



THE PUG PERIPHERAL



THE MONTHLY NEWSLETTER OF THE
PITTSBURGH USER'S GROUP
MAY 1989

FRONT PAGE NEWS BY GARY TAYLOR

LAST MONTH I COMPLETED MY PERSONAL TAX RETURN USING THE TI-TAX MULTIPLAN TEMPLATES PRODUCED BY WILLIAM G. CHAVANNE. I, LIKE MANY OTHER AMERICANS, WAIT UNTIL THE LAST MINUTE TO FILE TAX RETURNS AND THIS YEAR WAS NO EXCEPTION. THIS YEAR, HOWEVER, I THOUGHT IT WOULD BE A NOVEL THING TO USE THE MULTIPLAN TEMPLATES THAT WERE MADE AVAILABLE TO OUR CLUB FROM THE WEST PENN 99'ERS TO COMPLETE THE GOVERNMENT FORMS. SO I BEGAN A WEEK EARLIER THAN USUAL BECAUSE I WOULD HAVE TO FIGURE OUT HOW TO USE MULTIPLAN FIRST BEFORE I COULD GET INTO THE TI-TAX TEMPLATES. I HAVE NEVER FOUND A PRACTICAL USE FOR MULTIPLAN IN MY OWN PERSONAL COMPUTING AND THERFOR I HAVE NOT BECOME PROFICIENT IN ITS USE. THE SECOND TIME I EVER LOADED IT UP WAS DURING AUDREY'S TUTORIALS SO I AM BY NO MEANS AN EXPERT.

WHAT I FOUND WHEN I PRINTED THE DOCUMENTATION AND LOADED THE FIRST SCHEDULE WAS AN EXTREMELY PROFESSIONAL, WELL DOCUMENTED, EMINENTLY PRACTICAL SET OF TEMPLATES THAT SIMPLIFIED MY TAX RETURN PREPARATION INTO AN ENJOYABLE EXPERIENCE. IT USUALLY TAKE MAY A FULL WEEK END OF STRUGGLING WITH FORMS AND SCHEDULES AND CALCULATIONS. I WAS ABLE TO COMPLETE MY FEDERAL TAX RETURNS WITH THIS PACKAGE IN "3 HOURS!" I AM VERY IMPRESSED! I WONDER WHAT HAS TAKEN ME SO LONG TO FIND OUT ABOUT THIS PACKAGE OF TEMPLATES. NOW THAT I HAVE FOUND THEM I VOW THAT I WILL NEVER DO MY TAXES AGAIN WITHOUT THEM. I MIGHT ADD THAT I DID NOT HAVE SIMPLE FORMS TO FILL OUT, I FILED A 1040 WITH SCHEDULES A, B, D, E, AND 4562. I STRONGLY RECOMMEND THESE TEMPLATES. I REALIZE THAT IT IS MUCH TOO LATE TO USE THIS PACKAGE THIS YEAR AS TAX FILING TIME IS PAST UNLESS YOU HAVE FILED FOR AN EXTENSION. NEXT YEAR WE WILL HAVE THE NEW TEMPLATES AVAILABLE AS SOON AS THE AUTHOR UPDATES THEM FOR THE NEW LAWS. LAST YEAR I PAID HR BLOCK \$120 TO PREPARE MY TAX RETURNS. THIS YEAR I SENT A CHECK TO WILLIAM CHAVANNE 4549 ENGLISH AVENUE, FORT MEADE, MD 20755!

MARLENE CURRAN IS VERY ACTIVE IN HER COMMUNITY AND USES HER TI-99/4A COMPUTER TO PRODUCE A VARIETY OF FLYERS, NOTICES, AND HAND-BILLS WITH GRAPHICS AND FONTS. SHE USES A PROGRAM CALLED FONT-WRITER II AUTHORED BY J. PETER HOODIE ALMOST EXCLUSIVELY FOR HER WORK. I HAVE PERSUADED HER TO SHARE HER KNOWLEDGE OF THIS PACKAGE WITH US. SHE WILL HOLD A CLASS AT 3:30 TO SHOW YOU HOW THIS PROGRAM WILL MERGE GRAPHICS AND TEXT TOGETHER. SHE WILL ALSO SHOW YOU SAMPLES OF HER WORK, AND WILL ANSWER ANY QUESTIONS ABOUT THE PROGRAM. IF THERE IS ENOUGH INTEREST AFTERWARDS THE CLUB WILL ATTEMPT TO MAKE A SPECIAL PURCHASE FOR THE MEMBERS.

THE ZENO BOARD IS CLOSER TO BECOMING A REALITY. ERIC HAS HAD A GOOD RESPONSE FROM THE TI COMMUNITY AND IS GOING AHEAD WITH A PLANNED PURCHASE OF 10 PROTOTYPE BOARDS IN THE NEAR FUTURE. THESE BOARD WILL BE USED TO PROVE OUT THE CIRCUIT LAYOUTS AND HELP IN WRITING UP THE DOCUMENTATION. I HAVE FIRST HAND KNOWLEDGE THAT THE FIRST ZENO BOARD HAS ALREADY BEEN INSTALLED IN A CONSOLE BY JOHN WILLFORTH FOR JACK SUGHRUE. IF THE PROTOTYPING WORKS OUT THIS BOARD SHOULD BE READY FOR SHIPMENT IN A COUPLE OF MONTHS.

