

The Boston Computer Society
TI-99/ 4A User Group
Newsletter
June/July
Edited by Justin Dowling

LISTEN
BY
JUSTIN DOWLING

Notice that this issue is a bi-monthly one. We receive fewer funds from The BCS to do newsletters. (You may have noticed the resultant downturn in the economy in your own budgets at work, at play.) We can afford 6 8-page newsletters in the fiscal year, or 12 4-page newsletters. Right now, we plan to do 6. TI 99/4A has been an orphan

now since 10/83. But in prior years when we couldn't count on retail sales advertizing to generate cash flow, we at least could capitalize on the 99/4A marketplace, which, as you know, has been thriving to these past 5 years. Things are not as rosy now as then; we have enough software for the 99/4A to last a lifetime; it will do most of what the big guys can do (personally, I find the MAC graphics better [easier] than ours). I hope acti-

tivity will level off. The declines you see this year, like shortening of the newsletter exchange list, or like the decision of the Ottawa group to abandon exchanges altogether, or like our decision to shorten production, these declines can be interpreted as downturns, yes, but we won't crash if you all flap your arms real hard!

On the exchanges, I intend to substitute a meeting newsletter for the missing months if I can. I expect the costs to be lower. More frequent communication to other groups than communication to our own out-of-town members will do more for our members in the way of news dissemination in the long run. We're in this for the long run.

There are some original articles inside, mixed with the best stuff of more far-flung users. Taking a page from Steve Michelson of the Toronto 9T9 club, we also include stuff that is not strictly tech talk about the 99/4A and Geneve. We have two articles from the Hunter Valley group for example (the guys that brought us the McGoverns, who brought us Funnelweb). I hope you get a laugh from this Australian sense of humor.

Enough, 'later.

INTRODUCTION TO THE UCSD P-SYSTEM by Ron Williams

This month I will get away from programming and tell you about some disks and programs that have been around for the p-system. When I first started programming in the p-system environment I didn't have much. It took me a while to find disks and programs that run in the p-system environment. I will try now to tell you about some of these disks and programs so maybe you will not have to look so hard like I did. I will list the disks

below with a brief description of each.

SIGCODE:, SIG-TX1:, SIG-TX2: These are the disks from Anders Persson of Sweden. On the disks are mostly units with source code many of the routines simulate XB functions like HCHAR, VCHAR and CALL KEY also a unit that will let you do windows on the screen. These are "must disks" for any p-system programmer. A lot of memory information on the p-system running on the TI is included. I reviewed these disks in this column a while ago in more detail.

PSTRM: A collection of programs put together by Jerry Coffey for the p-system. On this disk is a system to transfer p-system files over a modem using many of the communication protocols that the TI supports. It also includes a program to partition a p-system disk in two parts one part for the p-system and one part regular TI disk system. I reviewed this disk previously in more detail before.

UBOOT: Programs by Jerry Coffey to create 40 or 80 track p-system boot disks using the Myarc quad density (80 track) controller option. Once again I reviewed this disk previously.

BOOT_VT: This disk is a collection of programs that will let you use a terminal to run 80 columns with the p-system. The terminal is connected thru the RS232 port. This disk I reviewed late last year. Programs and disk by Andrew Becker.

REWVOL1: This disk is a collection of programs to transfer D/V 80 files to and from the p-system. A program to print out the different procedures and functions of a Pascal text file is included. A unit to get the system date and a "PIO" modified "MODRS232" program is also included. Programs and disk by Ron Williams.

UTIL1: This disk has a few programs dealing with Fibonacci and GCD numbers. A

simple data base that could be modified for many uses is here as well as a program that will print out p-system directories and regular TI directories in multi-columns. Programs and disk by Ron Williams.

UTIL3: On this disk is a program to read in p-system text files and print them all at once or in sections. The program will print to disk, screen or printer. The program will also do the same with a D/V 80 text file. A program to compute gas mileage and read the number of disk blocks on a p-system disk is also here, as well as a system to do in the p-system, disk sector copies. A simple multi-column p-system, TI system disk directory printer is part of the copy program package. The copy program main menu will also do disk sweeps like DM-1000 will do. Making a disk appear to be blank. The p-system disk formatter that was modified by Anders Persson is part of the copy program. This formatter will do double sided double density with the Corcomp disk drive controller. It will not do double density with the Myarc controller. Most programs by Ron Williams on this disk except for the above mentioned formatter program.

