

west pepi

VOLUME 1 NUMBER 4

MARCH 1997



TURNING PRINTERS INTO

BY Ed Machonis

Ed Mandich handed me this artical from the QB-99'er newsletter and I thought that it may be of interest to those that didn't read the artical. I am always looking for short cuts.

>ARTICAL< There are often times when we just want to type a short note or letter and rather than load in a full blown word processing program, we settle for writing it out with such low tech implements as pen and pencles.

It is very easy to turn your printer into an electric typewriter. Four lines of basic code will do it.

- 1 OPEN #1:"PIO"
- 2 INPUT AS
- 3 PRINT #1:A\$
- 4 GOTO 2

This program enables the user to type a line of text, edit it as desired, and then print it by hitting the enter key.

Whenever a line of text is to be indented or contains a comma,

that line must begin and end with a quotation mark ("). The quotes will not be printed nor will they be counted in the with of the line of text. To skip a line just hit enter.

This program allows sending print codes directly to an RX-80 printer provided they are in the same form as in the previously described RX-80 program. (i.e.), CHR\$(27) = CONTROLLPERIOD) pressing CONTROL PERIOD. then and then <ENTER>, SHIFT E, print control code for emphasized type is sent to the RX-80 printer. of corse, Other codes. sent in the same maner.

By adding a few more lines, the program can be more useful. can require an input as to printed maximum line width to be and use this information to set equal right and left margins. check has been added to insure that the maximum line width is not exceeded and it includes a promped to display what a overly long line can be shortened to. instruction have also been added. The expanded 10 line basic program looks like this....

CONTINUED PAGE 4.

WEST PENN 99'ERS CLUB INFO

Next Meeting Date:

March 18, 1997

Meeting Location:

Penns Woods Civic Association

Just off Route 30

N. Huntingdon, Pa

Time of Meeting:

7: P.M.

GENERAL ITINERARY OF OUR CLUB'S MEETING

6:45	P.M.	Ooors Open
7:00	P.M.	Genrral Meeting
7:45	P.M.	Demos and New Info
8:45	P.M.	Questions and Answers
9:30	P.M.	One on One Help
10:00	P.M.	Socializing
10:00	P.M.	Doors Close

MEETING HIGHLIGHTS FOR THIS MONTH

	River Rescue		**
On This I have been the former of the former	Address & Envelope BaseDer		
upen intrest	Open IntrestDe	wo pā	Anyone

LIST OF WEST PENN OFFICERS FOR 1997

President:	Paul Brock	412-478-2754
Vice-President:	∹Norm Rokke	514-264-6442
Treasurer:	Ed Mandich	412-824-5566
Recording Secretary:	Paul Brock	412-478-2754
Corresponding Secretary:	Paul Brock	412-478-2754
Librarian:	Mickey Cendroski	412-265-5201
Newsletter Editor:	Paul Brock	412-478-2754
Assistant Editor:	Paul Brock	412-478-2754



The West Penn 99'ers Users Group is a Non-Profit organization, dedicated to encouraging the continued use of the II-99/4A home computer.

Our Membership Fee is:

* \$15.00 per year for an INDIVIDUAL / FAMILY membership.

* \$10.00 per year for a NEWSLETTER ONLY membership

Those having Full memberships are entitled to the manu extra benefits our club has to offer.

Some of those benefits are:

- * Getting to meet some of the nicest people.
- * Demos of the latest TI-99/4A software.
- * Free copying of our West Penn 99'ers Disk Library.
- * Up date of T.I. news, Local, National, International.
- * One on one help / Problem solving.
- * Participation in our Module Lending Library.
- * Participation in our Video Lending Library.
- * Ribbon re-inking- for just \$1.00 per ribbon. * Various Computer supplies at a substantial savings.
- * Ability to trade or sell computer equiptment, or electronics.
- * Help on getting equiptment fixed.

We meet the third Tuesday of each month at the PENNS WOODS CIVIC ASSOCIATION in North Huntingdon, PA. at 7:00 P.M.

If you can't make it to our meetings...at least become a Newsletter member - and enjoy our NEWSLETTER FORMATdone entirely on a II-99/4A computer.

SEE PAGE 10 FOR OUR WEST PENN MEMBURSHIP APPLICATION.



