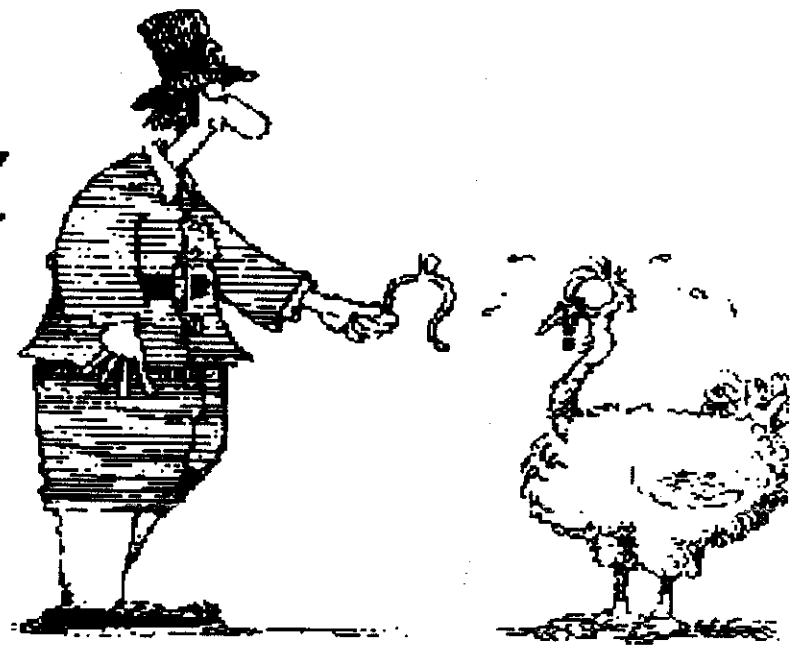
If I had only one wish...

...it would be that you have a wonderful Thanksgiving!



To: All TI99/4A Users Groups

From: SlaVes and OTIUG Groups

November 1991

NewsLetter

NEW PRODUCT SOON TO BE AVAILABLE!

Just recently announced by Don O'Neil on Delphi and GEnie conferences, is Don's new accelerator for the texas instruments 99/4a computer. This small 3 inch by 5 inch board installs inside your computer to speed it up drastically, with the posibilty of 20 times faster! Currently in it's final testing stages, it runs at 12 mhz crystal speed and is equivilant to the speed of the geneve 9640. Check out the spec's in the table below:

NEW 99/4a Product Overviews:

99/4a Accelerator card:

upgrades 3.3 mhz 9900 to 12mhz 99105

offers at least x5 performace gain or x10 performance gain with new 16 bit ram

provides access to 16 bit data bus for 0 wait operation

invisible to system, offers 100% compatability with current code.

piggy-backs 9900, no soldering required for instalation!

This product should be shipping very shortly from bud mills services and opa, look for their assembled, you install. Installation can be arranged with either budor opa. also announced by don was his next project, available sometime around the time of the Chicago Faire, is his replacement p-box interface cable/multi function card:

P-BOX interface card:

functional replacement for ti p-box cable

battery backed static ram dsr's for easy upgrades (16 bit, 0 wait)

smaller connection to side of console, only 1.5" wide!

uses 16 bit data bus from adaptor or from accelerator(adaptor included)

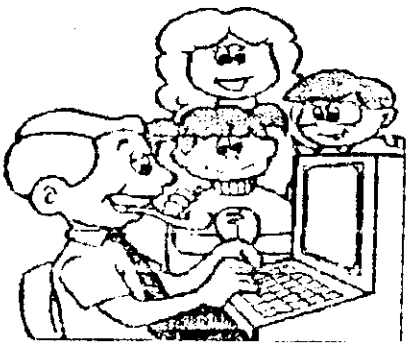
8 SIMM slots for up to 8 mb of ram expansion

32k static ram, 0 wait operation built in, replaces your existing 32k.

1 "processor direct slot" for future expansion:

CONTINUED ON PAGE 3

NEW PRODUCTS . . . (continued from page 2)



* 16 bit data bus
* all standard cru and address available
* video interrupt available
* supply voltages all ready regulated
* great for 9938/58/78 video expansion

options available

up to 8mb "RAMBO" program memory using 256k, 1 mb IBM style dram simms, 0 wait operation, DSR link access

real time clock like p-gram/corcomp clock, dsr link access

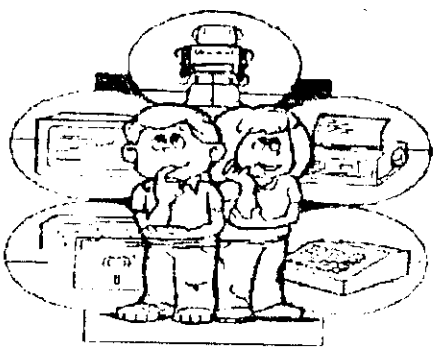
68881 or 68882 math co-processor at 12 mhz to speed up math in programs that utilize it, 0 wait (16 bit), DSR link access

