



# CLEVELAND AREA TI99-4A USER GROUPS NEWSLETTER

JANUARY, 1989

| OFFICERS         | NORTHCOAST               | TI-CHIPS                  | MEETING DATES        |                        |
|------------------|--------------------------|---------------------------|----------------------|------------------------|
| PRESIDENT        | MARTIN SMOLEY 1-257-1661 | GLENN BERNASEK 238-6335   | NORTHCOAST 1:30 P.M. | TI-CHIPS 10:00 A.M.    |
| VICE PRESIDENT   | ERNIE WALNAR 289-7742    | RUSS SHINANDLE 1-887-5330 | EUCLIDIAN ROOM       | NORTH ROYALTON LIBRARY |
| TREASURER        | JIM MEKEEL 286-3179      | LIN SHAW 235-3912         | EUCLID SQUARE MALL   | STATE ROAD & RT 82     |
| MEMBERSHIP       | CHUCK POULIN 731-6473    | JOHN PARKEN 331-2830      | THIRD SATURDAY       | THIRD SATURDAY         |
|                  | 361 E. 280TH ST          | 4172 W. 217TH ST.         |                      |                        |
|                  | EUCLID, OH 44132         | Fairview Park, OH 44126   |                      |                        |
| SECRETARY        | CHUCK POULIN 731-6473    | MARY PHILLIPS 582-4009    | DECEMBER 17, 1988    |                        |
| LIBRARY(DISK)    | MARTIN SMOLEY 1-257-1661 | MARK McCAULEY 235-8888    | JANUARY 21, 1989     |                        |
| (TAPE & MODULES) | TOM WELLS 475-4067       | JOHN PARKEN 331-2830      | FEBRUARY 18, 1989    |                        |
| (HARD COPY)      | DICK ALDEN 1-352-9172    |                           | MARCH 18, 1989       |                        |
|                  |                          |                           | APRIL 22, 1989       | APRIL 15, 1989         |

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TI-CHIPS EXECUTIVE NOTES  
Mary Phillips, Secretary

TI-Chips members and guests met December 17 for holiday cheer. Many delicious cookies and treats were shared during the meeting.

Tom Thalnar showed off the Myarc Geneve with some amazing high-resolution graphics. He explained, for the benefit of new and potential members, the genesis of the 9640 and how the DOS has evolved for it. Using hard disk backup has increased it's capabilities.

John Parken did a demo of three disks he had compiled - "Chips Boot", "Chips Games", and "Chips Utilities." After he was through showing "what my TI can do", everyone was clamoring for copies of the disks. John's copies were gone in minutes, but Mark McCauley promised to make copies for anyone who wanted them.

Les Kee elaborated on the use of fractals, which he had demonstrated a few months ago. Les also showed the group three Extended Basic routines from Micropendium which can print DV/80 files on the screen, and print a disk catalog to the screen or the printer.

TI-Chips welcomed a new vendor - Ramcharged Computer System...formerly Ron's Computer & Video. They had many products for sale at reduced prices. They agreed they would not compete with the Thalners in products offered.

As reported before, Cleveland Public Library has started modem access to their computer catalog. Beginning

at the end of December, the Cuyahoga County Public Library system will offer their computer catalog for telephone access. If you are a CCPL cardholder, you may have already received notice of this by the time you read this.

Happy New Year from TI-Chips!

ASK C.T.  
By C.T. Tibs  
Cleveland, Ohio

It's been a very enjoyable nine months in which I've been able to talk to and with you about some of the ins and outs of the base unit TI-99/4A. The questions that have come to my attention, either directly or indirectly, have all been excellent, and have been fun to answer. I hope I've been of some help. I know it can be down right frustrating, at times, trying to get something to work when you don't have the slightest idea what makes it work, or what to expect.

However no matter how enjoyable it's been for me, the time has come when I must regretfully put this column on STANDBY status. You see 99'ers, I can no longer afford the luxury of taking the time to compose a TI-Basic tutoring article each month in lieu of inquiries by my fellow Basic TI-99/4A users. There's an awful lot I could talk about when it comes to the operation of the 99/4A computer, and there's nothing that I enjoy more! But trying to develop a tutoring article without input guidelines is like building a house without some form of plans. It can be done, but boy does it ever take one heck of a lot of additional time to accomplish!

This isn't "Goodbye", but rather just "So-Long", because if you have a question or problem with your TI-99/4A, or know of someone who has a question or problem; then either let me know by writing to: C.T. TIBS - 13246 HARPER ROAD - STRONGSVILLE, OHIO 44136 or contact G.W. BERNASEK (of the TI-CHIPS), and he'll make sure I receive your inquiry. I will make every effort to have your inquiry and my answer published in the next available issue of the CLEVELAND AREA 99/4A USER GROUPS newsletter. Remember 99'ers, if and when you need me - I'll be there!

C.T.

# EXECUTIVE NOTES - NorthCoast 99er's 12/17/88

HOME PUBLISHING ON THE 99/4A  
SR. PAT TAYLOR, B.V.M., DUBUQUE, IA

You had to be at the meeting to believe it could happen. First, there was a major snow storm going on for most of the day. At first I thought I'd be the only one to show up. When I got there another group had taken over our room for their kids Santa Claus Christmas Party. Since I didn't want to be known as the guy who kicked Santa Claus out of Euclid, I decided to move our meeting to the small meeting room. Now we had a room, but I could not come up with enough tables and chairs. Little by little we managed to beg, borrow and steal enough chairs for our members. "For some reason about 35 members were crazy enough to come out in that terrible weather." On top of that we didn't have enough cables to hook up the system and I wound up stripping wires with my pocket knife, pushing the bare wire ends into jack sockets, and taping wires with some scotch tape to hold them in place. I will remember this meeting for a long, long time. Aside from my problems, everyone seemed to have a good time. Deanna's demo was excellent. It covered several different graphics programs and some of Deanna's music-graphic combinations. There was a great deal of activity before and after the meeting, and I managed to answer many questions about the system and programming for inquisitive members.

REJOICE... all of you who, like myself, enjoy graphics and would like to use more of your current programs more effectively and explore, as well as understand, the inter-relatedness of the programs, and find fresh ways to present, modify and/or combine new and old ones.

The first manual of its kind that I have seen is now on the market. It is done by Harry T. Brashears, 2753 Main St., Newfane, NY 14108 (\$15.00, including posting, mailing). It is 74 pages accompanied by a disk, and the initial cost includes two later supplements and two more disks.

REJOICE... all of you who are into writing newsletters, preparing ads, etc. If you want new ideas, you can well find this a great bargain, especially if you already have some of the programs discussed such as TI-ARTIST, JOY PAINT, GRAPHX, and PICASSO which alone and in combination help create the way pictures and words can be used for effective communication.

REJOICE... all you who do multiple banners, signs, and cards if you would like to find ways to make the solid fonts less so...to use less ribbon ink and add style. Have you considered varying fonts with texture fills? I had not even considered it a possibility.

