CEDAR VALLEY 99er UG JANUARY 1992

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CEDAR RAPIDS/MARION

NEXT MEETING: 6:30 PM JAN. 14,1992

WEST MUSIC, COLLINS ROAD SQUARE

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Important meeting dates to mark down and remember: January 14 (our next meeting,) February 11, March 10, April 14, May 12, June 9, July 14, August 11, September 8, October 13, November 10, December 8, January 12, 1993! Our meetings are on the second Tuesday of every month. Everyone is welcome, member or not.

You can send mail to any officer, or conduct any club correspondence, by directing your mail to the address on the back of this newsletter. Library orders, membership forms and dues, and any other club business can be sent to this address. Make sure it is care of Jim Green.

I request that the following members prepare a short piece for inclusing in our newsletter. Your article may be submitted to any officer, or at the address on this newsletter. -Gary Bishop

January: Bob Heiderstadt, Jim Green (Thanks, guys.)
February: Ed Edwards, Susan Breiner
March: Sr. Barbara Fernandes, Ray Novey
April: Sr. Margaret Flynn, Bill Paeth
May: Bob Wahlstrom, Bruce Winter

As space permits, new members join, and renewals are received, additional names will be published. Help keep this newsletter going by submitting your article by the end of the month.

MINUTES OF THE DECEMBER MEETING

Our December 10th meeting at West Music had nine members in attendance. The minutes from the November meeting were approved as printed in the newsletter. John Johnson read the treasurer's report in Bruce Winter's absence, and it was approved as read. Bruce Winter has ordered 200 disks, but as of meeting night, they had not yet arrived. He did get them on December 14th.

OLD BUSINESS: 1. John wants to pass along his thanks for last month's multi-part Midi Demo program. 2. We discussed John Johnson's article in last month's newsletter, on his trip to the T.I. Fair in Chicago. 3. Gary Bishop passed around some more pictures he had from the T.I. Fair.

NEW BUSINESS: 1. Gary passed around a list of computer equipment that is for sale. The list was given to him by a fellow from the Chicago T.I. group that he met while attending their meeting. 2. Jim Green has a request for some empty ten pack disk boxes to use for keeping the library disks in. So if you have any you can spare let him know or bring them to the next meeting. 3. Jim Green also needs a copy of DM 1000 with the docs for the library. We don't have any version that has the docs on the disk. Ed Edwards said he might be able to help us out on this one. 4. The trip to Chicago in which Gary Bishop, John Johnson and Bob Wahlstrom attended a Chicago User Group meeting and swap meeting on Dec. 7th. was discussed. We had a good time but the drive there and back was in a lot of fog which made for a long trip. 5. The Best Buy store has printer paper for $16.99 for a box of 2500. 6. The Eastern Iowa Computer Fair will be on Sat March 7th at the IBEW building again and we voted in favor of setting up a table again, to demo our club. 7. We are planning to contact members of the T.I. groups in Iowa that have shut down to see if there is any interest in joining our group and also the possibility of obtaining a copy of their old library programs. 8. When Bob Murdock was with us last month he left our library a disk of Ron Griffen's TI Artist Slide Show pictures that Jim Green showed us. 9. We are planning on exchanging newsletters with the Lima, Ohio group and dropping five groups that we have not heard from in over seven months. 10. We are going to include in next month's newsletter a list of active T.I. BBS's.

PROGRAM: Jim Green showed us a few things that he has learned about using DM 1000. How to configure your printer off the title screen with F3, and how to include printer control codes. When looking at the catalog listing and using T for reading dis var 80 files and P to print them. This was all new information for me as I don't have a DM 1000 version with doc. Thanks Jim for the helpful program.

Submitted by Bob Wahlstrom, Secretary

SYNOPSIS OF RECENTLY RECEIVED NEWSLETTERS

K/Town 99ers, Knoxville, TN Jan 92 rcvd 12: Using .GM (graphics merge) and .GR (graphics reformat) in Art Gibson's Newsletter program; attempts to use Plus! V2 SMALLIFY XBasic program improver; chili con carne recipe, Stumblings and general comments, TI-Base program.