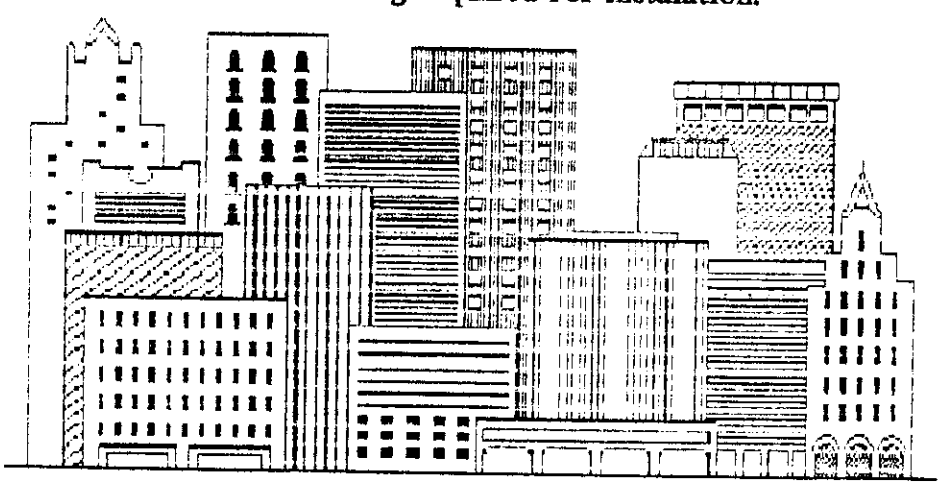
16 Bit Bus Expander Adapter:

provides access to 16 bit data bus for 0 wait operation

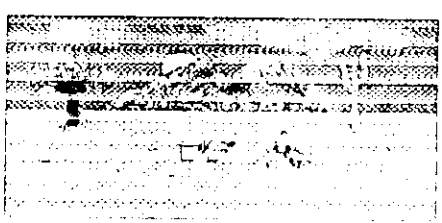
bus provided on 20 pin connector for connection to new interface

piggy-backs 9900. no soldering required for instalation!





The



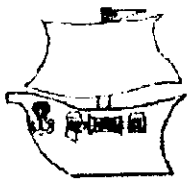
Salt Flats BBS

300/1200/2400

ON LINE 24 HRS PER DAY

334-2047 GIVE IT A CALL

IMPORTANT INFORMATION

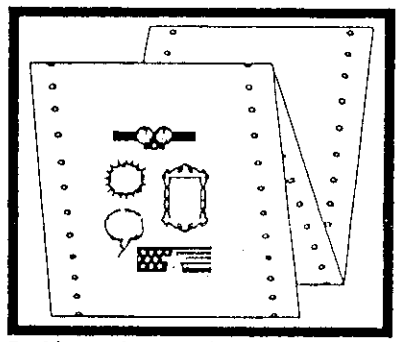


SPECIAL REPORT

BY: PAUL A. BROCK

This is a column for those that don't get the Computer Monthly. There is an article written by Barry A. Traver that I haven't seen anywhere else, there is some good information in this article. I thought that I might pass some of that information on to the readers of the WEST PENN 99'ers. the following information comes from Barry's column in the June 1991 issue, called TI-99ers in the '90s. I am coping it and hope that I don't make any typing errors.

In addition to commercial programs published by Asgard, Page Pro 99 has received fairware support as well. Let me mention a few products and addresses. Ed Johnson (399 S. Lexington Ave.,St Paul, MN. 55105) has released TIPS2PP (converts tips pictures to Page Pro 99 format) and Page Pro Font Editor(creates new Page Pro Fonts. Paul Scheidemantle (2762 Lovington,Troy,MI 48083) has made available a Page Pro Picture Cataloger (creates a catalog of Page Pro Pictures). Bill Gaskill has come out with a Page Pro Editor/formatter (helpful, according to Chris Bobbitt, in generating text for newsletters) And Chris Bobbitt himself has released Medical Clipart."an extensive collection...useful for physicians and students. " (incidentally, this information on fairware products comes from a helpful "Page Pro Productivity Chart produced by Chris.)



Paul is running out of printer paper fast with his big interest in graphics!

