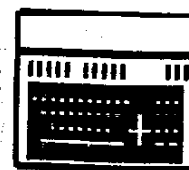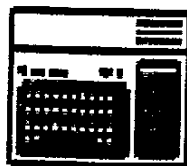# TI - D - BITS

BOOKS

FOOTBALL

Hay Gang !!!

It's that time of the year

To FALL Back into Computing.

Dust off your Machine after

the Long HOT!! Summer and

become Active in Our Group

One Again.

The Philadelphia Area TI-99/4A Users' Group meets twice a month. On the first Saturday of any given month, we meet at the Bucks County Youth Development Center, (YDC, which is next to Neshaminy Mall), Administration Building, beginning at 10:00 am. On the third Saturday of each month, we meet at LaSalle University, 20th Olney, in room H-329 located in the Science Building. Membership to The Philadelphia Area TI-99/4A Users' Group is available to all. We invite anyone that is interested in the TI-99/4A to visit us. Stop in and see what is available to you for your TI and how membership can benefit you!

Current executive board consists of:
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PRESIDENT........... Don Arsenault..... 215-368-0446
VICE PRESIDENT...... Allan Silversteen. 215-885-7910
SECRETARY........... Mark Wannop....... 609-365-1776
TREASURER........... Tom D'Annunzio.... 215-947-7353

Committees consists of:
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TI-d-BITS	Ralph Field.......	215-362-2534
	Don Arsenault.....	215-368-0446
	Bill Hughes	
	Rice Hall	
LIBRARY	Ted Chesey........	215-752-1458
	Newton Stallman	
MEMBERSHIP ...	Bill Hughes	
ASSISTANT TREASURER.	Frank Passini	
EDUCATION	Barry Traver	
	Frank Passini	
	Ted Chesey	
	Tim Coyne	
	Carlo Angelico	
EQUIPMENT	Rice Hall	
PROGRAM	Dr. Eric Bray	

REMEMBER to be considerate when calling any of the above people. Limit your calls to the early evening hours. (6pm to 9pm)

The opinions expressed herein are those of the individual authors are not necessarily those of the Philadelphia Area TI-99/4A Users' Group or its officers. Nor is the Philadelphia Area TI-99/4A Users' Group or any of its officers responsible for any damage, inconvenience, or loss which may result as a consequence of the use of any written material herein.

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The Philadelphia Area TI-99/4A Users' Group's program library is available to all active members at NO CHARGE for copying to your disk. A charge of $2.00 per disk is made for club supplied disks for members. Non members may obtain copies of the library for a fee of $5.00 per disk. A catalog of the library's contents is given to all new members upon request and updates will appear in this publication from time to time. To obtain material from the library, contact the librarian for the best procedure to obtain your requests.

###############
PRESIDENT'S COLUMN
By Don Arsenault
###################

First off, I want to thank all of our members who helped us and attended the damp Ham and Chips Fest. Special thanks to Bill Bubeck who provided us with a portable generator all day to power our system, and to our Newsletter Editor, Ralph Field, who got soaked helping out all day. Another special thanks to the Commodore SIG who graciously provided a tarp to spread between the vans at our spaces, which kept us reasonably dry.

Many bargains were to be had for those who braved the weather, which included disks from our Public Domain and Freeware library, bargains in commercial software from our group, and a complete almost brand new TI system from a former TI employee.

The new software for our systems keeps coming and coming! MacFlix, from Genial Software allows us to view the many MacPaint graphics on the TI-99/4A and the 9640, and to convert them to TI-Artist and MYART formats, as well as print them out on the printer. An interesting and handy conversion routine is included for use with the PC-TRANSFER program, to convert the MacPaint pictures from PC format disks to our format.

Asgard software has released a new editor program called PrEditor which is a text editor for programmer's use. It will run on the TI-99/4A and on the 9640 it runs in 80 columns. The program allows one to have two files in memory at once. You can switch back and forth between them, cut and paste between them. It takes advantage of the extra memory available in a Supercart or Mini-Memory for use as a larger text buffer. It offers many block manipulation functions which do not rely on you supplying line numbers, rather you just mark the beginning and the end of the block to be worked with, and all the block operations are nearly instantaneous.

Another interesting item from Asgard is called DINOSAURS. It is a collection of dinosaur graphics, fonts , background scenes, etc. in TI-Artist format.

The first order of MYARC Hard/Floppy controllers were delivered at the September meeting, five members, including myself, now have added hard drives to our systems. Speaking of hard drives and bargains, if you are in the market for a hard drive, see our VP Allan Silversteen, for information about prices. The latest prices for new hard drives from an acquaintance of his are: Tandon 20 Meg - $170 , Tandon 30 Meg - $175, Seagate 20 Meg _ $175, all plus PA sales tax. The drives are all brand new and fully guaranteed form a local PC clone

manufacturer. The writer is the proud owner of two of the 30 Meg drives, and they are performing great on my 9640. If anyone is interested in a demo of them in operation, get in touch with me, and we'll set up a demo.

On the unpleasant side, there has recently been a lot of things proposed by PACS which will have a great effect on our SIG. PACS is currently attempting to get a tax-exempt status from the IRS, and in this process they have demands. a copy of this letter, and our reply is included elsewhere in this newsletter. We have to decide NOW! what we are going to do in regard to this matter. Please try to attend the October meeting when this will be discussed. Other matters to keep in mind include the fact that as of next summer LaSalle will no longer be available for the PACS meetings, and whether we wish to continue to be officially associated with PACS.

Please take time to read the letters from the PACS treasurer, and our reply to him, and help us to make a decision as to what course we are to take in our TI group.

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SECRETARY'S NOTES
By P. Mark Wannop
###################

JULY MEETING NOTES

TI-D-BITS NEWSLETTER NEWS

The TI-D-BITS NEWSLETTER will be on a bi-monthly schedule during the summer. What with vacations and other family outings, catching up on home upkeep, and so on, the amount of time available to the newsletter decreases. It takes time (and volunteers) to key in articles that are not already in TI-Writer form, as well as layout, graphics production, photocopying, labeling, mailing, and all the other !#$%! that goes into getting a newsletter out! The TI-D-BITS usually runs 20 pages in length - much larger than most club newsletters. I have fits getting a 10 pager out every month for Deptford, and I think Ralph does a fantastic job on the TI-D-BITS!!!

Incidently, you can help produce the newsletter; I'm sure volunteers would be appreciated to type articles from other TI newsletters to disk, as well as other jobs... Give Ralph a call, his number's on page 2 of TI-D-BITS.

Another way you can help - WRITE AN ARTICLE!!! (The universal newsletter editor's cry!!!)

(And while I'm on the subject of producing

newsletters, I'd like to express amazement on the DATA BUS! The DATA BUS has grown greatly both in physical size and page count in the past couple of years; there are a greater range of articles in the magazine and it has something for everybody. And further improvements are not only contemplated, but planned to be implemented. The amazing thing about it is that the magazine is produced and mailed, every month, in under three weeks. Considering that commercial magazines commonly are produced three months in advance, I find this very impressive! I think Ron Stoloff and the other folks working on the magazine are doing a fine job!)

PRINTER'S APPRENTICE WORKSHOP EXPANDS

The Printer's Apprentice workshops will expand to two meetings a month. The usual workshop on the first Saturday of the month at YDC will continue (This is the usual "workshop and tutorial" marathon day, covering a range of subjects); in addition, there will be a workshop on Printer's Apprentice on the THIRD TUESDAY, at 7:30 P.M., also at YDC. (I'm glad it's a Tuesday, as the Deptford TI group meets the third Monday; I'm gonna be busier than a hound in a flea circus the third week of the month...) "YDC", for the uninitiated, is the Bucks County Youth Development Center, by the Neshaminy Mall.