" Dec 91 rcvd 12/16: Potpourri about making your own graph paper; information on Jack Sughrue's Plus! V2 and swap shop of tapes from Lima Faire; recipes for TV mix, Southern microwave pralines; TI Base example; Multiplan template errors; Ellen's pineapple pudding cake; Christmas wish list; clearinghouse project is running.

West Penn 99ers Dec 91 rcvd 1/3: Needs reviewed.

Cleveland Area 99ers Dec 91 rcvd 12/13: Chicago Faire summary; program to transfer data between TI Base to Multiplan using XBasic; program for a minidata base for keeping track of how long in hours up to 45 stores are open for up to 7 days; more reasons to use Freenet to connect to Compuserve and Internet mail users.

TIC TOC, Rocky Mtn 99ers, Dec 91 rcvd 12/2: TI World news for October 91; taking control of TI Writer formatter; archiver tips and explanations, program to list XBasic programs to printer in 28 col format instead of normal 80 columns; why verify a formatted disk.

" Nov 91 rcvd 11/29: comprehensive list of vendors and support companies for the TI; president's message; TI world news Aug 91 by Jim Peterson; Tips of TigerCub #65; listing of the Disk of the Month.

CONNI Nov 91 rcvd 11/30: Needs to be reviewed.

CONNI Dec 91 rcvd 12/27: Needs to be reviewed.

Newsletter 99er HCUG Hurst, TX Oct 91 rcvd 12/12: TI Writer hints #12 by Stan Katzman, the .TL command; New Age 99 #14 Jack Sughrue about gentleman genius John Willforth; funsy prpgram; TI tricks for backing up your work; TI Writer LF and SF trick and .RS (replace string); XBasic trick to make it easy for naming and saving programs; Geneve 9640 tip to patch FCN-4 key to work from XB in GPL mode; Why computing? list of computer definitions by Sr. Pat Taylor (reprinted from us!).

" Nov 91 rcvd 12/12: Ti Writer hints #13 .IF, high tech exclamation about magnetic recording; making a TIPS label letterform.

Chicago Times Jan 92 rcvd 1/4: To be reviewed

Chicago Times, Dec 91, Prez Sez- BBS still needs files. Played CC-40 games while in the hospital. Membership News..Got 60 membership renewals at the Faire. Happy Holiday season. A seven page article on a Mail List Manager. Geneve Support Article..Now have the Myarc Disk Manager Ver. 1.30 addendum. Also have two disks of utility, game, and language programs. Pages 17 thru 23 list their Geneve Program Catalog. Wanted..A used Geneve or an 80 column device, a Rave speech card. For Sale..Two (TI?) systems,

P-Gram Card, 384K RAM disk, P-Code Card. Two pages of pictures from the Faire. Pascal/p-Code part 7 8. Editors Notes..Out with the old and in with the New Year. Thanks to everyone.

TOPICS LA99ers, Dec 91 rcvd 12/24: XB misc #6 hex/decimal conversions and subroutines; character case conversions; time and byte saver for multiple initialization of variables to a single value; DM1000 ver 5.0 available; Smart connection program for transferring files between TI and PC; programming hints, DM1000 and FWEB V4.10 printer set examples, hex/dec and dec/hex conversion charts; minidata base program, TI Faire in Phoenix Feb 15/16, 1992; disk drive explanation and contents of sectors 0 and 1.

Byteline, Decatur 99ers OCT/NOV 91 rcvd 12/27: explanation of interleave on disks; lightning power statistics; explanation of shadow ram; Smart connect program to exchange information between TI and PC explained; TI accelerator explained; Tigercub tips #62; programming music the easy way #2 by Jim Peterson; for sale; PC bus specifications; FWB 4.0 menu flow chart; description of TI Writer mail merge; history rewritten (humor).