I RECEIVED A LETTER FROM CHARLES GOOD OF THE LIMA USER'S GROUP POINTING OUT A FEW CORRECTIONS TO THE CS1*FINDEX LISTING THAT WE PUBLISHED LAST MONTH. ALL CORRECTIONS ARE IN REM STATEMENTS AS FOLLOWS: 180 REM REMOVE LINE 260 AND ALL REM LINES INCLUDING 1900 TO FIT INTO MINIMEMORY
1900 REM CHANGE 1910 TO RUN "CS1" FOR EXTENDED BASIC AUTOLOAD

THE TRIP TO THE OTTAWA FAIR WAS A LOT OF FUN AND I WAS ABLE TO BRING BACK SEVERAL NEW PROGRAMS THAT I HOPE TO DEMO AT THE NEXT MEETING. TWO OF THESE PROGRAMS ARE FROM COMPRODIME. ONE IS CALLED "JIFFY CARD" AND WILL PRODUCE GREETING CARDS ON YOUR SCREEN WITH A WYSIWYG (WHAT YOU SEE IS WHAT YOU GET) FORMAT. IT IS SIMILAR IN OPERATION



TO THE "JIFFY FLYER" PROGRAM THAT WAS DEMONSTRATED AT THE FEBRUARY MEETING. THE SECOND PROGRAM IS CALLED "GIANT ARTIST POSTERS", GAP FOR SHORT. THIS PROGRAM WILL ENLARGE ANY TI-ARTIST SCREEN IN BANNER FASHION IN 9 SIZES FROM 4X 10 24X! THE POSTER CAN RANGE IN SIZE FROM 10" BY 14" TO 5' BY 8"! THE ' SYMBOL STANDS FOR FEET! I WILL HAVE SAMPLES AT THE NEXT MEETING OF SOME OF THE POSTERS I HAVE BEEN ABLE TO PRODUCE.

I TALKED WITH GARY BOWSER OF THE TORONTO USERS GROUP AND PURCHASED A NEW CATALOGER CALLED "DISKODEX". THIS PROGRAM FULLY SUPPORTS THE "DISK UTILITIES" COMMENT SYSTEM. THIS MEANS THAT THE PROGRAM WILL READ A DISK CATALOG, INCLUDING THE COMMENTS PLACED THERE BY THE PROGRAM DSU, AND PRODUCE A DATABASE USING THAT DATA. GARY HAS A SMALL COMPANY PRODUCING SOME EXCITING NEW HARDWARE AND SOFTWARE. MOST OF IT IS IN THE DEVELOPMENT STAGE. WE SHOULD BE HEARING MORE FROM HIM IN THE FUTURE. HE HAS ALREADY DEVELOPED A CIRCUIT ON THE COLEMAN/WILLFORTH PROTOBOARD THAT WILL EMULATE A OPM COMPUTER. HE HAS ALSO WRITTEN AN EMULATOR FOR COLECO/ADAM CARTRIDGES. IF YOU ARE INTERESTED IN GETTING A COPY WRITE TO OPA OASIS PENSIVE ABACUTORS, 432 JARVIS STREET, SUITE 502, TORONTO, ONTARIO, CAN M4Y-2H3. THE PRICE FOR "DISKODEX" WAS \$20

ANOTHER PROGRAM THAT I PURCHASED IS CALLED "PAGE PRO 99" FROM ASGARD SOFTWARE. THIS PROGRAM WILL ALLOW A SINGLE PAGE TO BE PRODUCED THAT CONTAINS GRAPHICS AND TEXT IN TWO COLUMN FORMAT. THIS IS THE START OF MORE SOPHISTICATED AND SIMPLE TO USE PROGRAMS THAT APPROACH DESK TOP PUBLISHING. MOST OF THE TOOLS FOR DESK TOP PUBLISHING HAVE BEEN DEVELOPED OVER THE LAST COUPLE OF YEARS AND NOW SIMPLIFICATIONS AND CONSOLIDATION OF THESE TECHNIQUES ARE BEGINNING TO SHOW UP. THIS PROGRAM SELLS FOR \$24.95 + .75 HANDLING FROM ASGARD SOFTWARE PO Box 10306, ROCKVILLE, MD 20850.

I TALKED WITH CHARLES EARL AT THE FAIRE ABOUT PRESS. HE SAID THAT HE IS WORKING HARD ON COMPLETING THE PROGRAM. HE HAS HAD TO DEVELOP SOME DEBUGGING TOOLS OF HIS OWN DURING THE DEVELOPMENT OF PRESS AND DECIDED TO RELEASE "HOT BUG" AS FAIREWARE. IT IS A NEW "POP-UP" DEBUGGER OFFERING STEP OR REALTIME EXECUTION OF PROGRAMS. IT COMES COMPLETE WITH A HEX ORIENTED CALCULATOR AND WILL SUPPORT REMOTE DEBUGGING FROM ANOTHER TI! IT WILL LOAD INTO A SUPERCART OR GRAM KRACKER LEAVING A FULL 32K FOR YOUR PROGRAM.

IT HAS A FAIREWARE PRICE TAG OF \$20 AND CAN BE PURCHASED FROM CHARLES EARL, 34 MCLEOD STREET, OTTAWA, ONTARIO, CANADA, K2P-0Z5. AS FOR PRESS HE DOES NOT SEE ITS RELEASE FOR A COUPLE OF MONTHS. THAT WOULD BE SOMETIME IN THE 3RD QUARTER OF 1989.

