL .), lowercase to UPPERCASE (CTRL ;)

```

=====
Load      LF (enter) DSKn.FILENAME      (Loads the entire file)
Files     LF (enter) 3 DSKn.FILENAME  (Merges entire filename with data
                                         in memory after line 3)
Note:     LF (enter) 3 1 10 DSKn.FILENAME (Lines 1 thru 10 of filename are
n = 1-9   merged after line 3 in memory)
          LF (enter) 1 10 DSKn.FILENAME (Loads lines 1 thru 10 of filename)
=====
    
```

```

=====
Save      SF (enter) DSKn.FILENAME      (Saves entire file to DSKn)
Files     SF (enter) 1 10 DSKn.FILENAME (Saves lines 1 thru 10 to DSKn)
=====
    
```

```

=====
Print     PF (enter) PIO                (Prints text to a parallel printer)
Files     PF (enter) C DSKn.NAME        (Prints text to disk w/O control characters)
          PF (enter) L PIO            (Prints 74 columns of text with line numbers)
          PF (enter) F DSKn.NAME      (Prints to disk in Display/Fixed 80 format)
          PF (enter) 1 10 PIO        (Prints lines 1 10 to the parallel printer)
Note: PF can be used to print to disk (DSKn.NAME), RS232.BA=300, or PIO.CR.LF
      To cancel printing hold FCTN 4
=====
    
```

```

=====
Delete    B (enter) 10 20 (deletes lines 10 thru 20 from memory)
=====
    
```

```

=====
Delete File DF (enter) DSKn.FILENAME (Deletes the named file from disk n)
=====
Tab/Margins T (enter) L=Left margin R=Right margin T=Tab I=Indent
          $Use (enter) to execute or FCTN 9 to escape and terminate the "T" command
=====
    
```

```

=====
Recover Edit RE(enter) answer (Y) or (N) to recover what you have just purged
=====
    
```

```

=====
Move (line) M (enter) 2 2 10 (moves line 2 to after line 10)
          M (enter) 2 6 10 (moves lines 2 thru 6 to after line 10)
=====
    
```

```

=====
Copy      C (enter)                (works just like the Move command, above)
=====
    
```

```

=====
Find      FS (enter) /string/ (looks for entered string in text following the
String                                         location of the cursor when FS was begun)
          FS (enter) 1 15 /string/ looks for the entered string in lines 2-15
=====
    
```

```

=====
Replace   RS (enter) /old string/new string/ Replaces the old text with the
String                                         data in the new string)
=====
    
```

```

=====
Show (FMB)
Directory SD (enter) DSK# (displays a directory of desired disk drive)
=====
    
```

```

=====
Show Line S (enter) Line# (moves cursor to desired line, E=last line)
=====
    
```

The multitude of Graphics programs available for the TI computer and their compatability with word processing programs has prompted a request for some description of each. This is an attempt to clarify compatability among most of the later programs. The diagram on the next page covers most of the freeware and commercial programs available.

TI-WRITER is the only prudent choice for a word processing program for those having 32K and disk drives. There are no others which come close to providing the features and versatility. All versions still use TI's WRITER program files. The best and least costly is FUNNELWEB's version which in addition to freeing E/A & WRITER from their respective modules, includes C, DISKO, FORTH, FASTTERM, and our choice of others in a disk-based program which shines when installed on a RAMDISK. Almost all of the programs which we will discuss will be used either with Text from TI-WRITER or through TI-WRITER.

The CSGD series of graphics programs written by Dave Rose is shown at the top of the diagram. It is compatable with both Prowriter and Epson-gemini printers, but you must purchase the correct version for your printer. The keyboard or joystick can be used in any of the Editors. The message printing program is common to CSGD-I, II, and III.

CSGD-I contains the Editor programs for creating your own (1) Character Sets, (2) 5X5 graphics, and (3) Pictures. The Editors, primarily the Character Editor, have undergone 4 revisions. Provisions are also made to jockey graphics around to convert between alternate printer types.

CSGD-II is basically a banner program which prints the message sideways and 8 times magnified. It also contains the Graphic Editor, but not the other editors. It has gone through three revisions, including the latest which allows printing lower case in the Banner mode.

