# THE PUG PERIPHERAL 

THE MONTHLY NE WSLETTER OF THE PTTSEURGHUSERSGROUP

J WE: 1988

## CLUB NEWS By GARY TAYLOR

We have installed a new bulletin board PROGRAM CALLED PARADIGM. IT IS WRITTEN BY Travis Watford and Mike Gimble which they have released as fairware. This bBS replaces OBT Yer 7.1 (OVER The Bridge) by MIKE RIESS. WE TRIED HIS PROGRAM FOR A COUPLE OF MONTHS AND FOUND THAT IT HAD SOME SHORTCOMINGS THAT WERE JUST TOO DIFFICULT TO oVErcome. We will be trying out the new bes FOR A COUPLE OF MONTHS TO SEE IF IT WILL SATISFY OUR NEEDS. IT IS NOTICABLY FASTER AND HAS MANY NEW FEATURES WHICH I AM SURE YOU WILL FIND INTERESTING. WE NO LONGER have to worry about the message base growing TOO LARGE AND HALTING FURTHER INPUT OF NEW MESSAGES UNTIL THE MESSAGE BASE IS COMPRESSED. I believe that Gene has set up THE SYSTEM TO HOLD TWO HUNDRED MESSAGES, AFTERWARDS THEY WILL BE OVERWRITTEN. OF COURSE, EVERYONE WILL HAVE TO LOGON AS A NEW USER AGAIN AND GET NEW USER NUMBERS. I KNOW SOME OF YOU WERE CONFUSED FROM THE LAST TIME time we changed so be aware that you will be ISSUED A NEW USER NUMBER WHEN YOU LOG ON FOR THE FIRST TIME. IT WILL BE DIFFERENT THAN THE OLD ONE. SO WRITE IT DOWN SO THAT YOU WILL BE ABLE TO LOGON NEXT TIME. JIM ALEXANDER WILL BE CREATING NEW FILES TO replace the ones that came with the program. JIM WILL ALSO be maintaining the download FILES, SO IF THERE IS A PARTICULAR TOPIC OR PROGRAM THAT YOU WOULD BE INTERESTED IN SEEING ON THE DOWNLOADS THEN LEAVE A MESSAGE to JIM In the Feedback section.

WE HAVE DISCONTINUED THE DISK OF THE MONTH. PRImarily due to the fact that so many new DISKS ARE COMING INTO THE LIBRARY THAT IT SEEMS HARDLY NECESSARY TO TRY TO PUT TOGETHER A DOM EACH MONTH. THERE WERE 21 NEW DISKS ADDED TO THE LIBRARY LAST MONTH PRIMARILY DUE TO THE DISKS I WAS ABLE TO bRing back from the faires in boston and DALLAS. OF PARTICULAR NOTE ARE THE THREE OUtstanding graphic. disks of Startrek space SHIPS. EACH OF THESE DISKS CONTAINS A FILE THAT WILL PRESENT A SLIDE SHOW OF THE
pictures using Display Master. The brief demo I gave at the meeting utilized tass 2001, WHICH IS IN THE LIBRARY TOO. THERE WILL BE 9 NEW ADDITIONS TO THE LIBRARY THIS month that I was able to secure from the TI FAIR IN LIMA, OH. SO LOOK FOR THE LIST OF new disks at the next meeting.

No! The fans are not available yet. Getting THE CORRECT ONES IS BECOMING MORE DIFFICULT than I had originally thought. I have one COMING IN TO TRY OUT. THE REASON IT IS TAKING ME SO LONG TO IDENTIFY THE RIGHT FAN TO GET IS BECAUSE I HAVE FOUND OUT THAT SOME CLUBS HAVE BOUGHT FANS THAT WERE NO MORE QUIET THAN THE ORGINAL ONE FROM TI.

DURING THE TI-WRITER PERIOD OF MY DEMO CLASS LAST MONTH, I DECIDED TO USE MY COPY OF FUNNELWEB VER 3.3. I USUALLY USE THE TI-WRITER MODULE AND TI DISK IN THE CLASS because I felt everyone would be at least SOMEWHAT FAMILIAR WITH ITS OPERATION. SINCE I ONLY DEMONSTRATE THE HELP AND ADVICE IN THE TUTORIAL THAT APPEARS IN THIS NEWSLETTER WRITTEN BY STAN KATZMAN, THAT PARTICULAR PORTION OF MY CLASS DOES NOT LAST VERY LONG AND GIVES EVERYONE A CHANCE TO GET A QUESTION OR TWO ANSWERED ABOUT TI-WRITER. UPON LOADING FUNNELWEB HOWEVER, IT BECAME obvious that many people have the disk but DON'T USE IT. I WAS CAUGHT OFF GUARD BY THE LACK OF USE OF THIS GREAT PROGRAM BY OUR CLUB MEMBERS. IN MY OPINION, THIS PROGRAM IS ONE OF THE MOST SIGNIFICANT EVER WRITTEN FOR THE TI-99/4A. It has been AROUND FOR OVER 30 MONTHS AND HAS BEEN CONTINUALLY UPDATED WITH NEW RELEASES EVERY SO OFTEN. THE LATEST VERSION IN OUR LIBRARY IS 4.0, WHICH I WILL BE DEMONSTRATING IN MY NEXT CLASS. THIS PROGRAM NOT ONLY PROVIDES GREAT ENHANCEMENTS TO TI-WRITER BUT ALSO EFFECTIVELY ELIMINATES THE NEED FOR ANY CARTRIDGE OTHER THAN EXTENDED BASIC. I PERSONALLY have NOT USED THE ORIGINAL TI-WRITER CARTRIDGE OR DISK FOR TWO YEARS. I WILL BEGIN A BASIC DEMONSTRATION OF THE

