

* IMPACT/99 *

by JACK SUGHRUE
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HOW TO ORGANIZE YOUR LIFE

I ♥ the questions people ask me in letters. Though the advice I give is usually as valuable as pyrite, I give it anyway. Most readers of these articles these past seven years know I teach fifth grade, that I write books, that I drive very inexpensive standard shift cars (my four kids were in college at the same time a couple years ago), that I love to read James Joyce, P.G. Wodehouse, and Gertrude Stein, that my favorite musician is Keith Jarrett, that I love to watch movies and cook and swim and create string figures. But mostly I love to teach and do things related to teaching and TI computing (writing programs for school; creating environmental tools [like PLUS!] for adults on the TI, still my favorite computer and my favorite tool/toy).

All of which is a long way around the questions I've been receiving of late. At least fifteen 99ers this past half year have asked me how I can organize my life in such a way as to accomplish all the different things I like doing. "Where do you find the time to do everything?" is often the way it's finally expressed.

Well, let me tell you how to organize your life.

Let's go back a year or so. My computer desks are always in a shambles. Stuff is piled all over the monitor and PBox and printer. Before I compute each day I gather up and take this stuff to other parts of this room and add to the piles there. I can never seem to get ahead of this. Those TI friends who've stayed overnight in this "spare room" have only seen it in the cleaned-up stage. Or almost. The bed is cleared off for the occasions.

I asked myself, "What IS all this stuff?"

Being modemless, I write LOTS of letters. About 35 a week. Many to fellow 99er computer loonies. I get lots of mail back I really look forward to and lots of mail I'm really sorry to see: the kind where you get on so many mailing lists you grow concerned over the world's tree population. The using up of the world's paper supply for the kind of junk mail I get is incredible.

As soon as my Fairware PLUS! disk was reviewed in MICROpendium and COMPUTER SHOPPER with my address, I began to get on lists of all the Bughouse Batties. Get rich schemes are the most frequent: send just \$5.00 and mail the enclosed form to just 10 other people, etc. A modern-day version of the illegal pyramid clubs of the 50's. Then there are the "contest winner" or "you have been selected to receive" at some nominal cost or required purchase a "prize." The next most popular junk is to contribute to somebody's religion (preferably converting in the process - but not essential so long as the money is there). The fourth-most pile of junk is the catalogs. I get put on lists for the most extraordinary catalogs (provocative longerie, crocheting implements, tulip bulbs directly from Holland, abrasives [I figure MY personality doesn't need any.], joke items [like plastic doggie doo and bow ties that squirt water], and so on). And, lastly, the charities. Now, like most Americans, I contribute to quite a few favorite charities such as Greenpeace, Common Cause, Amnesty International, Cancer Fund. But, a few years ago I started sending my contributions in with

misspellings in my name. Jack Zughrue or Lughrue or Dughrue or whatever. Now I know exactly where any new piece of junkmail got my address and I just don't contribute there anymore. (None of the above, by the way, has sold my name yet.)

So a lot of this kind of paper garbage comes in every day. And I usually toss it on top of my printer desk or on top of my computers. If I take a minute before supper to sort the stuff out, I usually dump my briefcase full of my mail and papers to correct from school on the desks first, then put ESSENTIALS on top of the computers, so I won't start anything without having to remove these piles first. Then I put the next pile right next to the computers as this stuff has to get done later, though still immediately. The next piles are for the things that can wait. They just join the already waiting piles. The last pile or two is composed of stuff I will probably throw away if I take the trouble to look at it: most of what was mentioned above.

I really organized myself last fall and got grocery bags and marked them "#1" and "#2" and all the way to "#6", as I had six large piles by that time. The #1 bag had to be dealt with right away. And so on. This seemed to be working okay, except the bags numbered 3 and higher began to overflow. My computer room took on a look of post-Apocalypse desolation, and, Elaine, my patient wife was having difficulty with the patience. "Aha!" I thought. "I'll use the Sughrue Method of Educational Organization": what I do in my classroom. Why I hadn't thought of it before I don't know.

I jumped in my VW Fox Wagon and zipped down to the nearest supermarket and asked for a dozen banana boxes (which they throw away, so I was recycling to help the environment), loaded the car, and raced homeward. I don't know if you know what a banana box is. It's a wide, squat, very sturdy box with handle slots and an equally sturdy cover. I keep ALL my disks catalogued in banana boxes for nice storage and easy access. The boxes can be stored under beds or safely atop one another. Just about anything fits into them. You can paint or wallpaper them to match anything. My fifth-grade students refer to them as "wicked-awesome cartons."

And so by last month I just finished putting the contents of Bag #1 into Box #1, Bag #2 into Box #2; all the way up to #8. (By this time I had two MORE bags I called "MISC.") The other four boxes are for all the good things: TI newsletters, personal mail, manuals for the disks that require them and things relating to PLUS! and the public domain programs I write. These four kinds of things I sorted first using alphabetized file folders.