" Dec 91 rcvd 12/27: description of PC ATTRIB command; programming music the easy way #3; Tigercub tips #63.

A TRUTH LEARNED FROM HOUSECLEANING

Recently I found myself with some spare time. I decided to clean out all the accumulated paper stored in various boxes, drawers, shelves and folders in my hobby room. The papers consisted of old magazines, newspapers, lots of saved technical and hobby articles, catalogs, letters, computer newsletters from the CV99UG and much more. You get the idea. Many dated back to the 1950's. Material I hadn't looked at or used for years, and probably never would. I dutifully scanned each item before tossing it into the trash can. A few I recognized had to be saved, but they were in the minority. Out went well over 100 pounds of paper. Then I came to the CV99UG monthly newsletters dating back to 1987 when I joined the group.

I read every newsletter and found something to save in each issue. One or more articles went into a hard binder that would be easily available for reference. I filled the large binder with articles on the TI99/4A, TIPS FROM THE TIGERCUB, schematics, various programs, reviews of interesting programs available that I might some day want to use, plus many one-of-a-kind items.

While reading those newsletters, I was struck by one overwhelming thought. What a dedicated group of knowledgeable and friendly members the club had, and how much they had helped me to upgrade and learn more about my computer. Names kept reappearing: Jim Green, Jerry Canady, Ed Edwards, Bill Paeth, Bruce Winters, Bob Wahlstrom, John Johnson, (Alias that mysterious Jack Johns), Jim Riess and last but definitely not least, Gary Bishop.

How fortunate I have been to be a member of this group. To all those mentioned, and yes, to all of the group not mentioned, I say --THANK YOU.

BOB HEIDERSTADT

LIBRARY NEWS

It has been a while since I published any news about our group library, mostly
because there has been little activity. Almost none of our group has requested
any selections from the library, and likewise, almost no one has made a
contribution to it. (Hint, hint!)

Nevertheless, we do have a few new disks to talk about. If any of these
programs sound interesting, contact me at the next meeting for a copy. As
always, the cost to you is just 30 cents per disk, plus postage for you out of
town members.

DISK NUMBER	DESCRIPTION
460-463	Funnelweb Version 4.4 This is the newest version of the powerful environment program that allows you to do almost all of your computing with one program. Four disks are single sided, single density. If system has greater disk capacity, you will need fewer disks.
464-466	Aircraft Pictures and other graphics. These artworks were donated to our group from the Quad Cities 99ers. Three disks of graphics done by Ron , these pictures are stored in TI Artist format. Disk 464 contains mostly animals and autos, while 465 shows many fighter aircraft from WW2 through today. Disk 466 seems to be a mix of the other two disks, plus some new material. These disks are double sided, and come with a Load program that shows each picture in a slide show format.
467-473	Business programs from the Chicago User Group, courtesy of Sister Pat Taylor. Each of these SSSD disks contains multiple programs related to business and finance, from simple loan payment calculations and budgeting programs to payroll data base and farming programs. There are about 25 programs per disk, and I have not yet run them all. Few, if any, come with instructions other than what appears on the screen. I welcome volunteers to evaluate a complete disk.
474	Graphics Printing public domain programs from the collection of Jim Peterson (Tigercub Software). 28 utilities on this DSSD disk. Includes MAX-RLE program.
475	TI Artist Utilities, also from Jim Peterson's PD library (#1217). This one hasn't been reviewed yet; any volunteers?

Our library grows and grows. Take advantage of it, and ask for your copy of
any of the useful and/or fun programs available to you because you belong to
the Cedar Valley 99ers!

I will repeat here my plea from the December meeting. The library is in need
of disk boxes in good shape. These are the boxes that you purchase new disks
in, and then empty them when you put your new disks in a larger disk file. The
library could use about ten or twelve boxes. Thanks for your help! Happy New
Year!