BUG2: I am not sure that this is the true name of this disk. But this is a catalog program that is similar to Personal Record Keeping. Source code is included so field lengths and numbers can be adjusted. This disk and programs is by Ake Jonsson.

Most of these disks I have or are in the BCS library. If you are interested in some of these disks write to the Boston Computer Society TI-99/4A user group at One Center Plaza, Boston MA 02108. I am sure that any mail directed to me will be forwarded.

USING MULTIPLAN

By D.L.Mahler

There are many ways Multiplan can be used

to maintain records needed for income tax preparation. One of the most obvious is to keep running records of deductible expenses. As an example, set up the following headings:

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ITEM[r1c1] DATE[r1c2] AMOUNT[r1c3]
TAX[r1c4] CONTRIB[r1c5] MEDICAL[r1c6]
MISC[r1c7]
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Draw in lines in r2c1 (--) and use COPY RIGHT 6 to put the lines in the other columns. Enter the first item in r3c1,r3c2,r3c3 (e.g. RE TAX, 01/02, 1000). Make sure you use ALPHA, not UAL for the date, or MP will try to do division! Do not use the \$ sign; we will take care of that later! Remember, CTRL1 will always bring you to top left corner and FCTN1 to bottom right corner. When a menu is shown, CTRL A brings you to next item on that menu, and CTRL C wipes that menu. ENTER will execute the command showing on screen. Slide over to r3c3, call up COPY FROM, use arrows to get to r3c4, and press ENTER; voila!

Now call up WINDOWS SPLIT TITLE 1 col vert and 2 rows horizontal; press ENTER. The headings will always now be on screen.

Call up FORMAT CELLS "r33:22c3:7" C \$; you will see ***** replace the 1000 because \$1000.00 needs more width than 1000. So call up FORMAT WIDTH while the *** box is high-lighted and change width from "d" to 10; "\$1000.00" should appear. Use the same procedure in other columns as needed.

Use NAME command to name c4r3:20 "TAX", c5r3:20 "CONT", c6r3:20 "MED", c7r3:20 "MISC". (You can always INSERT more rows as you need them!). Page down to row 22, call up UAL, and in r22c4 enter "SUM(TAX)", in r22c5 "SUM(CONT)", in r22c6 "SUM(MED)", and

in r22c7 "SUM(MISC)". (Do not type in quote marks.) Now hit F8 (recalculate); starting to look like something, isn't it? Now enter your additional items, in each case using COPY FROM to copy from c3 to appropriate column. Note that you do not actually have to type in the desired cell; as you page over MP names the active cell, so just press ENTER when you arrive there! When you finish the current batch of entries, hit F8 and all the calculations are done! Don't forget to TRANSFER SAVE your data on disk under some name as TXDED90.

To obtain hard-copy on your printer, call up PRINT, set margins and field size (e.g. cl:7rl:22 or higher if you have added rows). Use of Jack Mathias's TIMP-PRINT will allow you to use compressed print, italics, double-strike, etc. in various areas of your print-out.

I was going to go on to show how to keep track of taxable income from municipal bond funds, but think we will leave that for next time if there is interest!

A Multiplan Tip

by
Justin Dowling

I published this tip some time ago, but I am reminded that old timers have moved on. Meanwhile newcomers have taken their place. I didn't save the original copy, so here goes again. If the speed of this article is too slow for you, my apologies. I'd like to get it just about right, but users are at all levels of expertise.

You use Multiplan, but you cannot fit your spreadsheet onto an 8 1/2 X 11" paper. So you either use Jim Swedlow's utility *Sideways* or you print two pages and paste them together. Multiplan has no format command to change the font size from Pica or Elite defaults (10 & 12 CPI) to condensed print (around 17 CPI).

Well, there's many ways to skin this cat. One of them is to create a template with imbedded printer commands that will shift the printer into condensed print when you print out the spreadsheet. You load in this template with the imbedded printer commands at the start of your first session. Whatever you create on that sheet will be printed out in condensed print. In terms of text, that's 132

characters per 80 column line on a regular 8 1/2" page.

Start your first session by setting up a blank spreadsheet however you want it. Just keep it empty of data except for 2 A's <AA> in row 1, column 1. Save the spreadsheet as "CONDENSED".