The only trouble is, I've had to add TWO MORE banana boxes this past month to house the overflow of Boxes #3-8.

Now here is the secret to How To Organize Your Life:

Once you have done all the above - from piles to bags to boxes - you will have noticed that the tops of your desks and computer equipment stay relatively clean.

Then take Boxes #3-10 to the dump. Save the empty banana boxes for later. Use the time you would have wasted dealing with the stuff in Boxes #3-10 by taking piano lessons or teaching your aardvark to fetch.

It's amazing what you can do with all that spare time. You might even get back to Video Chess or some of your oldies but definitely goodies. (Diablo and High Gravity being my two favorites.)

Matter of fact, I think I'll play with High Gravity right now.

See how easy organizing your life can be?

Teach Yourself BASIC

The Mysterious K

COMPUTERS USE a very simple code, called **binary**, to represent information. Binary is very simple; it uses only two symbols, 0 and 1. The symbols, 0 and 1, are called **binary digits**, or **bits**.

In a typical personal computer, information is stored in the **memory** of the computer. The memory consists of many thousands of bits organized as bunches of bits in **memory locations**.

One memory location can hold eight bits of information. A bunch of eight bits is called a **byte**. So . . . one memory location can hold eight bits, or one byte. The memory of a typical personal computer has many thousands of memory locations.

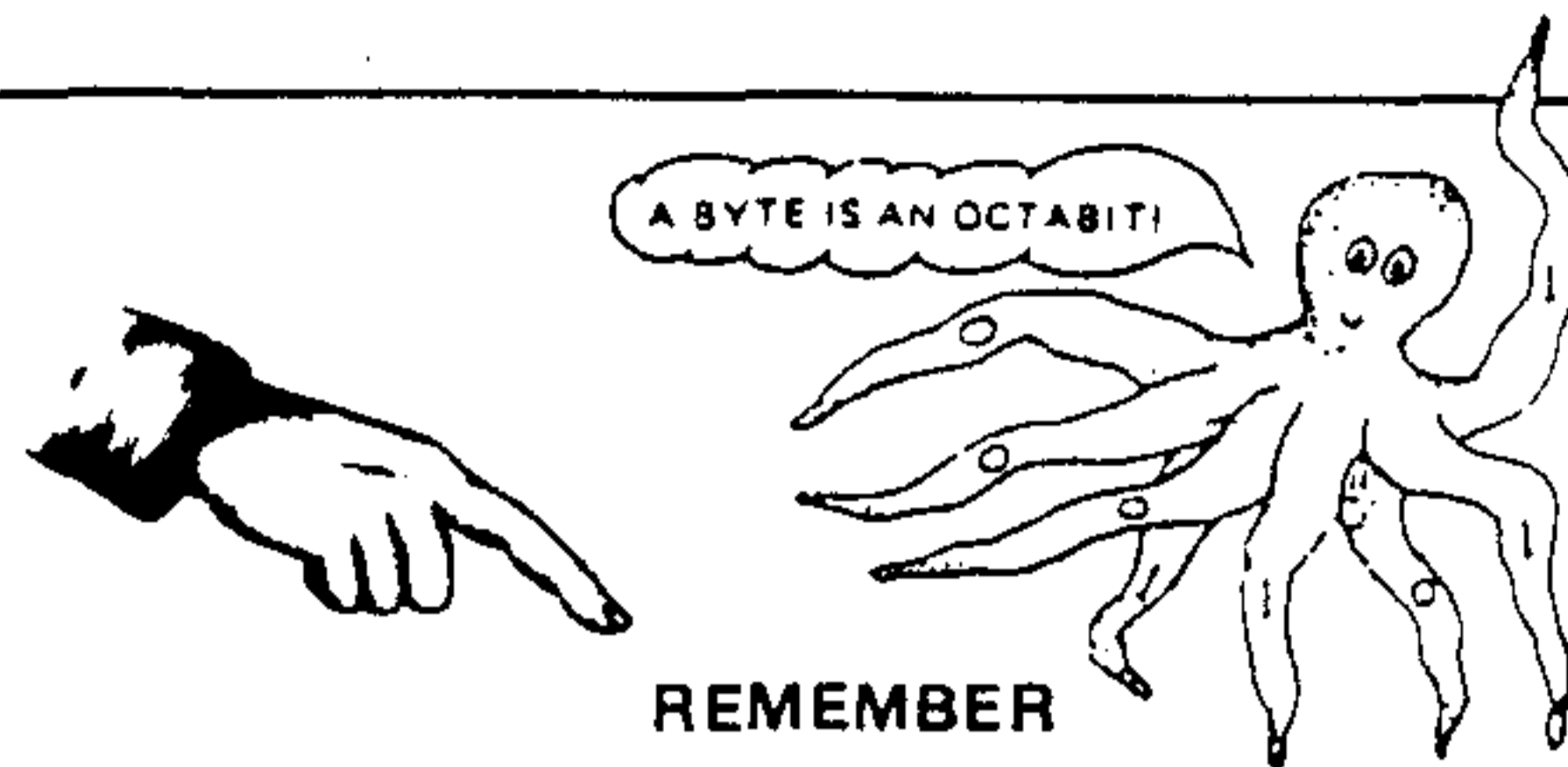
- One memory location can store eight bits.
- A group of eight bits is called a byte.
- So, a memory location can store one byte.
- A computer memory has many thousands of locations. So the memory can store many thousands of bytes.