I haven't seen the actual program yet, but I understand that Joe Delekto's Screen Preview Program is now available (including disk and 12 page manual) from Asgard for $12.95 plus $2.50 shipping. from the description it sounds a bit like Harry Wihelm's Paper Saver program (in that it allows you to see on the screen in miniature what your formatted printout will look like), but Asgard's Screen Preview sounds more powerful (in that Asgard's program actually allows you to make changes in the text while running the program).

Screen Preview is a replacement for the TI-Writer formatter (it supports most but not all TI-Writer formatter commands) and runs from the TI-Writer Utility option (or any equivalent). Here's how Asgard describes the program: "This program... will format your text file, with embedded TI-Writer formatter commands, to the screen in a miniature format,... You can view an entire page at a glance, checking margins, page breaks and other formatting. if you see an error, you can point to the line that needs correction and change the text on the fly. Finally, when the page is done to your satisfaction,press a key and it's printed on your printer, and you can move on to the next."

According to Asgard, Screen Preview not only works with standard floppy disks, but "is also compatible with hard drive systems and most RAM disks." If (like many people) you use your computer mostly for word processing, you could find this product to be very helpful. I plan on giving it a try myself. <END>

The following are my comments...

Most of this information was explained at the meeting, but I missed it somewhere! Maybe someone else missed the information, then this will be of some help. Since the beginning I have been using Asgard's products, After I got my printer I went crazy. You might say that I am a graphic freak. I got a pile of pictures. I am having a lot of problems with my equipment, but thanks to the WEST PENN U.G. I am getting them worked out.

R2D2&TI2 MADE IN USA

-WP♦

Tutorial 1.0 by Stephen S Bagstad
NorthCoast 99'ers - November 24, 1990

Stephen says clubs can use the turorial in their newsletters and you can give a copy to your friends as long as it's free.

In reading the tutorial, I think it was written on a Geneve. I am using MP Vn4.0 on a 4A and will make the necessary adjustments. Also, time permitting, I will add a list of the new commands in each tutorial.

INTRODUCTION TO MULTIPLAN

Among the "critical" uses of computers, we probably could count keeping track of, and being able to manipulate, three types of information: words, numbers and general. Programs that do these three things have come to be known as word processors, spreadsheets and databases. Multiplan (to be from now on abbreviated MP), a spreadsheet licensed by TI from Microsoft (the programming biggie), could be thought of as a bunch of empty boxes arranged in ROWS and COLUMNS that lets one manipulate information in the boxes. You should know that there is more than a little overlap between these types of programs; for small uses, one could probably get a job done with any of the three types if efficiency was not a big concern. MP thrives on work involving need for calculations, such as statistics, percentages, costs, investments and examining alternatives. It is less well suited to word processing or larger databases. Although quite inexpensive now, MP is fully capable of much of the work done on much more elaborate (and expensive!!) computers running programs such as the infamous Lotus 1-2-3 (IBM), Quattro (IBM), Excel (IBM/MAC) (Microsoft's successor to MP). Note any of these programs goes in the multi-hundred dollar range only for the software!

In order to run MP, one needs the package (Module and disk), 32k memory expansion and disk system. In theory, a printer is optional, but to make good use it borders on essential. A second disk drive is also desireable. With the Geneve, the module is put onto disk; with a DS drive, both module and program will fit on the same disk. Myarc files modify the TI program for 80 column use, a very desirable option. I do not know if this would work on an 80 column 4A, which may be restricted to 40 column use.

To start the program, load the cartridge. You will be asked to insert the program disk into drive 1 and hit enter; the program itself will be ready to go once this is done. Note that the program disk must be named "TIMP" or it will not work. Once loaded, you will see a screen full of things, with numbers 1-4 (1-7 Geneve) across the top and numbers 1-18 (1-21) down the left side. Toward the bottom is the COMMAND MENU with a bunch of words. On the next to last line is the MESSAGE LINE, which for now should read "Select option or type command letter". On the last line is the STATUS LINE, which shows location, space remaining and the file name you are using for your worksheet (initially TEMP). The left side of the status line will show R1C1 (Row1, Column 1) and the "AREA" corresponding to Row 1 (left side) and Column 1 (along top) is highlighted.