FEATURES OF THE FUNNELWEB DISK. ONE OF THESE FEATURES IS A CONFIRURATION PROGRAM THAT ALLOWS YOU TO CREATE A CUSTOM MENU OF PROGRAMS TO LOAD INTO YOUR COMPUTER. IF TIME PERMITS, I WILL TRY TO SHOW YOU HOW TO CONFIGURE YOUR DISK. IF ANY OF YOU HAVE ALREADY CONFIGURED YOUR DISK, PLEASE BRING IT WITH YOU AND SHOW US WHAT YOU HAVE DONE, THIS IS THE PLACE TO SHARE YOUR IDEAS WITH OTHER USERS.

I RECEIVED A LETTER FROM INSCEBOT INC. INTRODUCING A NEW DATA BASE SYSTEM CALLED TI-BASE. FROM THE FLYER THAT ACCOMPIANIED THE LETTER THIS PROGRAM WILL SOLVE A SOME OF THE PROELEMS WITH EXISTING DATA BASE PROGRAM FOR THE TI, SPECIFICALLY THE INABILITY TO PERFORM MATH FUNCTIONS. THEY ARE OFFERING THE CLUB A $20 \%$ DISCOUNT FROM THEIR $\$ 24.95$ RETAIL PRICE TO $\$ 19.95$. THEY ARE ALSO EXTENDING THE $20 \%$ SAVINGS TO TI-ARTIST, DISPLAY MASTER, AND ARTIST EXTRAS.

THE HOTTEST THING IN FORTH INNOVATIONS IS NOW AVAILABLE. IT'S THE FORTH SYSTEM THAT Loads into the 8K Supercart mooule. Paul NEWMEYER OF THE NORTHCOAST 99ERS IN Cleveland, OH . has created the forth SUPER-CART DISK. THIS DISK IS COMPATIBLE WITH FORTH-83. BRODIE'S 1987 bOOK STARTING FORTH IS WRITTEN FOR FORTH-83. I was able to Get a copy to demo at the next meeting and we may be able to get Scott to Show us a SOMETHING ABOUT FORTH. YOU CAN REACH PAUL NEWMEYER BY WRITING TO HIM AT 270 S. RIDGE E. GENEVA, OHIO 44041

I was treated to the North American premier SHOWING OF FUNNELWEB VER. 4.1 AND JOHN Birdwell's DISKU Ver. 4.1 at the TI-Faire in lima, OHIO. Charlie goode of the lima, OHIO USER'S GROUP DEMOSTRATED BOTH PROGRAMS BUT INDICATED NEITHER PROGRAM WAS READY FOR release as they were being beta tested but SHOULD BE AVAILABLE SOON.

RAVE 99 HAS INTRODUCED A NEW CARD FOR YOUR Pbox called the Speech Synthesizer Adapter CARD. FOR $49.95+2.50$ SHIPPING, YOU CAN MOVE YOUR SPEECH SYNTHESIZER FROM THE SIDE of the console to the pbox. This is a card, ON WHICH YOU INSTALL THE SPEECH SYNTHESIZER CARD FROM ITS HOUSING, THEN PLACE IT IN YOUR Pbox. They can be reached at 112 Rambling Road Vernon, Ct. 06066 or you can call them AT 203-871-7824.

WHILE I WAS AT THE LIMA TI-FAIRE I MET WITH Jim Peterson of Tigercub Software fame and ASKED HIM TO SEND ME SOME INFORMATION ON HIS NUTS AND BOLTS COLLECTION OF SUBROUTINES. He stated that he has a couple of DEMONSTRATION DISK THAT HE WOULD LOAN US TO SHOW AT OUR MEETING. THESE DISKS SHOULD BE available for showing at the July meeting.

GENE-III VER. 3.1 IS NOW AVAILABLE FROM WALTER R. DAVIS 17718 ORCHARD LANE, SALINAS, CA. 93907. FOR 15.00 and a blank DISK. THE GENE-III PROGRAM IS WRITTEN IN EXTENDED BASIC FO THE TI-99/4A COMPUTER WITH ONE SINGLE-SIDED, SINGLE DENSITY DISK DRIVE AND 32 K MEMORY. THE PROGRAM LOADS COMPLETELY INTO MEMORY, SO THAT USERS WITH ONLY ONE DRIVE WON'T HAVE TO DISK SWAP. IT HAS AS ITS CENTRAL FEATURE A 4-GENERATION ANCESTER CHART DISPLAYING FIFTEEN PERSONS WHO MAKE UP EIGHT FAMILY GROUPS.

TURBO PASCAL IS BEING OFFERED BY L.L.CONNER Enterprise of 1521 Ferry Street, LaFayette, INDIANA 47904 FOR $\$ 59.95$. I HAD STATED PREVIOUSLY THAT YOU COULD GET IT FROM TEXAMENTS FOR $\$ 79.95$.


DRAMP BY



THE
ADVENTURE CONTINUES

FROH: THE V.P. TERMINAL
TO : ALL READERS
SU日J: HINTS \& THOUGHTS

As I sat in front of ey terainal and thought about what to write about in this article, I remembered that many tines I asked about a file or progran on a disk. So what I have put together is a quick reference sheet to help you.

In my following months article I will have aore tips and mays to make your TI99/4A nore efficient. If you have any questions please contact ae at 441-6762 or leave a aes sage on the PUG BBS at 824-6779.