Perhaps you have heard about the mysterious **K**. People say a computer has 128K or 256K or 512K—or more—bytes of memory.

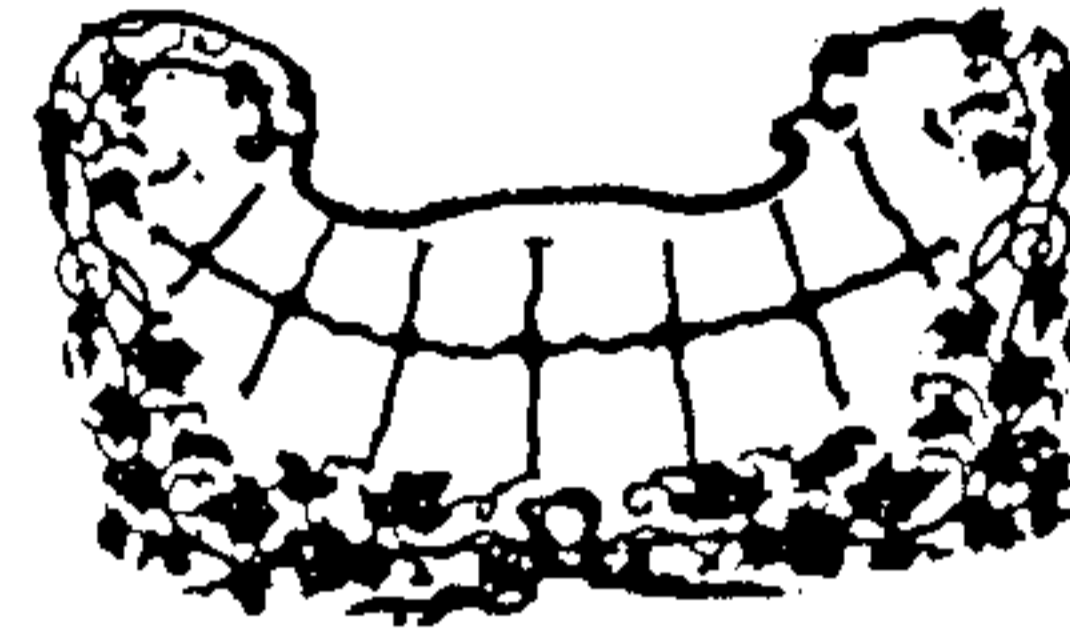
- 1K bytes equals 2^{10} bytes equals 1024 bytes.

Use the computer to change 1K bytes or 256K bytes or 512K bytes to ordinary numbers.

- You type `PRINT 2^10`
It prints `1024`
- You type `PRINT 256 * 2^10`
It prints `262144`
- You type `PRINT 512 * 2^10`
It prints `524288`



$$1\text{K bytes} = 2^{10} \text{ bytes} = 1024 \text{ bytes}$$



Perhaps you have heard the ancient story about the wise person who did a great service for a king. The king asked her what reward would be appropriate. Her request was simple. She asked only for grains of wheat, computed as follows:

On the first square of a chessboard, one grain of wheat. On the second square, two grains of wheat. On the third square, four grains of wheat. And so on, doubling at each new square.

On square number n , there are to be 2^{n-1} grains. Let's find out how many grains on square 16:

- You type `PRINT 2^15`

It prints `32768`

Inexorably, the grains pile up. How many on square 64?

- You type `PRINT 2^63`

It prints `9.223372E+18`

Yup, that's a lot of wheat, more wheat than existed in all the kingdoms everywhere. The king realized that he had been duped.

The
BASIC
Teacher

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By Bob Albrecht and George Firedrake

This is the first of what I hope will be a series of non technical articles aimed at users who don't want to program but who would benefit from learning more about some of the enhancement utilities that are available for extended basic. These utilities are often no more difficult to use than DM-1000.

For our first example let's use Barry Boone's SYSTEX to improve the loading speed of the fantasy game CARFAX ABBEY. CARFAX ABBEY is a fairware game by David Vincent of Kent UK. This game uses 7 assembly language graphic routines that take over 1 minute to load. After these programs are in memory, the main program begins to load. From start to finish it takes about 3 minutes to get the program booted. Now this is a short time in geological terms, but it is forever and a day to a computer user sooo let's improve it.