WE ARE PLANNING A CLUB PICNIC FOR SUNDAY JULY 16TH TO BE HELD AT DORMONT PARK IN DORMONT. THE PICNIC WILL TAKE THE PLACE OF THE MEETING FOR JULY AND WILL BE COMBINED WITH LIBRARY SWAP. WE WILL HAVE SEVERAL TI SYSTEMS SET UP AND A COPY OF THE CLUBS LIBRARY ON HAND. FOR A SMALL FEE OF \$5 YOU WILL BE ABLE TO COPY ALL THE DISKS FROM THE LIBRARY THAT YOU CAN. DORMONT PARK IS ACROSS THE STREET FROM MY HOUSE AND WE WILL HAVE HOT DOGS AND HAMBURGERS FOR ALL. WE DO NEED A COUNT OF HOW MANY PLAN TO ATTEND SO THAT WE CAN HAVE ENOUGH FOOD ON HAND. YOU WILL HAVE TO SUPPLY YOUR OWN BEVERAGES. THERE WILL BE MORE DETAILS IN THE JUNE NEWSLETTER, INCLUDING A MAP. THE LIMA USER GROUP CONFERENCE WILL BE HELD IN LIMA, OHIO ON MAY 20, 1989. IF YOU WANT TO GO, I WILL HAVE MAPS TO SHOW YOU HOW TO GET THERE WHICH WERE PROVIDED BY THE LIMA USER'S GROUP.



WELCOME

The PUG would like to extend a warm welcome to our newest members: Bill Medcalf and Barry Zentner. We would also like to convey our continued welcome to Tim Goralski, Gerald Graff, Nick Graatikos, Robert Hicks, Thomas Hodell and Scott Coleman who have recently renewed their memberships.



HIGH RES GRAPHICS AND THE 99/4A

by Anne Rhein

Our Heritage

CONTINUED FROM LAST MONTH..... Besides Sketchmate, Amerisoft International introduced several other graphics packages during 1984, most of which are now hard to find. Graphics Grabber is much like the earlier Screen Dump Utility from Extended Software except that this newer program is in assembly language and much faster. It can dump a screen either horizontally or vertically onto the paper, and the printout is larger. Master Painter 99 is a very useable drawing and painting program, but like Draw A Bit requires the remembering of quite a number of function key strokes in order to use. Like Draw A Bit, it also has a hard-to-read manual. A screen dump is on the disk.

3D World had a new twist. It allowed one to make complex, colorful, 3 dimensional designs that could be rotated, inverted or made partially invisible. Designs could be saved to disk or printed out. Programming experience is not necessary in order to use the program. Access to the image file for use in a Basic program is explained in the manual. Be prepared for a learning experience when you use this program. It's complicated, but very interesting if you have the time to spend.

Expanded Graphics Basic lets you add 30 new commands to either Basic or Extended Basic. After IGB is loaded into the computer the new commands can be accessed by a series of CALL LINKS right along with the regular programming language. Although not a drawing program per say, it does allow the programmer fairly easy access to the bit map mode and to screen drawing. The commands include graphing and plotting routines, and a screen dump. Like 3D World it is a fascinating educational experience to use this program if you have time to spend. It is an ambitious program, with nearly all available memory used up. If you aren't careful you may run into errors due to memory full, and lose your data.

Quality Software's Draw 'N Plot also lets you add a number of new graphics commands to your Extended Basic programs by means of CALL LINKS. But besides the eleven callable subroutines, Draw 'N Plot includes a drawing editor which allows drawing and erasing a pixel width line. Circles, squares, and lines between two points may be drawn automatically. Shapes may be filled in solid on command. Use of color is limited to two at a time - foreground and background. Pictures may be saved to disk or printed. Although this package does not support some of the nicer frills such as magnification, rotation, etc., it is the best

program yet for adding graphics to KB programs. However, like Expanded Basic Graphics, be warned that memory is a problem. You can crash the system if your program is too large!

A companion disk, Chart Maker, originally worked with Draw 'N Plot to create all kinds of charts and graphs. The newer version of Chart Maker only requires Extended Basic. Quality 99 Software has done an excellent job of keeping their programs revised and updated since they began putting them out in 1983. Their graphics programs also include a Banner Maker and a very fast Screen Dump which will even print module screens if an interrupt switch is installed on the computer.

With so much graphics software coming out so fast for awhile, it was hardly surprising that some of it would be obsolete almost before it hit the market. Navarone's Paint 'N Print cartridge was originally meant for the unexpanded system. Apparently not enough users were interested in a software package which only did about half of what competing programs could do. In an effort to save Paint 'N Print from complete obscurity, Navarone released a companion disk which greatly expanded Paint 'N Print's capabilities. But by that time there were many graphics packages on the market competing for the customer dollar. One of these was Graphx. Another was TI Artist, which, along with Graphx, would radically affect the 99/4A graphics software market.

Graphx - The Giant of the Industry

Graphx got its start in Australia, and was such a good paint program that before anybody realized what was happening, the era of the TI 99/4A Paint Program was in full swing. With Graphx, freehand drawing and erasing in the bitmap mode are controlled by the joystick. It offers speed control and full color capability. Circles, boxes and lines can be drawn automatically. Shapes can be filled with built-in patterns as well as color. Portions of the picture can be copied and/or moved to another location in the picture, or even to an entirely different picture by means of the "clipboard" feature. Text may be incorporated into the drawing. A "zoom" mode lets the user view and edit a small portion of the picture that has been magnified to four times its original size. The resident screen dump prints to an Epson or compatible printer in four different formats. A unique feature of Graphx is the aforementioned clipboard which lets you store and retrieve parts of pictures while you are working on them. Picture parts or special alphabets (fonts) can also be saved to disk to be incorporated into drawings whenever you

want them. With the clipboard, you can also try your hand at computer animation. This program's not only easy to use but has an excellent tutorial/reference manual that comes with it. The manual even explains how to display a Graphx picture file in an assembly language program.