REJOICE... all you CSGD owners who would like to use your multiple collection of graphics in even more ways... know which utilities convert them to other formats as well or if you use CSGD as much as I, the reverse is equally true, as you may wish to convert materials to CSGD. Are you aware of the beautiful graphic and font catalog that is available. I use it for constant reference in choosing character sets and graphics. I believe it is referred to as a dictionary disk in the article.

Had you ever considered using FONTWRITER for sign painting? Are you effectively using it's DUMP?

Did you find the directions in TI-ARTIST not too specific on making instances? Here it is spelled out for you. Or have you paled at the thought of making or improving fonts...this might give you the courage. Would you like to see the fonts existence arranged by height... it is there too.

Is the graphic vocabulary overwhelming with its instances, images, graphics, porting...the most common are covered, perhaps the rest will be in the later supplements.

REJOICE... all of you who want instances printed in proportion for newsletters, ads, etc. Robert Coffey's program is on the disk and it's potential is explained.

As you a person who has to see an example to get a clear idea of what is being said...plate after plate using TI's own programs are there to illustrate clearly the point discussed! If you like to see differences illustrated, that too is done in some parts.

TI-WRITER and graphics boggle your mind...that too is explored.

That gives you an idea of a few things in this manual. If you are interested in this type of skill, it is a marvelous manual, and I already look forward to the supplements!

## NEXT YEAR

I have listed all the meeting dates for 1989. They remain the third Saturday of each month except for April. As you can see the April meeting falls on the fourth Saturday. Please note the meeting dates so you can be there. We'd like as many members as possible to attend the meetings. You'll have a great time and learn something new about the 99/4A. We have the whole Euclidian Room for 1989, so there will be room for the Novice S16, and many other new and wonderful projects.

## RENEWALS

Check the label on your newsletter for the date your membership runs out. We have a wonderful group of people in the NorthCoast 99'ers, and we don't want to lose even one of you. So, when your membership is due, stay with us. Things are getting better and better for the TI.

## THE NEXT NORTHCOAST MEETING

At the next meeting the demonstration will be by Steve Weinkamer. Steve will update us on the newest release of EZ-Keys. When Steve originally demoed EZ-Keys the members were amazed. The new version should be great and maybe I can pick up some of the functions I missed the first time.

See you all at the next meeting. Marty



**TI-BASE - From INSCEBOT  
TUTORIAL 5.1 By Martin Smoley  
NorthCoast 99'ers - Dec. 17, 1988  
Copyright 1988 By Martin A. Smoley**

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Well here it is December already. Gee! time flies when you're having fun. This month I'm going to change my mind again. I said I didn't like System type setups, so this month I'm doing a system for you. This is my Version 1.02 and my 1988 finale. This tutorial will contain practically all programming, with only a couple comments from me. The whole thing works, so if this is what you wanted, your time is here. This type of program runs too slow for me, but once it's finished you can run the whole thing with a few number entries. TIBSYS, which is listed below, runs all the other CFs (more or less). So, to get the system going you would type DO DSK2.TIBSYS (E). You can find your way through the system by the order of the DO DSKn.XXX commands. You'll notice that all the remark statements are at the end of the CFs. This is because the processor doesn't read anything after RETURN. Putting your remarks after that point will speed things up. I have also kept the size of the CFs down so you can edit any of them using MODIFY COMMAND. I try to use the same fieldnames (NM, FN, LN, MI) for all my databases. This allows me to use this type of programming on several DBs by merely changing USE NEWNAMES to USE (WHATEVER). Except for possible minor field length problems this System CF should be usable for many things.

```

LOCAL ? N 2 0
LOCAL SEL N 2 0
REPLACE ? WITH 0
      DO DSK2.PREP1
      DO DSK2.SYSSCR
USE NEWNAMES
TOP
  WHILE .NOT. (?)
    DO DSK2.INFSCR1
    DO DSK2.SLCASE
  ENDWHILE
  DO DSK2.FIN1
RETURN
*
* TIBSYS          Save as TIBSYS/C
* *****      TI-Base System 12/1/88

```

\*\*\*\*\*

NOTE: Don't type in the last two lines of each CF. I'm referring to the \*, and the \*\*\*\*\*s. I put those in to keep things separated.

```

CLEAR
* Pre-Program Preparation
*
* PREP1 Save as PREP1/C
* *****
*
CLOSE ALL
SET HEADING OFF
SET RECNUM OFF
COLOR WHITE DARK-BLUE
SET TALK OFF
WAIT 5
RETURN
*

```

\*\*\*\*\*

```

CLEAR
COLOR BLACK GRAY
WRITE 3,9,"This is a TI-Base System."
WRITE 5,9,"It is a club type system"
WRITE 7,9,"to produce a club Roster,"
WRITE 9,9,"a complete set of labels,"
WRITE 11,9,"or search for individual"
WRITE 13,9,"names and print more than"
WRITE 15,9,"one label for a specific"
WRITE 17,9,"name on the list."
WRITE 19,12,"** USES NEWNAMES **"
WAIT 4
COLOR WHITE DARK-BLUE

```

```

RETURN
*
* SYSSCR          Save as SYSSCR/C
* *****      System Screen 12/1/88
*
*****

```

```

CLEAR
REPLACE SEL WITH -1
WRITE 2,8,"** Make A Selection **"
WRITE 4,10,"> 0 < To Quit CF"
WRITE 6,10,"> 1 < Print Roster"
WRITE 8,10,"> 2 < Print All Labels"
WRITE 10,10,"> 3 < Print Spec. Labels"
WRITE 12,10,"> 4 < Edit NEWNAMES"
WRITE 14,10,"> 5 < Append To NEWNAMES"
WHILE (SEL<0) .OR. (SEL>5)
  WRITE 22,4,"Enter 0-5"
  READ 22,15,SEL
  WRITE 22,3,"          "

```

```

ENDWHILE
CLEAR
RETURN
*
* INFSCR1        Save as INFSCR1/C
* *****      Info Screen 1 12/1/88
*
*****

```

Continued Next Page.