I started to use the Creative Filing Systen, which is in the library. I hope to write a reviem of this product by next month.

Update on new bulletin board system. In the next fen meeks I will be putting up new inforation files, newsletter articles, BBS phone numbers and downloads on the board. So if you have not called as yet, CALL TODAY.

CLIP AND SAVE
program and file guick routine

| FILENAME | SILE | FORMAT | ENVIRONMENT | NDTES |
| :---: | :---: | :---: | :---: | :---: |
| RUNDAY | 40 | Program | BASIC OR XB |  |
| SUPERTREK | 69 | INT/VAR 254 X | X | 1 |
| CUBIT | 35 | DIS/FIXED 80 | EA OPTION 3 | 2 |
| MGR1 | 33 | Progran E | EA OPTION |  |
| MGR2 | 30 | Progran | EA | 5 |
| PENNIES | 54 | progran | TURMEL OF DOOM | 7 |
| Pirate | 52 | Program | ADVENTURE | 7 |
| BASEBALL | 158 | DIS/FIXED 128 | ARCHIVED | 3 k 2 |
| 60LF | 275 | INT/FIXED 192 | COMPRESSED | 342 |
| PUG_P | 30 | procram | II ARTIST | 7 |
| PUG_C | 20 | Progral | II ARTIST | 5 |
| freadme | 10 | DISIVAR 80 | II MRITER | 7 |

## NOTES

1. require memory expansion to run
2. COULD ALSO bE dATAFILE
3. USE ARCHIVER VER 2.4 TO UNPACK.
4. USE ARCHIVER VER 2.4 TO UNCOMPRESS
5. SECOND PART OF A FILE - NEEDS NO LOADING
6. USE STORE FEATURE TO LOAD THESE FILES
7. NEED THAT ENUIROMENT TO LOAD THAT FILE.

Fron: JIMMY GLICK
To: ALL
Subject: For sale
I have a TI/994 computer for sale with the following included:

## TOnputer

Menory Expansion
DDisk Drive
Printer (Geaini $10 x$ )
ISpeech Synthesizer
$\$ 300$ Baud Modea
tlots and lots of software including:
Hord Processor
Data Base
Adventure Ganes
If you are interested call ae at 412-421-4057 and akke offer.......

> Fros TIGER CUB TIPS
> via Chick De Marti - LA Topics

This is a great debugging aid.
10: Turns all nuseral and $p$ unctuation white! by Harry $W$ ilhele in Twin Tiers User Br oup Nersletter
20 ! Turn it on by CALL LDAD $(-31804,63):$ : Turn it off by CALL LOAD $(-31804,0)$
100 CALL INIT
110 CALL LOAD $116128,2,224,38$
, $0,2,0,8,17,2,1,63,36,2,2,0$,
$3,4,32,32,36,2,224,131,192,3$
,128)
120 CALL LOAD 1 16164,240,240,
240)

130 CALL LDAD $(-31804,63)$
EDITOR'S NOTE -- If you have ever nade the mistake of entering an 0 (letter) instead of a 0 (zero) or vice-versa, you will really appreciate this hint. Also adds a
little variety to the screen!


GETTING THE MOST FFOM YOUF CASSETTE SYSTEM<br>EY MICKEY SCHMITT<br>NUMEER 15<br>UNDERSTANDING - CREATING - AND USING - CASSETTE FILES

This month I am continuing with the topic of Understanding - Creating - and Using - Cassette Files. More specifically, I will be continuing with the topic of.." "HOW TO "OPEN" UP A CASSETTE FILE"... which I first began discussing two months ago... in part II of this particular series.

The "OPEN MODE" entry instructs the computer to process the cassette file either in the "INPUT MODE" where files may be read only... or the "OUTFUT MODE" where files may be written to only. Keep in mind that the "NEW" "OUTPUT" file which is being created will have all the characteristics given it by the "OPEN" statement specifications... including the standard default characteristics, as well. Note... that if you are using two cassette recorders... only CSl can be specified for an "INPUT" file and... both CSI and CS2 can be specified for an "OUTPUT" file.

As a word of warning: the "OFEN MODE" specification is required. There is no default specification for this entry.

The "FILE ORGANIZATION" entry must be "SEQUENTIAL" for a cassette recorder. records on a "SEQUENTIAL" file are read or written... one after the other... in sequence... from beginning to end. You may however: "optionally" specify the initial number of records on a file by following the word "sequential" with a numeric expression.

If you omit the "FILE ORGANIZATION" specification... no problem... the T.I. computer will automatically assume the default specification... as "SEQUENTIAL" organization.

If all of this sounds way too confusing for you... fear not... I felt the same way myself! With that particular thought in mind... I have decided to create a "REFERENCE CHART"... in order to get a better understanding of all the "NEW MATERIAL" that I have examined so far. ( Please keep in mind... that this particular "REFERENCE CHART" is a continuation of the "reference chart" which first appeared last month... in part III of this particular series.) ******************************************************************************* *


| * |  | * |  |  | * |  |  | * |  |  | * |  |  | * |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| * | 1 | * | 1 | 1 | * | 1 | 2 | * | 1 | 3 | * | 1 | 4 | * |
| * |  | * |  |  | * |  |  | * |  |  | * |  |  | * |

## *******************************************************************************

| * | N | * |  | * | N | * |  | * | N | * |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| * | E | * | OPEN MODE | * | E | * | FILE. | * | E | * |
| * | $E$ | * | ======x=m==== | * | $E$ | * | . . ORGANI ZATION | * | E | * |
| * | D | * | INPUT.... READ | * | D | * | $===============$ | * | D | * |
| * |  | * | OUTFUT..WFITE | * |  | * | SEQUENTIAL | * |  | * |
| * | c | * |  | * | c | * |  | * | C | * |
| * | 0 |  | **************** |  | 0 |  | **************** |  | 0 | * |
| * | $M$ | * |  | * | M | * |  | * | M | * |
| * | M | * | YOUR CHOICE $=$ | * | M | * | SEQUENTIAL | * | M | * |
| * | A | * |  | * | A | * |  | * | A | * |

## 

Next month I will continue with the topic of Understanding - Creating - and Using - Cassette files. More specifically, I will be concluding the topic of "HOW TO "OFEN" UP A CASSETTE FILE".." including... the conclusion of the above chart.