Quit the session and load your favorite sector editor. I prefer DISK-PATCH that you find in your Funnelweb editor/assembler central menu. I selected the file search feature, told it to look for a file called CONDENSED, and determined that the sector where that file starts is numbered 023 on a 5 1/4" floppy formatted DSSD.

I went to this sector and used the same keys as TI Writer uses to page: fn 4 & fn 6. (I have DISK-PATCH in ASCII mode <fn 2>.) I located the 2 A's I entered into CONDENSED on sector 024. I put my cursor over the first A with the arrow keys and switched to HEX mode from ASCII <fn 1>.

Now, instead of two characters <AA> I have four, filled with the HEX numbers for ASCII "AA" (4141). I look in my printer manual to see what codes the printer wants to see before shifting itself into Condensed Print Mode. I own an EPSON LX90, which is a 9 pin dot-matrix printer; you may have a STAR or some other kind of printer. You need to see what codes you must send your printer to throw it into Condensed Print Mode.

My printer wants to see a HEX 1B0F. This is an escape code, which is ASCII 27 and a SOH, which is ASCII 15. The character sets in your 99/4A start at ASCII 32, which, I think, is the code for the space character. In TI writer you can generate the control codes (which are ASCII 1 to 31?) by going into "special character mode" with a ctr U.

But in the sector editor all I did was enter 1B0F in the place of 4141, the 2 A's I had entered. When I loaded the file CONDENSED into Multiplan, keyed in some data, and printed the sheet to my printer, it came out in Condensed Print.

Save the blank spreadsheet with the embedded Condensed Mode characters for use anytime you create a spreadsheet and you want this feature. You can even get creative and imbed a number of print codes in a spreadsheet, around your customized company logo for example.

I've the past I've noticed about some of the good stuff that HUG gets through the exchange of newsletters. This section will also become a regular part of the newsletter. The following is a small example of some of that info:

THE ALL-NEW, SUPER-DUPER, BANDY-DANDY, 98 CENT, DO-IT-YOURSELF, WAXPAPER

R. L. E. DIGITIZER!

BY: RAY KAZNER, SFV 99ers

When I saw my first R.L.E., I thought, "GOLLLLL-LEEEE! I'd SHORE like to draw ME a pit-chur like THAT!!" Then I found out that it takes something called a "digitizer" to make an R.L.E. and THOSE things could cost a LOT more than my '88 Chevy (fer-shirrrrr!) Since my TI-ARTISTIC talents were FAR from perfect, I decided I'd try to make a CHEAP digitizer, one which required very little talent to use, but would yield a fairly good R.L.E.

"Tracing" a picture, then sticking the paper to my TV screen, so I could move TI-ARTIST's cursor under it (drawing as I went) seemed a good idea, but regular tissue paper wouldn't let me see my cursor CLEARLY enough! I tried "plastic wrap," which certainly DID allow me to see the cursor but wouldn't hold ANY kind of ink! Besides, one touch and it was all SMUDGE, SMUDGE, SMUDGE! And you know how it LOVES to "cling to itself!" Mur-der!

While shopping, I spotted a roll of WAXPAPER (98 cents for 100 feet) AND a (9"X12") cardboard folder (with "pockets" inside) used by school kids. Though the folder was way too big for my TV screen, the drawings of ODIE and GARFIELD on the cover (my favorites!) seemed to be just about right!

At home, I taped a hunk of waxpaper onto the folder, then QUICKLY traced over every line, "etching" the image into the waxpaper with a mechanical pencil (with the lead retracted.) THAT WAS A MISTAKE!!! If you decide to try my "digitizer" yourself, trace with GREAT CARE! Make your tracing as ACCURATE as possible! Care NOW, will save you LOADS of "correcting time" later, when you are completing your "on-screen" master-piece! Be SURE to hit ALL lines, BEFORE you remove the waxpaper copy from your "original."

Next, load TI-ARTIST and put a "frame" around the drawing screen, which helps to align the copy vertically, and can be erased later. Be SURE the copy lies WITHIN this frame, THEN tape it to your screen.

THIS PART IS MOST IMPORTANT! Find a comfortable position, "head-on" to the screen, and begin to "outline" the copy, by placing "DOTS" BEHIND the waxpaper lines. (See sample) DO NOT shift your head sideways! That causes DISTORTION and is HARD to repair later!