TI-BASE Tutorial 5.2  
NorthCoast 99'ers (C) Martin A. Sooley

\*\*\*\*\*

```
DOCASE
  CASE SEL = 0
    WRITE 18,13,"Have a nice day"
    REPLACE ? WITH 1
    BREAK
  CASE SEL = 1
    DO DSK2.PRSTR
    BREAK
  CASE SEL = 2
    DO DSK2.LBL55
    BREAK
  CASE SEL = 3
    DO DSK2.FNDPRNT1
    BREAK
  CASE SEL = 4
    DO DSK2.EDFL1
    BREAK
  CASE SEL = 5
    DO DSK2.APFL1
    BREAK
ENDCASE
RETURN
```

```
*
* SLCASE          Save as SLCASE/C
* ***** Case Selection 12/1/88
*
```

```
SET PAGE=000
SET LINE=80
CLEAR
LOCAL TEMP C 60
LOCAL BLNK C 1
WRITE 10,4,"Set Printer + press ENTER"
READ 10,30,TEMP
CLEAR
WRITE 10,12,"Printing Roster"
SORT OFF
TOP
  REPLACE TEMP WITH "%E          ";
  ; "          ";
  ; "          ** NorthCoast Roster **"
  PRINT TEMP
  PRINT BLNK
SET LINE=134
PRINT ALL
SET LINE=80
  REPLACE TEMP WITH " %@"
  PRINT TEMP
CLEAR
RETURN
*
* Version 1.02
* PRSTR          Save as PRSTR/C
* ***** Print Roster 12/03/88
*
```

```
SET PAGE=000
CLEAR
LOCAL TEMP C 40
LOCAL BLNK C 1
WRITE 10,4,"Set Printer + press ENTER"
READ 10,30,TEMP
CLEAR
WRITE 10,12,"Printing Labels"
SORT ON ZP
TOP
WHILE .NOT. (EOF)
  REPLACE TEMP WITH "%E          ";
  ; "          Exp. Date " ; XP
  PRINT TEMP
  PRINT BLNK
  REPLACE TEMP WITH TRIM(FN) ; " ";
  ; MI ; " " ; LN
  PRINT TEMP
  PRINT SA
  REPLACE TEMP WITH TRIM(CT) ; " ";
  ; ST ; ". " ; ZP
  PRINT TEMP
  PRINT BLNK
  MOVE
ENDWHILE
```

```
CLEAR
RETURN
*
* LBL55          Save as LBL55/C 12/01/88
* ***** Prints all Labels
*
```

```
LOCAL SEL2 N 3 0
LOCAL MORE N 3 0
REPLACE MORE WITH 1
WHILE (MORE > 0)
  TOP
  DO DSK2.INFSCR2
  WRITE 19,6,"ENTER 1-5"
  READ 19,17,SEL2
  CLEAR
  WHILE (.NOT.(EOF)) .AND.;
    (NM <> SEL2)
  MOVE
ENDWHILE
IF (NM = SEL2)
  DO DSK2.DISPNA1
ENDIF
WRITE 6,6,"FIND MORE NAMES"
WRITE 8,6,"0 = No      1 = Yes"
READ 8,25,MORE
CLEAR
ENDWHILE
RETURN
*
* FNDPRNT1      Save as FNDPRNT1/C
* ***** 1:/29/88
*
```

**TI-BASE Tutorial 5.3**  
 NorthCoast 99'ers (C) Martin A. Saoley

\*\*\*\*\*

```

LOCAL TEMP1 C 40
LOCAL TEMP2 C 40
LOCAL TEMP3 C 40
LOCAL BLNK C 1
LOCAL ANS N 3 0
  CLEAR
  REPLACE TEMP1 WITH "LE          ";
  ; " Exp. Date " ; XP
  WRITE 10,3,TEMP1
  REPLACE TEMP2 WITH TRIM(FN) ; " ";
  ; MI ; " " ; LN
  WRITE 12,3,TEMP2
  WRITE 14,3,SA
  REPLACE TEMP3 WITH TRIM(CT) ; " ";
  ; ST ; ". " ; ZP
  WRITE 16,3,TEMP3
  WRITE 22,1,"  Number of Labels"
  READ 22,22,ANS
  WRITE 22,1,"          "
  IF ANS > 0
    DO DSK2.PR-LBLS1
  ENDIF
  CLEAR
  RETURN
  
```

```

* DISPNA1      Save as DISPNA1/C
* *****    11/29/88
*
*****
  
```

```

SET PAGE=000
SET LINE=80
WHILE (ANS > 0)
  WHILE (ANS > 0)
    PRINT TEMP1
    PRINT BLNK
    PRINT TEMP2
    PRINT SA
    PRINT TEMP3
    PRINT BLNK
    REPLACE ANS WITH ANS - 1
    WRITE 22,4,"  Labels To Go =",ANS
    WAIT 1
  WRITE 22,4,"          "
  ENDWHILE
  WRITE 22,4,"More? How many? "
  READ 22,22,ANS
  WRITE 22,4,"          "
  ENDWHILE
  
```

```

CLEAR
RETURN
*          Version 1.02 11/29/88
* PR-LBLS1  Save as PR-LBLS1/C
* ***** Multiple Label Print
*
*****
  
```

```

CLEAR
COLOR WHITE MAGENTA
WRITE 10,8,"DataBase should be open."
SORT OFF
TOP
EDIT
WRITE 10,8,"DataBase is not closed!"
COLOR WHITE DARK-BLUE
RETURN
*
* EDFL1          Save as EDFL1/C
* *****    EDIT A File 12/02/88
*
*****
  
```

```

CLEAR
COLOR WHITE MAGENTA
WRITE 10,8,"DataBase should be open."
SORT OFF
APPEND
WRITE 10,8,"DataBase is not closed!"
COLOR WHITE DARK-BLUE
RETURN
*
* APFL1          Save as APFL1/C
* *****    APPEND To 12/02/88
*
*****
  
```

```

SET TALK ON
CLOSE ALL
SET HEADING ON
SET RECNUM ON
COLOR WHITE MAGENTA
WAIT 5
CLEAR
DISPLAY STATUS
RETURN
*
* FIN1          Save as FIN1/C
* *****    Finish Program 11/10/88
*
*****
  
```

We have previously covered everything in this system. There are a couple of tricks that might be of interest. In INFSCR1 the WHILE loop will not accept a value less than zero or greater than 5, and in PR-LBLS1 there is a WHILE within a WHILE, and they both use the same variable (ANS). I have not typed in complete CFs. I used FunnelWeb to edit CFs we covered earlier, and I deleted and added some lines and then saved them under a new name. Read over the old tutorials. You will find it all there, with explanations. I searched for NM in the label CF, because it is the easiest and least confusing for the user. We created the NM field in tutorial 4. In January 1989 I plan on starting with the new features of TI-Base Version 2.0. I'm sure I will recover some of this old stuff in an effort to compare Ver. 1.02 with Ver. 2.0. If you're lost, don't despair. Keep those questions and tips coming in. And, I'd like to thank Jerry Keisler of the PARIS 99/4A UG. He gave me several good tips. THANKS JERRY.

Continued Next Year.



**TI-Base - TUTORIAL**  
**Extended Basic Background 2.1**  
**NorthCoast 99'ers**  
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```