MYARC'S HARD/FLOPPY CONTROLLER;

HARD DRIVES ON THE TI-99/4A AND GENEVE 9640

Myarc has released a long-awaited piece of hardware, and it looks like it was worth the wait! Eric Bray, who is our SIG's representative with Myarc, demonstrated the card for us, and it is an impressive unit!

The card combines a floppy disk controller capable of running four floppies - up to 80 track (720K), 5.25" or 3.5", plus controlling up to three XT or AT compatible hard drives of up to 120 megs EACH in capacity! Plus a tape backup...

To begin with, you do NOT have to get rid of your old disk controller; the new card can be used WITH your present unit if you want to add lots of floppies. In this case, the new card's floppies are designated 5,6,7, and 8! Of course, if you don't need all those floppies, you could always sell your old card or hold onto it as a backup. (TASS 2000, a TI-Artist slide-show program, has the capacity to access all 8 drives available.)

Hard disk management has directories within directories. The main directory allows 114 sub-directories, each with 127 files. Moreover, each sub-directory can have 114 MORE sub-directories, and this can go on...

Furthermore, Floppy disk management now allows sub-directories. From the main directory of a floppy, up to three sub-directories can be formed. The main directory and the sub-directories can hold 127 files EACH. Obviously, this increases the amount of files on a given disk greatly; I can think of uses already, CS6D springing directly to mind...

There are three ways the hard drive can emulate a floppy; one is to create a sub-directory called "DSK1." When one requests a file on the first drive, the unit will check this sub-directory FIRST for the filename; if it is not found, it will search the FLOPPY drive designated DSK1. The second way is to create a sub-directory called DSK, which would be used for those programs written to look for specific disknames. The third is an "emulate file". A Myarc Disk Manager 5 option allows one to sector copy from floppy to hard disk - the file is called an "emulate file". At any one time you can have one of these files active. It will emulate DSK1. (the designation of the floppy drives will increment by 1), and is useful for things like TELCO that often access a floppy drive.

At present, there is no "parking" program, as different manufacturers apparently "park" in different manners.

There is a set order in turning on the system with the hard drive. One turns on the hard drive(s) first, then any external floppies. Next comes the P-E Box, followed by the 99/4A console. Go in reverse order when shutting down.

With the Geneve 9640, plug everything into a power strip and use the switch on the power strip to turn everything on and off at once(!)

Power requirements for hard drives were also discussed. A 3.5" half height hard drive will require about 1.5 amps at start-up and from .6 to .9 amp running; a 5.25" half-height hard drive needs roughly 2.5 amp start-up and 1.2 to run; a full-height 5.25" hard drive needs a hefty 4 amps to get going and 2.2 to run - requiring a hefty power supply.

While the full height 5.25 hard drives can be found at the lowest prices of the three, the cost of the power supply would likely eat up any savings (plus more electricity). Eric mentioned that 3.5" half-height hard drives can be found at reasonable prices if one takes time to look.

The P-E Box power supply is not beefy enough to handle any hard drive without modification; however, the modification is not too difficult, and could be done by someone with a bit of electronics experience. Eric

mentioned that one person replaced the 12 volt regulator with a 5 amp capacity unit, using a TO3 heat sink to dissapate the extra heat. Some discussion was raised concerning the capacity of the power transformer; the component TI used is a fairly hefty piece, and should be safe. Obviously, even with beefing-up modifications, I wouldn't run more than one hard drive with 2 half power floppies (like TEAC 55Bs). For three hard drives and eight floppies, you should plan on purchasing a few good power units... And your own electric plant!

GENIAL TRAVeler REPORT

Barry Traver spoke briefly on his diskazine GENIAL TRAVeIER, and other topics of interest. GENIAL TRAVeIER V2,#2 will be released shortly and will provide two programs for use with PR Base. When PR Base went from version 2.0 to 2.1, the format of the data disks was changed, enabling them to be cataloged. (In version 2.0, a catalog would give a "not initialized" message on a PR-Base data disk, leading to some unfortunate occurances...). However, the procedure for converting a 2.0 data disk to 2.1 format is tricky and requires a sector editor - a procedure many wouldn't want to fool with. A program provided in TRAVeIER will do this conversion easily.

Even with the new format, PR Base 2.1 allows the disk controller to "think" that 0 sectors have been used on the disk, even if it contains data; another program in this issue adds protection to address this problem.

This issue will lighten up a tad and feature some high-quality games by Barry and other excellent programmers.

Another curious program slated for TRAVeIER is one that will allow one to modify an XBASIC program while running(!)

Barry passed around a price sheet for Asgard Software products; Barry represents Asgard to our group (as well as his own Software publishing company Genial Computerware) and offers their releases at special discount prices.

The John Calvin Traver project is done, with a package of 9 "flippies" offered for $20.00. This set features high-quality fairware programs.

Barry is offering a break on subscriptions to MICROpendium to group members; also, Barry announced he will be doing a series in Computer Shopper on extended Extended BASICs. There are a variety of programs that add to the versatility of TI's Extended BASIC. These include: STAR, written by Mike Riccio of our group; Extended Display Package; Triton Super Extended Basic;

Mechatronic XBII+, imported from Germany; SXB (Super Extended Basic); DEP; String Master; Myarc XBII, and Barry's XXB. All of these add extra features to Extended BASIC; the features depend on the program used. (In addition to these, there are GK Utilitys 1 and 2, for folks with Gram Krackers.)

SPEAK AND MATH and PHRASE

Frank Passini displayed a program package he wrote which runs under Extended BASIC and requires the speech synthesizer, and TI's Text-To-Speech program for the "Phrase" portion. Speak and Math emulates the TI hand-held educational game for children; it gives mathematics problems both by speech synthesis and on the screen. The screen display is very nicely designed, as well. The Phrase portion allows one to enter any phrase and see how the synthesizer pronounces it. Due to the programming of the synthesizer's rom, one often has to spell phonetically to have the synthesizer pronounce it "right". Once you have found the best sounding combination of letters and have modified intonation using various punctuation marks (covered in the Text-To-Speech manual, and to a degree in the Terminal Emulator II manual), you can note down that combination for use in your programs.

The Text-To-Speech package is still copyrighted by TI and has not been placed in Public Domain; the user would have to own it to run this program. However, Terry Atkinson has written a fairware program using Text-To-Speech files, and Barry Traver has gotten written authorization from TI to use the Text-To-Speech files with this program (it may be upcoming on GENIAL TRAVeIER). If a user legally owns this fairware program, he has the Text-To-Speech files....

Frank also showed a graphics demo call Wave Power. This is a simple but eye-catching demo of undulating wavy lines reminiscent of an ocean, while the TI logo swims about like a fish in the sea. Cute, but it can make one seasick...

HAM N' CHIPS IN AUGUST

August brings the annual PACS HAM N' CHIPS festival. What's that, you say? Well, it's sort of a mini "Trenton" fest, a flea market at which all of us can find bargains on new and used computer equiptment and supplies. The PATIUG (PACS TI SIG) will have a table this year; members are encouraged to bring their unneeded equiptment to sell. In addition, there will be many vendors available. This will take the place of the regular August meeting, so come on out and do some bargain hunting!

I HEARD IT AT THE APPLE MEETING (HONEST!)

After the TI meeting was over, I noticed I had time to stick my nose in (for the first time) at the Apple Main Meeting. It was from the fellow running the meeting that we all heard of a revolutionary new version of BASIC known as PROCRASTINATOR'S BASIC. It features the conditional statement IF - THEN - ELSE - MAYBE - ON THE OTHER HAND - SOMEDAY... It's a very conditional language...