First you'll need one disk drive, a back-up copy of CARFAX ABBEY and a copy of SYSTEX. Now turn on the TI. At the READY prompt type:

```
CALL INIT::CALL LOAD("DSK1.GRAF1","DSK1.GRAF2","DSK1.G
RAPH3","DSK1.GRAF4","DSK1.GRAF5","DSK1.GRAF6","DSK1.G
RAPH7")
```

Place the disk containing CARFAX ABBEY in drive 1 and press enter. Now read the paper until the load is done. Place the SYSTEX disk in drive 1 and type:

```
RUN "DSK1.SYSTEX"
```

You will soon be asked if the assembly language routine has been loaded. Press "Y" then "ENTER". Now type:

```
11 RUN "DSK1.CARFAX"
```

Press "ENTER". Now type

```
SAVE DSK1.GRAPHICS
```

Place a formatted disk in drive 1 and press "ENTER". Believe it or not we have just performed a very delicate operation, 7 assembly language routines have just been disguised as 1 fast loading EXTENDED BASIC program. There will also be a saving of about 47 sectors of disk space. Place the copy of CARFAX ABBEY in drive 1 and type:

```
OLD DSK1.CARF/LOAD
```

Press enter. At the READY prompt type 440 and press the down arrow (Fnct x) you should see:

```
440 CALL INIT :: CALL LOAD("
DSK1.GRAF1","DSK1.GRAF2","
DSK1.GRAF3","DSK1.GRAF4","
DSK1.GRAF5","DSK1.graph6","
DSK1.GRAF7")
```

As you can see this is a step that we want to eliminate so press FCTN 3 followed by FCTN x. The display should now say

```
450 RUN "DSK1.CARFAX"
```

Rewrite the line to read

```
450 RUN "DSK1.GRAPHICS"
```

Now press ENTER, place the disk containing the the file we just created into drive 1, type

```
SAVE DSK1.LOAD
```

Press enter. The final step consists of transferring the needed files from the old CARFAX ABBEY disk to the new one the files that must be moved are:

```
CARFAX
CARFAX/DOCS
HELP (if your disk has a file called CHEAT/NOTES,
copy it and change its name to HELP)
```

I hope you have tried the steps listed above and don't forget to pay the authors if you make these programs a part of your library. SYSTEX can be applied to other programs like Steve McWatty's GRAPHIC LABELER or many others that load in assembly programs. Try it out, you'll get an error message if it doesn't work and you'll lose about 3 to 4 minutes of your time.

P.S. Let me know if the instructions are too detailed. I am aiming at the tyro and devout non programmer feedback from any source will accepted and acted upon as time and ability allow.

Would you like to learn how to use PLUS! to write a letter, utilizing the codes and templates found in PLUS!? Wonderful--then let's do it.

For this tutorial, assume two drives (a single drive will work). So, first load Funnelweb and go to Edit mode. Now put the PLUS! disk in drive 1 and work disk in drive 2.

After entering Editor mode, you'll find the cursor blinking on the command line. Enter LP and then enter DSK1.L3. Quickly you will see a template for writing letters. Don't be frightened by all this gaubly gook you now see on the screen. Instead, let's bravely march in and see how we can miraculously tame these squiggly microbes and produce a nice letter.

Before continuing, observe the first line of the template. Do you see the .IF DSK1.C3 statement? This include file contains all the transliteration codes you'll need to write a letter--underline, italics, double strike, etc. When you engage the Formatter they will load automatically.

Notice another nice feature here--your margins are set so you won't jump screens. I have one recommendation for you at this juncture--hit FCTN 0 to eliminate the line numbers from the side of the screen. If you must have them at any time, simply hit FCTN 0 again. FCTN 0 toggles them on and off. Not to contend with the screen jumping sideways, like a fast track of frogs, pleases me to no end.

OK, you're ready to correspond. All you have to do to write a letter is fill in the prompts. The first prompt asks for your street address, city, and zip. After filling in this data, your next prompt will ask for the date. Enter the date and come to the next prompt--the company name to whom you are writing. If this entry does not apply, delete that line.

The prompt now asks for the company's address, or the address of the person you are writing to, and the company president's name. Either fill that in or delete the line.

Now we are ready to enter the greeting--the person to whom you are writing. After entering that, you face a mass of % signs. Go right ahead and type over them with the body of your letter. When you finish entering the body of the letter, delete any remaining % signs.

Next you come to a string of < signs. Here you type over these signs and enter the Sender/Secretary initials. Delete any unused signs.

Finally we come to the signature. Type in your name and title. Then go back to the command line (FCTN 9), and type SF. At that you will be asked for the filename. Here enter DSK2.xxx. Now remove the Plus! disk and replace it with the Funnelweb disk. Load your Funnelweb Formatter. Then remove the Funnelweb disk and replace it with PLUS! and print the letter.

If you're like me, you will want to change some of the items in this letter format. Permit me to state how I would change them.