CSGD-III is primarily a label program which produces multi-width labels in 3 heights. It also contains the Message program and an "easier to operate" Letterhead program. ALL OF THE FILES CREATED IN CSGD ARE I/V 254 and are not compatable with TI-WRITER. The Docuprinter is compatable with WRITER and will produce 1 or 2 column texts using a choice of 6 type fonts and D/V 80 files through the Formatter. It does not handle fonts of greater height than 1 row.

The CSGD programs are supported by a multitude of graphics, pictures and over 100 fonts written by Dave Rose and contributors who use and enjoy his programs.

TI-ARTIST is an extremely versatile drawing program written by Chris Faherty. It allows creating, loading and modifying, size changes and many other features using the keyboard or a combination of the keyboard and joystick.

NONE OF THE PROGRAMS DESCRIBED IN THIS DISCUSSION CAN BE LEARNED READING THE MANUAL. You must use them and make your mistakes: It helps you to remember.

The only files that were available with ARTIST were ART-EXTRAS; however, Dave Rose converted his I/V 254 files to D/V80 which can be loaded as "Instances" and were released as the COMPANIONI-III series. In addition, TI/ARTIST allows the loading of GRAPHX files so that a

rather large base of graphics is available to use and modify or create your own.

GRAPHX is a program with quite a few similarities to ARTIST; was written in Australia and introduced in the U.S. in 1984. It allows use of the Joystick ONLY, and is not compatable with any but the Epson printer. It is a quite versatile drawing board in the hands of an experienced user.

The support graphics available consist of a series of GRAPHIX COMPANIONS and GRAPHIX PICTURES. They are all well done. The availability of additional graphics is made possible through TI-ARTIST which will load and save to the Image (PGM) format.

JOYPAINT & JP PAL are Graphics Drawing Boards well spoken of by their owners. It does have options which allow loading from and saving to ARTIST &/or GRAPHX filtypes. It is currently only compatable with the EPSW printer.

ARTCONVERT is a Program that converts TI-ARTIST files to TI-WRITER files. It is supported by 4 diskettes of files; ARTDATA-I through IV. This permits anyone with TI-WRITER to have the ability to print graphics. It will also merge and print two graphics, but there are no provisions to include text in the graphic file to complete a document.

One unique feature of ARTCONVERT allows the user to convert one row high TI-ARTIST fonts for use through TI-WRITER. This would allow conversion of all of Rose's 1 row high fonts in Companion I-III to be used though they contain 1/70 of 96 typewriter keys if you do not have the COMPANION series. Compatible with Prowriter and Epson-Gemini.

FONTWRITER by Peter Hoddie is really the first graphics program which is compatable with TI-ARTIST and TI-WRITER. With this program you can create your own type fonts, revise TI-ARTIST and CSGD fonts and use TI-ARTIST Instances mixed in printed documents even on the same line.

The resources for this program are as broad as all of the ARTIST files plus all of those I have indicated earlier which can be converted through ARTIST.