                                              Jim Green

NEG/REV invokes the NEGATIVE/REVERSE Sub-Menu which will allow you to change negative images to positive and vice to versa. It also provides the ability to reverse (mirror) the image so it faces in the other direction. These functions are now available for all print options. (This ability was requested by me and the author Thanks ME for the idea. It's the other way around Ron, THANK YOU!)

The rationale for this is that a label image should lead the eye into the text, Front Card Image lead into the open edge of the Card and Inside Card Image face the verse. (Perfectionism is a sickness!)

[Now if we could just flip the image upside down?????? Hint, Hint. Then we could flip the image, print the Front card image right side up instead of upside down, roll back the paper, and print a different image along side with the Inside Card option. Enabling 2 smaller images, side by side on our posters.]

FFD will generate a Form Feed.

REDO returns you to the MAIN MENU.

CARD will take you to the CARD Sub-Menu with choices for FRONT, INSIDE, OTHER and EXIT. OTHER refers to the OTHER MENU discussed below. Both FRONT and INSIDE have their own sub-menus. Space does no permit a complete description of the Card option. Time and energy permitting, I hope to write separate articles in the future on how to make Cards, Labels, Posters, Banners, etc.

The bottom four screen lines have followed us to this sub-menu and it's time to talk about that 21st line, which up to now has remained blank. When using the FRONT or INSIDE Sub-Menus, it will successively display up to 6 functions as they are entered to help keep track of your entries.

As promised, this version is completely compatible with my RX-80 printer when using the Inside Card Option. Thanks Ron!

SIGN leads to the SIGN Sub-Menu where the options are HEAT, POSTER, OTHER and EXIT. the HEAT Sub-menu has most of the POSTER options except that everything is printed in mirror image so that a heat

transfer ribbon can be used to create iron-on messages and images on T shirts, etc. It does have an interesting option named 2IMAGES which will print the image twice, side by side in reduced size. There is no reason why you can't use this option with POSTER by temporarily changing sub-menus. If the mirror image is not suitable you can now reverse it with the NEG/REV menu available with CONTROL N. POSTER is used when you want to create the conventional sign. With 8 fonts and thousands of images, your imagination is your only limitation.

IMAGE will let you select a new image from the current image file. If the image you want is not on the current image file, you should invoke SELECT with CONTROL S instead of IMAGE.

LABEL is one of the most popular options of TIPS and has a brand new feature. You can now offset the print (in effect changing the left margin) by up to 45 spaces. Now you can spot label sized images all over your poster, well the left half anyway. Want to print on the right half? No problem. Call up a reset left margin command with USE-SPOOL. Say you change the left margin to 40, the offset will be added to this value so using an Offset of 25 will start your image at column 65. Don't forget to reset that left margin to zero when you are done.

When printing labels, just print one label and examine it to make sure the label is as desired, if so, Ron has provided a prompt for printing more labels. If a change is required, just enter 0 at the prompt and you will be returned to the beginning.

END provides a graceful exit from the program with a printer reset. Most of your operations will eventually return you to this menu. END here saves having to go back to the MAIN Menu with REDO in order to Exit.

This completes the description of the PROCESS menu. As you can see it is a very important menu, sort of a central nervous system, which enables you to access the different functions of TIPS. Before we leave the menus, we should take a look at the OTHER MENU. This is a sort of fine tuning menu which enhances the appearance of your masterpieces and is nearly always available at the touch of CONTROL O. It looks like this:

March 17

The Manipulator function offers the possibility of printing files, but since you have already done this, select "N". You will then be asked for the drivenumber and filename of the source file (e.g. GMAZ.TXT) and the same for the new file you are creating. While you can input up to seven characters for the source file, the program works well with a four-character input (e.g. GMAZ). You are limited to four characters in your output (new) file. Since my file deals with computer-related items, I named it COMP. The program adds the necessary .TXT and .XXX extenders.