I frequently use a pre-printed letterhead, so I delete the lines containing your street, city and zip. At times I also eliminate the company name prompt. FCTN 3 is handy to do your line deleting work. Simply pretend you're Darth Vader and zap everything you don't like.

I don't like a double space set up for my letters, so I deleted the .LS 2 code. The letter then will print in single space. Another thing I don't like is the location of

the signature, so I replaced the >LM 51 code with .CE 9. This resets the left margin to 6 and centers the following 9 lines.

Have you been catching on to the wonderful fact that you can change this letter format to suit your own tastes? Once you have a letter format you like, save it to disk so you don't have to reinvent the wheel each time you write a letter. You could save this format to a work disk, or you could save it back to DSK1.L3. However, if you save it back to L3, this will overwrite the current L3 file. Make sure you have a copy of PLUS! that you use only to make copies from. Never write to a master disk, because writing to it risks losing valuable files.

If you read this article and didn't try it out at the computer, you probably don't appreciate how easy it is to write a nice letter on our TI-99/4A.

NOTE: The following letter was sent to John Parken of TI-Chips by Will McGovern of Funnelweb dated Jan 9, 1989.

Dear John,

Thanks for your letter. I'll answer as Will, my 19 year old son, is fairly hopeless at answering letters. Besides, in the last year, he has almost entirely abandoned the TI for the Amiga, on which he is now a reasonably expert assembly programmer. He left some items unfinished on the TI after putting in a lot of effort, e.g. an MS-DOS to TI file transfer programs, because there had been so little return on his earlier solo efforts. Perhaps that partially answers your questions.

We have just received a DIGIT AVPC and this has re-kindled some sparks of his interest in the TI. He has done an 80-column editor for this device now as a first effort.

As for response on FWB. For all we know FWB may well have become the most widely used fairware on the TI-99. In total the "fairware" receipts have been substantial - as hardware directly received as collective gifts or financed by the \$'s it has fully equipped the basic expanded system we started with and has gotten a second one established too, with enough left over to have made the hobby interesting and self-perpetuating in a limited sense.

On the other hand, you wouldn't want to look at it as a business. In terms of hours spent on it, an all-consuming spare time effort over several years, much to the neglect of other interest, the gross return is better measured in cents/hour rather than \$/hour.

Perhaps more disappointing is the value people place on it, as compared to commercial software prices, even in the depressed TI-99 software market. Even individual components of the package have as much in them as many whole commercial offerings. It's kind of a trap - I spent several months on the config program for V4.10 and later with over 560 sectors of source code and a whole new visual style for TI programs, but I don't think it would have made much difference to fairware return if I hadn't bothered.

Most of my letter writing these days is to old friends ("old" being on the time scale of the TI-99's existence).

Why continue? - Mostly because it is a fascinating hobby and the DIGIT AVPC has breathed new life into it for a while longer. That's the direction most new effort will go, as the basic FWB system is pretty mature now.

Directions =====	FUEL GAME GAS GLASSes GLUE HAMMer HANDle ? HELM HILL INVENTory ISLE IT JETSaa LADDer LEDGe LENS LIGHts MAP MASK MATtress OBJEct OCEAn OILSkin OPENing OYSTER PAINTing PEARL * PICTure PILIng PIN * PIRAtE POOL PORThole RAINcoat REMBrandt* RIM RING * ROCK RUM SCREWdriver SEA SHED SHIP SHOVel SIGN SILT SNAIl STAMps * SUMMit TOOLshed TOP TORCh WATCH * WATER WIREri	YOHO Verbs =====	BREAtHe BURN CHARge CLEAn CLIMb CRANK CRAWl DESCRibe DIG DIVE DON DRINK DRIVE DROP EAT EMPTy ENTER EXAMine FEEL FIND FIX FOLD FOLLow GET GIVE GLUE GO GRAB HEAR HELP HOLD HYPERventilate IN INVENTory Inventory JUMP KILL LEAP LEAVE LIFT LIGHt LISTen LOOK Look MAKE MIX MOVE OPEN FAUSE PICK	PRESs PROBe PULL PUSH PUT PUTOn QUIT READ RECHarge RELEase REMOve REPAir RINSe RIP ROLL RUB SAIL SAVE SAY SCORE SHORT ? SHUToff SLEEp SPIT SQUInt STAB STAND START STOP SWIM TAKE TEAR THROW TO TOUCH UNLOck UNROll UNSCrew USE UWRap WAIT WAKE WALK WASH WEAR WITH WRAP YAWN
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AN AID FOR RETURN TO PIRATES ISLE
By John Floyd

Well, let's face it!!!! Mr. Adams out did himself on this one! This adventure has got to be the most difficult of the entire series.

With a few sneaky tricks I have compiled a list of what I beleive to be ALL of the nouns and verbs used within the adventure. There are a few words that I am unsure of as to their use.

The word AUTO may be a verb rather than a noun and the words HAND, HYPE and SHOR can mean several things.