TI Artist, like Graphx, was a sleeper at first. But it quietly ran down competition until, today, it is the frontrunner of all graphics programs. Like Graphx, TI Artist can be used almost without ever referring to the manual. Drawing and erasing are done freehand in full color with various brush widths and with most of the frills that Graphx supplies plus some of its own. The screen dump is the best of any program around, and will work with practically any printer. Another thing that makes this program a winner is the ability to take files from other popular paint programs and convert them to be used with TI Artist. But the one feature that makes this program really outstanding is the ability to save any part of a screen as an "instance". This instance is saved in a display/variable 80 file format that can be looked at by TI Writer. When converted, the numbers in this file can be used for Call Character routines in Basic, or even for transliterate codes that will dump graphics into TI Writer files! These features make TI Artist the most versatile program on the graphics market, and have spawned a new type of software: Artist support packages.

As support packages pour out for Graphx and TI Artist, these two have become more and more established as the best paint programs for the 99/4A, and fewer paint programs are being introduced. Bitmac, which made its appearance in 1985 was another good program doomed to obscurity. Authored by David Vaughan, Bitmac was simultaneously introduced by Data Biotics and Vaughan Software, both of whom claimed copyrights. Despite its cloudy beginnings it is a nice program with many of the features of Graphx and TI Artist as well as a couple new ones. This program is operated by icons which are pointed at with the Joystick. To select, the fire button is pressed. Besides the standard features you would expect a good drawing program to have, this one can reduce or enlarge your drawing for you - something neither Graphx or TI Artist can do at this point. A screen dump to Epson compatible printers and a Slide Show feature are also contained right within the program. Where Graphx has its Clipboard feature and TI Artist has its Instance file, Bitmac has its Boolean input. This option allows the user to overlay current screen graphics with graphics that are stored on a disk. For an advanced or specialized user the program also has an interesting coprocess feature which allows the use of a second computer, not necessarily a TI, to calculate plots for Bitmac. All you need for the second computer is an RS232 and the proper cable to interface it to the 99/4A's RS232/2 port. With this setup, very elaborate and beautiful graphics can be created on the 99/4A while the second computer manipulates data for business graphs, maps, satellites or a host of other things.

Because of their unique differences, Graphx and TI Artist have been able to flourish side by side, complimenting rather than competing with each other. As yet no other program has

come close to replacing either of them, but there may be a contender in the newest paint program. Joy Paint, from Great Lakes Software has some impressive new features of its own. Like TI Artist and Graphx, it is a full-fledged paint program, with one exception: it has no color capability other than a choice of screen background color and black or white for the pencil. The lack of color is not necessarily a disadvantage - you may never use color anyway if your main objective is to dump the graphics to a printer. Painting here refers to filling in with patterns, and Joypaint has a large selection of patterns with which to paint. With the companion disk, Joypaint's Pal, you can even create and save you own patterns.

Joypaint is fully Joystick controlled. The drawing board features are accessed by pointing your drawing tool at the function you wish to use and pressing the fire button. Parts of drawings can be moved, copied and even enlarged, but only with 10,000 pixels at a time. Since there are somewhat under 50,000 pixels, that's just over 1/5 of the screen area. Joypaint employs a windowing technique that allows 92% more drawing space than just the normal screen. Joypaint's Pal allows files from other programs such as Graphx and TI Artist to be converted to the Joypaint format, and back again, so compatibility is carried on. This easy-to-use program is truly impressive! Whether or not it will catch up to Graphx and TI Artist in popularity may depend more on what kinds of companion disks become available for it than anything else.

Now a better definition of a drawing package can be given. As seen here, it is a program, or group of programs, that will allow users of the 99/4A to create high resolution graphics on the monitor or TV screen. The graphics should be able to be saved and later reloaded, edited, and, in most cases, printed to a dot-matrix printer. High resolution means that each pixel can be placed anywhere on the screen individually and removed (erased) as desired. We have seen that the programs discussed here can do this and much more besides.

The next thing to consider is, how the program is to be used. The program you buy for your own use should be a program which will best do the things you want and need a paint program to do. There are three distinct ways in which a drawing package can be of value: as a utility for adding graphics to your own programs, as a tool for designing slide presentations and printed material for business and home purposes, and last but not least, as personal enrichment. Using a drawing program in this manner can be rewarding and satisfying as well as simply entertaining. Each of the packages focuses just a little differently on these three aspects, and this is something that will be explored further in the next issue. Part 2 will set up a comparison chart that will let you see at a glance just what each of the 10 main drawing packages for the 99/4A can or cannot do, and how each can best be used. Following the chart, each function will be described in detail. As you go down the list you will see that each program has some features that no other program has, and which may make it the most important program for YOU.

== CHAIRMAN'S COLUMN ==

I would like to report to all of our members of the PUG, that your Membership Chairman has been active making calls to various places and out of thirty (30) calls this month and hearing thirty interesting tales, I have accomplished the following....