Once you select picture numbers to be manipulated (transferred to the new file), you will be asked for the picture numbers they will have in the new file. The easiest way is to accept the default numbers at the bottom of the screen, and when you have your new file all or partially completed, use the Sort function to arrange them in alphabetical sequence, if this is desired. When your new file is complete, you may use it in the same ways you use your present TIPS picture files.

As soon as you have completed and sorted your new file, I suggest that you use the TM program to print the new file (numbers and names, remember?), and then move to one of your TIPS companion programs to print out the actual graphics, the same as for your other, heterogeneous, TIPS picture files.

When you print the file in the TM print function, you may find that not all picture names will print, the problem being that some came over from the other type of computer in lower case. The Rename Pictures function of TM will redo these in upper case, and you can then print out the entire file correctly.

I found the program to be very user-friendly and had only minor problems with it, and those I expect to eliminate when I have time to practice with it more in depth. I highly recommend it, and think that you will find a little time spent in organizing your TIPS pictures into homogeneous files will save you much time and frustration when you have a quick project to execute and little time in which to do it.

The program is released as Disk Ware, and the author states that " I do not grant any company or person other than Jim Peterson/Tigercub Software to charge any copying fee for this program..." In other words, you can give it away, but don't sell it! He also asks that those who use the program send a note, or a copy of the club's newsletter, or a disk from the club's library (or why not a disk from your personal collection?) to him.

Address: TI EXPRESS
C/O PATRICK R. POWELL
P.O. BOX 496
OCEAN PARK, ME
04063-0496

You may also contact him on Genie. Address: P.POWELL7

P.S. I give this an A-PLUS rating on both program and documentation. Hope you enjoy using it as much as I do!

The Prez's Blurb

Trivia...Instead of a regular trivia item I have a request for info on a game called ARGROIDS. I acquired it from a BBS but it has a copyright notice on it that reads "copyright 1982, fully assembled software, all rights reserved, randy jones". I have never heard of this program before but I am very impressed and would like to keep it and upload it to other BBS's. I would appreciate any information on this program as to its availablity and origin. A letter to me at my address on the front of this newsletter or a note on the Texaments BBS would be fine. Thanks.

Spelling...The spelling checker is working quite well. The letters I write haven't gotten much use out of it due to a lack of time but all other articles have. I bought a hand held 80,000 word spelling checker to aid me with updating the user dictionary. The computer checker has the problem of only knowing 20,000 words while the hand held unit can't tell me which words are wrong until I enter them. So I let the computer checker tell me which words it doesn't know and I use the hand held one to check if they are correct. Then I enter them in the user dictionary. Some day.....perfection.

Ramdisks...The ramdisk experiment continues to be a success. I am refering to my idea of turning off the PE box first on power down. This is also working on regular disks. I have had no disk failures while leaving the disk in the drive while powering up or down with the above technique. I am still chicken to do this all the time but see below for more on this. Gary Bishop warns that some disk drives will put trash on a disk on power up. To check if yours will, watch the light on your drive when you power up. If it flashes you probably will have problems. Obviously it will be wise to try this a while before you do this to any disks you care about.

System #2...Due to a an unusual sequence of events I have ended up with a second system. Most of the power up and down I have been doing with regular disks has been on the menu disk for that system. Not having finances for a second ramdisk I have dumped my ramdisk to a DSSD disk and am using that in drive number one. Building a second system has been fun and awaken me to how much I have in the first one. Gradually building it up I had not realized how much I had. If anyone wants the John Johnson Boot Menu it is in our library on disk number 449. I have gotten used to it from the ramdisk and I doubt I could live without it any more. I had some trouble with the widgit I got and as a result here are the reset button pin numbers on the cartridge connector as viewed from the rear bottom side. The left most and 4th from the right pins get shorted. I was too lazy to look up the pin numbers.

Bargains..A mostly curiosity trip into the Software 2000 store at Westdale yielded an NX-10 printer ribbon at $5. That was half the price of the last one I bought. I also noticed 5 1/4" DSDD disks for 41 cents. Our foggy trip to the Chicago User Group swap meet yielded a 32k for $25 and a stand alone disk drive for $40.