I hope that this list of words can be of some assistance to those of you who have become stumped while playing the adventure. If you are one of those that becomes offended by someone else offering hints, I recommend that you destroy this list immediately! (Or at least put it someplace that you cannot refer to it until you decide that you really need it!)

I have divided the list into nouns and verbs and have alphabetized each catagory for ease of locating words. All of the treasures are noted with an asterisk so that you can easily refer to them.

Now I myself have not been playing this adventure very long and by no means know the solution to the game. The list has however helped me in a few situatons.

Okay now! Try all of the verb/noun combinations as you trek through this fantastic adventure but don't get discouraged, you will die many times in this adventure and each is a learning experience.

HAPPY ADVENTURING

THANK NORTHWEST OHIO 99ERS

***** * EASY GRADER * *****

by Harold Hoyt

(Thanks to St Louis User Group)

Now that my daughter, Kim, is a school teacher, I see that she can use all the help that she can get. I see her using a "slide rule table" for grading homework and tests. You move the number of problems on the test under a window and look up the percent right as a function of the number of questions missed. I thought that it might be handy to have several copies of this kind of table, produced by the computer for easy insertion in a notebook. Maybe all of the school teachers might find it handy.

In order to get a large table printed in a small space, a printer that can do condensed 136 characters and subscripts is required. The table covers a range of 4 to 99 problems. Some squirming was required to get everything to fit. The table is printed as three smaller tables. After each table is printed, the program stops to allow the operator to position the paper. After the paper is positioned as desired, press any key to continue. Do not turn off the printer to position the paper as the control codes to the printer are sent only once when the printer file is opened. The first two tables fit nicely on one 8.5 by 11" sheet and the third table nearly fills a second sheet.

One could make several copies of the table without separating the sheets and then put the paper back in the printer reversed so that the tables would print on both sides. One would have to stagger the printing by one sheet to come out even.

Problems 5 through 35 are in one table, 36 through 67 in a second, and 68 through 99 in the third. Line 100 opens the printer. Substitute codes as required for your printer into the string at the end of line 100. 27 65 06 sets line spacing at 6/72". 27 66 03 sets condensed. 27 92 01 slashes the zero and 27 83 01 sets subscripts. The 13 performs a carriage return to start a fresh line for the header.

For P=0 to 2 refers to pages or passes. Could have said T for tables? For C=4+32*P to 35+32*P allows the three tables to be non-overlapping. The rows are calculated to be one less than the maximum # of problems. The whole thing was designed without TAB settings using tricks to make each column entry right justified printing PRINT #1:RPT\$(" ",3-LEN(C\$))C\$; :This function will use 3 printing spaces if C\$ is 0,1,2 or 3 characters long.

The only meaningful calculation is in line 140 where C\$=STR\$(INT(100*((C-R)/C)+.5)). C is the total # of problems, R, the # wrong, is the row #. C-R/C is the fraction right. Multiplied by 100 is % right. Add 0.5 and do an INT rounds up to the nearest percent.

* EASY GRADER *
* THE PROGRAM *

```

1 SAVE DSK1.GRADER !200
100 CALL CLEAR :: OPEN #1:"P
10",VARIABLE 136 :: FOR C=1
TO 14 :: PRINT #1:CHR$(VAL(S
EG$("15276506276603279201278
30113",2*C-1,2))):NEXT C
1147
110 X$=" Easy Grader
by Harold Hoyt 10/1
1/88" :: DISPLAY AT(10,7):X$
:: FOR P=0 TO 2 :: PRINT #1
:X$:TAB(60);"# of Problems"
1047
120 PRINT #1:" Wrong";:FO
R C=4+32*P TO 35+32*P :: C$=
STR$(C):: PRINT #1:RPT$(" ",
3-LEN(C$))&C$;:NEXT C :: P
RINT #1:" Wrong" !PrntHdr 11
43
130 FOR R=1 TO 34+P*32 :: R$
=STR$(R):: PRINT #1:TAB(8-LE
N(R$));R$;:FOR C=4+32*P TO
35+32*P :: C$="---" :: IF C
(R THEN 150 1173
140 C$=STR$(INT(100*((C-R)/C
)+.5))!238
150 PRINT #1:RPT$(" ",3-LEN(
C$))&C$;:NEXT C :: PRINT #
1:RPT$(" ",3-LEN(R$))&R$ ::
NEXT R 1135
160 DISPLAY AT(12,1):" :: D
ISPLAY AT(12,1):"Press Any K
ey To Continue" :: CALL KEY(
0,K,S):: IF S=0 THEN 160 ::
DISPLAY AT(12,1):"Working" !
080
170 NEXT P :: CLOSE #1 1255

```

NOTICE !

EASY

GRADER

EXAMPLE

ON P. 8

MAY 9, 1989 HAPPY COMPUTING !!!