FOR THE RECORD BY PAUL BROCK

FEBRUARY MINUTES



UP DATE ON THE LIBRARY

I called the meeting to order at 7:25. As I glanced over the congregation I noticed that there wasn't any new faces. As I mentioned I wasn't in contact with anyone. I had written to Ron Warfield of the BC 99'ers to see if we could stau in touch.as we would no longer be enjoying their newsletter. I didnit recive any replay as of this meeting. was in touch with Rau Bounder. He has put the old faithful (TI-99/4A) on the shelf to keep up with other organizations, using the IBN. It seems that he has a lot of fires going.

There was a good report from the treasurer. Mickey reported that the library is being worked on and has updated with the C99 disks. Morm stated that I had jumped the gun on the raffel tickets. We will talk more about this at the next meet-

ing. It seems that we were out of 5 1/4 floppies, so we had a problem coping disks. I mentioned that it was going to be hard to get 5 1/4 disks in the future. Art is going to order some for the club.

I asked the members if I could order some software from RamCharged Computers. This passed unanimously. Also Norn agreed to bring something back from the FEST WEST.

The demos didn't go too well. Someone wasn't prepaired to give a demo. We will give a demo next time. The raffel prizes was a rem of paper and pack of 50- 3.5 disks.

Art kept the coffee, the Pepsi & Coke flowing.

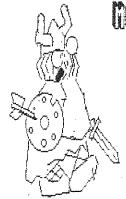
I adjourn the meeting a little after 8:00, so we could copy disks and go to Norms class on C99. I am glag that the weather turned out good so everyone could attend. See you on the 18th of March.



Untill then my

OUILL has run out

of ink!



CESSOGE FROM THE PRESIDENT

Here it is March already. I am still at the my desk, working on the fourth edition of the West Penn 99'ers newsletter news. As you alrady know I have been getting some of my articals from past nwesletters. These articals maybe repeats, and old hat and maybe the one that maybe new to some one that has just started. I hope that I can keep the publication an interesting newsletter.

I don't wish to make too many changes but some times I am pressed for time. I am tring to find better ways to do things faster. My spelling is inproving because I have an TI-Spell-Checker. That, don't help if there is an type-O. I some time get side tracked and forget where I am.

The publication has become a challenge for me. Frist was to get a publisher, and find one that would a do a job inexpensively. I then how to get everything organized. Now I know what Mickey ment by get- organized. Some times I can't find my disks!!

I have about a dozen softwaer programs that will produce a newsletter. Which on do I stay with?? So far I have found that Page Pro Composer is working out just fine. I got my mouse, and I would like to put into a few of my other programs, but have been pretty bussy tring to get the newsletterout.

Not only is there St Patrick's Day, this month but there is Easter also. So **IGCPV EASTER**

EVER NOTICE...how weekends are like rainbows? They always look great from a distance, but seem to disappear whenever you get up cose.

MAPPY DIRIMON II'er where ever you are!

PRINTALINE

1 PRINT ::::"TO INDENT TEXT OR TO USE A COMMA, BEGIN & END THAT LINEWITH QUOTATION MARKS"::

2 INPUT"PRESS ENTER TO SKIP A LINE. HOW WIDE?(80 CHARAC TERS MAX)":WIDTH

3 MARGIN=INT((80-WIDTH)/2)

4 OPEN #1: "PIO"

5 INPUT "INPUT LINE A LINE OF TEXT: ":TEXT\$

IF LEN(TEXT\$)>WIDTH THEN 7 ELSE 9

7 PRINT: "LINE TOO LONG! SHORTEN TO":: WIDTH; "CHAR ACTERS MAX."::SEG\$,1,WIDTH)

8 GOTO 5

9 PRINT #1:TAB(MARGIN);TEXT\$

10 GOTO 5

When typing notes, etc., where it is disireable to start printing at column one, input a line width of 80 and monitor the line width on the screen.

A simple way to use this program for correspondence is to use a line width of 56. This will fill exactly two lines of the TI screen. Right margin justification can be accomplished by inserting spaces between words untill the second linne of text is completely filled.

The OPEN statement in line 4 should be changed as required for the particular printer in use. The line width feature is designed

for PICA prrint. Line 3 can.be changed to accomodate ELITE or CONDENSED type styles.