I have mailed out 3-newsletters to interested parties and hopefully this will add to our membership, but this remains to be seen! One thing that really surprised me, was that the U.S. Post Office charged me .45c for each newsletter that I mailed. so President, Gary Taylor, and our Newsletter Editor, Audrey Bucher, are doing a fine job on getting the newsletter out to all of us each and every month.

I would like to mention another piece piece of good news, I picked up a TI- Computer complete with a Munchman Module, 3-cables, (one was a single cassette cable) and the instruction manuals. I would like at this time to thank the donator, Mr. David Bertenthal of the Pgh. area 15220.

As we all know, all donated TI-Computers are tax-deductible and are turned over to the Boy Scouts of America in Bridgeville, for a troop project, which is to supply the public libraries in the area! Well that's one more that they will receive.

At this time I would like to say that this job has been quite an experience for me, that should be shared by everyone, but for now there is only one chairman and that's me and I am glad that I was voted in to do the J.O.B.!

That's all for now and until there is more to report on the life of a "CHAIRMAN" I would like to leave you with this! As one of my favorite comedians used to say at the end of a show "GOD-BLESS" and BYE FOR NOW!

wbt~Chairman!



RECAP OF MINUTES OF PUG MEETING of April 16, 1989

Meeting called to order by Pres. Taylor 6:15 P.M.

Librarian Harper gave her Report. She reported that the Library has 7 additional discs. Also there will be a new Bingo disc courtesy of Mark Caprelli. He revised the program

to print out cards two wide--a big improvement.

Pres. Taylor gave his Report:

Pres. Taylor reported on the Boston Faire and some software and miscellaneous items which he brought back. One of the items was a supply of "Any Keys" which were passed out to members as a souvenir at our meeting. He also brought back a supply of a book of computer codes which were sold to our members.

Pres. Taylor passed out a list of BB's in the Pgh. Area, a list of government BB's, some software catalogues & Comuserve applications.

OLD BUSINESS:

Herb Reich gave a report on the status of the Un-used TI Computers Collection Program. He introduced John Mrabovsky who is going to make the Program his project for becoming an Eagle Scout. He outlined the plan to the Membership.

Members Willforth, Keppler, Schmitt, Zic, Harper, Taylor, Dick, McCurran & Connor offered to provide the technical assistance which the recipients of the computers will need.

The first donation of an un-used computer was made by David Bergenthal.

NEW BUSINESS:

A limited quantity of software discs were sold to members at the price of \$1.00. These were obtained at the Boston Faire and were: Operas by Wagner, Star Trek music themes & Max RLE II & many others. All of those discs will go into the Library.

Demonstrations:

Audrey Bucher demonstrated a disc for printing greeting cards. She made a limited quantity of copies for our members. She donated the disc to our Library.

The Bingo prize, Joy Sticks & a disc, was won by Dustin Keppler.

Mr. Ron Ponist was our distinguished guest of the evening. He discussed in considerable detail surge protection & secondary surge arrestors for electronic equipment including, of course, computers. He warned us to look for the U L label on such protectors arrestors.

Meeting adjourned at 9:15 PM.

Respectfully Submitted..Herbert H. Reich, Rec. Secy.



FROM THE LIBRARIAN

Hi there all you disk fans! Boy, we sure have the new stuff for you this month. Everyone who plans a long lazy summer with the computer, look out, and be ready to roll!

We have a new version of Bingo, which prints cards in two different formats. We all got to see that at the last meeting, and if you weren't there, well, come on out this month! Also new in the games department is a game called THE MINE. This is another game from Germany (remember OH, MUMMY?) and it is a winner, too. There are many sections of the mine to go through, and interesting challenges in all of them. Also, we have a new version of Carfax Abbey, which is also known as the Best of Great Britain part two. This version still loads kind of slow, but it has new treasures to find and other improvements. Still more for the games department, we have Pole Position. Okay, all you gamers, let's see your skills!

Cliff Pemper donated a new program which will transfer disk memory images to cassette tape. Look for this in the utilities section of the library. Also in utilities, we have a new sector editor for the hard disk system called Sector One, and MX DOS with disk manager and icons. Gary showed this program at the meeting, and it was obviously inspired by a certain other brand of computer, which is something we all enjoy eating! (That's a hint!)

In Miscellaneous, we have a new program called Super Menu 66, for the 8K RAM cart. In Graphic, the new improved MAX-RLE-2, and a Dutch program that displays the planets. For you music fans, we have a choice of the hit songs from Star Trek or some of the music of Wagner. PLEASE NOTE: the Wagner disk is double sided, and cannot be broken down, unless of course, one of our resident hackers would like to take that as a challenge! If so, let me know!

In the area of word processing, we have a program called TI CARDS, which includes docs and 'related graphics'. These are some reference and helps with the TI WRITER style program.

And last on our lengthy list of new items in the library, we would like to extend a special thank you for three disks from The Tigercub. Jim Peterson has for some time written a series of articles that have appeared in most of the TI newsletters at one time or another. He has sent us three disks for the library, including TI Writer files of the Tips from the Tigercub #46 through #54, and a software catalog, as well as Tigercub Care Disk set. These will be available at the May meeting.

In next month's newsletter, read about everything you missed, OR come on down, and then next month you can read about everything you enjoyed! Also next month, a review of some of the copyright programs that will NOT be in the library, but which are available from Jim Peterson and the Tigercub.

See you at the meeting



REPRINTED FROM THE QB MONITOR

COLISTER

A TINYGRAM

by Ed Machonis

Another 28 column lister? Why not? This one happens to be my favorite and not just because I wrote it. I like it because it does the job the way I want it done, but then I wrote it that way.