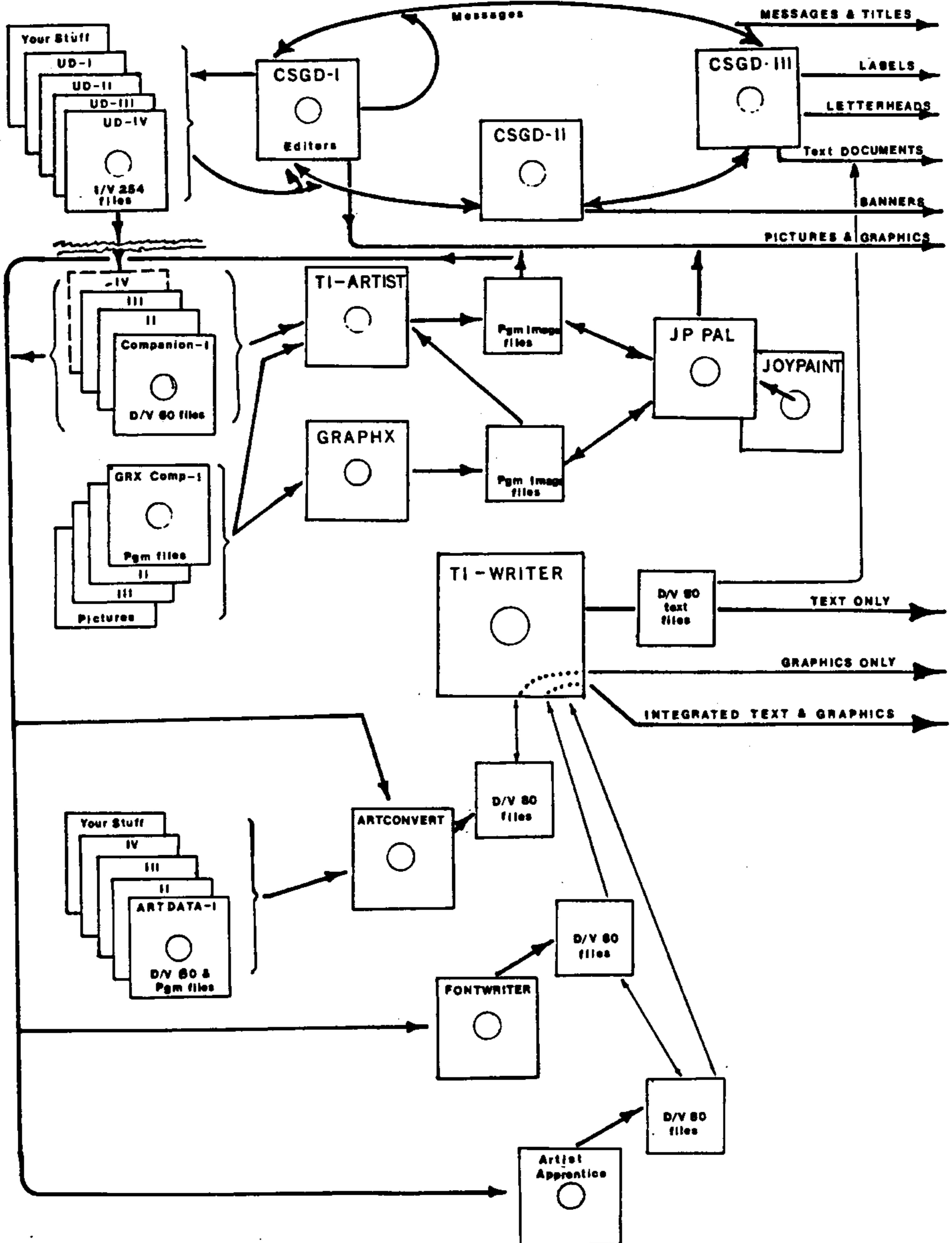
ARTIST APPRENTICE is similar in several ways to FONTWRITER. It allows use of TI-ARTIST type files, fonts and graphics to produce files which are printed according to a "Scheduler". It is limited in being compatable only with EPSON printers.

#### GENERAL OBSERVATIONS:

Most of the programs are, by necessity, somewhat complex. The MAX-RLE program with an almost infinite picture resource can also be used to convert files between D/V 80, GRAPHX, TI-ARTIST, and IV 128. There are many more Graphic programs available since this article was first published, ie, the series from Rodger Merritt, PRINT\_IT, PICTURE\_IT, JIFFY FLYER, JIFFY CARD, and FORMSHOP. PRINT WIZARD, MACFLIX, CERTIFICATE 99, 1000 WORDS, etc. All of the programs are sufficiently time consuming to require the need for reproducing and also they are fairly small.

Don MacClellan - Bluegrass 99 computer Society  
(Slightly edited by DS of the NorthCoast 99ers)

# SOME POPULAR GRAPHICS PROGRAMS



```

*
-N O R T H C O A S T U G -
*
TI99/4A
Euclid Mall
* * * * *
*

```

To: Northcoast Users  
From: Paul Newmeyer  
Subject: Drawing With Plus!

This is a letterhead template. Its graphic is saved on disk for recall and filling in. From that disk I printed this entire page in one operation, on my Star NX10 printer, set in IBM mode by throwing dip switch 6. How did I do this? Good question! First, I had to make the box. That I did with our magic key, Ctrl U, and FunnelWeb. The four corners were formed by hitting Ctrl U, Fct R, Ctrl U, and "I" to form the top left corner, ";" to form the top right corner, "H" to form the lower left corner, and "<" to form the bottom right corner. Before entering each of these four codes I had to start the code, and I did this by hitting Ctrl U, Fct R, Ctrl U, >. After using the code I stopped it by hitting Ctrl U, Fct R, Ctrl U, #.

The horizontal lines were formed by hitting Ctrl U, Fct R, Ctrl U and 56 "M's". I made the vertical lines by punching Ctrl U, Fct R Ctrl U, and a series of ":" signs.

I made the long vertical line by hitting Ctrl U, Fct R, Ctrl U, J.