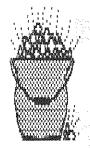
If you are not Irshthen smile when you read this. HAPPY
ST PATRICK

REVARD OFFERD
A reward of 500 microfarads is offered for
information leading to the
arrest and conviction of
Hopalong Capacity. this
unrectified criminal escaped from the Veston
Primary Cell where hhe had
been clamped in ions
awaiting the gauss chamber.

He was charged with the induction of an 18-turn coil named Milli Henry. who was found choked and robbed of valuable Joules. He is armed with a carbon rod and is a potential killer. Capacity is also charged with drriving a DC motor over a wheatstone bridge and refusing to let the band pass.

If encountered he may offer series resistance. The electromotive force spent the night searching for him in a magnetic field, where he had gone to earth. They had no sucess and belive Ohm via a short circut. He was last seen riding a kilocycle with his friend Eddy Current, who was playing a harmonic.

From the U.G. of Orange
County.



BIT OF TREASURE TO BE SHARED

SPEEDING UP EXTENDED BASIC

One of the complaints we frequently hear about on the TI-99/4A is the speed of the computer when running BASIC or Extended BASIC programs. Compared to other home computer BASICs avaiable, the TI variety is fairly slow. A number of reasons account for this-too many to explain fully in this limited space. However, if you have Extended BASIC, there are some things you can do to improve your computer's execution speed. And if you have the 32K Memory Expansion card, you can increase that speed even more.

The frist method involves inserting a special code in your programs that will turn the "Prescan" on or off. Each time you RUN a program on the 99×4A, the computer pre-scans it, setting aside room in memory for variable storage. This is why the computer seems to hesitate-sometimes at considerable length-before executing a program.

It is not necessary to scan a whole program, however, and a lot of time is wasted by doing so. By turning the pre-scan off and on at selected points, you can decrease the time it takes your program to start. Use a bit of caution here, though. All variables and subprograms must be pre-scaned before a program starts executing. The following lines will ensure that these items do come under pre-scan:

(Program starts in pre-scan mode) 100 VAR1 :: VAR2 :: SVAR2\$: VAR3 :: VAR4 :: DIM A(100) 110 CALL CHAR :: CALL SOUND :: CALL HCHAR :: CALLVCHAR ::CALL KEY

120 !OP- (turn pre-scan off)

(place main program here)



(Place main program here or sub-routines)

In the example shown above SUB1 and SUB2 are EX-BASIC subprograms. The codes to turn the pre-scan off and on are as follows:

!@P- Turns pre-scan off.
!@P+ Turns pre-scan on.

The second method requires that you have 32K Memory expansion card instulled in your system. To increase overall execution speed, you can disable the automatic motion of uneeded sprites- which eats up orocessor time - so that your computer has more to work on other tasks. Usually, the computer is constantly updating all 28 sprites- even when they are not being used. You can make the computer update fewer sprites, or disable them completely if your program doesn't need them. The following command will dis able all of the sprites:

100 CALL INIT :: CALL LOAD (-3187,0)

By changing the second parameter in the CALL LDAD statement from 0 to 5, you would enable 5 sprites (*1 through *5), while still

significantly increasing execution speed. Just change this parameter to enable the maximum number of sprites which your program needs to use.

William K. Balthrop

The following artical was sent to me by Lew King in Jan. 97.

"NON PRINTABLE CONTROL CHARATERS"

Last spring Bruce Harrison published a public domain program called "FONT DESIGNER". This program allows you to design any type of character that you want, then dump it to the printer. or you can use the many fonts that Bruce and other have designed. Any make printer, 24 oin or ink jet, with an Epson LQ emulation can be used. The printer buffer has to be set for BUFFER". The download font can then be selected by using "ESC % 1" and the printer built in font by "ESC % 0". ESC is the escape character which shows up on the screen as a small "16". That is hexidecimal for 27. The same as "CHR\$27" in basic. this is obtained in TI WRITER or FW Editor by hitting CTRL U FCTN R CTRL U. Ref: TI Writer Manual pages 98 and 146.

Now the fun part. "ESC t 2", to printer. This moves the download font to the extented character area from 128 to 255. Along with the font, control characters 0 thru 31, now reside at 128 thru 159. to access these you must use FunnelWeb V4.4 in the "All Character" or 8 bit mode. Hit "CTRL. CTRL U" then uppercase ABC ect. Don't forget to toggle back out of the 8 bit mode with "CTRL, CTRL U" again when you are done special charusing the acters.