100 ! ##### SML=>D/V80
101 ! Copyright 1988 By Martin A. Sooley
102 !
300 LNFL1$=""      ^ ^ :: FL1=15
310 FNFL2$=""      ^ ^ :: FL2=15
320 SAFL3$=""      ^ ^ :: FL3=25
330 CTFL4$=""      ^ ^ :: FL4=20
340 ZPFL5$=""      ^ ^ :: FL5=5
350 PHFL6$=""      ^ ^ :: FL6=12
360 XPFL7$=""      ^ ^ :: FL7=5
500 OPEN #1:"DSK6.NOCOTEST",INTERNAL,FIXED 150,INPUT
600 OPEN #2:"DSK6.NOCO-TIBX",DISPLAY ,VARIABLE 80,OUTPUT
990 C=0
1000 IF EOF(1)THEN CLOSE #1 :: CLOSE #2 :: STOP
1100 IF C<1 THEN INPUT #1:N
1110 C=C+1
1200 INPUT #1:LN$,FN$,CH$,SA$,CT$,ZP$,PH$,XP$
1280 CALL CLEAR
1290 IF C<2 THEN PRINT "  ":N: : :
1400 IF C>0 AND C<10 THEN NM$="+00"&STR$(C)
1410 IF C>9 AND C<100 THEN NM$="+0"&STR$(C)
1420 IF C>99 THEN NM$="+"&STR$(C)
1500 SF=LEN(LN$):: IF SF>=FL1 THEN SF=FL1
1510 LNT$=SEG$(LN$,1,FL1)&SEG$(LNFL1$,SF+1,FL1-SF)
1600 SF=LEN(FN$):: IF SF>=FL2 THEN SF=FL2
1610 FNT$=SEG$(FN$,1,FL2)&SEG$(FNFL2$,SF+1,FL2-SF)
1710 MIT$="^^^" ! ##### Create new space for MI
1800 SF=LEN(SA$):: IF SF>=FL3 THEN SF=FL3
1810 SAT$=SEG$(SA$,1,FL3)&SEG$(SAFL3$,SF+1,FL3-SF)
1900 SF=LEN(CT$):: IF SF>=FL4 THEN SF=FL4
1910 CTT$=SEG$(CT$,1,FL4)&SEG$(CTFL4$,SF+1,FL4-SF)
2010 STT$="OH" ! ##### Create space and fill with OH
2100 SF=LEN(ZP$):: IF SF>=FL5 THEN SF=FL5
2110 ZPT$=SEG$(ZP$,1,FL5)&SEG$(ZPFL5$,SF+1,FL5-SF)
2200 SF=LEN(PH$):: IF SF>=FL6 THEN SF=FL6
2210 PHT$=SEG$(PH$,1,FL6)&SEG$(PHFL6$,SF+1,FL6-SF)
2300 SF=LEN(XP$):: IF SF>=FL7 THEN SF=FL7
2310 XPT$=SEG$(XP$,1,FL7)&SEG$(XPFL7$,SF+1,FL7-SF)
2410 GPT$="NOCO^" ! ##### Create space and fill with NOCO^
2510 IDT$=""      ^ ^ ! ##### Create space for ID number
2990 PRINT NM$:LNT$:FNT$:MIT$:SAT$:CTT$:STT$:ZPT$:PHT$:XPT$:GPT$:IDT$
4000 PRINT #2:NM$:LNT$:FNT$:MIT$:SAT$:CTT$:STT$:ZPT$:PHT$:XPT$:GPT$:IDT$
4500 GOTO 1000
5000 CLOSE #1 :: CLOSE #2
5050 ! SAVE DSK6.SML=>D/V80
5550 END

```

fill in our new file. For example in line 300, LNFL1\$ is filled with 15 characters. It starts with a circumflex, then there are 13 spaces and last another circumflex. This is the length I want LN to end up with in the new database. The circumflexes will not allow XBasic to collapse the file. FL1=15, is the length of this field. I set this up at the beginning of 5M so I could make changes by adding spaces and changing FL1. This will then change those variables where ever they are used in the rest of 5M.

See Next Page.

**NOCO-TIBX**

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**TI-Base - TUTORIAL**  
**Extended Basic Background 2.2**  
**NorthCoast 99'ers**  
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"Remember, this is an XBasic article. We'll get back to TI-Base later." Lines 500 and 600 open our disk files. Line 990 creates C and puts 0 into it. Line 1000 will check to see if we have reached the end of NOCOTEST. If you recall, the old program saved the number of records as the first item in the data file. Line 1100 pulls that number out, and thus gets it out of our way, so we can read the important data. Line 1100 only executes once, because this is the only time C will be less than 1, as you can see by line 1110. Line 1200 reads or inputs 1 complete record, Last Name, First Name, etc. Next the screen is CLEARed and N, or the number of records, is printed on the screen. Line 1290 is also only executed once. Line 1400 combines "+00" and C together as long as C is from 1 to 9. Line 1410 combines "+0" and C together as long as C is from 10 to 99, and 1420 combines "+" and C from 100 to 999. This is strictly a demonstration of how to add a plus sign and leading zeros. As you will see later, it is of no real value to what we are doing. Lines 1500 and 1510 are important. SF=LEN(LN\$) tells XBasic to find the length of LN\$, the Last Name, and place that value in SF. The next part of that line says, IF SF is greater than or equal to FL1 THEN make sure they are equal to each other. NOTE: IF SF is not greater than or equal to FL1 then it will be left whatever it is (Not Changed). Remember FL1=15, from line 300. Now the biggie, line 1510. SEG\$(LN\$,1,FL1) is quite confusing for no reason. It says, take LN\$ and extract the character from number 1 through FL1, which is 15. In most cases the length is longer than we need, but trailing spaces will be thrown out by XBasic anyway. I did this because some of my variables were longer than the allotted space. SEE +006 >Mentor-on-the-Lake OK, for an example. SEG\$(FNL\$,SF+1,FL1-SF) is tough but it works. It says, take the blank line with circumflexes on each end, that we created in line 300, and extract characters starting with the length of LN\$+1 (SF), and continue to the end. The length to the end from that point would be FL1-SF. We're still on line 1510. Now, the & in the middle of the line says put those two oddball pieces together into one string, and last, put it all into LNT\$. "Like I said, it does work." FYI: The experienced programmers out there will look at some of these routines and say, "Wow, this guy is really sloppy". That's true, but if I kept refining these things until they were great, it would take all year for one article and the people who needed help wouldn't get it. Lines 1710, 2010, 2410 and 2510 all create space that didn't exist previously. They also put something in that space to make sure the size of the space remains constant. Line 2990 prints what we have created to the screen and line 4000 prints it to the new data file (NOCO-TIBX). Line 4500 loops back to line 1000 until there is no data left in NOCOTEST, and the program actually ends with the STOP in line 1000. Line 5050 is a trick I use. If you edit a lot, saving a program with a long and intricate name can be troublesome. And SML=>D/V80 is one of those. I place this line near the end of my program with a line number that is easy to remember. 5050 is pretty good. When I want to resave the program because of editing changes, I enter this. 5050 <FCTN X>, <ENTER>, <FCTN 8>, Press <FCTN 2> (Delete), until the line number and the ! have been deleted and all that is left is SAVE

DSKx.SML=>D/V/80, and press <ENTER> to save the program. As long as I'm doing tips and tricks, I'll keep going. We have created NOCO-TIBX which can be loaded into FunnelWeb's editor. I loaded it to do a lot of editing. All of my old files were entered in upper case only, like +006 JONES, QUINCY W., etc. I wanted to change that first. In FunnelWeb you can place the cursor on any character, and pressing <CTRL and period> will change that character to lower case. CTRL and semicolon will change it to upper case. This process will auto-repeat to do a complete word or sentence. This trick really helped me a lot. Next, I retyped some middle initials in the space below the first name. Then I spaced over the middle initials located after the first name. This brings up a point. When editing this type of file always press CTRL zero to get out of wordwrap mode. If you accidentally reformat this thing you'll be amazed at the garbage that is produced. If you want to remove something, space over it, do not delete it. If you must delete something like the I in LAINE, you must then move to the end of that item and add an equal number of spaces to return the circumflex to the proper length position. The circumflexes will hold our field length, much the way the tabs did at the bottom of page 1.1 last month. The O at the end of Mentor-on-the-Lake O is where the circumflex should be, because that field was longer than the allocated space. You can replace it with a circumflex or leave it, we'll chop it off later. If you edit your file, as I have, do not save it, but print it to disk. Type <FCTN 9>, then <PF>, and then DSK1.NOCO-TIBX, instead of PID or RS232. This will keep FunnelWeb from putting those trailing characters in the file which will cause trouble for us later. And now that that file is taken care of and printed to a disk file, let's get to the next program. The program is "D/V=>I/FX", as listed below.