EOF...Jack Johns...CR

KEYBOARD DISCOVERY

What are the differences between a typewriter and a computer keyboard? Computers include what typewriters have plus a great deal more.

The TI-99/4A has numbers and letters on top of the keys as do all typewriters and computers, but it also has special keys that do double and sometimes triple duty. Any symbol above the number line can be accessed with SHIFT plus the number as one does on a typewriter. Any symbol on the side front of a key can be accessed by using the FCTN key with it. As an example, to get a question mark, I put my finger on FUNCTION which is a key at the bottom right with a grey dot on it and while holding it, press "I" since it has the "?" on the front side of its key. On the left hand side there is a key which has a red dot and is called "CTRL" for CONTROL.

On the keyboard, there is a strip called an overlay, and on it are two lines of information. The top line has a red dot and the bottom line a grey one. Anything listed on the strip top line can be accessed by using the CTRL key (with red dot) plus the number key under the writing; anything on the bottom line can be accessed by using FCTN key (with grey dot)and the key under the writing on the strip. So if I want to quit and get back to the title screen, I can put my finger on FCTN and while holding it on "+" or "=" as it is the key under the word Quit on the overlay strip.

The most exciting keys are probably "S", "D", "X", and "E" as they allow you to go in the direction they point if you use them with the FCTN key. Therefore if you make an error, you can simply go back with the FCTN and arrow key in the direction you need and type right over it correctly. The Alpha key will lock the upper case letters for use if you only want capital letters.

Three other exciting keys when used with function (FCTN) are 1, 2, and 3. FCTN plus 1 will delete a single error, FCTN plus 2 will insert a letter(but when you are finished you must use CTRL 2 to to bring the line back), and FCTN plus 3 will erase an entire line.

There are yet other things one can do with the keyboard when one is more experienced. This is enough for now.

DM-1000 REVEALED

Once more, I found out the value of belonging to a TI user group. I had a question about a program, and the group gave me the answer. Since others at our last meeting seemed to also benefit from the information that I learned, I will present the problem and its solution here for everyone's amazement!

My problem was a simple one; I could not make DM-1000 print a disk directory after I had cataloged a disk. I knew that the program had the capability, but I had forgotten the method to ask for a printout of what was on the screen. I went looking for the DM-1000 documents, but I had none. I was then amazed to find that every copy of DM-1000 in our user group library does not have a docs file! We have at least three copies of DM-1000 in the library, but no documents file! (If you have such a file, please bring your disk to the next meeting so that we might copy the file to the library's disk.)

Well, I started calling for help to several of our local user group members, but they also did not have the documents file. Luckily, Gary Bishop came up with a printed copy that he no longer needed, so I was able to learn how to print out a disk directory. Not only that, but I learned about some additional tricks that DM-1000 is capable of. Here's the solution:

Load DM-1000, and at the title screen, press Function-3. This will give you the screen for setting your specific printer parameters. The first line asks for the printer name, such as PIO or RS232.BA=9600.CR, or whatever your printer is known by. (You use this same printer name when printing from Funnelweb or TI Writer.) The next line asks if you wish to send control characters to the printer. I didn't know this feature was in the program until I read the document file! Valuable stuff! This control code option allows you to specify what print font, size, etc. you wish to use for printing out the disk directory. The program will send the commands to your printer each time you use DM-1000, as long as you save these commands to the disk. In my case, for example, I sent the code to my Gemini 10-X for compressed type with normal line spacing. You might want to choose italics, superscript, double-strike, or any of the printer options available to you. If you choose to not send special codes to the printer, then you will get normal elite type at normal line spacing.