Of course all control codes sent to the printer must be done without spaces. Spaces were used just for clarity. Keyboard hits such as"CTRL", means to hold down the control key then hit the comma key. Also any characters that you don't design are replaced with the built in orinter characters. That is if you need one special character for something, you can make that one character and assign to a seldom used key such as the "(tilde). When it gets dumped to the printer, only that one character will be changed. all the others will remain as the default. Now none of the special characters that you design will show up on the screen. It is easy enough to change the character set in FW to reflect any custom characters that you want, but you can wait for another time if there is enough interest in it.

This information is adapted from the Feb/85 edition of Micropendium mag.

Save the ".TL" commands at the bottom of this artical to your TI-Writer (same disk that "FORMA1"& "FORMA2" are on).

While you're in whatever document your printing, type ".IF DSK*.xxx as the frist line, where * is the drive number, and xxx is the filename of these ".TL"'s. In the text, just add the symbols discribed below to activate the appropriate functions. In the symbol list, "F-"means FUNCTION keys and "C-" means CONTROL keys.

With the CONTROL-U keys, you will have a strange little character that represents the HEX value of the character.

TL COMM . RESULT TX.SYMBL

CONTINUE PAGE 6



CONTINUE from Page 5

TL COMMAND	RESULT	TEXT SYMBOL
consists a real control (the NAS) plant project	1 m 1 1 a a / 0 M	1 77 17
.TL 123:27,52		11 (17
.TL 125:27,53		11) 19
.TL 91:27,83,0	SUPERSCRIP/ON	10 L 10
.TL 93:27,83,1	SUBSCRIPT/ON	71 3 11
.TL 124:27,84	SUPER-SUB/OFF	19 ± EV
.TL 1:15	SUPER-SUB/OFF CONDENSED/ON	C-U + "A"
.TL 17:18	CONDENSED/OFF	C-U + "Q"
	ENLARGE/ON	C-U + "B"
.TL 18:27.87.0	ENLARGE/ON ENLARGED/OFF	C-U + "R"
TL 3:27.77	: ELITE/ON	C-U + "C"
TL 19:27.88	ELITE/OFF	C-U + "S"
TL 8:27.64	INITIALIZE PRINTER	C-U + "@"
.TL 16:7		C-U + "p"
TI 92:8	BACKSPACE/PRINT	88 / 48
TL 11:27.78	BACKSPACE/PRINT PERFORATION SKIP/ON	C-U + "K"
TL 27:27.79	PERFORATION SKIP/OFF	C-U + "["
TI. 4 · 27 . 45 . 1	SOLID UNDERLINE/ON	C-U + "D"
TL 28-27 45.0	SOLID UNDERLINE/OFF	C-U + "T"
TI. 5.97 71	DOUBLE-STRIKE/ON	C-U + "E"
TI 91.97 79	SOLID UNDERLINE/OFF DOUBLE-STRIKE/ON DOUBLE-STRIKE/OFF EMPHASIZED/ON	C-U + UU''
TI 0.97 60	FMDHASI7FD/ON	C-U + "F"
" OO. OT TA	EMPHASIZED/OFF	C-U + "V"
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how to eliminate the auto-start on d/f 80 (E/A option 3) program. Using a disk editor, find a string that has this exact string: "20314523462020" and convert it to "2020202020202020".

If you want to disable the keyboard for any reason, type in CALL LOAD(-3257,2,128). You will have to turn off the console to regain controll!!!

Want to know how many BYTES of memory you have?

A: X/BASIC - 13928 B: TE II - 14026 C: BASIC - 14536 Bytes of Memory.

A woman walks into a bank and says to the lending officer, "I'd like to talk to you about a loan."

"Great!" the banker replies. "How much can you give us?"

Do you find yourself standing in front of the refrigerator asking yourself weather you're hungry or not? Then go back to your TI.

BE QUICK, BE SMART, BE A MEMBER of the WEST PENN 99"ERS. Have fun at the next meeting. Bring a friend!

C for yourself part 2 Norman Rokke

To begin, I have to apologize for an error in my previous article. In describing the creation of an option 5 program, I gave directions to type DSK2.PFF instead of DSK2.C99PFF. I hope that the error in filename was obvious enough that it didn't cause too much of a problem.