NOTES FROM HERE AND THERE

DEPTFORD DOIN'S

The July meeting of the 99+ Express group featured the Geneve computer. Members who own 9640's showed off the programs, and Mike Riccio was "borrowed" to show off the new Myarc hard/floppy disk controller!

The Jersey Shore chapter of DVUG has decided to break away from DVUG, and has entered into an affiliation with 99+ Express; what this means is that they will receive the 99+ Express newsletter for the cost of printing and postage (and also contribute material to it...). As this cost will be less than the portion of their yearly dues formerly sent to Christiana (where the DVUG newsletter is produced), this arrangement is financially beneficial to Jersey Shore. In addition, both South Jersey groups plan on occasional co-sponsored events.

This brings the two South Jersey TI groups under the same loose "umbrella"; DVUG currently has chapters in Christiana and Dover, Delaware.

COMPUTER SHOPPER NOTES

Computer Shopper remains the only newstand magazine with any in-depth coverage of either the TI-99/4A or the Geneve 9640. I haven't quoted from the TI-Forum column for awhile, so let's take a look at what's been said...

The June edition, along with a bit of the "gee, we're still here and going strong this many years after that awful day in October" sort of thing (okay, I've written that bit myself; it's getting a tad tired by now, though), there's a list of results of a survey of 700 TI users, completed by Ali Ungers of the North Coast 99ers in Ohio, as printed in the Charlotte TI-99/4A Users Group newsletter (whew!).

The "average" TI owner is male, over 25, with a college degree. He is self-employed or a professional, uses a computer at work, and has two TI's (one may be at work). Only one system typically is fully expanded, with standard TI equipment (32K, TI RS232, TI Controller, and one single-side full height drive); he may have an external drive as well. Printer is most often a Star Gemini, and he has about 25 modules. He plays games, and

uses TI-Writer; most programming, if any, is in Extended BASIC. His modem is usually 300 baud. The "typical" user has no third party equipment, whether it be P-E Card, external keyboard, mouse, or whatever...

TI-BASE FROM TEXAMENTS

The August TI-Forum holds some news of interest for folks who have been looking for a better database for the TI. TI-Base from Texaments (53 Center Street, Patchogue, NY 11772) looks and acts similar to dBase II, found on MS/DOS machines.

The package costs $24.95, plus $2.50 shipping; you get a program disk plus a tutorial disk, a 36 page manual, and a keyboard overlay strip. The program requires X BASIC, EA, or Mini-Memory, 32K, and at least one disk drive. It isn't copy protected, so it can be transfered to hard disk.

The fact that it emulates dBase II so closely with a 48K machine is rather remarkable, and is cited as an excellent example of efficient programming. The prompt is the "dot" familiar to dBII. To create a database, type "CREATE DSKx.DATABASE", x being the drive number, DATABASE being the chosen name. Each database may have up to 17 fields, up to 255 characters/field, and 16129 records per database, disk space permitting. Feilds are specified as character, numeric, or date field types. Once you are set up, hit "execute" (FCTN 9) and the template is stored and you can enter data at this time.

To use an already created database, type "USE DSKx.DATABASE". You can APPEND (add records), EDIT existing records, or DELETE existing records. When one deletes a record it is flagged inactive; it can be restored using RECALL.

If you really want to get rid of "deleted" records, use PACK, which erases deleted records and resorts the database.

A full range of mathematic operators are supported, from add, subtract, divide, and multiply, to algebraic (LOG, SQR, SIN, COS, TAN) to Boolean (less than, greater than, "not", "and", "or", etc.). Equations may contain variables, which may be manipulated at any time.

TI-Base also contains its own command language. One can write database functions and procedures in this language, with programs up to 150 lines or so. If longer programs are needed, one can "nest" programs (have one program call another). Therefore, complex programs can be written in modular form. The 45 commands are generally the same as dBII commands with a few minor exceptions. Familiarity with one program will bring familiarity with the other.

Up to FIVE databases can be opened at once. Data may be exchanged and manipulated between current records of any open databases at one time. Ron Albright opines that this is as close to "relational" as most applications will ever need.

Texaments states that there will be a "public domain library of database applications and routines written using the TI-Base command language."

There are some limitations to the program: only 17 fields, which may be skimpy in some applications; print output seems limited; the manual could be beefier; and sort is limited to one form (at one point, albright says "descending"; at another he say "ascending"... it's one of these...).

Albright also mentioned he found no way to import data from other sources, pointing out it would be helpful to some folks if it would accept a standard comma delineated or other ASCII data file.

Still, Ron Albright found this an excellent program at a bargain price; it certainly sounds interesting!

Jon Zittrain mentions the Paradigm BBS (PBBS) by Mike Kimble and Travis Watford. It runs on the TI-99/4A, and is based on Scott Darling's earlier program. Users can select any line length for word wrapping. The sysop has 2 screens; a 40 column which duplicates what the user sees, plus a 28 column sysop information screen. These may be toggled back and forth.

The program requires a special cable to immediately disconnect and detect hangups; other BBS programs use similar wiring.

Loading is assisted by an assembly routine that greatly shortens loading time of the X-BASIC programs. The Paul Charleton XMODEM routines are used, with Watford planning to re-write them "for more efficient transfers". (I might mention that Mike Riccio found that the Charleton XMODEM code for BBS's doesn't work properly with other (non-TI) computers. Mike wrote his own XMODEM routines for his COM-LINK BBS program, which do work with any computer using XMODEM.)

The authors are busily writing more assembly code to improve the program further. Kimble will send the latest version for $5.00, with fairware registration and additional documentation for $30.00. Address is 1000 Hyatt Avenue, Columbia, South Carolina 29203.

THE CRYPTOLIMERICK

Last times:

An amoeba named Sam and his brother
Were having a drink with each other
In the midst of their quaffing
They split their sides laughing
And each of them now is a mother

K IYJAT SYFZ GHLHAT HA XBHAK

BKP K RFFGHAT RYM MBIZBE EJXB RHAK

BHP QHEFMHXVP ZFAW

ZY XYEF ZY KA FAW

UJHZF PJWWFAQI...

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SECRETARY'S NOTES
By P. Mark Wannop
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IT WAS A DARK AND STORMY DAY..

I was still a tad tired when I opened my eyes; I had spent the previous evening giving a talk on disk drives at the Apple club in Cherry Hill. And I awoke to a dark room; this did not bode well for the PACS Computer Flea Market that was to take place that very day. A look out the window confirmed my worst suspicions. "Jeepers" I thought as I saw the rain coming down. (Actually, I didn't think "Jeepers"; however, this is a family magazine...). As I made breakfast I was wondering if anyone even bothered to show up. "Heck, am I even going to show up?" I thought, as I speared a moody sausage.

Shortly after, I found myself driving up Olney, heading to La Salle. It had been an odd sort of ride - an electrical line was down along Rt. 130, causing two lanes to be closed at one point; at several locations crumpled automobiles were parked up on the curb. Even WFIL wasn't on the air, except for an unmodulated carrier; I found myself wondering if rock DJs continued to play records and babble incessantly even when they couldn't be heard... And my hopes for the Computer Flea Market sank ever lower.

As I walked up Olney from 19th street, my spirits were lifted; I could see several royal blue tarpaulins hoisted upon supporting poles! Some hardy vendors had braved the rain and were open for business!

Due to the poor weather, there were only a few vendors, but they are to be commended for being there! Some were familiar faces, the same good folks who supply

PACS members every month with disks, books, computer cards, and other goodies; others were there just for the day.