In the mean time... if you need any help or have any questions concerning your cassette system - just give me a call ( 412-335-0163) and I'll try to telp.

line.
-BY FRANK N. IIC-
Here we go together-No.13. Little did 1 realize that over a year ago when I first started to write these articles, that I would still be at it today. Seeas that it's like being long winded. Do you think that this trait is inherited from someone in our club? Hana, could be. Onward... Fron time to tine 1 make notes of various itens concerning TI-WRITER. Not that we need more on this well covered topic, but soae of these tips are not well covered while still being quite useful. Look them over and give then a try.

14-If you want to place a Carriage Return at the end of a shortened line, you night find that it does not always take. You can always place it there by holding CTRL/8, which places the Carriage Return where you want it, then you must use FCTN/3 to delete the extra line. So, try it first to see how it works and then think of it as one combined step of--CTRL/B FCTN/3. By using it a few tiaes in practice you gain the confidence to use it during your regular work without further questioning in your ind, does it or doesn't it work. You will know what it does and how it reacts.

1t-When in the Editor mode and printing out your message with the PF (Print File) coamand, you can also have the line numbers orint out along with your text by siaply placing an $L$ then a space in front of Plo in the comand instruction. Don't forget, however, you lose the last 6 characters at the end of each line. So, keep your line lengths to a maximun of 74, this includes the Right Margin.
\#*-Reaeaber that the noraal page length alloms for 66 numbered lines. This also includes any blank lines you have placed in your text. The noral page done by the Formatter also includes 6 automatically placed spaces at the top and 6 spaces at the botton of each page for skipping over the perforations between tractor feed sheets. This means that you have an effective normal 54 lines for your text. Reamber, too, that any lines of instructions to the Foraatter do not take up a line space, nor do any of the . CO (Coment) comands. These are just reainders to yourself that will show only in the Editor aode.

11-Are you annoyed with having to switch disks from the Editor to the Formatter? Well, with two disk drives and Funnelweb Ver.4.0, you now can go to the Fornatter by executing the following: FCTN/9, Q-ENTER,E-ENTER. This will bring you back to the Menu screen. Press No. 2 (Formatter) and you're there. This version also gives an audible beep at the end of each line that indicates there are only 4 spaces left to fill before you are shifted to the next line. Another nice nen added faature is the numbered scale (0 to 79) at the bottom of your working

As always, ay the good 4's be with you.

## T. 1. WRITER (Part 6) <br> STAN KATIMAN

Well let's do sone aore things that by this tiae you probably already know about. Using sone "special" keys.

Let's start with Fctn 1 (Delete Character). This key allows us to reaove the letter that the cursor is sitting over. We have already discussed Fitn 2 (Insert Character). Fitn 3 (Delete Line), pressing this key will remove the entire line that the cursor is on. Fctn 4 (Roll Down) will show the next 24 lines of text. (Eg. if lines $1-24$ are showing, pressing Fetn 4 will now show lines 25-49.) Fctn 5 (Next Window) will "wrap" thenty colums at a tine across the screen. Fctn $b$ (Roll Up) will move the display up the screen 24 lines at a tine, (Eg. if lines $25-49$ are showing Fctn 6 will now show 1-24.) Fstn 7 (Tab) will now "tab" the cursor across the screen that has been preset in the "Tab" function of the Comand Mode. Fctn 8 (Insert Line) will insert a blank line above the line where the cursor is sitting. Fitn 9 (Comand/Escape) has been discussed any tines before. Fctn 0 (Line nuaber) toggles between showing and not showing the line numbers on the left side of the screen.

Now let's discuss the Ctrl keys. Ctrl 1 (00PS!), if you ake a change like Delete Line and you want the line back, press Ctrl 1 and you get the line back. There is a catch, you cannot have pressed any other key before you pressed Ctrl 1. Ctrl 2 (Screen Color) this "toggles" you through a series of screen colors and character colors. (1) personally just use the starting colors.) Ctrl 4 (Next Paragraph) moves the cursor ahead to the next paragraph nith each pres5. Ctrl 5 (Duplicate Line) will duplicate the previous line. II have yet to find a use for this one!) Ctrl 6 (Last Paragraph) ooves the cursor back through the text one paragraph at a tiae. Ctrl 7 (Hord Tab) oves the cursor across the line one word at a time. Ctrl 8 (Nen Paragraph) places a paragraph syabol and starts a nen paragraph. This is useful in the niddle of a document. Ctrl 9 (New Page) places a new page syabol on the screen at the place the cursor is setting. The syabol will cause the printer to advance to a nen page. Ctrl O (Hord Wrap) we have discussed this one (it toggles between mard map and fixed node. 1

These special keys also have a duplicate set by using the Ctr! or Fetn keys plus letters. There is only one "key" that is not on the upper strip and that is Ctrl Y. When you press Ctrl Y this allows you to go past the left nargin (a left argin release).