```

100 ! ##### D/V=>I/FX
101 ! Copyright 1988 By Martin A. Smoley
500 OPEN #1:"DSK1.NOCO-TIBX",DISPLAY ,VARIABLE 80,INPUT
600 OPEN #2:"DSK1.NOCO-I/FX",INTERNAL,FIXED 150,OUTPUT
700 OPEN #9:"PID",VARIABLE 136 :: PRINT #9:CHR$(15)
800 ON ERROR 5000
1000 IF EOF(1)THEN CLOSE #1 :: CLOSE #2 :: STOP
2000 INPUT #1:NM$
2010 INPUT #1:LN$
2020 INPUT #1:FN$
2030 INPUT #1:MI$
2040 INPUT #1:SA$
2050 INPUT #1:CT$
2060 INPUT #1:ST$
2070 INPUT #1:ZP$
2080 INPUT #1:PH$
2090 INPUT #1:XP$
2100 INPUT #1:GP$
2110 INPUT #1:ID$
2300 XPT$=SEG$(XP$,4,2)&"/"&SEG$(XP$,1,2)
2500 P$=NM$&LN$&FN$&MI$&SA$&CT$&ST$&ZP$&PH$&XPT$&GP$&ID$
3000 PRINT #9:P$
3500 PRINT #2:P$
4000 GOTO 1000
5000 CLOSE #1 :: CLOSE #2
5010 ! ##### D/V=>I/FX
5050 ! SAVE DSK6.D/V=>I/FX
5500 END

```

See Next Page.



**TI-Base - TUTORIAL**  
**Extended Basic Background 2.3**  
**NortCoast 99'ers**  
**Copyright 1988 By Martin A. Sooley**

D/V=>I/FX should be a snap for you by this time. First, you need to have your printer turned on for this one. In lines 500, 600 and 700 we are going to open NOCO-TIBX, our D/V 80 file, and NOCO-I/FX, a new I/F 150 file, and the printer. Line 800 is just a safety device that closes everything in case something goes wrong. Line 1000 checks for the EOF in NOCO-TIBX, and lines 2000 through 2110 read or input each of the string variables we printed out in line 4000 in 5M. At last! line 2300. Line 2300 is a much better example of SEG\$(X\$,x,x). Take a look at the expiration dates in NOCO-TIBX on the last page. They are month-year (02-89). This does not sort well. I want them to be year/month (89/02). We just input XP\$ in line 2090, this is a good time to make the change. Remember XP\$ contains 02-89. It is 5 characters in length. In 2300, SEG\$(XP\$,4,2) is saying take XP\$ and starting with character 4, pull out 2 characters. In other words pull out characters 4 and 5, or (89). Because this is to the left side of that total group, within line 2300, it will become the left part of our new variable. In that line we are also saying SEG\$(XP\$,1,2). This means extract 2 characters from XP\$, starting with character 1, or (02). This will wind up on the right side of our new variable. We are not taking out character 3 (-). Now, we take the piece on the left (89), stick it together with a new piece for the middle (/), and stick those together with the new piece on the right (02), and put the whole thing (89/02) into XPT\$. I hope you get this, because this example is pretty clean and straightforward. In line 2500 we are putting all of our string variables together, into one long string variable. The reason for this is to eliminate the hidden length character XBasic places at the beginning of every variable it outputs to a disk file. We will still have one length character at the beginning of P\$ that we must allow for. I have printed the new I/F 150 file named NOCO-I/FX at the bottom of this page. The only thing that you don't see is a "u" just before the plus sign at the beginning of each line. The "u" stands for a length of 117. You will notice that the circumflexes hold the spacing we will need for the TI-Base CONVERT function. This is where we move into the area of TI-Base Version 2.0. We have run the XBasic program named D/V=>I/FX and it has both printed a listing like the one at the bottom of this page and created a disk file named NOCO-I/FX. Use your disk manager to copy NOCO-I/FX to the disk you will use for your TIB DATDISK. Your next step is to load TI-Base Version 2.0. With NOCO-I/FX on the DATDIST type:

**CONVERT NOCO-I/FX NC-DB9 GO <E>**

This will throw you into TIBs CREATE screen. At that point you should enter all the information at the top of the next column. You are CREATEing the database for TIB to pull NOCO-I/FX into.

arrows to move, enter to advance  
**FIELD DESCRIPTOR TYPE WIDTH DEC**

| FIELD | DESCRIPTOR | TYPE | WIDTH | DEC |
|-------|------------|------|-------|-----|
| 1     | NM         | C    | 5     |     |
| 2     | LN         | C    | 15    |     |
| 3     | FN         | C    | 15    |     |
| 4     | MI         | C    | 2     |     |
| 5     | SA         | C    | 25    |     |
| 6     | CT         | C    | 20    |     |
| 7     | ST         | C    | 2     |     |
| 8     | ZP         | C    | 5     |     |
| 9     | PH         | C    | 12    |     |
| 10    | XP         | C    | 5     |     |
| 11    | GP         | C    | 5     |     |
| 12    | ID         | N    | 7     | 0   |

[ NC-DB9 STRUCTURE ]

Notice that NM has a length of 5. We need one more space in NM then we can see columns for it at the bottom of the page. +001 is 4 columns, so we make NM 5 columns as above. The first field is the only one that must accept an extra character. The rest of the fields will be whatever we made them back in 5M. When the last item in row 12 has been entered press <FCTN 8> and TIB will do the rest for you. TIB will (by brute force), chop up NOCO-I/FX into the fields you requested, and jam the pieces into NC-DB9. The trouble is when it's done you can't use the database as is. Before anything else, you must type USE NC-DB9 <E>, and right after it looks like TIB has opened the database for you, type RECOVER <E>. After TIB has RECOVERed the file you will be able to USE NC-DB9 as a normal database. You can use EDIT to look around in NC-DB9, but it's not bother to change anything because we still have to run it through a COMMAND FILE to clean it up a bit. The two CFs are listed on the next page. MOVEML1 and MOVEML2 are modified versions of MOVED1 and MOVED2 from Tutorial 4. I started with those CFs and added lines to get the end result I wanted. Place the DB named NEWNAMES, from last month on your DATDISK and DO CLEAR to empty it. When MOVEML1 is executed, it, along with MOVEML2, will copy NC-DB9 to NEWNAMES and make a bunch of changes. Here are a couple of important highlights. In MOVEML1 we create a bunch of LOCALs to match fields in NC-DB9 that can have the circumflex chopped off the end. We make these variables one character shorter than their matching fields. Therefore, REPLACE LNT WITH 1.LN will chop off the last character no matter what it is (15 CHARS =>INTD=> 14 CHARS). The next line, REPLACE 2.LN WITH LNT, will copy LNT to the new database, NEWNAMES; however, the fieldlength is 15 again so a space will be added to the end of LN, (14 CHARS =>INTD=> 15 CHARS). We have managed to chop off most of the circumflexes and replace the with blank spaces. As you should be able to see, we have thrown away the NM field and REPLACE it with a completely new number, NUMT. Remember, these tutorials are to teach you, so you can write CFs of your own, not do everything for you.

|                  |                  |                        |                     |                                 |   |
|------------------|------------------|------------------------|---------------------|---------------------------------|---|
| +001Smoley       | ^Martin          | ^A.6149 Bryson Drive   | ^Mentor             | ^DH44060216-257-166189/02NOCO^^ | ^ |
| +002Whitman      | ^Raymond (Sliam) | ^^2574 East 254th.     | ^Eastlake OH.       | ^DH44094951-2345 ^88/09NOCO^^   | ^ |
| +003Aardvark     | ^Grant           | ^E.9995 State Rt. 84   | ^Geneva             | ^DH440141-465-9876 ^88/02NOCO^^ | ^ |
| +004Aardvark     | ^Willard         | ^^No Newsletter        | ^^                  | ^DH^ ^1-465-7689 ^88/09NOCO^^   | ^ |
| +005Vivannovitch | ^Elexxie         | ^^111 E. 98th. St.     | ^Cleveland          | ^DH91023541-5415 ^88/05NOCO^^   | ^ |