I wandered through, looking for the TI group, which had planned on taking space at the flea market. I wondered if I would find them out there, or if they were in the normal meeting room, or if they were there at all... There at the upper end of the lot I found Don, Ralph, and other members! The TI SIG was out, under a combination of vans and tarps. The club library was there, computer powered by a gasoline generator, and copies were being made. The club library had been rather active that day, in fact. There were new things added to it, many coming from the closing of Pilgrims Pride's retail store; all the public domain and freeware programs from that store were incorporated. There were also commercial software packages for sale at attractive prices. Despite the poor weather, the Flea Market had been better attended than one would have thought. Believing my earlier feelings, it turned out to be worth getting to, after all! However, one thing upset me a tad... I was told that the Data Bus deadline was the 22nd! TWO DAYS away!!! WhatEVER was I going to write about???

ARCHIVER 3.01

There is a new Archiver available for the TI; it is also in our group's library. It is a completely new program, as version 2.4 was too large to rewrite efficiently. The new program has several improvements.

The Pack/Compress and Unpack/Decompress can now both be done as a single step. You can even Extract selected files from a compressed archive. Of course you can still archive without compression. The program is 100% compatible with v2.4. It automatically detects whether or not an archive is compressed, and acts accordingly.

Compression has been optimized, and compression yields are slightly greater than with v2.4.

There has been a View Text file option added and the menu system is 'friendlier' with the main menu showing all options. The program uses defaults everywhere. You can now dump catalogs to a printer from Catalog and Arcfile commands. You are told how many files are listed plus how many sectors are used, so you have an idea how many sectors will be needed to Unpack/Decompress an archive. It is set up to be included on your Funnelweb disk, and includes a "Load FW" option. There is a concise but informative documentation file with the program.

This is a fairware program; please support the author.

DEPTFORD DOIN'S

COMIC SHOW EDITOR

Here's a howl of a program I saw demonstrated at Deptford's 99+ Express meeting... The Comic Show Editor, slightly re-written and translated from its original German by Ray Kazmer (the fellow who did the Woodstock Christmas animation Barry demonstrated last year) is a fairware program that does something unusual for the TI, although not uncommon on other machines. Basically what it does is create animation by rapidly re-drawing the screen.

Most animation on the TI has been done with sprites; being readily available and versatile, they generally fill the need for most applications. However, sprites are limited in size. Referring once again to the Woodstock program, the bird is roughly the size limitation of a single sprite. Sprites can be ganged together, but they do not move exactly simultaneously unless special routines are used (such as are found in Mike Riccio's STAR package). The Commodore 64 and 128, and the Atari 8-Bit machines also use sprites.

Animation on the Apple and some other computers is generally accomplished by redrawing the graphics screens and "flipping" them (the Apple having two graphics screens). As slightly different versions of a scene are shown progressively, animation is created, much like the individual drawings photographed to make an animated cartoon. This has the disadvantage of requiring the programmer to make a series of screens. It has the advantage of allowing the ENTIRE screen to be animated simultaniously.

(To cover all bases, I should mention that there is a sprite board available in "bare board" form that give Apples sprite capability. It uses the SAME 9918A Video Display Processor (VDP) chip found in the 99/4A. Needless to say, this is not a common accessory, and is not a normal way of animating on the Apple.)

The Comic Show Editor enables the TI user to create full screen animation from TI-Artist pictures. You need to have at least two slightly different versions of a picture to create animation with this package, and can use up to no more than 100. The animation is done in loops, that is, once all screens have been shown, it will jump back to the first screen. For that reason, pictures are loaded into the Editor in ascending order to the last in the series, then loaded again in descending order, making a smooth animation loop. Only the black and white information (_P files) of TI-Artist are used.

The quality of animation depends on the person doing it. If you use, say, 8 to 12 pictures to raise a character's arm, you could conceivably get animation as smooth as vintage Disney or Fleischer. If you use only 3 or 4 pictures to do the same motion, you'll get Hanna-Barbera quality animation. The more work one puts in, the better the result. The speed of the animation is controlled by the - and + keys.

Note that the screens all HAVE to be done previously using TI-Artist. The program merely compiles them and organizes them so that they can be run on the screen rapidly. It does NOT do "inbetweening" (creating pictures "inbetween" a beginning and a closing screen).

This is a Fairware program, and is now in our library. The suggested fairware donation is - hold on - TWO BUCKS!!!

COMPUTER SHOPPER NOTES

The September TI FORUM in Computer Shopper was a curious beast; Barry Traver's last installment of his "Extending Extended BASIC" series. Jon Zittrain limited himself to introducing Barry and Ron Albright's sections of the column, but the way he introduced "Ron's Part" seemed to say more than the sum of the words...

"The following article about Jerry Price and Tex-Comp is Ron's part of this month's column, written solely by Dr. Albright; I (JZ) do not necessarily endorse or subscribe to the information and views contained therein."

Zittrain does not elaborate further on his apparent reservations, and of course, I cannot presume to know what he had in mind when writing the above; however, I do know that Mr. Price and Tex-Comp have been objects of controversy in the past, including in our own meetings.

Ron Albright begins his section again by recalling the Day In October That TI Orphaned The TI-99/4A, and then goes into a long tribute to Mr. Jerry Price and Tex-Comp. It is pointed out that the company has been around almost as long as the TI computer, and remains a major mail order source of programs and supplies for the 99/4A, as well as maintaining a walk-in retail outlet in Los Angeles. It is also pointed out that many TI owners are not in user groups, and Tex-Comp is a major source of product and information for those folks. The article is probably one of the best testimonials I've ever seen in print for any company.

However, I think for those who may not have been with us for more than a couple of years (or may have forgotten the earlier articles), I should balance the high praise given by Dr. Albright with some caveates...

What appears below was originally posted on the Philly TIBBS BBS, 11/28/85, and was written by Past President Tom Burke.

The following is a "Letter To The Editor" that appeared in the October '85 issue of SUPER 99 MONTHLY, (reprinted here with permission). It is pretty well self-explainatory and shows a very real problem with one of the major TI product distributors, namely Tex-Comp. I have dealt with Tex-Comp twice in the past and I will never do so again. My decision for NOT continuing relations with Tex-Comp came well before the problem outlined below. This only ingrained my feelings deeper and I want to get the word out to as many TI users as I possibly can so that they do NOT support a company with such low morals as Tex-Comp protrays.

To the Editor,

Thank you very much for your response (July 85 issue) to my last letter. Our TI National Users Association of Canada is growing daily and response to both of our freeware packages (DM-1000 and 2D- Graphics) is almost overwhelming. We'd appreciate your help with the following problem.

Our Ottawa TI-99/4A User Group feels its been grievously wronged by Tex-Comp in that they have used our freeware package (namely DM-1000) as a promotional item for another of their products. To add insult to injury, they altered our LOAD program to indicate it was rightfully distributed by them and at the same time deleted our 'freeware' notice! Also included in the Tex-Comp package (which one of our members ordered) was a notice that the source code for DM-1000 could be purchased from them for the sum of $7.50 U.S.

We would like your readers to know that our group purchased DM-1000 and its source code from Bruce Caron in May of this year and released it as freeware in June. We will, in fact, be releasing the first update to the program at the Chicago TI Faire on Nov. 2nd. Source and object code for it are available as 'freeware' to anyone contacting me through our User Group or directly at the address given above. Donations for the program can be made by cheque to The Treasurer (Ottawa TI User Group). We are not requesting a set amount for it as we feel users themselves should be the judge of its worth.

Our hope is that Tex-Comp will make reparation for this serious error in judgement on their part. If they don't, we hope you and other TI publications will do whatever you can to try to make it right. Response from

TIers in England, Canada, Australia and the U.S. has indicated that the Freeware concept can work. I hope Tex-Comp will see the light too!