More next tiae.

## MULTIPLAN <br> By Audrey Bucher Part 8

One of the nost useful features of Multiplan is Hindoms. It took ne a long tine to try this, but once I did, I don't know hom I nanaged nithout then. I think it is sonemhat difficult to try to clearly explain then in an article but I'll give it a try. I suggest though that you play around with then yourself. Dolng is the best may to learn.

The comand I use most often is the windom Split Title connand. In a spreadsheet such as our Expenses for 1988, there are fitles both in the first rom and in the first coluan. Once you aove the cell pointer past the third colum or the twentieth rom, you can no longer see the Titles. You can "fix" those Titles in place.

Place the cell pointer in the colum to the right of the titie coluan and in the row beneath the row which contains your Titles. Press $W$ for window. You will see the following Conand line:

HINDOM: Split Border Close Link
You mant to split the fitles from the figures so choose Split by pressing S or Enter. How you see:

WINDOM SPLIT: Horiz Vertical Title,
Choose Tfor Title. You will nam be presented with two fields.

Mindow Split titles: of Rows:3

- of coluans:l

Notice that IMP proposes the correct response for the number of rows and colunns to be split so you can just press Enter. When you use the Split Titles Comand the windows are autonatically linked so now you nay move your cell pointer wherever you wish and the Tities will alnays be in sight. You probably will not use the nindowing for Expenses for 1988 spreadsheet as this is filled in by the Xcopy Conand. I nerely used it as an example of a spreadsheet that has Titles in both the Roms and Coluans.

But now let's look at our Checks for January spreadsheet. He had only put sixteen rows in our example to nake it short. However, l'a sure you will have nore than ten entries in any given aonth. Notice that when you nove the cell pointer down past Row 20, you mill lose the Columen Titles. Even though we use the 60 to Nane command to get to a particular coluan and I trust MP conpletely to go to the correct colum, I still like to see the Title on the screen. So for this spreadsheet, I mould use the Split Horiz Connand. Again, place the cell pointer beneath the row which contains your ritles (in this case, pow 4). Press $W$ for mindow, S for split and $H$
for horiz. You will see the following:
WINDOU SPLIT HORIZONTAL at ROw:4
linked:yes (no)
Tab over to the next field and select $Y$ to link the mindows. Now whenever you scroll one of the mindows horizontally, both windows scroll together. The active window is split horizontally. The area used by the given row and the rows below it becones the new window. The area above the given row remains part of the original mindow. You may move your cell pointer between mindows by using Control 6 (change mindow), which makes a different mindow the active window. Control 6 again will take you back to the original window.

Let's sum up the Windon Split Comand. You are given three choices. Hindow Split Horizontal splits the active window across the screen, giving two mindows, one ahove the other. Windon Split Vertical splits the active window between coluans, one to the left of the other. Windon Split titles splits the screen both vertically and horizontally to display titles in separate mindows. Up to eight mindows ay be opened using the Window Split Conmands (if you can get then to fit and still shom you anything).

To close a mindon, simply press $W$ for hindow and $C$ for close. You will see the following:

HINDON CLOSE mindow number:n
The active window is the proposed response.
Just a few mords now about the remaining comands.
Hindow Border mill draw a line around the active window that sets it off from the surrounding morksheet. Try this comeand to see what a bordered window looks like. A border takes up one screen position on each side of the mindow, reducing the area for the display of data by two screen lines and two screen columas. To remove a border use the same comands: $\|$ and $C$.

Last of all, the Hindom Link Conmand. This is used to change the link status of windows that are already split. Press W for Window and $L$ for Link. IMP proposes linking the active mindow with the window from which it was split, so just press Enter and tab over to the third fieid and press $Y$ for yes or $N$ for no, depending on which you would like. When windows are not linked, you can scroll then separately to vien different parts of the norksheet simultaneously. However note that Hindows split by the Hindow Split Titles Comand camot be unlinked.

I hope I have not totally confused you at this point. As I said in the beginning, it's not an easy subject to describe. TRY IT, I think you'll like it and if you have any questions just give a a call.

Flip and Mirror With TI-ARTIST By Beverly Cook

Here's a little tip on a very obscure feature of TI-ARTIST. This feature is mentioned briefly and without much explanation. To flip or mirror a picture or instance, select either the MOVE WITHOUT COLOR or COPY WITHOUT COLQR feature from the enhancement. Position the pen at one of the corners (as shown below) and completely surround the picture with a box. Press the fire button and the picture will be picked up. If you're happy with the position of it, press the fire button again and the picture will be dropped, but it will be in the direction you wanted the change made. It's a bit confusing, but try it a time or two and you'll see how it works.


## FROM THE EDITOR

I have thoroughly enjoyed the unique opportunity of being Editor for such a terrific User's Group. It's not possible to do a very effective job unless you have member participation. We are very fortunate in the Fittsburgh User's Group to have several people willing to contribute articles on a regular basis. One area in which we are lacking is the Graphics Area. I'm sure many of you out there play around with some of the many excellent graphic programs available for the TI. FLEASE, won't you take some time to share your knowledge with the rest of us. I guarantee you that by writing an article, you yourself will learn something new or something you had forgotten.

Articles on any subject are always welcome. Perhaps you would like to provide a review of one of the neat programs you receive and let others know that there is genuine support for our 994/A.