I also wanted to change a few of the PLUS! C6 commands, so on line one I set IN +0;LM 75. Further, I used the carrots to fill empty spaces in the graphics section. Otherwise, the whole thing would have drawn into a crazy puzzle.

You may think that I spent a lot of time typing in all those codes. Not really. Have you discovered the Ctrl 5 tool? In Editor mode it will repeat a line as often as you desire. It's a great time saver.

After designing and saving the graphic I typed and saved the letter. To print I positioned my paper in the printer so the head would start printing at the top of the paper. This positioning could be done either manually or by using the codes to locate the print head at the top.

Notice that I can use all the control codes found in PLUS!. I have used many of them in this article. Also, I could have made the box by using only single lines or made it with the fat lines. Many possibilities exist.

I use this set up: FunnelWeb in Ram Disk; PLUS! in drive one; a storage disk in drive two. This gives me great power over my word processor; power I haven't exhausted yet. In making this page I employed other tricks which I haven't space to mention. Next month I'll give you some more.



## PLUS! & TI-WRITER

```

,LM 10;RM 92
,TL 1:27,52 - - - A='1 =Italic on
,TL 2:27,53 - - - B='2 = " off
,TL 3:27,83,0 - - C='3 =superscript on
,TL 4:27,83,1 - - D='4 =subscript on
,TL 5:27,84 - - - E='5 =both above off
,TL 6:27,15 - - - F='6 =Condensed on
,TL 7:18 - - - G='7 = " " off
,TL 8:27,87,1 - - H='8 =Double Width on
,TL 9:27,87,0 - - I='9 = " " off
,TL 10:27,51,24 - - J='A =Line Spacing (1/144 to 127/144)
,TL 11:27,50 - - K='b = " Sp. 6/inch
,TL 12:7 - - - L='A =Buzzer
,TL 14:8 - - - N='B =Back Space
,TL 15:27,71 - - D='F =Double Strike
,TL 16:27,72 - - P='o = " " off
,TL 17:27,69 - - Q='l =Emphasized on
,TL 18:27,70 - - R='2 = " " off
,TL 19:27,66,2 - - S='3 =Elite Print on
,TL 20:27,66,1 - - T='4 =Pica Print on
,TL 21:27,45,1 - - U='5 =Underline on
,TL 22:27,45,0 - - V='6 = " " off
,TL 23:27,69,27,71,27,45,1 - W='7 =Wonderful Combo on
,TL 24:27,45,0,27,72 - - X='8 = " " " off
,TL 25:49,57,56,57 - - Y='9 = 1989
,TL 26:27,173,174,173,174 - Z='A = Alternating white/black diamonds(4)
,TL 0:27,64 - - - - - O='i = Resets all Printer Commands

```

This is my favorite file, from the PLUS! disk by Jack Sughrue. Using the command {CTRL U / SHIFT (n) / CTRL U}, where (n) is one of the alpha letters above, the FORMATTER tells the printer to change print style, underline, or whatever the letter signifies in the right column. When you wish to change back to the former print style, etc., you must {CTRL U / shift (n) / CTRL U} again, using the command that cancels (turns it off), and then the command of the former style, etc.

I load this file at the beginning of every document that I type up. This way it is easy to pop back up and see what commands are available. You can still use the .IF (Include File) if you want to, using a printed sheet (as above) as a reference guide. In fact, you could cut the top half of this page out and use it for a guide. TIP: You can change any of the printer commands to suit your printer, and yourself. Line spacing, printed words (such as the 1989, above), border or separation lines (such as 'Z' above). There are many things you can do with the CTRL 'U' command.

# HAPPY



# TYPING



**TI-BASE - From INSCEBOT  
TUTORIAL 8.2 By Martin Smoley  
NorthCoast 99'ers - March 12, 1989  
Copyright 1989 By Martin A. Smoley**