Sincerely,

(signature)

Bob Boone
Past President
Ottawa TI-99/4A U.G.,
Box 2144 Station D
Ottawa, Ontario
Canada K1P 5W3

As you can see, this was printed in a national TI oriented publication. In addition, I was told of another incident involving Tex-Comp at the time the above was written. One of PATIUG's better known members sent to Tex-Comp in response to an ad offering all the Scott Adams adventures at an attractive price. What our member expected to receive were the original disks, as sold by TI; what he did get was all the files copied to one disk!

Needless to say, the purchaser did not feel he had gotten what he asked for. Even if Tex-Comp somehow got permission from TI and Scott Adams to do this, it should have been stated so in the ad.

As I say, I don't know Zittrain's reasons for disassociating himself from Albright's unfailingly positive comments on Tex-Comp; however, since I am aware of the incidents quoted above, I feel it is only fair to air both sides of the story.

For those interested in what Tex-Comp may carry, their address is P.O. Box 33084, Granada Hills, CA 91344; Phone (818) 366-6631. The catalog is $2.00, with a $5.00 credit given on the first order.

You pays your money and you takes your choice...

OTHER TI SUPPLIERS

The following companies have not had, to my knowledge, any controversy attached to their business practices; I feel it is only fair to include their addresses also, if for no other reason than that very fact.

Tenex,
P.O. Box 6578,
South Bend, IN 46660;
Phone (800) 348-2788.

Triton,
P.O. Box 8123,
San Francisco CA 94128;
Phone (800) 227-6900

Queen Anne Computer Shop,
6102 Roosevelt Way N.E., Seattle WA 98115;
Phone (206) 522-6558 voice/
(206) 361-8895 BBS (PC Pursuit area).

L.L. Conner Enterprise,
1521 Ferry Street, Lafayette, IN 47904;
Phone (317) 742-8146 or (317) 423-4879.

Braatzs,
719 E. Byrd Street, Appleton, WI 54911;
catalog $1.00, specify 99/4A.

Pilgrims Pride,
Hatboro PA;
(215) 441-4262;
They've gone IBM clone, but will special order TI stuff if possible...

Except as noted, I don't know catalog costs; if you write these companies, a stamped self-addressed envelope in a nice courtesy...

WHAT? ANOTHER CRYPTOLIMERICK?...

Last time's...

A young poet living in China
Has a feeling for rhythm such fina
His limericks tend
To come to an end
Quite suddenly...

REBUB XYZ YA HNO KYA HJ ZR. SBBZ

XEH XYZ ZRWAF HA REB YUK SD Y XYZC

XEBA YZPBO, "OHBZ MR EWUR?"

EB UBCNMBO, "AH MR OHBZA'R;

M'K ZH FNYD MR XYZA'R Y EHUABR."

- ZMU XMNNMYK ZLEXBAP FMNSBUR

Hang In There..

)(*)(*)(*)(*)(*)(*)(*)(*)(

::::::::::::::::::::
IMPACT-99
T.I. Happenings
by Jack Sughrue
Box 459
E Douglas MA 01516
::::::::::::::::::::

GOOD OLD DAYS ARE COMING BACK!

Remember those good old days of 1982-84 when there were loads of books and magazines for us TIers? When we could buy text materials for our computer faster than we could read them?

Methinks these days may be returning. At least a little.

At recent fairs and meetings I've attended there has been lots of talk about the disappearing textware in the TI community. No more books. No more magazines. No More...

Actually, there is more good, intelligent, useful TI stuff being written for textware today than there was four or five years ago. It's just that most of it is being written by users in user groups, not by some writer in an ivory tower somewhere. Most of these new writings are free (in newsletters with club membership or in exchanges with other groups) and readily available.

Someday, I'd love to publish a list of my favorite dozen newsletters worldwide, but then the IMPACT column may be reduced to only 12 publications.

So much for that idea.

Joining a user group, even by mail if there aren't any nearby, may be the most sensible investment a 99er could take.

However, there are still lots of other sources for textware in our fellowship.

COMPUTER SHOPPER ($21 for 12 monthly issues) P.O. Box 1419, Titusville, FL 32781-9988. This 10 X 14 500-plus page giant is probably the best single source for inexpensive disks, drives, cables, monitors, printers, what-have-you. It also has a listing of user groups (Check to see if yours is there.) and a TI classified section. But the reason most of us subscribe is the TI FORUM written by Ron Albright and John Zittrain. These two guys have a folksy approach to the realm of TI computing. Their monthly articles are full of wit and information and lots of heady reviews and predictions.

MICROpendium ($20 for 12 monthly issues) P.O. Box 1343, Round Rock, TX 78680. This is the best magazine source for all TI owners, from super techie all the way down the ladder to people like myself. The 40-page newsprint periodical is totally devoted to the TI world

and is as up-to-date as one can get. If you can only afford one TI magazine, this is probably the one. (John Zittrain, Ron Albright, Barry Traver, Chris Bobbitt, and Bruce Forbes are probably going to kill me for saying that.)

ASGARD NEWS ($6 for 4 quarterly issues) P.O. Box 10306, Rockville, MD 20850). Though this magazine is fairly new, the editor - Chris Bobbitt - has been programming and writing steadily for the TI community since his teenage years. So it's a natural step up to see a full-fledged magazine come out. Most of the first issue was devoted to previews of coming attractions and reviews of many of Asgard's products. Each issue, though, has an extended article (the 9640 vs the 99/8, for example) and editorials and regular columns and corners. Lots of small, helpful hints and comments are given on a variety of TI subjects.

GENIAL TRAVeler ($36 for a one year subscription; $65 for a two-year subscription. These subscriptions also have bonuses.) 835 Green Valley Drive, Philadelphia, PA 19128. In a way Barry Traver's diskazines are not strictly a hardcopy magazine, but the DV/80 files dumped will give you the equivalent of a novel. To be a 99er with a disk drive and not have this service is to live a deprived life. These are packed! Really packed disks of an incredible variety of things for the TI: music, utilities, games, wordprocessing, everything else. Far less than a penny a sector, these disks may be ordered as Volume One (the set already complete), Volume Two (still some to come), or both. I would reccomend Volume One first.

All of the above you may own or at least know about. But there is another text/disk setup out there that is really worth discovering. It's been around since September of '87, and it is another large value for we 99ers, though it just hasn't gotten the attention many other TI efforts have gotten.

TId Bits is a bimonthly magazine for only $8 (6 issues) for hardcopy or $12 (6 issues) for disk (SSSD flippy). The disk contains lots of additional PD and Fairware stuff to extend to two sides. The magazine contains photos and graphics.

Mail to Bruce Forbes, editor: Route 2, Box 412; Sumerduck, VA 22742.

It may be hard to make a decision about which version to get - disk or text. Although the disk contains the exact text of the hardcopy (and a lot of other surprise goodies besides), I personally am partial to the hardcopy for a number of reasons.

TId Bits pilot issue contained some screen photos,

graphics of an envelope cataloguer, and a screen graphic
to go along with a program printed out.

The next issues, however, contained some of the best
photographs I have ever seen of the internal structure of
our computer. The text talks about chip replacements and
gives some very precise, easy-to-follow photographs and
enlargements that make the process very logical, very
clear, and - even to a non-techie like myself - very
unfrighteningly practical.

It's one thing to see drawings (which are also in the
magazine), but it's quite another to have step-by-step
photographs of the entire process.

These magazines are jam-packed with all kinds of
stuff that you don't find in MICROpendium, ASGARD NEWS,
or - because of the nature of the zine - Genial TRAVeler.

Bruce supplies the reader with all kinds of inside
information on a large variety of things for us 99ers.
Lots of prices of things. Lots of addresses. Lots of
reviews. Lots of programs.
    It's a one-man operation at this point, and each
issue gets better and better.