A FIRST EXAMPLE

We'll begin a very easy example for this time, we can get into more as we go along. One use that is interesting is tracking utility bills, so let's try that for ELECTRICITY. Get out your last three electric bills and let's suppose we have to work with the following: for Sept. '90, 781 KWH, 32 days, $100.09; Aug., 694 KWH, 30 days, $87.70; and July, 898 KWH, 30 days, $114.17. Type "A" (just the letter A, not the quotes) to tell MP that we want ALPHAnumeric information in the current cell (R1C1); the message line changes to ALPHA: and we can type "JUL" and hit ENTER. JUL should appear in R1C1. By the way, mistakes can generally be corrected by either typing over new information into a "CELL" or hitting CANCEL (c-C or c-=). Use the right arrow (f-D) to move to the right to R1C2. Type "898" and ENTER, noting that for entry of numbers, a letter for commands is not needed. Move right to R1C3 and type "30" and to R1C4 and "114.17". Your screen should now look like this:

	1	2	3	4
1	JUL	898	30	114.17
2				

Move down to row 2 with the down arrow (f-C) and back to the left with left arrow (f-S) to R2C1. Enter "AUG", "684", "30", "87.70" in Row 2, then "SEP", "781", "32" and "100.09" in Row 3. We'll do our first calculation, then stop for next time. Move to R4C4, underneath our last bill. We'd like to see the total spent for these three months in this space. Type "V" or "=" to begin entering the sum. Type "SUM(" to tell MP we want to add up some things. Using arrow keys, move UP to R1C4; once there, hit ":" (this tells MP where to begin in adding a column of values). MP will return to R4C4, so move up one cell to R3C4 and hit ")" then ENTER to tell MP the ending value. The result will look like this:

	1	2	3	4
1	JUL	898	30	114.17
2	AUG	684	30	87.7
3	SEP	781	32	100.96
4				301.96

We've seen a fair amount so far, so we'll stop for now. To print this info, type "P" from your command line for printer, "O" for options, and TAB (c-A) to SETUP. Type your printer setup "P1O" or whatever else it may be and ENTER, then ENTER to print. Save your work with "T" from the command line for Transfer, "S" for Save, and filename "UTILITY". Be sure you have a suitable data disk in drive 1 and hit ENTER.

NEW ITEMS COVERED

Requires MP Module, disk, 32k memory.
Diskname = TIMP
COMMAND MENU
MESSAGE LINE
STATUS LINE
ALPHAnumeric enteries
CANCEL c-C OR c-=
ARROW KEYS f-D, f-S, f-X, f-E
STARTING FORMULA =, V
SUM SUM(R1C:R1C)
PRINTER SETUP P, O, c-A, P1O
SAVING A FILE T, S, UTILITY

Tutorial 2.0 by Stephen S Bagstad
NorthCoast 99'ers - November 24, 1990

FIRST EXAMPLE (con't.)

Start up the program again with module. The bottom (STATUS) line should show TEMP (our initial filename), and we'll be ready to "Select option of type COMMAND letter". Let's begin by loading in our little sheet from last time, which we named UTILITY. Hit "T" for Transfer, "L" for Load and type UTILITY to load it from drive 1 (putting your data disk there first). If you have more than 1 drive, you can leave your program disk in #1 and use "T", "O" for Option, TAB (c-A, c-2 or c-1) and type DSK2. (or other drive number) for setup. From then on, all saves or loads will be done using that disk. Disk 1 is used if there is no entry there. NOTE: If you make a mistake in entering a command, you can always back out of it with (c-C)!

If everything has cooperated, you should be looking at the 4 row by 4 column sheet we finished with in the first article. You may need to know that saving and loading is CASE SENSITIVE; that is, if you called the file "Utility" and tell MP to load "UTILITY", it won't work. It's probably easiest to use all capital letters/numbers for file names to avoid this confusion, but MP will allow either as long as you are exact.

Let's make our sheet look a bit neater. You may have noticed that we don't know what the numbers we have in front of us mean. With the cursor in R1C1, select "I" for Insert, "R" for Row, and ENTER to insert 1 row before the present row #1. When finished, we'll have a blank #1 row; the former #1 row will now be #2 and so on. Our sum is now in R5C4, not R4C4 as before; notice the sum is still performed correctly. In R1C1, select "A" Alphanumeric and type "Month"; arrow key to R1C2 WITHOUT hitting enter and type "KWH". Notice that the MESSAGE line reads "ALPHA/VALUE:" and that by moving around the sheet with arrow keys means we don't have to constantly hit "A" for Alphanumerics. Put "Days" into R1C3 and "Cost" into R1C4. Now we can see what the numbers represent by these new column headings. While we're at it, you can see that there is lots of space between Month in C1 and KWH in C2. That's caused by two things, both of which we can control: COLUMN WIDTH and JUSTIFICATION. Without any other action, MP sets all columns to a standard, or "default", width of 8 characters. Let's change C1 to a width of 6. From anywhere in C1, hit "F" for Format, "W" for Width and type in "6" replacing the "0" for default normally used by MP. In short order, C1 should become only 6 characters wide. Let's also change the default justification, or the way the entered items line up. Standard for alpha info is left side justified. Numeric is right side. From anywhere on the sheet type "F" for Format, "C" for cells, "C1" to tell MP to make this change for everything in C1, TAB, and "C" for Center justify. This will cause the column heading "Month" and each month entry (JUL, AUG, SEP) to appear centered in the defined width. Your sheet should now look like this:

	1	2	3	4
1	Month	KWH	Days	Cost
2	JUL	838	30	114.17
3	AUG	684	30	87.7
4	SEP	781	32	100.96
5				301.96

Using the methods just outlined, center all entries in R1 (our column headings), and shorten C3 to a width of 6. We'll now develop this info into something useful that the utility company doesn't readily tell us that might give us an incentive to see how our home is doing with power use. Insert a new column between the present C3 and C4 (go anywhere in C4, type "I" for Insert, "C" for Column, and enter for 1 new column before the present C4). Label the new column in R1C4 "KWH/D. Label another column after our Cost one (now C5) in R1C6 "C/KWH". Move to R2C4 (under KWH/D label) and hit "=" to bring up the "VALUE" line. Move to R2C2, hit "/", move to R2C3, hit enter. You should see 29.9333 in R2C4, your average power used per day during this month. While still there, hit "C" for Copy, "D" for Down and "2" for 2 cells. This action will copy the R2C4 formula to R3C4, then R4C4 and make those calculations (22.8 and 24.4063). Now off to R2C6 (under C/KWH label) and enter the formula R2C5/R2C2*100. (that is from R2C6; hit "=", move to R2C5, hit "/", move to R2C2, type "*100" and hit enter.)-Jk You should see 12.7138, the cents per KWH paid in July. Again copy this formula down two cells. Add new data (KWH, Days, Cost) for October (548, 28, 60.21) and November (590, 29, 61.60) by INSERTING two new rows before R5. Note that the preset justifications DO NOT remain in effect for the inserted rows. We'll clean this up in a moment.. Copy the calculations for KWH/D and C/KWH down into the new rows.

We're almost done for this time. By now, you may have noticed that every time you do something, even move from one cell to another, there is a time lag, and a message at the bottom may say "cells to recalculate..XXX" where the XXX changes as MP updates the various calculated values in case a change you made has affected them. As your sheet gets bigger, this can become a real pain and of course there's a way to help. I recommend #IMPORTANT# that your first action on starting up MP is to hit "O" for Options and "M" for Mo to recalculation. This choice, NOT the default, means that MP will only recalc the sheet when you command it to or, whenever you SAVE the sheet. Also #IMPORTANT# it will not automatically recalc before printing, so if you want an up-to-date printout, I recommend saving first. Anyway, turn Recalc OFF as I just described.

Finally, we'll clean up the columns and their headings. Format C4 to CENTER and FIXED, C5 to DEFAULT and $, and C6 to DEFAULT, FIXED with 1 DECIMAL. Note the $ (currency) format forces a $ ahead of the 1st digit and requires two places after the decimal point. Commas are unfortunately not available for larger numbers. Format C1 and R1 to Center. And we must redo the "SUM" in R7C5, so go there; type "E" for Edit, f-4 three times to back up through the formula without erasing, f-9 to erase the "0", type "1" so the sum will now be from 1 above the caluclated value through 5 above it. After all of this, you should have:

	1	2	3	4	5	6
1	Month	KWH	Days	KWH/D	Cost	C/KWH
2	JUL	838	30	30	$114.17	12.7
3	AUG	684	30	23	$87.70	12.8
4	SEP	781	32	24	$100.09	12.8
5	OCT	548	28	20	$60.21	11.0
6	NOV	590	29	20	$64.60	10.9
7					$426.77	

As before, you may print your work; I'd SAVE first. The only difference this time is you will be asked if you want to replace (overwrite) the original "UTILITY" file; when you hit "Y" for Yes, the new sheet will replace the old one. Now you should begin to see the possibilities of MP even with these simple calculations. Until next time!

NEW ITEMS COVERED

LOADING FILE T, L, UTILITY
CHANGING DATA DRIVE T, O, c-A, DSK#.
TAB c-a or c-2 or c-1
FILENAME is case sensitive
INSERT row or column I, R, # or I, C, #
ARROW KEYING around when entering data
    is faster f-D, f-S, f-C, f E
DEFAULTS: width 8
    alpha left justified
    numeric right justified
changing cell defaults F, C, ------
/ is divide
* is multiply
COPY DOWN C, D, #
Justifications are lost with inserted
    rows and columns
SPEED UP MP turn off calculation O, M
EDITING cell E -----