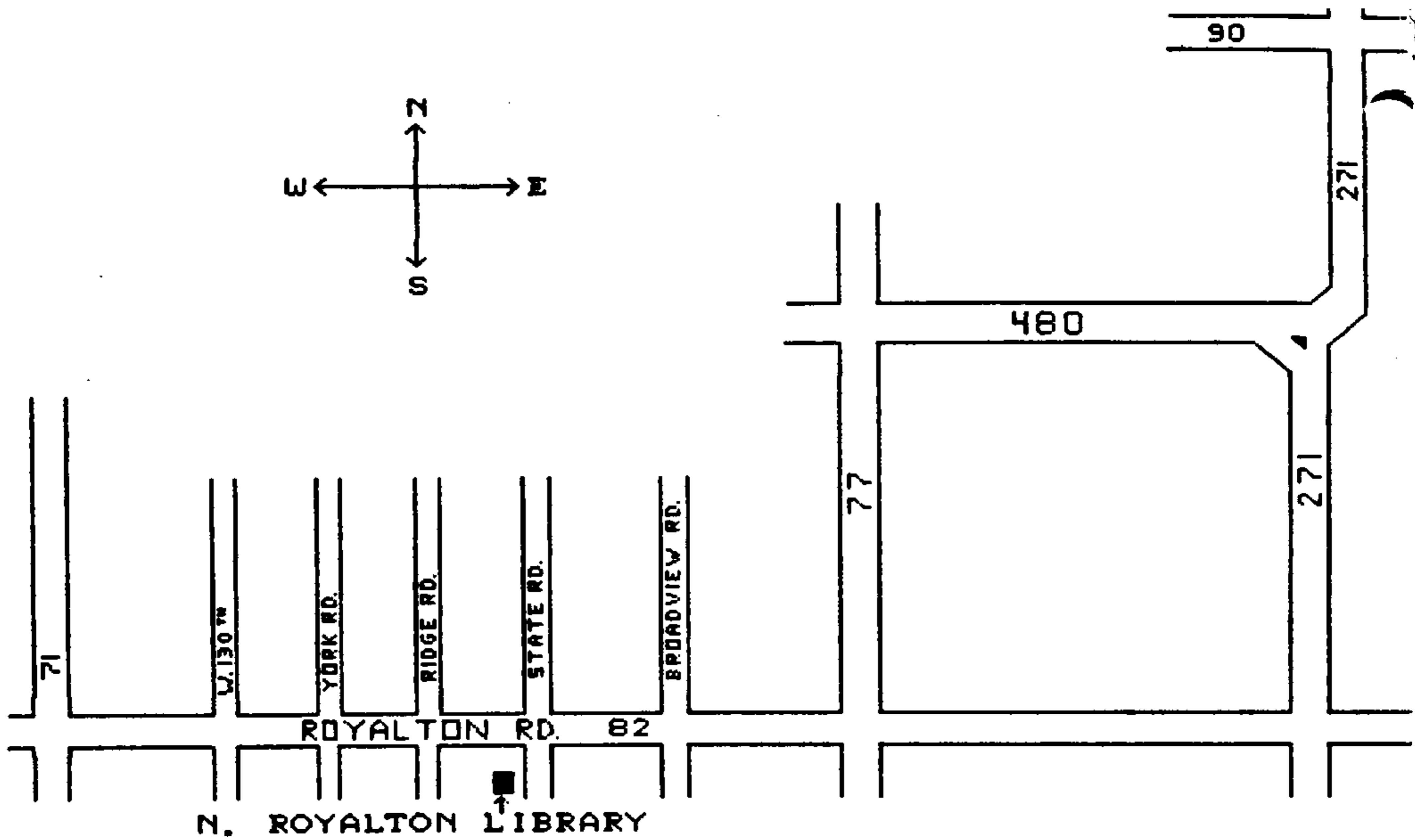
```

* Command file 2WLBS/C
* Copyright Martin Smoley 1989
*
* SET TALK OFF
* TRACE ON
SET RECNUM OFF
SET HEADING OFF
SET PAGE=000
CLEAR
COLOR WHITE,DARK-BLUE
LOCAL XPDT C 38
LOCAL NAME C 38
LOCAL ADDRS C 38
LOCAL CTSTZ C 38
LOCAL TEMP C 38
USE T NAMES
TOP
PRINT (ST),(G)
WHILE .NOT. (EOF)
    REPLACE XPDT WITH "
        | "          Exp. Date " | XP
    REPLACE NAME WITH TRIM(FN) | " ";
        | MI | " " | LN
    REPLACE ADDRS WITH SA
    REPLACE CTSTZ WITH TRIM(CT) | " ";
        | ST | ". " | ZP

    MOVE
    IF (EOF)
        PRINT (G),XPDT,(Drft)
        PRINT (CR),(LF)
        PRINT (E),NAME,(Drft),(G)
        PRINT (4),ADDRS
        PRINT CTSTZ,(Drft)
        PRINT (CR),(LF)
    ELSE
        REPLACE TEMP WITH "
            | "          Exp. Date " | XP
        PRINT (G),XPDT,(HT),TEMP,(Drft)
        PRINT (CR),(LF)
        REPLACE TEMP WITH TRIM(FN) | " ";
            | MI | " " | LN
        PRINT (E),NAME,(HT),TEMP,(Drft),(G)
        REPLACE TEMP WITH SA
        PRINT (4),ADDRS,(HT),TEMP
        REPLACE TEMP WITH TRIM(CT) | " ";
            | ST | ". " | ZP
        PRINT CTSTZ,(HT),TEMP,(Drft)
        PRINT (CR),(LF)
    MOVE
ENDIF
<NDWHILE
CLOSE ALL
DO DSK5.SETUP
RETURN
*
* CF to print two across labels