Bruce has promised to continue this magazine through
at least one year's subscription. And hardcopies of all
past issues will be available through 1988 with each
subscription. The disk versions will continue to be
available, I assume, for a long time to come. Newsletter
editors may be interested in getting this version for an
excellent source of some interesting material.

Bruce says of his excellent efforts, "A lot of
thought went into the pricing of TId Bits. We were
keeping in mind that the TI community has been shafted
too many times. Therefore, we set a break- even factor
projected to December 1988. If we should pick up a
sponsor or advertiser throughout the year, those funds
would be used to lure a TI brain to produce unique
articles for us." [I'm available, Bruce.]

We are committed to 1988 and are cautiously
optimistically looking to 1989. If the world doesn't end
or the TI community completely collapse we project some
kind of survival into 1989 and beyond."

Hooray!

Writers and programmers and techies and non-techies,
take note! Here is a good source for you to get those
articles and designs and comic strips published.
    Readers, here is another great TI source that needs
all our support. For only $8 we could be supporting our
own futures with our fabulous machines.

Good luck, Bruce!

HELPFUL HINT OF THE MONTH

This has to do with TI Writer (or any version:
FUNNELWEB 8A WRITER, whatever).

Did you know you can type anything you want after a
carriage return ON THE SAME LINE and it won't print out.
But it'll SAVE. This is great for text notes for screen
reading.   I've used this a lot, particularly when I'm
writing articles or poems. Very handy.

Also handy is the space use in LF and SF.

When you LF and there is already a DSK2.HEMENWAY up
there on auto and you want to load DS2.KONG, all you have
to do is type the KONG and press the Spacebar and Enter,
even though it'll say DSK2.KONG WAY on the screen.
Actually, you can even SAVE a file with a long (up to 80-
col) note after a filename and space. This will disk
SAVE and screen read but not print out.   Lots of handy
reasons for this on working disks.

Another handy-dandy is letter saving. If you write
as many letters as I do (between 30 and 40 a week), it's
a good idea to let your FUNNELWEB do the sorting and hard
work for you. Just name the letter by date and name in
the following way. If I write to Jim Peterson on May 17
I would SAVE the file as DSK2.517JIMPETE. Always month
first (5) followed by day (17) and the name as far as it
will go. So if I wrote on April Fool's Day it would be
41JIMPETER.   This is also handy if you write a lot of
letters on the same day, as TI WRITER will sort them for
cataloguing first by number then by letter. So they will
be numerically AND alphabetically sorted in the catalog.

Have any handy-dandys of your own (or ones you've
come across)? Send them along. I'll be happy to IMPACT
them for you, with full credit, of course.

X(X)(X)(X)(X)(X)(X)(X)(X)(X)(X

‡‡‡
TI-BASE
Report Card

```
Performance.........................A+
Ease of Use.........................B+
Documentation.......................A
Value...............................A+
Final Grade.........................A
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Cost $24.95 + $1.50 Postage and
Handling.
Manufacturer: INSCEBOT Inc.
P.O.Box 291610, Pt. Orange, FL. 32029

  Requirements: Disk system, 32K,
Extended Basic, Editor-Assembler or
Mini-memory. Printer optional. A
RamDisk is optimum storage.

  Shipped with 2 SSSD disks, manual
and overlay strip.
‡‡‡

TI-BASE ver 1.01

A review by,
Barry Long, CPUG
Harrisburg, Pa.

  Recently our Users Group was contacted by INSCEBOT
with an inquiry as to whether we might be interested in
demonstrating their newly released TI-BASE. As the
Secretary for the CPUG, I replied back that yes, we
would. To my surprise, Dennis Faherty responded almost
immediately by return mail with ver 1.0 of TI-BASE.
(That's plus #1)

  I have used or tried many of the 'other' TI related
Data-bases over the years since I purchased my machine,
and I was a little skeptical when I read the letter, but
I am always on the look-out for the "perfect" Data-base,
boy was I surprised!

  The program comes with a very good documented
manual, as manuals go. It comes with two disks. The
first is the actual program disk while the second is a
TUTOR disk.

  I read the "Start-up" introductions and proceeded to
load the main program disk. It did seem to take awhile
to load, but I guess all good things are worth the wait.

  The first item is a Title Screen after which the

program prompts you for the date. Once the date is
entered, it loads the first command file called "Setup".
This displays your system parameters. If you have only
one disk drive, or a serial printer, you will have to
MODIFY the Setup to work properly.

  The manual instructed me to load the "TUTOR" disk
and follow along with the program. This lasts about 20
minutes or so, depending if you want to 'Pause" or not.
Pause is controlled by depressing the 'Space Bar'.
Resume is done by pressing the "S" key. The TUTOR
program is well done and it shows the author spent some
time on it. After the TUTOR is finished, you will be
sent back to the main program.

  TI-BASE is a very complex, inter-relational
data-base. That's right, I said "inter-relational". You
can open up to 5 different data files at one time and
move from one to the other with the "SELECT" command.
This allows you to scan different data-files for common
related data and print or display it as you so choose.

  This alone was impressive! But, there's more!
(That's plus #2)

  You have the ability to create a "COMMAND" file with
a DV80 text editor. The "COMMAND" file will "run" and
operate your data base for you. (up to a point).
Similar to the "batch files on the "other" system.
(That's plus #3)

  You "CREATE" your own data-fields. The prompts let
you know how much space is available for the field title,
etc. You may have up to 17 fields, and 255 characters in
each field. The optimum storage will allow 16,129
records in one data-base. Note Ver 1.01 will only hold
8,192 records. (only, gee!)

  You can SORT on any field (this can be slow if the
Data-base is large), FIND any item in the Data-base in
rapid time. You have 12 mathematical functions available
, including SQR, LOG, SIN and TAN to name a few. You can
Contenate the characters, TRIM trailing blanks, 5 BOOLEAN
commands as well as several LOGICAL commands. The DATE
is preset for Month, Day and Year. ie: 06/21/88. This
is handy for entering dates in your assigned field (if
you create one.) (Plus #4)

  You can MOVE data from one slot to another at your
will. EDITING is fast and you can EDIT either by record
or by Paging forward and backwards. Or, using the FIND
command to locate a particular file. You may DELETE an
individual record or the entire Data-base with one
keystroke (warning, it is FAST).

  The APPEND mode allows you to input data and will
add the data into the file as quickly as you can hit

either Enter after the last field or F-8 (EXECUTE). F-9(ESCAPE) will ignore your last input and return you to the master command prompt. You may MODIFY your fields as you choose, but, like any good data-base, you could lose data if your field length is different than originally created. A warning prompt will respond if this can happen, and the decision will be up to you to proceed. (Plus #5)

My demonstration of this unique and exciting new program appeared to go well with our Users Group and I did place several orders with INSCEBOT for the package.

In closing, I must state that TI-BASE is definitely not for the 'Novice' TI user. You must have 32K, RamDisk (optional), several disk drives (preferred), with a printer (optional). It will work out of Extended Basic, Editor-Assembler or Mini-Memory.

Some of the drawbacks are:
1. Slow Loading
2. Slow Sorting
3. Manual could be improved both in content and choice of print,
4. A sample data-base included with the program might help to illustrate the various features in actual use. The TUTOR file is nice, but an actual hands-on file would be better.

The Pluses are:
1. Speed of the actual search and commands.
2. The ability to sort on any field.
3. The ability to find your particular data FAST!
4. Automatic saving of your data prior to quitting
5. The large (extremely) storage capacity.
6. The interaction between up to 5 data-bases at once.
7. The large mathematical capabilities.
8. The inter-relational capabilities.

This is the first I have ever seen for the TI. (ACORN 99) was too complex and slow. TI-BASE is FAST!

For the small investment that INSCEBOT is asking, $24.95 + SH, I would highly recommend it to anyone who needs a GOOD Data-Base. If Texas Instruments would have introduced this back in the beginning, there would not have been a 'Black Friday'. This has anything that I have seen on the '64' put to shame.

The service that I received from Dennis Faherty has been superb. I called INSCEBOT the following morning and Dennis returned my call that evening. Version 1.01 was shipped out the very next day. I talked to INSCEBOT today (6/21), placing my order and giving him my gripes and pleasures. He indicated my suggestions were very welcomed. I like dealing with INSCEBOT and would

recommend them to any and all.

Now if only the authors of FIRSTBASE would respond to my earlier request, I could make a fair comparision.

respectfully yours,
Barry Long
Central PA 99/4A Users Group
P.O. Box 14126
Harrisburg, PA 17104-0126

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AMAZE AND MYSTIFY YOUR FRIENDS
by Thomas Boussum
Reading-Berks-99ERS Newsleter
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At a recent meeting of the Berks County Amateur Astronomical Society, of which I am also a member, I had another member of that club put down TI-99/4A's as being a toy. Of course, I took exception to his comment, but not until I discovered that this other member's computer was an Apple.

I remarked how my 'toy' had proven to be far more accurate than his Apple. He responded by saying that he could print 1,000 factorial (written as 1000!). If you see the mathematical expression n! it means that you must take the product of every integer from 1 to n. (0!-1 by definition.)

Of course, even with small values of n., n! gets large very quickly. The TI-99/4A can directly calculate and print out values for the factorial up to 84! At that point the user must resort to indirect methods to calculate and print out factorials.

Fortunately, the LOG function in BASIC can be used to calculate n! for values of n larger than 84. My friend asked me if I could calculate and print values up to 1000! Well much to his surprise, I have run this program out to 10000! And I have done it not just with the TI-99/4A but also on my hand-held TI-74. The TI is limited only to the point that the characteristic would go beyond the limits of computation. I have no idea just how far that can be taken.

But printing out the value is one thing, can the large factorials computed on the TI99/4A be used for calculation? You bet they can!

Since they are calculated using logarithms, you can use them to compute values in formulas which require the use of factorials. However most of those expressions

would underflow long before the direct calculation of factorials would run out. However, there is a place where factorials would be used, and that is in probability or combinations.

Suppose, for instance, that you had four pieces of colored paper, each one a different color, lying in front of you. The number of ways that these four pieces of paper could be arranged without a repitition would be 4! or 24 (or 1x2x3x4). The same applies to a deck of 52 cards. In this case the cards could be arranged in 52! combinations, or 8.065817517E+067 possible ways to lay the cards out without repeating a previous set up, if you could remember all those ways.

According to the program in the TI-74, which agrees with the program listed below for the TI-99/4A, the value 10000!=2.846259086E+35659.