Tutorial 3.0 by Stephen S Bagstad
NorthCoast 99'ers - November 24; 1990

FIRST EXAMPLE (Final)

Start up the program again, reloading the file of your electric bills that we have named "UTILITY". At the end of this session, we will have a full year of information that you can use as a pattern to know more about the money you are spending. The screen should look like the one at the end of the last article, with the months July through November shown. Let's add space for the rest of the months. Move to R2C1 ("JUL") and hit "I" for Insert. Select "Rows", then "6" to make room for six more rows (Jan-Jun). You should be in the new R2C1, so enter "JAN" and so on, entering the months preceeding JUL. To add the final month, since we only went through NOV last time, we could normally just go to the row below NOV and proceed; however, since we asked MP to total the cost in C5, we can keep this total by INSERTING a single new row between NOV and the row with our TOTAL. Do that, entering DEC in C1 of the new row.

Now let's enter in the rest of the data.

	KWH	Days	Cost
Jan	970	35	35.86
Feb	690	29	74.03
Mar	730	32	78.40
Apr	620	29	67.04
May	618	31	67.23
Jun	657	31	84.36
Dec	666	29	72.53

REMEMBER as you enter these, time will be saved if you arrow key around the worksheet.

When I finished this, my C2 was mixed format, with some KWH entries centered and some default (right side). Format all these values to default. Now let's try a new item, moving to R2C2, the first KWH entry and hit "N" for Names. Type "KWH" for the name, TAB, hit ":", arrow key to R13C2 and hit enter. This associates the name "KWH" with those values. Do the corresponding names for Days and Cost, noting that MP remembers your reference and will supply the correct "refer to..." for subsequent entries- NOT BAD? To see what this does for us, go to the bottom of each of these in turn, and request the Value (formula) SUM(name) (so for KWH, go to R14C2, hit "=", type SUM(KWH) and you will see 8452 there, and so on). The use of names simply makes the formulas, etc. more readable, as you could get the same result by using all RxCx notation.

To finish our calculated columns, go to R8C4 and COPY FROM that cell to R2C4. Then in R2C4, COPY DOWN 13 cells. Do the same with C6. So that we know what we have, enter "Total" in R14C1 and "Avg" in R15C1. In the missing R15 cells, enter the average KWH, Days, and Cost using the AVERAGE(KWH,etc) formula.

For final touches, I decided to format average KWH to Fixed and average Days to Fixed, 1 decimal, shorten C2, C3 and C4 to width 5 and C6 to width 6. I also added, using EDIT mode, an asterisk (*) after JUN-SEP since those are higher rate summer months; do this by moving to those cells, hit "E", f-4, "*" and enter. Finally, I inserted rows to offset the monthly values from the Titles and Totals/Averages. Enter a long string of "+" signs in the first column of each new row, formatting those entire rows to "CONT" to run the characters across the screen. You should end up with:

	1	2	3	4	5	6
1	Month	KWH	Days	KWH/D	Cost	C/KWH
2	================================					
3	JAN	970	35	28	$35.86	9.9
4	FEB	690	29	24	$74.03	10.7
5	MAR	730	32	23	$78.40	10.7
6	APR	620	29	21	$67.04	10.8
7	MAY	610	31	20	$67.23	10.9
8	JUN*	657	31	21	$84.36	12.0
9	JUL*	898	30	30	$114.17	12.7
10	AUG*	684	30	23	$87.70	12.8
11	SEP*	781	32	24	$100.09	12.8
12	OCT	518	28	20	$60.71	11.0
13	NOV	590	29	20	$64.60	10.9
14	DEC	666	29	23	$72.53	10.9
15	================================					
16	Total	8452	365	23	$966.22	11.4
17	AVG	704	30.4	23	$80.52	11.4

Hopefully this kind of analysis can help you with making choices about your utility use. It's a lot of information, relatively easily obtained and organized, that you don't necessarily get from your utility company. Until next time!

NEW ITEMS COVERED

```
=======================================
NAME  N, name, TAB, RC:RC
      N, KWH, c-A R2C2:R13C2
SUM(Name)  V, SUM(KWH)
      or    V, SUM(R3C2:R14C2)
AVERAGE(name)  V, AVERAGE(Days)
      or    V, AVERAGE(R3C3:R14C3)
COPY FROM  C, F, RC, TAB, RC:RC
READ long text "Cont"
      F, C, RC:RC, TAB, TAB, C
PRINT CELL info P, O, TAB, TAB, Y, TAB,Y
PRINT TI-Writer format P, F, filename
=======================================
```