```

The Command File on this page is the working result of my effort for this month. It is probably not the most efficient as far as programming is concerned, but it does print labels two across and it also demonstrates the use of the printer controls in the Command File mode. If you wish to type this CF in and use it, it is too large for the TIB Editor, so it must be entered with FunnelWeb in the non-wordwrap mode. Lines 4 and 5 do not execute because of the asterisk in the first column. If you run into a lot of bugs, you can find many of them by watching the program lines scroll up the screen. When the CF works well, remove the asterisk from that line to turn the screen junk off. If your problems are massive, as mine were, remove the asterisk from the TRACE ON line and all lines which are executed will also be sent to the printer, along with line numbers. The printout will help you find your problems. When the CF runs well remove the TRACE line completely. The line PRINT (ST),(G) is the first line to issue printer controls. It sets the printer tab at 40 columns and turns double strike on. Note: This line can be typed at the Bot Prompt and executed provided a DB is in use at the time. I am using T NAMES which contains 5 records. "WHILE .NOT. (EOF)", is roughly the same as saying to TIB, if you have any data right, now load the respective fields into XPDT, NAME, ADDRS and CTSTZ, then MOVE to the next record. The IF statement says, IF you have turned up the EOF marker with that MOVE, then print out the fields you have and jump to the end or ENDIF. This will print one label. If the MOVE has not brought us to the EOF marker, TIB will jump to the ELSE statement. The ELSE statement is the same as saying, we must have another record so proceed with the statements right after the ELSE, which will produce two across labels. TEMP is reused for each line so that portion works like this. REPLACE TEMP WITH " Exp. Date" XP, is filling TEMP with items from the second record because of the MOVE statement. Therefore, PRINT (G),XPDT,(HT),TEMP,(Drft) says this; set double strike on, print whatever is in XPDT (which we gathered from the previous data record), Horizontal Tab to column 40, print TEMP (which contains data from the second record, and last, change the printer back to Draft mode. This will print across the page side by side with a tab of 40. The next line prints a Carriage Return and a Line Feed. I like the PRINT (CR),(LF), it eliminates the need to initialize space for BLNK, which is what I previously used for a line feed. This process continues until the two labels are printed, another MOVE is executed and the whole process starts over. When the EOF is reached the WHILE statement no longer executes, and in my case the SETUP file is run. I have started using my SETUP CF at the end for other Command Files. I turn on the RECNUM etc. and it DISPLAYS the STATUS so I can see exactly what is happening. This way I always return to a system I am familiar with, and it's easy to do. You may not want to use my symbols for control codes, (G) double strike, (f) condensed etc., but you should have enough information at this time to set up whatever you want and be able to use whatever you do set up. I am beginning to like this type of printer control, because it is available at all times. I do not need to jump to FunnelWeb to insert special characters. I have not tried this yet, but I believe that the control codes for your personal system can be greatly expanded by dedicating the whole PRINTER database to one printer. For example, you would not have DIABLO, EPSON, NX-80, etc. You would have EPSON1, EPSON2, EPSON3 etc. and fill the whole database with EPSON commands. With the PRINTER database on the PR6DISK you could then SELECT an unused slot within a running CF and execute PRINTER EPSONn (n=1-0). At that point TIB would load another 15 printer commands which you could use. Interesting thought isn't it. Next Month.



CLEVELAND AREA 99/4A USERS GROUPS  
 C/O DEANNA SHERIDAN  
 20311 LAKE ROAD  
 ROCKY RIVER, OH 44116



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

!! TIME DATED MATERIAL !!