(more)

AGAIN, the same words of CAUTION apply when placing the dots as when you were making your WAXPAPER tracing, which is: TAKE YOUR TIME! Do NOT rush to finish it fast! CAREFULLY place each dot, as CLOSE to the "center" of each line, as possible! Although this will SEEM like a long, TEDIOUS job to you (and it IS) try to think of it as "building a strong foundation."

There is NO WAY you can follow a "traced" line by just pushing your joystick and mashing the fire-button! You'll see the cursor "weave all over the road" like a drunk driver! Before trying to make your first WAXPAPER R.L.E., plan to spend several hours with it. Be patient! Persevere! Your determination and care WILL be rewarded with a real work of art! (AMEN!)

It gets easier now as you play "connect the dots." You may find the ZOOM feature a real help with this. Another tip: SAVE the picture frequently! If you make a major boo-boo, you won't lose a TOO much time and sweat by simply reloading the SAVED picture, rather than struggling to repair it.

The FINAL STEP is to give your picture a good "polishing." OR what I had referred to earlier as "correcting time." If you took the time to do all the first steps PROPERLY and your picture is now "connected" simply view "THE BIG PICTURE" and all the "rough spots" will LEAP RIGHT OUT at you!! Adding or erasing a single pixel here and there, is all that remains. It sounds simple, doesn't it? (THIS is the HARDEST part!) After you've done all the "correcting" you THINK you can find, SAVE it, then store it away someplace (for a week or two) THEN reload it and compare your picture to the original. If you can't find ANYTHING else wrong with it, it is DONE! (Use MAX-FILE to convert your TI-ARTIST "PICTURE_P" file into a MAX-FILE.)

Some last tips: DON'T strive for ABSOLUTE PERFECTION! That's IMPOSSIBLE! (Garfield's "stripes" nearly ran me up a wall!!) BUT, by the same token, if you've waited those two weeks and you spot another "flaw," DO attempt fixing it! IF (due to limitations inherent in our consoles or TI-ARTIST, OR due to approaching blindness) you CAN'T fix it (after trying for five or six years) make up some "logical sounding" excuse, when you debut the master-piece. If you make it "high-tech" enough, ANYBODY will buy it! MY winning line is: "Well, NOBODY can draw a PERFECT, curved zig-zag line!"

So, here it is! My COMPLETED work of art! It's NOT a 100% PERFECT copy of the original but what can you expect from a console with an overloaded framistan in it's quadilop?!

There are TONS of "copiable" pictures, for your "WAXPAPER R.L.E. DIGITIZER!" (Coloring books for children, atlases, magazines, calanders, etc..) and if any 99'ERS out there, try doing some PLAYBOY stuff well, I'd appreciate a copy, (before I go totally blind!)



After ALL THAT WORK, it's time for some FUN! Here's a RIDDLE for all you sharp-eyed TI-RUNNER players. WHERE (in TI-RUNNER) do the initials "IBM" appear on screen? HERE'S A CLUE: Play the game up to Level 28, then look in the bricks, but don't look TOO CLOSELY, or you MIGHT miss them!) R.K.

MAN OUT

Dick SCHAYDEL

Another load of pigs off to market! That means a trip to Lightning Ridge is in order. After a supply of fuel and tucker has been laid in the environs of the L/R bowling club have to be explored again. I met a bloke at the Ridge when I was getting the 'roo fencing who reckoned that I might be able to make my own beer. It sounds a good idea. It would sure scare Bondy and the rest of that mob!

I think I'll go on a holiday in a week or so. I've a mate who will come round and check on the automatic feeders and take charge of the place for a fortnight in exchange for a couple of pigs. I think I'll take advantage of the situation and visit one of my mates in the Northern Territory. He has a place near Timber Creek and runs a bona fide safari operation on the Victoria River. He takes loads of tourists up and down the river to look at the local wildlife. Ever since those "Croc-dile" films came out, everybody wants to see a Croc! Gorr reckons that as long as there is money in it, he'll keep it up. I wanted to chuck my pigs and join him up there. Too much regulation for me, mate! I never did like that touristy stuff.

I was fossickin' about in my pile of disks and I came up with a program that is unique as far as I can tell. She's real beaut, mate! The name of this program is SUPERTRACE and it is written by the bloke who writes these Tigercub things. When I was writing programs in XB, the most difficult thing to do was to use TRACE to track down a program logic error. It all seemed simple enough. Type in TRACE in the command mode and then RUN the program. The trouble is, those flamin' line numbers flash across the screen so fast that you are never really sure when the problem in the program can be found.