Since I wrote the first article, I have found that there is an easier way to run an option 3 program or create an option 5 program. It's amazing what you can learn when you read the documentation. This method uses the CLOAD program which is on the Funnelweb disk and is accessible through option 5 C-LOADER on the main menu. This program lets you make a list of option 3 files in a DV80 file. It reads that file and loads all of the option 3 files in the list. Then it lets you choose the entry point to run the program.

Let's look at how we would use this loader. Use the editor to create a file with the following contents.

DSK2.HELLO;O DSK2.CSUP DSK2.GRF1 DSK2.PRINTF

Save this file as DSK2.HELLO;3 and leave the editor. I use;3 to indicate that this is a file with a list of files to be used for an option 3 program. Select 5 C-LOADER from the menu. Enter DSK2.HELLO;3 and press ENTER. After the files have been loaded press FCTN-3 to clear the entry and press ENTER. When you get the screen of DEF Table entries, move the cursor so it is over the S of START and press FCTN-6.

Now, no matter how much you may change HELLO;C, you can run the program just this easily whenever necessary.

The loader can also be used to simplify creating an option 5 program. For

our sample program this would require a DV80 file with the following contents.

DSK2.C99PFI DSK2.HELLO;O DSK2.CSUP DSK2.GRF1 DSK2.PRINTF DSK2.C99PFF DSK2.SAVE

Save this file as DSK2.HELLO;5. I use the ;5 ending to remember that this file contains a list of files for creating a program image file of the program. It is used just like the option 3 file above except that you select the DEF SAVE instead of START. Remember, SAVE is on the third screen. Press ENTER twice to get to that third screen.

In my last article I mentioned that one advantage of C99 was speed. Another of its advantages is that you have 256 characters (32 sets) available for use just as in pure assembly. This is twice as many as in BASIC and more than twice as many as in Extended BASIC. No more having to define a character for one purpose in one part of the program only to redefine it for some other use later in the program.

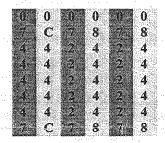
In Extended BASIC I have at times used redefined characters to center text which is an odd number of characters long. However, I had to be very selective about when I did this because of the limited number of characters available. In C99, this technique can be used much more freely because of the large number of characters available.

I'd like to consider a C99 program to center some odd length text on the screen. Let's use the text ODD. In order to center this we need to know the hex character definitions for the letters O and D. Using the CALL CHARPAT statement of XB we can find that these are as follows.

- O "007C44444444447C"
- D "0078242424242478"

These hex characters define how the text character looks on the screen. The hex characters define the left and right halves of the text character as shown below for the letter O.

The patterns for the entire word ODD would look like this.



What we need to do to center the text is to create four text characters which have the above definitions as their middle six columns and with zeros in the columns on either end as shown below.

70	n	-0	0	n i	n	10	n
	eq.		,my		py		ă.
, u	1	***	1		*		v
0.4	4	× 4	2	-43	2	. 4	0
-0	4	* *	2	4	2	**	0
-6-3	4		2	4	2	4	0
Α	4	1	2	4	2		0
4							
	**		de .		L		3,000
V.	7	. 📞	7	38:3	7	: 0	U

This gives us definitions for 4 text characters which when placed on the screen will display the text ODD but centered within the four character string. These character definition strings are

"0007040404040407"
'00C7424242424242C7"
'0087424242424287" and
'0080404040404080".

Now we can write a C99 program to redefine some characters and print the result on the screen.

extern grf1(),printf(),chrdef();

```
main()
{
    grf1();
    chrdef(97,"0007040404040407");
    chrdef(98,"00C74242424242C7");
    chrdef(99,"0087424242424287");
    chrdef(100,"0080404040404080");
    locate(1,15);
    printf("abcd");
    locate(2,15);
    printf("EVEN");
    locate(23,1);
}
```

We begin by specifying those functions which are external to our code. The only new thing here is chrdef(). This is a C99 function contained in GRF1 which performs the same job as CALL CHAR in XB.

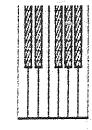
In the program itself we begin by putting the computer in graphics mode. Then we redefine the four characters with ASCII codes 97 through 100. These are the letters a,b,c, and d.