MUNCH OFFICERS AND NUMBERS (all in 508 area unless noted)

President/Mail	W.C. Wyman	839-4134
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+++++++	Jack Sughrue	476/7630

APRIL MEETING. The April meeting was called to order by acting Chair Jack Sughrue, in Corson's absence. Jack gave his views and review of the April 1st Fayah. Although attendance was down, those who attended had a good time. Jack announced plans for he and Lou Holmes and any volunteers to give a demo on a disk of the month. We hope to have copies of each disk of the month available at that meeting, at a nominal cost, in order to save copying time. For the June meeting we plan a used equipment and software saale'n swap, so plan to bring anything you are interested in selling or swapping to the June meeting. There were 16 members present.

MAY MEETING. Jack Sughrue will give a demo of his new and possibly last PLUS disk, as you all know, this will be a great demo. Dan Rogers will continue with the Assembly group.

WELCOME NEW MEMBER. Welcome back to Steve McCann who has rejoined M.U.N.C.H. after a couple of years absence.

RAFFLE. Each month we have a raffle and the dollar donation per ticket helps to cover the monthly fee to rent the hall. This month's raffle will have a TI programming book, two educational game carts and at least one other item.

MONTHLY SALES. At each meeting you have the opportunity to buy and/or sell new or used hardware, software, books and original programs. Please have prices marked on any items you have to sell.

LIBRARY NOTICE. Please return any items borrowed from our library. If you can not come to a meeting or give these items to someone who will be at the meting, please mail any library items to the group address which is listed on the cover of this newsletter. There are no late fees, we don't care how long they have been out, please return these items.

REPRINTS. Reprints of any items in this newsletter is permitted as long as credit is given to M.U.N.C.H.

ARTICLES. I am always looking for articles for this newsletter, anything which interests you will probably interest other members of the TI community, so please share your ideas and opinions with all of us.