| +006Jones        | ^Quincy          | ^W.37285 Burgandy Lane | ^Mentor-on-the-Lake | OOH44060257-1029 ^88/08NOCO^^   | ^ |

See  
 Next  
 Page.



The value of our newsletter is becoming greater as each day goes by. Not only is it the BEST source of up-to-date information on the TI-99/4A, but our newsletter provides us with a source of reference material that isn't equaled anywhere else! Not only can we boast of having a super user group publication, but we also have a software library which, as I am finding out, is so extensive that I seriously doubt that I will ever exhaust its content! Getting back to our newsletter. I know that you aren't interested in EVERYTHING that appears in each issue. But sooner-or-later a question will crop up and the un-interesting article that appeared three or four months ago suddenly becomes very interesting. The problem is coming up with the back issue that had mysteriously disappeared.

In an effort to alleviate this situation, I have started a master CLEVELAND AREA 99/4A USER GROUP newsletter album. This album, or eventually volumes, will be available to the TI-Chips members for individual issue copying. Mark McCauley has volunteered his back issues to be copied and placed in the album. Our thanks to Mark for his kind offer. This is yet another sample of the service we are more than happy to provide our membership!

I have one more item for those of us who have some skill with a pencil soldering iron. I've been suffering with system lock-ups with both my EXTENDED BASIC cartridge and DataBiotics' MINIWRIter II+. It's the epitome of frustration to have 30 to 60 minutes of work GO DOWN THE DRAIN just because the Navarone CARTRIDGE EXPANDER (the WIDGET) or the cartridges I have plugged in were bumped (touched).

I've read articles on installing Extended Basic in the console, putting "feet" on the Widget and even devising an extension cable to get the Widget or cartridges out of the way. Any of these ideas will work. However 99'ers, I'd like to report on what I did to solve this miserable problem.

The first thing I did was to think, "Just what is causing these ~~99~~ lock-ups?", and the answer was fairly simple. Obviously it was the lousy card edge contacts and socket. This is no great news break in that this problem has been written up many times before, the difference is in the way I reasoned it out. I asked, "Why go through all the trouble of disassembling my 99/4A, constructing "feet" for the Widget or creating a special cable?" Why not go directly to the root of the problem and correct that?

The "root" in question is, as I said, lies mainly in the card-edge contacts with the edge connector. I don't know whether it's wear and tear on the contacts, the spring tension clip connectors or a combination of both! The obvious answer to me was to increase the gripping power of the connector on the card-edge contacts. Remember 99'ers, this system relies on THIRTY-SIX SIMULTANEOUSLY PERFECT contacts to operate properly!

Therefore what I did was to remove the circuit card from my Widget, and clean all edge contacts with very fine steel wool and rubbing alcohol. (It didn't take very much LIGHT wiping with the steel wool to remove any surface oxidation.) After which I proceeded to apply a VERY SMALL amount of Resin Flux to each contact and a TINY DAB of Resin Core solder to the tip of my pencil soldering iron. I then LIGHTLY touched each edge contact with the pre-wetted

soldering iron to apply the VERY SMALLEST amount of solder. I continued to pre-wet the soldering iron with solder as needed for each contact.

After all contacts were LIGHTLY wetted with a SMALL bead of solder, I then LIGHTLY wiped each contact, from rear to tip, with the soldering iron to provide a UNIFORM, THIN coating of solder that would fit SNUGGLY into the edge connector. If this isn't done then the result is an interference fit that won't allow the card to be inserted into the socket.

Now came the time for "housekeeping". All this entails is cleaning the soldered contacts with alcohol, LIGHTLY scraping the area between the contacts and the leading edge of the card clean, re-assembling the Widget and inserting the now snug fitting card edge into the GROM connector. At this time I reasoned that if this works with the Widget, then why not modify my cartridges in the same way? Well 99'ers I did just that, and I'm delighted to report that I haven't experienced a lock-up since!

Now I realize that with all that has been written on this subject, I could well be "RE-INVENTING THE WHEEL." However, please understand that, like many others, I have not had the opportunity to read everything that has been written for the TI-99/4A. This is why I've started a newsletter album for the TI-Chips. "There's gold in them thar news-letters." All we need is a way to find it!

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A REVIEW OF EZ-KEYS PLUS  
BY STEVE WEINKHAMER, NORTHCOAST 99er's

Without a doubt, EZ-KEYS PLUS is probably the most revolutionary and versatile tool in the Extended Basic programmer's hands. Because it runs transparently behind any IBASIC program and some A/L programs, many of its utilities and subroutines, as well as its macro capabilities, can be used extensively with most application programs.

EZ-KEYS PLUS has evolved from the original EZ-KEYS program, which hit the general marketplace in the fall of 1987. Written by Harry Wilhelm and marketed by Asgard Software, the disk sells for a paltry \$14.95. Requirements for use are: IB, one ss/sd drive, and 32k memory. A printer is optional, but a definite advantage.

The central thrust of EZ-KEYS PLUS is its ability to let the user define and use "macros", which are combinations of keystrokes assigned to a single key. For example, you could define "CTRL Q" as "CALL CLEAR", so that every-time you wanted to clear the screen, or include that command in a program you are writing, you would hit "CTRL Q" and the CALL CLEAR command would be executed. You could do this in the immediate mode, or use it as a command in a program line, if it followed a line number. I'll go into more detail regarding macros and give some examples later.

EZ-KEYS PLUS has several built in assembly subroutines, that aid in writing or typing in an IBASIC program. The following is a list, with their parameters, and a short explanation of each.

CALL LINK("COLORS", foreground, background, editor foreground, editor background, special foreground, special background) sets screen colors which using EZ-KEYS PLUS. The first 2 parameters set the screen colors in the IBASIC programming mode. The next 2 set the colors in the Macro Editor (more on the Macro Editor later), and the third pair sets the colors of special characters and symbols found in



the Macro Editor.

CALL LINK("HILITE", foreground, background) changes the colors of numbers and mathematical operators signs. Black and white are reversed in color, so that these symbols stand out better on the screen. This could be helpful in debugging a program; for example perhaps an "i" was mistakenly used for "l", or an "0" used for an "O".

CALL LINK("RCOLOR") sets all character sets to the same color when a program is running.

CALL LINK("EZKEYS") turns Easy Keys Plus on

CALL LINK("OFF") turns Easy Keys Plus off

CALL LINK("SUMON"). This could be a very useful and important tool to anyone publishing an IBASIC program. Some of you are probably familiar with Tom Freeman's "Checksum" program used by Micropendium in its program listings. It is a utility that appends a number after each program line in a listing. This number is then compared with a number that appears after the program line that you have just entered. If the numbers agree, then the line was entered as published without error. It also allows generation of checksums with your own programs. A fantastic boon when typing in programs.