At the time I wrote COLISTER, I had no access to any program that could do what I wanted done, which was to be able to list a program to disk or printer in 28 column format, the way it appears on the screen.

A 28 column listing makes it easier for the reader to type in the program with less chance for error. It also makes it simpler to check for errors should any creep in. One only has to check the end of each line as it appears on the screen against the printed listing to see if any characters were omitted or added. (Home Computer magazine never did learn this lesson.)

But the biggest reason is that it not only saves the work of typing in a program in 28 column format, but it eliminates the chance for typing errors. By letting the computer do the work, nothing can go wrong. (If you believe this, I have a fantastic deal on a Bridge I'd like to tell you about!)

Why not just LIST to Printer or Disk? It's not that simple. The computer will list the program in 80 column format. Why not set the printer's right margin at 28? It will work up to a point. The point being a program line of more than 80 characters. The computer will send a carriage return after the 80th character and start printing the rest of the code on a new line. Listing to disk will also give you an 80 column listing.

Since I originally wrote this program several years ago, two programs that do the same work have been brought to my attention. One is 28 Column Converter by Jim Peterson, published in Tiger Cub Tips #18, and the other is COLIST, a Fairware program by the McGovern's. Both are very nice programs and you may well find them more useful to you than the one presented here. (I had originally named my program COLIST but have since renamed it COLISTER to avoid confusion.)

COLISTER has a couple of features not available in the other programs. First, it will print a blank line between program lines. I feel this makes it easier to "read" the program, especially the spaghetti code I am prone to. It facilitates picking out a line number in the middle of the program when following those GOTOs and OR ELSEs.

Second, it TABs the output 6 spaces. This centers the listing when merged into 40 column text in TI-Writer's Editor, and provides a margin so hard copies can be loose leaf bound.

COLISTER does not require that a program's line numbers be resequenced in order to list it. A lot of my program lines are numbered from 1 to 10. Default resequencing (100,10) would sometimes destroy their Tinygram status. (COLISTER is a good example. One Tinygram "trick" is to use single digit line numbers to gain a few extra character spaces for your code.)

COLISTER will print to either disk or printer. Listings printed to disk can be merged with text in TI-Writer's Editor. Do not print the listing through the Foreatter unless you have modified your Foreatter file to ignore the special format command characters that are also often found in programs.

This Tinygram uses only 4 sectors of disk space, which can be reduced to 3 sectors by deleting Line 1. It earns its keep on my SSSD utility disk. (Small is Beautiful)

Using COLISTER is very simple. First, load into memory the program you want to list. Next make a DV 80 listing by typing LIST "DSK#.FILENAME". Don't use the same filename as the program or the listing can overwrite the program.

Then load and RUN COLISTER. At the first prompt, enter the DSK number and the filename used above. For the second prompt, enter the print device name. This can be either PIO, RS232, or DSK#.FILENAME2. Again, use a different filename if reading from and writing to the same drive.

If you don't want the blank line between program lines, just change the FOR statement in Line 8 to read: FOR I=0 TO L-1. The TAB setting in this line can also be changed or eliminated, as

desired. If for some reason you want a listing with a different width, say 40 columns for those "other" owners, just change the value of C in Line 5. (The reason it's in Line 5, and being constantly updated, is because that's where the room was. Another Tinygram "trick".)

If you prepare program listings for newsletters, I think you'll find this program useful. The algorithms used to detect a new line number is relatively unsophisticated. It hasn't failed me yet, but I'm sure that someone, someday will write code that will trip it up. For that reason it is well to always look over the output to be sure that lines have not been split or joined when they should not have been.

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1 ! *** COLISTER ***
  A Tinygram by Ed Machonis
    QB-99ers, Bayside, NY

2 PRINT "1st LIST your prog
  rm to diskThen RUN COLISTER"

3 PRINT ;; "INPUT FILENAME?
  ex:DSK#.LIST" :: INPUT F$ ::
  INPUT "OUTPUT FILENAME? ex:
  PIO or DSK#.LIST28 ":"P$

4 OPEN #1:F$,INPUT :: OPEN #
  3:P$,OUTPUT :: ON ERROR 10

5 C=28 :: LIMPUT #1:A$ :: IF
  LEN(A$)<80 THEN 8

6 LIMPUT #1:B$ :: IF VAL(SEG
  $(A$,1,POS(A$, " ",2))<VAL(1
  EG$(B$,1,POS(B$, " ",2)))THEN
  F=1 :: GOTO 8

7 A$=A$&B$ :: IF LEN(B$)>=80
  THEN 6

8 A=LEN(A$) :: L=A/C+.99 :: F
  OR I=0 TO L :: PRINT #3:TAB(
  6);SEG$(A$,1+I*C,C) :: NEXT I
  :: IF EOF(1)AND F=0 THEN CL
  OSE #1 :: CLOSE #3 :: END

9 IF F=1 THEN F=0 :: A$="" :
  : GOTO 7 ELSE 5

10 ON ERROR 10 :: RETURN 7

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THE KIDDIE CORNER
by Sue Harper

For kids of all ages - a series of articles on how to get started making your own programs. Last month we worked on loops using GOTO. Here are the answers to the questions at the end of the article:

```
Program:
NEW
100 CALL CLEAR
200 GOTO ___
300 PRINT "T"
400 GOTO ___
500 PRINT "A"
600 GOTO ___
700 PRINT "E"
800 GOTO ___
```

To make this program print EAT, change lines 200, 400, 600, and 800 to:

```
200 GOTO 700
400 GOTO 900
600 GOTO 300
800 GOTO 500
900 STOP
```

To make this program print ATE:

```
200 GOTO 500
400 GOTO 700
600 GOTO 300
800 GOTO 900
900 END
```

Try them out, and make up some more word games if you like.