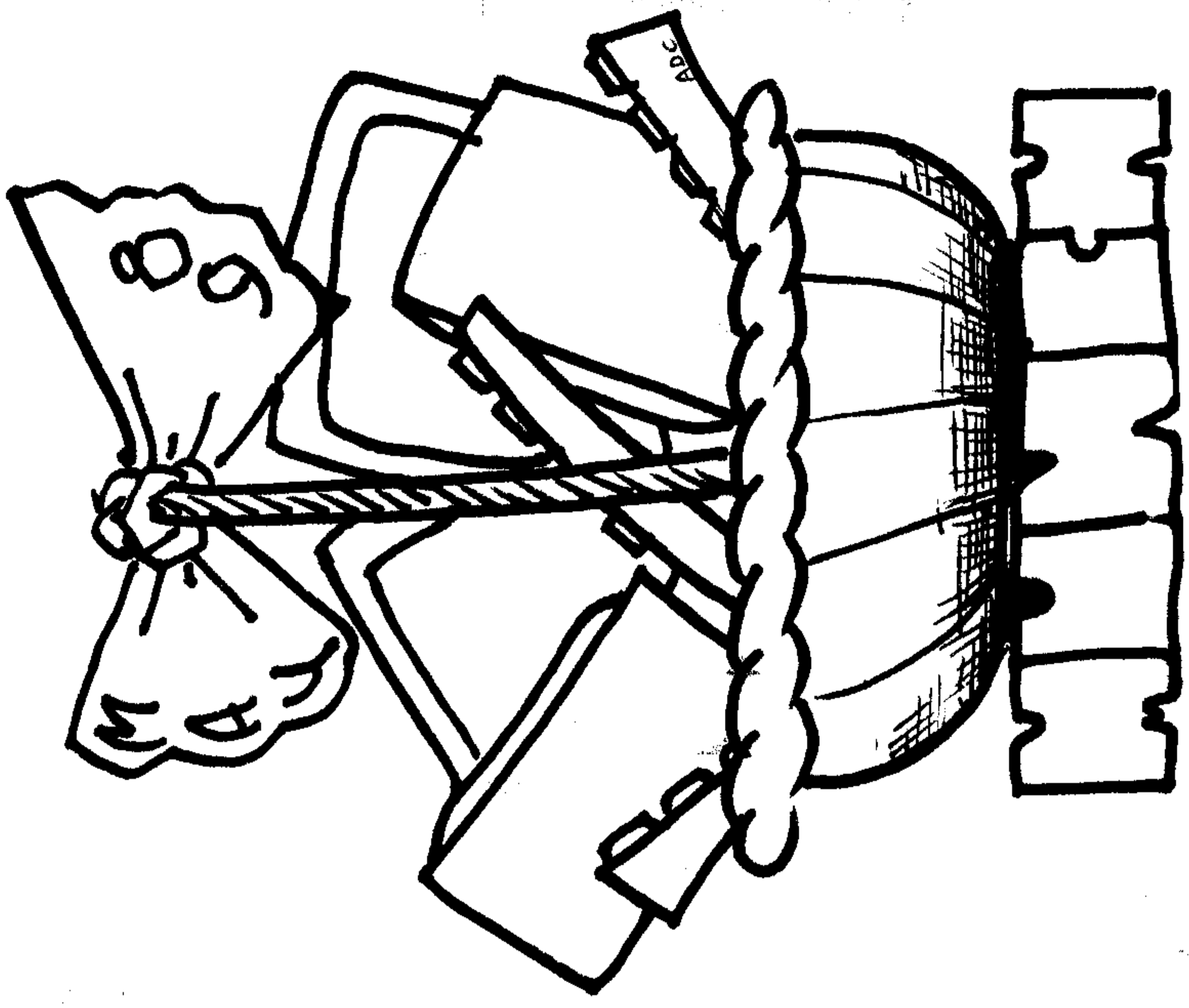
NEWSLETTER EXCHANGE EDITORS. Please note our corrected address on the front cove of this issue.

```

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Mass Users of the Ninety-nine and Computer Hobbyists
MAY 1989 Monthly Newsletter Version 8.05



1989 MAY 9 MEETING #2

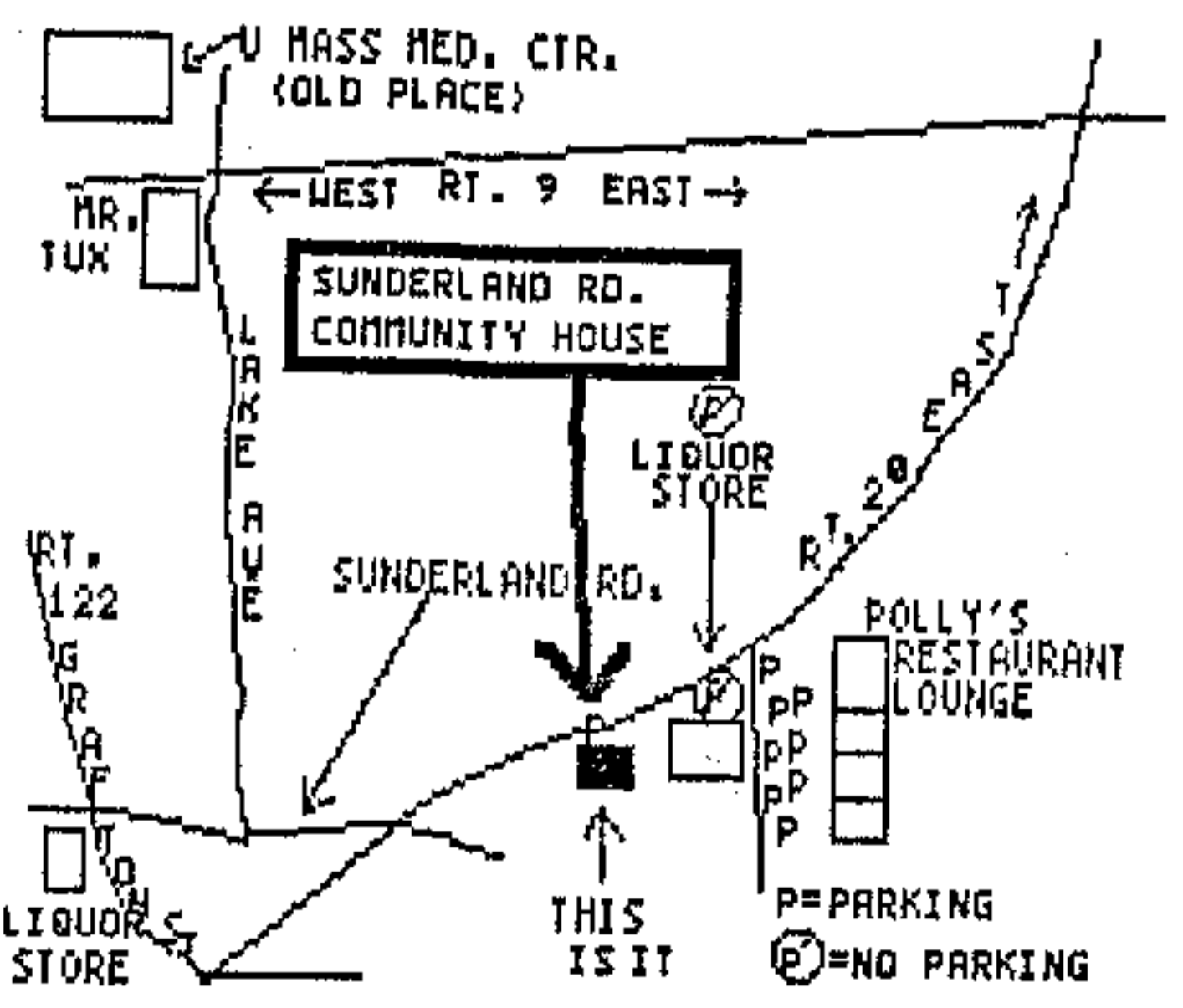
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!CORRECTED ADDRESS!

Next Meeting MAY 9



FIRST CLASS 7589



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