CALL LINK("DSKCAT") catalogs a disk.

CALL LINK("DUMP") dumps the screen to a printer. Can also be invoked by hitting the PCTN- key.

CALL LINK("SVSCRN", "DSKx.FILENAME") allows you to save an entire screen to the designated disk. For creating help screens for a program, without sacrificing program memory.

CALL LINK("LDSCRN", "DSKx.FILENAME") recalls screen previously saved with SVSCRN.

CALL LINK("PSE"). This command has limited use, in my opinion, but interesting nonetheless. If preparing a help screen, for instance, with this command invoked, you have full screen control of the cursor, as in the TI-Writer editor. Use with the SVSCRN command.

CALL LINK("SVFONT", "DSKx.FILENAME") loads custom fonts. This subprogram can lead to hours of fun and enjoyment. When used in conjunction with another program included on the EZ-KEYS PLUS disk, called CHARDEF, custom type fonts can be designed and edited. Then, when you run a program, the new font will be used.

CALL LINK("LDFONT", "DSKx.FILENAME") loads previously defined fonts for use in a running program.

CALL LINK("AUTO", time interval) allows automatic backup, from 1 to 18 "minutes", of programs you are working on. A value of 0 turns feature off. This is a macro definition assigned to the PCTN- and PCTN+ keys. The program will be saved alternately to any configuration you have assigned to these keys, but is defaulted as DSK1.BACKUP1, and DSK1.BACKUP2. The time intervals are actually based upon a clock interrupt and not on real time. This feature is nice for those of us who forget to routinely save our work in case of power failure or lockup. (a time of 5 works great).

As mentioned earlier, EZ-KEYS PLUS lets the user create macro definitions and assign them to any one of 55 available keys. Each macro can be up to 669 keystrokes long, and include the arrow keys, insert, delete, and other special function keys such as the ENTER key. Also, a macro can call another macro or call itself (similar to LOGO's recursive feature).

To define a macro, the PCTN 5 key is pressed, which puts the user into the macro editor mode. A list of the currently defined keys is then displayed. To define, or edit an existing key, simply press the key desired. A new

screen is displayed and the macro key is shown at the upper left. Keystroke entry should be entered in the same order in which the IBASIC interpreter will receive them, so some thought and experimentation may be necessary to achieve the desired results until you become familiar with the conventions of EZ-KEYS PLUS. Special symbols are displayed on the screen to represent the special function keys. The possibilities of macros and their tremendous power are limited only by the user's imagination.

One of the nicer features of EZ-KEYS PLUS is its cursor control feature. You now have control of the cursor within each programming line or macro definition. The keys and their redefined functions are as follows:

CTRL E moves the cursor up one screen line

CTRL X moves the cursor down one screen line

CTRL 6 moves the cursor to the beginning of the line being edited

CTRL 3 erases everything to the right of the cursor

CTRL 9 erases everything to the left of the cursor

The cursor can now be moved to the beginning of a program line and then be moved all the way to the left in order to edit line numbers, without having to hit the "REDO" key. (These features alone make the program more worth the price!)

Here's a few examples of macros and how they work. Have you ever typed in a program that was full of repetitious CALL commands, such as CALL LOAD? You can define a key using the following keystrokes: CALL LOAD() ct5 ct2. (Where the "ct" symbol means use the CTRL key, followed by the respective alpha key.) This macro says: put the words CALL LOAD, followed by the parentheses on the screen. Back the cursor up one space, go into the insert mode and insert the numeric information you now type in.

You can define a key (for instance CTRL Y) to run a program simply by typing in its name and hitting the CTRL key: ct7 " ct6 ct2 RUN "DSK1. en (Where "en" represents the enter key.) This means the following during execution: First type in the filename. Move cursor to end of line, put the quotation mark there, return cursor to beginning of line, go to insert mode, put the words RUN "DSK1. there, then execute the enter command. There are several other ways to achieve the same results, but for ease of explanation, I have used these. As you can see, the power and versatility of macros is staggering.

A spinoff of the use of macros is what the developer of EZ-KEYS PLUS calls "progllets". In IBASIC, you can write short, one-line statements in the command mode. For instance, the statement: FOR I=11 TO 110::PRINT I::NEXT I will print the number 1-10 on the screen. It is good for only a one-time execution, (unless the redo key is hit), can neither be entered into memory, nor be saved. Although mundane, this is an example of a progllet. Let's take this approach one step further. Suppose that you needed to find the square roots of different numbers. The following will do just that: ct6ct2PRINT SQR(ct7)en. Translated this means that after entering the number you need to find the square root of: send the cursor to beginning of line, go to insert mode, insert the words PRINT SQR(, go to end of line, close parentheses and hit enter key. There are several examples of progllets in the EZ-KEYS PLUS manual such as ones that convert hex to decimal and vice versa, and a short DV/80 file reader, to name a few. Here again, you are limited only by your imagination in the use of progllets.

Finally, a set of utilities is available in a menu driven IBASIC program package:



1. **SAVE CURRENT EZ-KEYS** lets you save all macro definitions, screen column configurations, customized applications programs (remember that you can run EZ-KEYS PLUS transparently behind any IBASIC program!). Also any additional A/L subroutines saved in low memory from >2000 to >3FFF are saved. Follow screen prompts.

2. **MACRO DEFINITION TO DV80 FILE** allows transfer of macros to disk for use in another EZ-KEYS PLUS application program, or assignment to another key. NOTE: EZ-KEYS PLUS is unprotected, and custom versions can be made ad infinitum for any special purpose you have.

3. **DV80 FILE TO MACRO DEFINITION** is for assigning a DV80 file to a key, used with #2 above.

4. **MACRO DEFINITIONS TO PRINTER** allows printout of currently defined macros and the respective keys.

5. **DISK CATALOG** prints out a catalog of disk content.

6. **COMBINE EZ-KEYS + A/L SUBS** allows you to add EZ-KEYS PLUS to A/L subroutines that have already been loaded, usually within an application program. Because of where EZ-KEYS PLUS resides in memory, however, it cannot be used with such programs as PRBASE or Funnelweb.

7. **PRINTER SPECS/SCREEN DUMP** configures printer name and line spacing for screen dump. Again, follow on-screen prompts.

8. **REDEFINE CURSOR** allows redefinition of cursor shape. EZ-KEYS PLUS comes with a cursor the shape of Texas.

9. **SET SCREEN COLORS** is the same as the CALL LINK("COLORS") subprogram, but easier to use.