Once you have set up this screen, and the program knows which device to send information to and what you want this information to look like when printed, there remains only the command to cause the directory to be printed. Surprise! Even this is not as simple as I first thought. The program gives you options again! If you ask for a directory of a disk and want to print this information from the screen, all you do is press Function-7. The printer will print the directory in the font style you have previously selected. The option is if there is a text file (D/V 80 or D/F 80) on the disk, you can ask for the whole file to be printed with one simple command! Or, instead, you can ask that the text file be displayed on the screen for reading! I didn't know that these options existed! In order to display the file on the screen, type "T" (for Type) in the lefthand field next to the file you want to read. If you want to

print the file, then type "P" (for Print) in the lefthand field next to the file name. When finished, pressing Function-9 (Back) brings you to the on-screen disk directory again!

This is a long explanation of a simple concept, but at least three of us at the last group meeting benefitted from my looking for the docs to DM-1000. Hopefully, a few more out there will also be enriched after reading this. Try it, and get the full benefit from this great Shareware program!

Jim Green

ALTERNATE PRINTER DIRECTION

In many of the prgrams I have written, I needed to send the printer output somewhere besides the printer. This is useful for debugging purposes, and can speed things up on longer programs. One option I read somewhere was to send the output to the RS232 device, with nothing connected to the serial port. This works, but there is no way to see what output was actually produced. Another option is to send the printout to a disk file, then use an editor to view the resulting file. This works also, but requires exiting the program, firing up an editor, then recalling the filename. I found this to be awkward.

My solution is not universal, but has served me well. I provide a choice for the program output to go to the screen, or a print device of some sort. If the screen is selected, you can view the output directly. Granted, it will not be formatted properly, but you still have a good idea what is going on.

Some comments about the program: File number zero (0) is used for the screen output. Several statements do not allow operations to be perfromed on file #0, such as OPEN, EOF(), CLOSE. A branch around these statements must be used. The branching is straight forward, but the conditionals I have used are not. Line 95 deserves an explanation. No, the formatter did not mangle the line; it is actually correct as printed.

```
85 DISPLAY AT(9,2)ERASE ALL:
"      SEND OUTPUT TO
    SCREEN(S) OR PRINTER(P):S
"
90 ACCEPT AT(11,27)SIZE(-1):
N$
95 F=-((ASC(N$)OR 32)=112)
100 IF F THEN DISPLAY AT(10,
2):"PRINT DEVICE?: " :: ACCE
PT AT(11,2):P$ :: OPEN #F:P$
120 PRINT #F:"THIS IS A TEST
"
130 IF F THEN CLOSE #F
```

There is one character accepted as N$ from line 90. The program will accept either upper or lower case "p" for the print output selection; all other characters send the output to the screen. Assume that either a "p" or "P" was entered.

The ASCII for "p" is 112, for "P" is 80. The bit values for each letters are 01110000 and 0101000. Notice the only difference between the two bit values is in the third position from the left. This position represents 32 decimal.

The "OR" function will produce a "1" if either bit being compared is a "1". If the character was lower case "p", the comparison is 0111000 "OR" 0010000. This produces 0111000, which is just plain old lower case "p" again. However, if the character was upper case "P", then the comparison is 0101000 "OR" 00100000, producing a result of 0111000, which is lower case "p". What I have done is simply made a case conversion, resulting in a lower case "p" regardless of whether the orignal character was upper or lower case.

Now that the character is forced to lower case, it is compared to 112, the ASCII value of lower case "p". If the comparison is true, a flag with a value of -1 is the result. If false, 0 is produced.

Recap: comparison is true produces -1 ("p" or "P" was entered)
comparison is false produces 0 (something else was entered)

The minus sign in front of the expression on line 95 now lets me use the final
comparison flag as a file number. After all, -0 still equals 0, and -(-1) equals 1. This method could be the basis of a very efficient character case control technique. -Gary Bishop

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Cedar Valley 99'er Users Group
c/o Jim Green, 377 Cambridge Dr. NE
Cedar Rapids, Iowa 52402

FIRST CLASS

Send To:
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