The following is a list of the actual information in each cell. Note, some values are the results of calculations. To obtian a print out of the actual information in the cells of your spreadsheet use P, O, TAB, TAB, Y, TAB, Y. To print your spreadsheet for use in TI-Writer use P, F, filename.

```
ROW/COL  1           2     3         4
 1 "Month"         "KWH" "Days"    "KWH/D"
 2 "==========
   ===========
   ===========
   =========="
 3 "JAN"           970   35      RC[-2]/RC[-1]
 4 "FEB"           690   29      RC[-2]/RC[-1]
 5 "MAR"           730   32      RC[-2]/RC[-1]
 6 "APR"           620   29      RC[-2]/RC[-1]
 7 "MAY"           618   31      RC[-2]/RC[-1]
 8 "JUN*"          657   31      RC[-2]/RC[-1]
 9 "JUL*"          898   30      RC[-2]/RC[-1]
10 "AUG*"          684   30      RC[-2]/RC[-1]
11 "SEP*"          781   32      RC[-2]/RC[-1]
12 "OCT"           548   29      RC[-2]/RC[-1]
13 "NOV"           590   29      RC[-2]/RC[-1]
14 "DEC"           666   29      RC[-2]/RC[-1]
15 "==========
   ===========
   ===========
   =========="
16 "Total"         SUM(  SUM(D  RC[-2]/RC[-1]
                   KWH)  ays)
17 "AVG"           AVER  AVERA  RC[-2]/RC[-1]
                   AGE(  GE(Da
                   KWH)  ys)

ROW/COL 5              6
 1 "Cost"            "C/KWH"
 2
 3 35.86             RC[-1]/RC[-4]*100
 4 74.03             RC[-1]/RC[-4]*100
 5 78.4              RC[-1]/RC[-4]*100
 6 67.04             RC[-1]/RC[-4]*100
 7 67.23             RC[-1]/RC[-4]*100
 8 84.36             RC[-1]/RC[-4]*100
 9 114.17            RC[-1]/RC[-4]*100
10 87.7              RC[-1]/RC[-4]*100
11 100.09            RC[-1]/RC[-4]*100
12 60.71             RC[-1]/RC[-4]*100
13 64.6              RC[-1]/RC[-4]*100
14 72.53             RC[-1]/RC[-4]*100
15
16 SUM(Cost)         RC[-1]/RC[-4]*100
17 AVERAGE(Cost)     RC[-1]/RC[-4]*100
```

Tutorial 4.0 by Stephen S Bagstad
NorthCoast 99'ers - November 24, 1990

SECOND EXAMPLE

Since MP's main forte is number "crunching", I thought for a second example we could head through a PERSONAL NET WORTH statement that on one sheet can help you see your financial condition. I modeled it after layouts I've seen in a number of guides, and if you look around, you will no doubt see others. Natually, if you prefer another format, that's up to you.

We can first lay out the information we want to see, and then return to add a page title later. Bring up a blank worksheet. In R1C1, enter "ASSETS" and R1C2 "AMOUNTS". I added in R2C1 "(what we own)" just for clarification, so let's do that too. Now we want to list just what are our assets, so skip one line to R4C1, and enter "CASH/CASH EQUIVALENTS". We see that this much text will not all appear due to the default width of only 8 characters, so widen Column 1 to 22 characters, and Column 2 to 11. Continuing down C1, skip R5 and in R6C1 enter " Cash on hand". I put one space before beginning to type simply to offest the subcategories for better readability. Still moving down C1, enter " Cash in checking accounts", " Cash in savings accounts", " Cash in money markets" and " Life insurance cash value", with the latter falling into R10C1.

The remaining major asset categories are "PERSONAL PROPERTY" in R12C1, "REAL ESTATE" in R19C1 and "INVESTMENTS" in R24C1. subheadings for each of these are " Household furnishings", " Automobile(s)", " Specific(jewelry,etc.)" and " Clothing/other" for PERSONAL PROPERTY; " Our house" and " Other real estate" for REAL ESTATE; and " Stocks, bonds, CDs", " Mutual funds", " Other investments", " Co plans(pension,etc.)" and " Keogh/IRA plans", with the latter falling into R30C1. Finally, conclude the C1 activity with "TOTAL ASSETS" entered into R32C1.

To begin to get something useful out of this, enter some dollar amounts into C2 opposite each of the subheadings in C1. Enter the amounts as shown below, so we can stay together; Later, of course, you may enter your actual figures, or speculate with "what-if" figures to see what may happen.