If you have something you would like to contribute, please contact me at one of the meetings or by phone.....881-5244

If you are willing to give one evening a month of your time, I could also use some help in putting the newsletter together and affixing the labels. You provide the help, I'll provide the refreshments.....Thint about it and give me a call if you are interested.

Still waiting for the answer to the puzzle in the April issue?? Well, so is your editor. To date, we still have not received the March issue of the Suncoast Eeeper which promised to have the answer. Have any of you solved it?????

## by John F. Willforth

The following is not my original circuit design ( I have changed some things however ). The credit must go to Gary Emmich and Tony Albanese of the Northern New Jersey Users Group. The circuit below is essentially $1 / 2$ of the REAL TIME CLOCK and DIGITAL CONVERTER circuit they designed and distributed as PUBLIC DOMAIN. The circuit was later etched to a double-sided board, and a kit was distributed which became known as the MBP CARD. Last month I got a reprinted article from the TISHUG, written by John Paine which described the circuit he put inside his speech synthesizer to give the system a REAL TIME CLOCK. The circuit is the clock section of the one originally designed by Gary Emmich, and as such, because the schematic was reduced and not too easily read, and since it is public domain, I thought I would rewrite the article and redraw the schematic.

First the pin numbers to the left of ">--" are the pin numbers on the connector inside the speech synthesizer, those two marked " 23 " \& " 24 " go to these two pins on the clock chip, and those to the right of the "--X" are the data bus also attached to the same connector inside the speech unit.

The circuit consists of two 1 -of- 8 decoder/demultiplexer (74LS138s), which decode the address lines to select the clock chip at -31168 to -31154 which select the clock functions, the MM58167 clock chip, the osc. circuit, Q1 to invert DBIN, and the battery back-up circuit. The entire circuit may be put on a small RADIO SHACK perf. board and installed inside the Speech Synthesizer.

John Johnson's MENU program accesses the clock automatically, I've included original CLOCKSET and TIME programs with this article if enough space is available in the PERIPHERAL, if not, call (412) 527-6656, R.D. \#1 Box 73A Jeannette, PA 15644. Here are the addresses to peek and load (poke) and an xbasic command to reset the sound (the sound chip is at this address).
-31168 = Thousands of seconds
$-31160=$ Hours
-31166 - Tens \& Hundreds
-31158 = Day of week
-31156 = Date
-31154 $=$ Month

* To reset sound. . "CALL $\operatorname{SOUND}(1,20000,30) "$
* The data required by the above addresses is in "BCD" and will need converted.


```
    10 REM *********************
    20 REM ** **
    30 REM ** CLOCKSET **
    40 REM ** **
    50 REM **********************
100 REM THIS PROGRAM IS USED TO SET THE CLOCK.
110 REM THIS PROGRAM NEED ONLY BE RUN IF THE TIME DRIFTS OR WHEN BATTERIES ARE
    REPLACED.
120 CALL INIT
130 DEF SET-X+6*INT(X/10) ! CONVERTS DECIMAL TO BCD FOR OUTPUT TO CLOCK.
140 INPUT "MONTH 1-12 ":X
150 MO-SET
160 INPUT "DAY OF MONTH 1-31 ":X
170 D-SET
180 INPUT "DAY OF WEEK 1-7 SUN-1 ":DW $ INPUT DAY AND TIME
190 INPUT "HOUR 0-23 n:X AND CONVERTS TO BCD
200 H-SET
210 INPUT "MIN 0-59 ":X
220 M-SET
230 INPUT "SEC 0-59 ":X
240 S-SET
250 CALL LOAD(- 31164,S,0,M, O,H,0,DW,O,D,0,MO) ! SET CLOCK
260 CALL SOUND (1,20000,30) ! RESET SOUND GENERATOR
270 CALL CLEAR
280 STOP
```

```
10 REM **********************
```