The locate function allows us to place the cursor at a particular row and column on the screen. This function is part of CSUP and therefore does not need to be included in an extern statement. We then print the string of redefined characters. Then we print a even numbered string of characters beneath it for comparison.

Next time we'll look at writing a C99 program to provide us with the definitions for the redefined characters. C you next time.

Users groups may reproduce this article provided that they acknowledge the author and indicate that the article appeared originally in the West Penn 99er's Newsletter.

MORE RS232S





RS232 PORTS (THANKS BC 99ers Oct.96)

I have noticed more and more members wanting to connect extra peripherals to their RS232 cards. As it stands the TI RS232 supports 2 serial and one parallel port. To use the extra serial port you need a V cable and use RS232/2.

Well now you have an extra printer, a mouse and maybe you wanted to connect a direct cable to your "other machine" and find there is no where to plug all these toys.

I will explain how to add an extra RS232 card to the PBOX so you can have RS232/1, RS232/2, RS232/3, RS232/4, PIO/1, AND PIO/2

This modification is for TI RS232 cards only. Some Corcomp cards come with a switch to do the same thing. Open the extra RS232 card shell by removing the screws or popping the plastic shell. Place the card face up with the LED to your left and the card edge connections towards you.

Look at the card and 1 3/4 inches in from the left side and 2 1/2 inches down from the top you will see a integrated circuit with the number 74LSO2N on it. Marked Marked on the board will be UIS. At the bottom of this chip you will see a resistor marked RS (brown, black, brown). will have a black mark around it printed on the board. Right below this resistor you will see a metal plate strip with a soldered over hole at each end. The markings on the poard are PTH1. Carefully unsolder the resistor and move it down to the empty hales directly below it. You will have to remove the solder in the holes, or if you have three hands you can hold the resisitor to the holes and solder iron to the holes and when the solder melts the resistor will go into the hole. Good luck with this, use a small iron and be carefull. I will not be held responsible for damage you may cause. Replace the clam shell around the card.

When this is done, place the modified card along side the old card in the box and you have four RS232 ports and two PIO ports.

To address these ports you will have to change some of your programs to get the port you want. RS232/1, RS232/2, RS232/3, RS232/4, PIU/1 and PIU/2. You will need two Y cables for the serial ports.

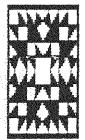
I have modified the extra card in my computer and have my main printer on PIO/1, a label printer on PIO/2. a Mouse on RS232/1, my Amiga hard wired to RS232/2, my II PRO hard wired to RS232/3 and Telco on RS232/4. This is great now because I can transfer files between the PRO and Amiga to the II, print everything to the main printer PIO/1 and print labels to the other printer PIO/2.

With a couple of A B C switches I share the moden and printer with the other computers.

If you can, you might as well make playing with your toys as easy as possible.

Thanks B.C. 99ers OCT.96 Newsletter Ron Warfield

PAGE PRO PATCH



Has anyone besides me and John Johnson (the author) used tha PATCH program to configure PAGE PRO version 1.8 ?

I use PAGE PRO a lot. It is my main program for producing the newsletter and many different print-outs for school. I use it almost every day. So, when I use it, I want my favourite fonts to be there and to have my defaults rather than the ones that come with PAGE PRO. The PATCH program will do the necessary work.

I have successfully PATCHED PAGE PRO on two different systems. Now the built in FONTS are the ones that I want and the defaults and colors are ones I use most often. It is really nice, when the PATCH works.

However, I ran into a problem when I tried to make a third PAICH to my system at school.

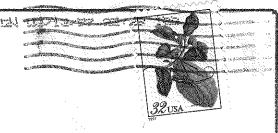
Everything looked OK but the built-in fonts wouldn't

Unfortunately, there is NO ERROR REPORTING as the program goes. Any error results in the skipping of various parts of the program. My defaults were OK but my fonts did NOT LOAD.

After many trials and the same result, I found that ONE FONT was causing all of the problems. The COURIER_SM font always gives an error and the program stops writing the built-in fonts.

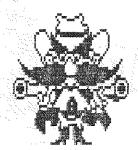
The only thing that I can figure out is that the byte count is incorrect and an error results. The file size is OK but the byte count could be off by one and give an error.

WEST PENN 99'ERSettlittle For The Thirt C/O Paul A. Brock General Delivery North Apollo PA 15673-9999



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