```
100 ! n! for large n using l
ogarithms base 10
120 INPUT "Maximum Value: ";
LIM
130 I=0
140 NF=1
145 !Line 150 prints 0!.
150 PRINT
" "&STR$(I)&"!=
"&STR$(NF)
160 FOR I=1 TO LIM
170 IF I>69 THEN 210
173 ! Change natural logarit
hm to logarithm base 10.
176 ! NL=LOG(NF)/LOG(10) con
verts the natural logarithm
of n! (NF) to the logarithm
of n! base 10.
180 NF=I*NF :: NL=LOG(NF)/LO
G(10)
185 ! Line 190 prints values
to 69!
190 PRINT USING "####!=":I;
200 PRINT USING "##.########
":NF :: GOTO 240
203 ! Change natural logarit
hm to logarithm base 10.
206 ! NL=LOG(I)/LOG(10) con
verts the natural logarithm
of I to the logarithm of I b
ase 10.
210 NL=LOG(I)/LOG(10)+NL ::
GOTO 220
215 ! Calculates characteris
tic, mantissa, and antilog o
f the factorial then convert
s to a string.
220 E=INT(NL):: M=NL-E :: V=
```

```
10 M :: V$=" "&STR$(V)&"E+"
STR$(E)
225 ! Prints values for n! w
here n>69.
230 PRINT RPT$(" ",4-LEN(STR
$(I)))&STR$(I)&"!="&V$
240 NEXT I
250 END
```

A word of warning. If you plan to run this program for 10000! be prepared to have your computer running for about an hour and a half. It takes that long because you are printing the factorial of each value from 0 to 10000 and because of the fact that the computer is converting all values to strings. All these conversions and printouts take time to accomplish.

(!)(!)(!)(!)(!)(!)(!)(!)(!)(!)(!)(!)(!)

!!!
USING PRINT USING WITH YOUR PRINTER
by Richard Roberts
Reading-Berks-99ERS Newsleter
!!!

One of the more obscure statements available with TI Extended XBASIC is one called "PRINT USING" Even more obscure is the fact that this statement can be used to format variables and constants that will be dumped to your printer. The Extended BASIC manual, on page 150, shows several examples of how "PRINT USING" can be used to format data for screen display, but nary a word of how to do the same with open files. It can be done, and is much more powerful than you may realize.

Any discussion of "PRINT USING" will require an understanding of the "IMAGE" statement, so if you are not familiar with it, you better brush up on it first. The "PRINT USING" statement uses "IMAGE" in one of two ways, either with a string expression, or with a line number reference. I prefer the latter, as it allows for more flexibility, but since these differences are explained in the manual, I will limit this to a few simple examples that are not shown in the manual.

```
100 TCOST=19.55
110 IMAGE "##.##"
120 OPEN #1:"PIO"
130 PRINT #1,USING 110:TCOST
```

Running this sample program will effectively show you how the "PRINT USING" statement will work with an open file. Of course, there are many other variations of "IMAGE" that can be used, so experiment with them and watch how it performs when line 130 dumps it to a

printer.   Shown below are a few more examples for use
with an open file.

```
100 IMAGE "##'## ##'##"
130 PRINT #1,using 110:COST1
,COST2
```

This "IMAGE" statement will allow you to print two
(or more) variables at a predetermined spot on the same
line. The length of the string expression in the "IMAGE"
statement can be as long as you wish, up to the limit of
an Extended BASIC line.

```
100 IMAGE "######### ##'##"
130 PRINT #1,USING 110:"TOTA
L COST",TCOST
```

This version shows you how you can format the
printed line for string data as well as numerical data.
A string variable could be used in place of the string
constant, as below.

```
105 A$="TOTAL COST"
110 IMAGE "######### ##'##"
130 PRINT #1,USING 110:A$,TC
OST
```

It is also possible to place the "IMAGE" statement
inside the "PRINT USING" statement, as shown below.
First, delete line 110.