EZ-KEYS PLUS is a fantastic program in every way. I rate it an A+. Like any powerful utility program, experimentation and time will be required to reap it's full possibilities. The only fault I can find with it is that the manual leaves a little bit to be desired, and I would only rate it as a "C+". I was fortunate enough to have purchased the earlier version of EZ-KEYS and between the two manuals, I was able to fill some of the gaps left in the updated version.

Asgard Publishing periodically sends out a free newsletter to registered users of EZ-KEYS PLUS that goes into some detail of the workings and applications of the program. (As of 11/88 there have been 2 newsletters published.) These newsletters are kind of like mini addendums to the program, so they are very helpful in clearing up muddy points to the user.

This belongs in everyone's library.

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### PLUS! TUTORIAL

#### C6 Command

By Paul Newmeyer - NorthCoast 99ers - Cleveland, Ohio

Several months ago I demoed the great PLUS! disk put out by Jack Sughrue. I sincerely appreciate this disk and not only enjoy using it, but also find it extremely useful. However, I feel that some of you may be scared off from it because it seems to complicated to master.

Permit me to encourage you not to be overwhelmed by this disk. Once you get the hang of it, you will discover that it's unleashed power will simplify using the potential in TI-Writer (or Funnelweb). Let's use Funnelweb as the tool for this article. With that in mind, let's take one step at a time, and I'll attempt to write a few tutorials to guide you.

Before going any farther, make a backup copy of PLUS! I

suggest you make your private system disk, by combining

the necessary files from Funnelweb and PLUS! If you need help with this, contact me, and I'll give you some guidelines. If you have a double sided drive, you can do this much easier.

I suggest you fire up your computer and follow along. I'll give you the bouncing ball and you join me in actually doing what I describe. Please don't read this article in the car while waiting for your wife to buy groceries. If you do, You'll drop it in confusion. You must do what I describe, as you read it, or you'll surely fail to appreciate this utility.

Let's start with the C6 command. That probably sounds like Greek to most of you, and you say, "What the heck is a C6 command?" Good question!

I'll try to answer that, but first load in your Funnelweb Writer, and go to Editor mode. In this mode type LF and press enter. Then put the PLUS! disk in drive 1 (if you have two drives, you can put the Funnelweb disk in drive 1 and the PLUS! disk in drive 2, or make a disk with both on it).

Next enter DSK1.C4. This will load codes for printing term papers. When I examined these codes, I found that they were helpful, but didn't quite suit my needs, so I augmented the codes for what I wanted. So, let's do that. Since I wanted the page numbers at the top instead of the bottom, I replaced the name "Sughrue" with a "%" sign, and removed the ".PO" code. The "%" sign tells the printer to automatically number your pages at the spot of the sign. The ".PO" symbol tells the printer to place something as a footer on the page.

I want to add a command which will limit my page length to 60 lines, so to do this, I type ".PL 60" where the ".PO" command used to be. Since I don't want a double spaced paper, I now remove the ".LS 2" command.

What am I trying to say? Simply this--make any changes here you wish, or type your own set of ".TL" commands, and you can have at your quick disposal your most used printer control commands. This will make printing a lot easier and quicker.

Now that we have our commands typed in the way we want them, save them to the PLUS! disk by entering SP, then "DSK1.C6". On the original PLUS! disk, C6 file was left open for this very purpose, to save your personally designed commands.

From this point on, you can use this set of commands each time you fire up your Funnelweb program. Here are the steps to use this C6 coding.

Suppose you want to write an article. Go to Editor mode and enter LF. Then enter "DSK1.C6". This automatically places ".IF DSK1.C6" on the first line of your text. Now, go ahead and type your paper, article, or whatever, using the .TL codes as you need to (see the .TL reference sheet in the PLUS! documentation; keep it by your printer at all times). Finally save the text by hitting FCTN. Back, putting in your file work disk, entering SP, and finally entering "DSK!.xxx".

Now, with the Funnelweb disk in drive 1, go to the Formatter, put the file disk in drive 1 and enter your file. Then put the PLUS! disk in drive 1 and enter all the prompts. The .IF command will automatically merge in the codes and execute the commands.

About now you are scratching your head and moaning, "That's too complicated." Now just settle down; I warned you

not to read this while waiting for your wife to shop. It isn't that confusing when you key it in.

This will work with a single drive system, multiple drive system, or a ram disk system. A single drive system takes a little more disk exchanging, but it's still worth it.

Another nice feature that you will notice when using this method is the single screen typing. No more screen jumping of text. What you see is what you get.

Here's another tip: you can keep the line numbers on your screen if you wish, but they take up space and hide some of your typing from being on one screen. To solve this, hit FCTN 0; it will toggle the line numbers on and off.

Thanks, Jack, for making this all so easy and convenient for us users.

We'll continue with these tutorials. If you have questions regarding PLUS!!'s use, drop me a note, and I'll try to incorporate them into an upcoming article.

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#### EDITORIAL COMMENTS - DEANNA

Just a couple of quickies as the new year starts. As you can see, I had LOTS of good articles from our people to fill this newsletter. I MUST be the envy of every newsletter editor in the TI world. Thanks to all our

regular and some-time contributors who come to me with experiences they would like to share with other Tiers. After all, that is really ALL a newsletter article is. Paul Newmeyer, who did the excellent PORTH articles is now starting a series on PLUS!. Only YOU can bring back C.T.TIBS. It is rather frustrating to try to bring info to you without any feedback and C.T. feels the ball is in your hands and all you have to do is throw it, and he will be back. I feel good about the immediate future of our local clubs and again would like to thank all who have been so generous with their time and help since I have been involved. If you read the agonizing pleas in other newsletters for contributions and participation by members, you will realize that we are truly blessed in the Cleveland area and have a good base to keep us going for several years to come. I made the remark in my demo at the last NorthCoast meeting that I think I enjoy my TI so much is because I am continually amazed at how much I can get from so little when you compare the memory available, speed, etc., to the machines being manufactured and marketed today. The fact that I can still accomplish practically anything I want on my TI that I can on my Leading Edge says something. Believe me, I will be one of the "last" ones to go from the TI world. Here's to another great year for our little machine and the family we have created within our two local U6's.

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CHECK YOUR EXPIRATION DATE.  
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**!! TIME DATED MATERIAL !!**