SUPERTRACE does better! It works on a program SAVED in MERGE format. It doesn't matter whether the program is BASIC or XB, it will break up the multi-statement lines before executing them. The line numbers are displayed as the program executes. So far, nothing spectacular wrong! One of the options of this program is to output to a suitable printer. Let me tell you, seeing something in hard copy is a lot better than squinting at those flamin' numbers flashing on the screen. Everything about the program is simple. All you have to do is follow what's on the screen and you can have a written copy of the program logic as it executes. A good piece of work!!!

A program that I use frequently is one written years ago by Dave Rome and John Giulow called TI-SORT. It works on a TI-Writer text file and will sort each line as if it were a record. There are two sort routines built in to the program and it will sort on two fields in ascending order. Using it, you can create database files with TI-Writer. Mailing lists are the first application that comes to mind. Just enter last name, first name, address, etc. The only thing that you have to keep in mind is to start the various "fields" at the same column. Load your database file and select the "fields" to sort by by entering the column numbers at the appropriate prompt. The file will be sorted and you can save the sorted file back to disk. Another good bit of work!

Living with pigs is always an interesting experience. I keep that lot fed with a high protein diet but they still have an appetite for just about anything that comes along. I have a big boar that I call MacTavish that loves to eat lollies. It doesn't matter what kind they are as long as they are sweet.

They are ALSO especially fond of snakes. Every so often, a snake crawls into the pen and one of the boars will usually get it. I don't know how they do it without getting bitten. I've never actually seen how they catch the flamin' things but I've seen them eating snakes.

It's time to go check on the pigs and the rest. With the dingoes about it never hurts to be as cautious as possible. They will take a sucker if they get the opportunity and I had one get into the farrowing stall a while back. I always have to make sure that everything is closed

BEATING AROUND THE BUSH

WITH Ron Klienschafer

FAR OUT? I'LL SAY!

That bloke further up in the bush, Dick by name keeps making constant reference to me. Now after an incident here on the Grawin, a short time back, I dont want it to be thought that I follow his social habits, although I know him well I should relate this little tale in case it should leak out and my own reputation is shot.

Since last July we have been in the grip of a drought and there is not a blade of grass on the ground with the result that all the cattle, sheep and 'roos will eat just about anything they can get their molars on. This happens in the bush, its part of the country, the animals are so poor in condition that they just cant be bothered to use up energy and run fast from any stranger or vehicle etc.

During one of Dicks visits here to try his luck at the Opal he, like a lot of others, decided to visit the local club to suck the sides in on a few tinnies after the days work, fair enough! one or two maybe but??, some blokes just dont know when they have had enough, it was in the middle of the umpteenth can when a poor delapidated blue flyer 'roo happened to slowly hop near the club and stop to graze on a cardboard carton when Dick along with "Bully" and "Specker" decided it was time that the club had a mascot, you guessed it, the 'roo was going to be that mascot. Faster than I have seen any of the three of them move (except to open a can, which the eyes cant follow, you can hear the hisst of opening AFTER the can has been put to mouth) they tore off after the poor 'roo and finally grabbed it. With a lot of huffing and puffing with dust and stones flying they dragged it back to the club and insisted the Secretary officially make it the mascot, one snag! it had to become a member. Dick immediatly named the 'roo Skippy (what else could come from an addled brain) and offered the cash to memberise the 'roo untill someone pointed out that entry to the club is not permitted without footwear so quick as a flash "Twinkle Toes" offered his size 15" thongs for the 'roo to use, this is the awkward part, getting thongs on a kicking heaving 'roo is no easy task even when it is a small blue flyer, one of them grabbed a wellington boot to put over the 'roos head to try to calm it down but this only exasperated the situation, with several almighty kicks the 'roo sent "Bully" and "Specker" flying and at the same time threw off the wellington boot that smashed a window but Dick, with grim determination, hung on untill the moment the 'roo absolutly shredded Dicks trousers and underwear, and lucky for him did not mark one bit of flesh. The 'roo quickly left the premises and so did Dick, "Bully" and "Specker", last words heard were "bloody uncooperative animals". I wonder if Dick will mention it in his column???.
Ron Kleinschafer.