```
130 PRINT #1,USING "##'##":T
```

                    or

```
130 PRINT #1,USING "########
## ##.##":A$,TCOST
```

A few other points to remember include the fact that
"IMAGE" AND "PRINT USING" can be used to round off
calculated variables. A single string expression such as
"#####.##" will round off and decimally align numbers as
small as any number at any designated location. This
function could save many hours of algorithm development
for accomplishing the same thing. So in the long run,
the "PRINT USING" statetment is one that any programmer
should be very familiar with, and use as much as
possible.

             <#><#><#><#><#><#><#><#><#><#><#><#>

Philadelphia Area Computer Society
c/o La Salle University
Philadelphia, PA 19141

(215) 951-1255

Date: August 20, 1988

From: Peter J. Pelensky
      PACS Treasurer

To: All SIG Leaders and SIG Treasurers

Over the course of the past several months, I have been involved in researching the Internal Revenue Code to ascertain exactly what must be done to obtain a non-profit status for PACS.

I have sat down by myself, with Steve Longo and with other CPAs examining various scenarios in order to gauge their effect, not only in terms of dollars, but in terms of organizational structure and people as well.

In the course of my research I became convinced that there must be a number of major changes, some of which will be detested, if PACS hopes to get such status recognized by the Internal Revenue Service. This memo deals with just such a major change.

The preferred way is beginning with the new year, all SIG revenues will no longer be maintained by the individual SIGs, but by PACS. Any monies needed for disbursements will also be handled by PACS.

To answer perhaps the major question -- why -- the reason lies with securing a non-profit status from the Internal Revenue Service.

The section of the tax code under which PACS falls for such status requires the submission of a volumnous amount of paper work. Keeping to the letter of the law, this should have been submitted within fifteen months of incorporation. We are obviously late.

Having been through this process before for other non-profits, it is my professional opinion as a CPA that the Service will initially turn us down as a result of this and PACS will be viewed as a taxable entity just like any other for-profit organization.

It is my hope that during the appeal procedure, I can demonstrate to the satisfaction of the Service that though PACS has not

complied with the letter of the law, we have at least complied with the spirit of the law.

Several items required for submission in seeking non-profit status are full sets of financial statements for not only the current year, but for the three years preceeding the current year.

These statements must be prepared in accordance with *generally accepted accounting principles* or an *other comprehensive basis of accounting*. Both of these terms have quite explicit technical meanings in the field of accounting and the field of taxes and are beyond the scope of this memo.

Suffice it to say that the Service will be looking for specific information presented in a specific way and if it does not find it -- their fault, our fault, nobody's fault -- the application will be rejected. Their reasoning is two-fold:

1) a non-profit organization derives revenues as the result of public trust and, accordingly, there must be a stewardship function - to insure that trust and safeguard assets;

2) a non-profit organization generates no tax revenue for the Service.

As the SIGS fall under the umbrella of PACS and PACS is the organization that is responsible for them, the cavalier attitude about SIG revenues that PACS had adopted in the past cannot continue if we are to become exempt from taxes as a non-profit organization.

Accordingly, as of January 1, 1989, it is my recommendation that SIGS no longer be allowed to collect their own revenues or maintain an independent treasury. All such funds collected by SIGs from any source whatsoever will be maintained by PACS. At the point a SIG needs to pay for any items to a vendor, a request will be made to PACS and the payment will be made directly to the third party.

However, I am declaring a moratorium between now and the next board meeting and seeking input from SIG leaders and SIG treasurers.

I had mentioned above that it might be possible for a given SIG to retain the privilege of generating its own revenues and maintaining its own independent treasury. It will not be easy. I will be the final arbiter as to whether that privilege will be extended.

A SIG must appoint someone with accounting and financial expertise who will be responsible for any and all matters related to finances and the preparation and reporting of all transactions. Again, I will be the final arbiter as to a person's financial

expertise.

A SIG must have someone with the knowledge, ability and experience to develope a chart of accounts that treads the fine line between being comprehensive without being unwieldy and have that chart and each new account added to it previously approved.

A SIG must have someone with the knowledge, ability and experience to prepare and maintain a permanent schedule of assets.

A SIG must have some one who can:
1) keep a formal cash receipts journal;
2) keep a formal cash disbursements journal;
3) reconcile a bank account to the penny;
4) post a general ledger and take off a trial balance;
5) prepare a list at month end of accounts receivable;
6) prepare a list at month end of accounts payable;
7) prepare a schedule at month end of all inventoriable items that are for resale;

A SIG must issue a monthly report to me. The preparer of the report must be someone different than the person who requests payments to third parties on behalf of the SIG.

It must be postmarked within 10 business days of month end without exception or excuse. The first time the report is postmarked on the 11th business day, their privilege will be revoked. There will be no appeal.

I will not teach the SIGs how to do any of the above. I do not have the time to teach either accounting or bookkeeping. It is incumbent upon each SIG to find someone who can perform the above functions in a timely manner. Nothing above is out of line with the responsibilities of any full-charge bookkeeper. If a SIG cannot find such a person within their own ranks to do this, then it is better off not even trying. PACS will assume this function and retain control and possesion of all SIG revenues.

I will, however, work with any and all SIG leaders and SIG treasurers who wish to be granted the privilege of being able to collect their own revenues, make their own disbursements and maintain an independent treasury. But it is incumbent upon each SIG who wants to do this to seek me out; I will not approach the SIG. I already have more than enough PACS work to keep me busy.

The default is still as stated above. But I am willing to work with any SIG that will work with me so they can retain their privileges while providing PACS with the information needed, in the manner prescribed, in a timely fashion.

I want the input of both SIG leaders and SIG treasurers in the next four to five weeks. I have provided my home phone and address. Call me and talk to me. Better yet, write it down so I can have something to review. But please, please don't ignore it.

Philadelphia Area
TI-99/4A Users Group
C/o Donald Arsenault
1290 Buttonwood Drive
Lansdale, PA 19446
(215) 368-0446

Peter J. Pelensky
PACS Treasurer
104 North Mole Street
Philadelphia, PA 19102-1405

Re: Memo dated 8/20/88 and Report and letter dated 9/1/88.

Dear Mr. Pelensky;

     We have received the documents noted above and called a special Board meeting of the Philadelphia Area TI-99/4A Users Group on September 7, 1988, at which the documents were read carefully and discussed. Those in attendance were:

     Donald Arsenault, PATIUG President
     Allan Silversteen, PATIUG Vice President
     Thomas D'Annunzio, Esq., PATIUG Treasurer
     P. Mark Wannop, PATIUG Secretary

     A number of questions come to mind which must be resolved before any decision can be made.

     Is there a basis in the PACS Charter for the need to pursue the avenue outlined in these documents? If there is a basis in the Charter, we would like to receive a copy of the pertinent sections of the Charter.

     Assuming the Charter supports this position, and since the SIG will obviously give up certain rights, what benefits would the SIG receive?

     Would TI funds be co-mingled with funds of other SIGs and/or funds of PACS in such a way as to provide delineation between SIGs, or would they be thrust into a common pot from which segregation would be difficult at best?

     The spirit of the aforementioned question arises to some logical problem with the equipment, but not to the same extent as we presume equipment would be so marked in such a way as to indicate immediate ownership of this equipment.

     Would the diskettes that are now part of the library be subject to PACS control, either directly or indirectly?

     The questions that we are raising here are just a few of the many that need to be resolved before we would comply with all of your demands.

An immediate concern that comes to mind is how much control we will lose of managing our own affairs by giving you total control of our group.

What provision would there be in the event of a PACS directive in direct conflict with one of our existing by-laws; would PACS be the final arbiter of such a conflict?

We pose these questions because they are of immediate concern, and although we would like to give you a decision within the timeframe you imposed, we feel obliged to delay any response until we can advise our members and address any additional concerns that they might have.

We might point out that had there been sufficient notice given to us, we could have addressed some issues to our members by way of the Data Bus; and we find it very curious that the deadline for the September issue occured the Monday following the Saturday PACS Board meeting where this was first presented.

If you have any questions, you can give us a call.

Sincerely,
PATIUG Executive Board

Donald Arsenault
Allan Silversteen
Thomas D'Annunzio, Esq.
P. Mark Wannop

PATIUG/pmw

CC:

Dr. Stephen A. Longo
Donald Arsenault
Allan Silversteen
Thomas D'Annunzio
P. Mark Wannop
Barry A. Traver
Jerry White, APPLE
Robert T. Waite, AMIGA
Henry Stolinsky, COMMODORE
Bennett Landsman, IBM
Ed Sullivan, MAC
Joann Iverson, PARADOX