Now, on to a new kind of loop, and one that will do lots of different things for you. This kind of loop tells the computer to count, and from what number to what number is up to you. For instance, let's say you want the computer to count from one to fifty. This is how to tell the computer to do that:

```
NEW
100 CALL CLEAR
200 FOR I=1 TO 50
300 NEXT I
```

When you run this program, the computer will take the VARIABLE I and make it equal to the number one. The third command, NEXT I tells the computer to go to the next number that I can be equal to. In this case, that is the number two. The computer checks with statement 200 to make sure two is smaller than fifty. If it is, the computer will continue to count until NEXT I is too big.

If you ran this program to check it out, you are now saying, "Hey, wait a minute! It didn't do anything!" Well, it did, but we only told the computer to count, not to print the numbers

on the screen. To do that let's add one line to the program:

```
250 PRINT I
```

Now run the program, and the computer will print the numbers from one to fifty, and then stop.

Now you know how the computer tells the game to run three times. Here is a sample program to make something happen four times:

```
NEW
100 CALL CLEAR
200 FOR Q=1 TO 4
300 PRINT "HELLO"
400 NEXT Q
500 STOP
```

This program will print the word HELLO four times, and then stop. This program will do the same thing:

```
NEW
100 CALL CLEAR
200 FOR P=12 TO 15
300 PRINT "HELLO"
400 NEXT P
```

The only things we changed are the name of the variable - from Q to P - and told the computer to count starting at a different number.

You can tell the computer to count by twos or fives, or tens, or any other number using the command STEP. Here is a sample:

```
NEW
100 CALL CLEAR
200 FOR B= 2 TO 48 STEP 2
300 PRINT B
400 NEXT B
500 END
```

This program will count from 2 to 48 by twos.

```
NEW
100 CALL CLEAR
200 FOR G=100 TO 1 STEP -7
300 PRINT G
400 NEXT G
500 STOP
```

This program will count backwards from 100 to 1 by sevens.

Here are some things to try till next month:

1. Write a program that will print your name 19 times.
2. Write a program that will count UP from one to seven and back down again.
3. Write a program that will print the words "I LOVE THE SUMMERTIME" and change the colors of the letters to these colors IN ORDER: Dark red, light blue, dark blue, light green, medium green, black, and stop.

See you next month!!!!

*** IMPACT/99 ***

by JACK SUGHRUE
Box 459
East Douglas, MA 01516

THE SOFTWARE BIGGIES

GENIAL COMPUTERWARE (Box 183, Grafton, MA 01519) is emerging as a TI software developer to challenge long-time leader in this field, ASGARD SOFTWARE (Box 10306, Rockville, MD 20850). Both companies' free catalogs make a 99er's mouth water.

Genial's 15 programs (by authors Peter Hoddie, Paul Charlton, Warren Agee, Mike Dodd, John Johnson, and Wayne Stith) are primarily utility: MACFLIX (\$15) lets you view, print, and save graphics created on the Macintosh; PICTURE TRANSFER (\$30) permits viewing different graphic files, creating slide shows, combining multiple images, and converting among formats (GIF, RLE, MYART, GRAPHX, TI-ARTIST) for the Geneve; TRIAD (\$20) combines the features of a terminal emulator, 40-column text editor, and disk manager in one program; HYPERCOPY (\$20) is called by Genial "the final word in disk copiers" and can copy an SSSD in less than 35 seconds, provide a skewing technique for faster disk reads, format, provide multiple copying facilities, and more; GRAPHICS EXPANDER (\$10) not only converts between TI-ARTIST and CSGD formats but can stretch, shrink, mirror, and rotate graphics all in fast assembly; GRAMPACKER (\$10) customizes GRAM emulating devices in significant and very useful ways; XBASHER (\$10) is faster and better than Jack Sughrue's SMALLIFYING program contained within his PLUS! disk and can compress up to 1/3 of an XB program; XB:BUG (\$15) debugs, modifies, searches, displays as it provides a fine XB tool for the programmer; REMIND ME! (\$15) functions as a fun and fast schedule planner with all kinds of built-ins; BROWSE (\$10) aids in the management of text files by permitting viewing, printing, combining, and browsing; PC TRANSFER'S (\$25) fast and efficient way of moving data between your TI (and/or Geneve) and an MS-DOS machine make this an extremely valuable tool for those 99ers who work with IBM; GENIAL FONT PACKS (\$10 each) provide a collection of 19 different fonts for use with TI-ARTIST along with some additional graphics programs; and FIRSTBASE (\$49.95) a full-featured database program expected to be the only real competition to the powerful TI-BASE (\$24.95 - Inscebot, P.O. Box 291610, Pt. Orange, FL 32029), will have a variety of exceptionally fine database features for the TI or Geneve.

Asgard's catalog of 57 software packages contains a larger variety of materials for the TI/Geneve user: games, graphics, utilities, production tools. In addition to Hoddie, Agee, and Charlton, the author/artists who create Asgard software include Ken Gilliland, Donn Granros, Harry Wilhelm, Tom Wynne, Chris Bobbitt, Ed Johnson, Robert Coffey, Tom Bentley, John Behnke, Jim Reiss, Mickey Schmitt, Paul Scheidemantle, Howard Uman, Tom Wible, Travis Watford, and Charles Earl.