10 REM **********************
20 REM ** **
20 REM ** **
30 REM ** TIME **
30 REM ** TIME **
40 REM ** **
40 REM ** **
50 REM ***********************
50 REM ***********************
100 REM THIS PROGRAM DEMONSTRATES HOW THE CLOCK IS ACCESSED BY A PROGRAM.
100 REM THIS PROGRAM DEMONSTRATES HOW THE CLOCK IS ACCESSED BY A PROGRAM.
110 CALL CLEAR
110 CALL CLEAR
120 DIM WK$(7),MO$(12)
120 DIM WK$(7),MO$(12)
130 DEF TIME-X-6*INT(X/16) ! CONVERTS BCD OUTPUT OF CLOCK TO DECIMAL.
130 DEF TIME-X-6*INT(X/16) ! CONVERTS BCD OUTPUT OF CLOCK TO DECIMAL.
140 FOR DW=1 TO 7
140 FOR DW=1 TO 7
150 READ WK\$ (DW)
150 READ WK\$ (DW)
160 NEXT DW
160 NEXT DW
170 FOR DM-1 to }1
170 FOR DM-1 to }1
180 READ MO\$ (DM)
180 READ MO\$ (DM)
190 NEXT DM
190 NEXT DM
200 DATA Sun,Mon,Tues,Wednes,Thurs,Fri,Satur
200 DATA Sun,Mon,Tues,Wednes,Thurs,Fri,Satur
210 DATA January, February,March,April,May,June,July
210 DATA January, February,March,April,May,June,July
220 DATA August,September,October,November,December
220 DATA August,September,October,November,December
230 GOTO 380
230 GOTO 380
240 CALL PEEK(-31164,X1,X2,X3,X4,X5) ! READ SEC. MIN. \& HOUR X2\&X4 NOT USED
240 CALL PEEK(-31164,X1,X2,X3,X4,X5) ! READ SEC. MIN. \& HOUR X2\&X4 NOT USED
250 X-X1 :: SEC$-STRS(TIME)
250 X-X1 :: SEC$-STRS(TIME)
260 IF X1<10 THEN SEC$-"O"&SEC$
260 IF X1<10 THEN SEC$-"O"&SEC$
270 X-X3 :: MIN$-STR$(TIME)
270 X-X3 :: MIN$-STR$(TIME)
280 IF X3<10 THEN MIN$-"O"&MIN$
280 IF X3<10 THEN MIN$-"O"&MIN$
290 X-X5 :: HR-TIME :: M$=" AM"
290 X-X5 :: HR-TIME :: M$=" AM"
300 IF HR>11 THEN M$=" PM"
300 IF HR>11 THEN M$=" PM"
310 IF HR-0 THEN HR-12
310 IF HR-0 THEN HR-12
320 IF HR>12 THEN HR-HR-12
320 IF HR>12 THEN HR-HR-12
330 HR$=STR$(HR)
330 HR$=STR$(HR)
340 TI$-HR$\&":"\&MIN$&":"&SEC$\&M\$
340 TI$-HR$\&":"\&MIN$&":"&SEC$\&M\$
350 DISPLAY AT (6,11):TI\$
350 DISPLAY AT (6,11):TI\$
360 IF X1+X3+X5=213 THEN 380
360 IF X1+X3+X5=213 THEN 380
! DISPLAY TIME ON SCREEN
! DISPLAY TIME ON SCREEN
! UPDATE DAY \& DATE AT MIDNIGHT.
! UPDATE DAY \& DATE AT MIDNIGHT.
370 GOTO 240
370 GOTO 240
380 CALL PEEK(-31158,X1,X2,D,X4,X5) ! READ DAY, DATE \& MONTH
380 CALL PEEK(-31158,X1,X2,D,X4,X5) ! READ DAY, DATE \& MONTH
390 X-D :: D$-STR$(TIME)
390 X-D :: D$-STR$(TIME)
400 X-X5 :: X5-TIME
400 X-X5 :: X5-TIME
410 L1$="Today is "&WK$(X1)\&"day"
410 L1$="Today is "&WK$(X1)\&"day"
420 L1=INT((32-LEN(LI$))/2)
420 L1=INT((32-LEN(LI$))/2)
CONVERT TO STRING \& DISPLAY
CONVERT TO STRING \& DISPLAY
430 DISPLAY AT(2,L1):L1\$
430 DISPLAY AT(2,L1):L1\$
440 L2$-MOS(X5)&" "&D$\&", 1988"
440 L2$-MOS(X5)&" "&D$\&", 1988"
450 L2=INT((32-LEN(L2$))/2)
450 L2=INT((32-LEN(L2$))/2)
460 DISPLAY AT(4:L2):L2\$
460 DISPLAY AT(4:L2):L2\$
470 GOTO 240

```
470 GOTO 240
```

A FIRST LESSON IN EXTENDED BASIC<br>PROGRAMHING<br>by Jia Peterson

Extended Basic is nothing more than BASIC with a lot more words added. If you have learned anything about BASIC progranning, it will also apply to Extended Basic.

A PRogran is just a numbered series of instructions to the computer, written in more-or-less-plain English, telling the conputer to perform a certain task. The coaputer will follow these instructions in the order they are numbered, except when you tell it to GOTO or GOSUB to another part of the program.

The instructions are numbered by LINE NUMBERS. You can type these in, but it is easier to just start out by typing NUM and Enter. The conputer will then automatically give you line numbers starting with 100 and advancing by 10 to 110,120 , etc. This is so that you can later squeeze more instructions in between using 105, etc. If you need to get out of autonatic numbering, in order to correct a line or insert a line, just press Enter twice. To start autonatic numbering again, just type NUN, space, and the next line number you want, such as NUM 130.

In Extended Basic, you can put several instructions under one line nuaber, by putting a double colon (: $:$ ) betwen then. But, while you are still learning, please DOW'T! Why not? Well, when you tell the computer to do sonmething it can't do, or can't understand, it will give you an ERROR wessage, either when you Enter the line or when you run the progran, and it will tell you the line number that is causing the problef - but if you have several instructions under that line number, you won't know which one is wrong! The first instruction we will learn is PRINT. This tells the conputer to print sonething on the bottom line of the screen, and then scroll up one line. Try entering Num, then -

100 PRINT 1
110 PRINT 2
120 PRINT 3 - and RUN it.
Now try -
100 PRINT A
110 PRINT B
120 PRINT C - and RUN it, It printed a 0 three tiaes, didn't it? Why? When you tell the printer to print anything other than a numeric digit lor a math symbol or decial combined with a number) it thinks that you are telling it to print the VALUE of a VARIABLE. And if you haven't previously told it otherwise, that value is zero. Try this

100 A $=10$
110 PRINT A
So what is a VARIABLE? If you suffered through high school algebra, you may recall equations such as - $\mathrm{S} \times \mathrm{T}$ $=D$, where $S$ equals speed and $T$ equals time and $D$ equals distance. You could give $S$ and $T$ any values you manted to, in order to calculate how far something mould go at a certain speed in a certain tiae. $T$ and $S$ and $D$ are VARIABLES. We use then a great deal in programing and
you will soon see why.
Now, suppose you really wanted to print the letter A. That's easy, just put it in quotation marks and the computer will know what to do.