F O Y will insert commas. You will have to widen C2 and C5 so the numbers will be displayed with the commas. C2 F W 12. C5 F W 12

	1	2
1	ASSETS	AMOUNTS
2	(what we own)	
3		
4	CASH CASH EQUIVALENT	
5		
6	Cash on hand	$300.00
7	Cash in checking acct	$400.00
8	Cash in savings accts	$200.00
9	Cash in money MKTS	$3700.00
10	Life insur cash value	$900.00
11		
12	PERSONAL PROPERTY	
13		
14	Household furnishings	$9000.00
15	Automobile(s)	$14000.00
16	Specific(jewelry,etc)	$2800.00
17	Clothing/other	$3000.00
18		
19	REAL ESTATE	
20		
21	Our house	$88000.00
22	Other real estate	$1500.00
23		
24	INVESTMENTS	
25		
26	Stocks, bonds, CDs	$1500.00
27	Mutual funds	$8000.00
28	Other investments	$0.00
29	Co plans(pension,etc)	$7200.00
30	Keogh/IRA plans	$2500.00

Use the NAMES command to have CASH refer to cells R6:10C2, PROP to R14:17C2, RE to R21:22C2 and INVEST to R26:30C2. Then into C2, opposite each C1 major category, use the "+" or VALUE command to put the sum of the matching defined name(sum CASH in R4C2, etc.).

[SUM(CASH) in R4C2, SUM(PROP) in R12C2, SUM(RE) in R19C2 and SUM(INVEST) in R24C2.]-JK

Finally, complete the asset side by going to R32C2 (opposite TOTAL ASSETS), and enter SUM(CASH)+SUM(PROP)+SUM(RE)+SUM(INVEST), and you had better see 143000 in that spot. Before we finish for now, format C2 to $ and R32C1 to Centered. Save the file as NETWORTH on your data disk and print, if desired. Play with your own numbers if you want, but leave these intact on your disk. We'll finish this one next time with LIABILITIES and calculation of NET WORTH.

Need Graph Paper In A Hurry? Here's A Program To Do It

From: ERIE 99'ER USER GROUP N/L
(May '91)

```
100 ! GRAPH
110 E$=CHR$(27)
120 A$=RPT$(CHR$(128),228)
130 B$=RPT$(CHR$(255)&SEG$(A$,1,6),8)
140 B$=RPT$(B$&CHR$(255),4)
150 A$=E$&"K"&CHR$(228)&CHR$(0)&A$
160 B$=E$&"K"&CHR$(228)&CHR$(0)&B$
170 OPEN #1:"PIO.CR"
180 FOR I=1 TO 11
190 PRINT #1:E$;"@";E$;"3";CHR$(24)
200 FOR J=1 TO 8
210 PRINT #1:B$;B$;CHR$(10)
220 NEXT J
230 PRINT #1:A$;A$;E$;"3";CHR$(2)
240 NEXT I
250 PRINT #1:RPT$(CHR$(13)&CHR$(10),9)
260 PRINT #1:E$;"@"
270 CLOSE #1
```

PROGRAM LISTINGS:

Have you ever tried listing a Basic or XB program with the printer? It prints out in 80 columns. This saves paper but it doesn't look like the screen display. And if you want to publish a program, the 28 column format is the only way to go. But, I keep forgetting the printer commands for getting a 28-column listing so when I saw an article with the printer commands spelled out, I decided to put them in a short program and let the disk do the remembering for me. The printer has to be turned on first, then run this short program to set the printer, then load the program that you want to list (OLD DSKn.File_name). Then enter the standard command LIST "PIO".

Here is the program:

```
100 REM  PROG-LSTER
110 OPEN #6:"PIO"
120 PRINT #6:CHR$(27);CHR$(
81);CHR$(28)
130 END
```

Line 120 may be different for some printers. Also, the last number, 28, could be changed to another value such as 40 if that is your prefered column width.

P.S.: I experimented first with trying to save a program to disk in a D/V28 file but the computer wouldn't "list" anything but a D/V80 file, even if I opened the file ahead of time as a D/V28 file. The command is: LIST "DSK1.File_name", and adding any file specifications resulted in a syntax error message.

-Phil Van Nordstrand, JSC Users Group

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NOVEMBER 1991 NEWSLETTER

TI SLAVES

OUR NEXT MEETING IS NOVEMBER 16 1991 AT 9:00 am WE MEET IN THE DISABLED AMERICAN VETERANS HALL AT 273 E. 800 S. PLEASE BE THERE PROMPTLY.!!

COME AND HAVE FUN.

OGDEN TI USERS GROUP

OUR NEXT MEETING IS NOVEMBER 2nd AT 9:00 am and NOVEMBER 19th.

WE MEET AT THE OGDEN MUNICIPAL AIRPORT IN THE FIRST BUILDING JUST EAST OF THE NEW TOWER.

Slaves & Otiug
1396 Lincoln APT B
Ogden, Utah 84404