Games: BALLOON WARS (\$4.95) an arcade strategy game with 20 screens of dangerous manned balloon flying; COLUMN ATTACK! (\$9.95) an 11-level fast arcade game demands perfect laser control to defeat the insane Flugelins; DOOM GAMES I & II (\$7.95 each) include a pile of bizarre epics for the TUNNELS OF DOOM addicts; THE GAME PACK (\$5.95) provides two distinct arcade games on one disk [Haunted Mine II and Missile Wars]; HIGH GRAVITY (\$9.95) is an addictive space simulation game that must be played to be appreciated [and my personal favorite]; VOLCANO

FORTRESS (\$7.95) is a collection of five additional TOD great games; LEGENDS (\$22.95) is considered by MICROpendium, Computer Shopper and many newsletters to be the best graphics adventure game EVER for the TI; LEGENDS II: THE SEQUEL (\$17.95) features so many new, exciting things it is already considered by many to be even better than its predecessor; OLD DARK CAVES: THE LOWER CAVERNS (\$17.95) by the same author not only continues with the extraordinary graphics of the LEGENDS series but contains a 50-level dungeon; OLIVER'S TWIST (\$9.95) will satisfy the cravings of Adventure Module owners with this very unusual adventure.

Graphics programs from Asgard that are \$7.95 each include two sets of ARTIST BORDERS, five of ARTIST FONTS, and nine of ARTIST INSTANCES. The variety of these TI-ARTIST collections is incredible. There is also ARTIST ENLARGER (\$9.95) which can enlarge, squeeze, stretch, or reduce singly on in multiple passes any pictures or fonts; FONTWRITER II (\$22.95) provides a companion/environment for TI-ARTIST that will let you successfully use graphics with any version of TI-WRITER; GRAPHX COMPANION SERIES (\$24.95) contains all four packages of this popular series of hundreds of pictures, clipart, borders, fills, and more; DISK OF DINOSAURS (\$12.95) is a delightful and unique graphic package of dinosaurs and animation; GRAPHX SLIDESHOW (\$9.95) allows viewing of GRAPHX or RLE pix in extraordinary ways; MY-ART COLORING BOOK (\$9.95) for the Geneve is a companion to the MY-ART program.

Although Asgard has always been famous for such productivity tools as RECIPE WRITER (and the ELECTRONIC GOURMET companions), SCHEDULE MANAGER, STAMP MANAGER, and the freewheeling C-database TOTAL FILER, the company has released a new pile of unique additions. TYPEWRITER (Disk \$19.95, Module \$24.95, Module with built in printer port \$39.95) is just what it says it is - a full-featured electronic typewriter that is incredibly easy to use; CALENDAR MAKER 99 (\$19.95) and CALENDAR MAKER UTILITIES (\$12.95) will satisfy even the most jaded calendar user with user-friendly graphic/text picture-perfect calendars from any month or any year from 1600 to 2400; CASSETTE LABELER (\$9.95) simply and quickly prints detailed cassette box inserts for your computer or audio cassettes; FORM MAKER 99 (\$24.95) not only creates very complicated business forms but almost any kind of ANYTHING that can be designed for home, school, business, PTO, the kids, or anything else; and PRESS (\$59.95) already described at the best word processor for the TI is compared favorably to the massive processors for the IBM and others.

Asgard's Utilities include BATCH-IT! (\$19.95) which permits all kinds of sophisticated programming techniques with a minimal amount of effort; EZ-KEYS PLUS (\$14.95) considered the ultimate XB programmer's environment has just as many uses for non-programmers; BEYOND VIDEO CHESS (\$9.95) lets you - AT LAST! - save and load chess games to disk, print screen or listing of moves, control the pieces with a joystick, use the board for two players, and more; MUSIC SYNTHESIZER (\$9.95) lets a novice create music by dropping the notes onto a screen page; PR-EDITOR (\$19.95), a multi-featured, superb text editor, is a programmer's ultimate tool, no matter what language you write in; RAM*BOOT (\$9.95) automatically boots setups for Myarc's 128 and 512K cards; TOD EDITOR (\$19.95) is the only utility for creating or changing TOD games; QUICK-RUN ((\$9.95) may be destined for the most-used XB utility for the TI once people begin to use it as it the fastest way to operate XB programs in existence.

It is well worth every TI owner's time and quarters to send off for these tempting, descriptive catalogs from Asgard and Genial.

THE PUG MEETS
 ON THE 3RD SUNDAY OF THE MONTH
 AT COMMUNITY COLLEGE OF ALLEGHENY COUNTY
 OFF ROUTE 885 NEAR CENTURY III MALL

MAY 1989	
S	M T W T F S
7	
14	
21	MEETING
28	

CLASSES BEGIN AT 3 PM
 GENERAL MEETING BEGINS PROMPTLY AT 6PM

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JUNE 1989	
S	M T W T F S
4	
11	
18	MEETING
25	

SCHEDULE	
3-4:30	Font Writer II with Marlene.....Rm. 482
4:30-6	TI Base Sig with Audrey & Lynn.....Rm. 482
4:30-6	Hardware Class with John Wilforth.....Rm. 475
6:00-?	General Meeting
SEE YOU THERE	



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