100 PRINT "A"
In either Basic or Extended Basic, the instruction DISPLAY works just like PRINT.

100 DISPLAY 999
110 DISPLAY "HELLO"
Text scrolling up from the botton looks rather "cheap", compared to those computers which display text from the top of the screen downward. In Extended Basic we can put the display wherever we want by using DISPLAY AT followed by a row and column number in parentheses. There are 24 rows on the screen and 28 colums when you are using PRINT or DISPLAY.

100 CALL ClEAR
110 DISPLAY AT11,11:1
120 DISPLAY $\operatorname{AT}(24,1): 24$
130 goto 130
He slipped in a couple of new instructions there. CALL CLEAR just erases everything on the screen factually it fills the screen with the blank space you get by hitting the space baph. GOTO tells the computer to go to another line number. In this case, it goes back to itself over and over and keeps the progran running so it will not print READY and scroll that first line off the screen. Use FCTN 4 to get out of it.

Try experienting with DISPLAY AT to put different numbers, words or phrases wherever you want then on the screen. You will find that if you specify a row number greater than 24, the computer will just subtract 24 until it gets down to a number within range.

100 DISPLAY AT(25, 35): "WHERE?"
In some prograns you way see PRINT folowed by and a number or variable. This is an instruction to print to a printer, to a disk, a speech synthesizer, or whatever, Actually you can print to the screen by -

100 PRINT 10:"SEE?"
but there is usually no reason to do 50 .
Now, a fen mords about print separators. Try this -
100 PRINT $1: 2: 3$
110 PRINT $1,2,3$
120 PRINT $1 ; 2 ; 3$
130 PRINT "A"; "8';'C"
See what happens? The colon (i) causes the couputer to skip to the beginning of the next line before printing again. The coma (,) causes it to jump half the width of the screen before printing again, And the semi-colon causes it to print one iten right after another EXCEPT that numbers are always printed with a blank space before and after the la negative number has a minus sign (-) instead of a blank before it). Now try -

100 PRINT 1:2:3:
110 PRINT $1,2,3$,
120 PRINT 4
130 PRINT 1;2;3;
140 PRINT 4
The colon after the 3 in line 100 was useles 5
because the conputer would advance to the next line anyway. The conaa after the 3 in line 110 caused line 120 to print half a screen width after the 3 . And the semi-colon after the 3 in line 130 caused line 140 to print insediately after the 3 .

Do a lot of experimenting with this, until you know just what the print 5 eparators will do. Try -

100 PRINT "A", "BCDEFGHIJKLMNOPB"
See what happens when the iten after the conen is more than half a screen in length? Nom try this 100 PRINT 1: : : : : 2
And try this -
100 CALL HCHAR $\{1,1,42,768)$
110 DISPLAY AT(5,1):"TEST"
120 DISPLAY AT $77,1 /$ SILE(4): "TEST"
130 DISPLAY AT (9, 1): "TEST";
Line 100 just fills up the screen with sonething 50 1 could show you that DISPLAY AT erases the reaainder of the line unless you specify the length of what you will print with SIIE or, much easier, put senicolon after the text.

## RECAP OF MEETING MINUTES OF MAY 15, 1988

Treasurer Shoenaker gave a Report. Balance on hand after expenses for April mas \$730.45. Against that balance, there was a printing bill to be paid, a deposit to be eade at the Post Office and discs to be purchased. Sales at this meeting approxinated $\$ 200.00$.

Librarian Harper gave a Report. There are 29 new discs in the Library, D.O.H. will be discontinued. An up-to-date library catalog is available for $\$ 1.00$ or a blank disc. It can be printed on the screen or printer with the Catlib progran. All discs are now $\$ 2.00$ instead of sone at $\$ 2.00$ \& sose at $\$ 3.00$.

SYSOP Kelly reported that there was a bug in the message-writing portion of the 8 PS progran which was corrected. We now, however, have a new BBS progran which pronises to be better than the present one. Kelly will start to use it on May 22nd, At that tiee, all users will have to re-register. The new prograe will support 200 users and will handle more messages than the present progran.

Newsletter Editor Bucher requested that someone write a series of articles on one of the any fine graphic programs which are available.

Pre5. Taylor gave his Report:

He reviewed the Texas II Faire including products \& programs on the aarket. He aentioned the nanes of many good fairware prograns which the brought back with hin.

He also mentioned that there is an RS-232 "stand alone" available for $\$ 30.00$.

He took naess of neabers who are interested in a quiet fan for the P-box. He will try to find those fans go that a class can be held on installing then.

## OLD BUSINESS:

In the interest of saving money, distribution of our Newsletter to other users groups will be continued to be pared-down.

There were two subnissions in the poster contest--one by Frank lic $k$ one by Willian Krieger. They were passed-around to the aebbership for a vote to be taken later in the meeting.

NEW BUSINESS:


Upon vote by the neabership, the poster subnitted by Frank lic was made the winner of the poster contest.

Printer stand was won by Don HeCullough.
The following denonstrations were given:
Gary Taylor--Slide Show
George Dick--Slot aachine gane
Heeting adjourned at 7:50 PH. Respectfully Subnitted Herbert H. Reich, Recording Secy.

## helcome

The PUG extends a wari melcone to those who have recently renewed their aenberships. Included are Ted Anderson and Gerald Graff.

FROM THE LIBRARLAN

A reninder that all disks in the library are now only 32. Next month I will have an article on the new disks in the library. 'End of school pressures' won over this month. See you at the next eneting......... Susan

## [] DUES \$15 PER YEAR []

[] HAVE YOU PAID YOURS? []
[] []



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