Reflections

Spring Shows 4A Still Active

This Spring and Fall are always busy time for TI user groups. In addition to the normal computer pursuits, TI-99/4A and Myarc Geneve conventions dominate the social calendars of TI vendors and users alike.

The following is a run-down of the highlights of some of the major TI shows in the Spring of 1990 - the 8th year of such shows.

Fest West '90, Tucson

The Fest West '90 is the fourth Fest West held, with previous shows in L.A., Las Vegas and in San Diego. The first big show of the season, in many ways, this was the biggest they've held yet.

Attending vendors and personalities included Rave 99, Bud Mills, Disk Only Software (representing Myarc), Asgard Software, Harrison Software, JP Software, Comprodine, 9640 News, Regina, TexComp, The L.A. 99'ers Marketplace, and user groups and local vendors from across the Southwest. While attendance just broke 200, this was up from previous years and most vendors reported strong sales.

Some of the major announcements at this show included JP Software's demonstration of the *Triad* integrated package for Geneve users and a new version of its *First Base* database, Comprodine's acquisition of the Great Lakes Software line of products, The *Asgard Mouse* and the *Spell It!* spelling checker from Asgard Software, *9640 Windows* from 9640 News, and the

tremendous price reductions on Myarc products from Disk Only Software. A surprise hit of the show was Asgard's *Rock Runner* game - which by the end of the day was being played on every available system.

All in all, the show was enjoyed by all attendees, and was a boon to the local user group.

TI-Base Version 3 Released

On May 1st, 1990, Texaments announced the availability of version 3.0 of the popular TI-Base package.

Version 3.0 is an evolutionary advance over previous versions and contains a number of new and enhanced features, as well as a number of corrections and changes.

Among the new features, TI-Base 3.0 includes a Report Generator that works along the same lines as the Printer Database. This utility allows report formats that can incorporate headers,

Asgard News

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From The Mail Box

Send all questions and comments to:
Reflections
P.O. Box 10697
Rockville, MD 20849

Where is the magazine?

In recently checking various computer magazines to which I subscribe, I note with dismay that I've not received an Asgard News since Vol.2 No.2. My subscription to NEWS, paid on 3/23/89 was to expire with No.4, which mean's I'm missing No.'s 3 and 4, assuming you are still publishing. Would you please check into this matter of my 2 missing issues? ... Thanks.

MAURICE VILLANO
STATE COLLEGE, PA

We were working so hard to build a reputation for being on-time and we blew it! Please see the Editorial in the Asgard News supplement for more information, but the long and the short of it is that we are 6 months behind. This is partially due to the fact we've decided to revamp the entire magazine format and some of its content. You will receive No.3 and 4 of Vol.2 as Reflections Vol.2 No.3 and Vol.2 No.4, hopefully within a few months of each other. Our apologies for the delay to you and to everyone who wrote in concern, but delays seem to be a fact of life in the TI industry.

Wants User Group Committee

Regarding *Computer Shopper*, the bad news is that we have lost our last link with the outside world. As far as I know, *Computer Shopper* was the only national, newsstand publication that acknowledged the TI-99/4A still existed.

It not only has a large subscriber list but it is available on newsstands all over the U.S. and Canada, and at U.S. military bases overseas. It is picked up and scanned by many times the number of people who see actually buy it.

However, *Computer Shopper* does still publish a list of user groups every month, and that is a way in which the loners contact the TI world. In the old days Stan Veit would accept a list of user groups from me, and I tried to get FOG [Editor: the people who compile *Computer Shopper*'s list currently] to do the same, but they insist on an individual notice from each group.

Harry [Brashear's] idea for a Central Committee is great - if he could get all the user groups together and hold a gun to their heads, it might possibly work! You just CAN'T get the user groups to get moving on ANYTHING! Don Veith tried to start a national organization years ago, and gave up in disgust. Somebody else tried before that. There is supposed to be a Canadian National Council, but I can't find out who or where.

JIM PETERSON
COLUMBUS, OH

You can certainly pack a lot of ideas into a letter Jim! It is a shame about the passing of Computer Shopper's *support for the 99/4A, but nothing can be done, really. An alternate publication, the* Computer Buyers Guide *has taken up the flag, but they don't have nearly the circulation of CS. Nonetheless, they might be of something to look into.*

Your last two ideas about maintaining a TI presence in Computer Shopper's *user group listing, and of creating a sort of committee of user group officers are sort of intertwined - both depend deeply on getting someone to do something. Considering our own difficulties in getting this publication out on time, we are hardly in a position to preach responsibility to TI user groups. However, it would be nice if some sort of informal group of user group officers could get together periodically to swap ideas about getting newsletters published, libraries maintained and memberships expanded. Because of the distances involved, it would be somewhat impractical to have face to face meetings. Perhaps one of the 3 popular telecommunications networks would like to identify users that are user group officers and invite them to a get-together. Who knows, if there are as many real benefits from such meetings as there sounds like there will be, something more formal can be created. Any ideas anyone?*

Planning ****
Attendance ***
Interest ***

Ottawa TI Faire

The Ottawa TI Faire is also in its fourth year (and possibly final - though more on that below). Record warm temperatures greeted attendees - in stark contrast to previous years when long underwear was the order of the day (at least for Americans).

As with the Fest West, an all-star cast of vendors were present including Rave 99, Myarc Inc (represented by Lou Phillips), Bud Mills, Harrison Software, Asgard Software, OPA, Art Green, and vendors from Quebec and other parts of Canada and the Northeastern U.S. The many French accents heard gave the show a decidedly international flavor.

While few major announcements were made at the show, the Rave 99 Expansion box was a real hit. This professionally done device (see the News section for more information) impressed everyone with its aesthetic as well as practical benefits. Bud Mills also pleased Horizon owners with the release of version 8.14 of *ROS* - which features extended support for RAMBO owners among other things. OPA previewed a mailing list program designed for use with *RAMBO*. Finally, Asgard released at the show *Rattlesnake Bend* and *Castle Darkholm* (new games for the Adventure module), and a series of 9 volumes of *Page Pro Templates*. Again, *Rock Runner* and the *Asgard Mouse* were again extremely popular.

While there were many interesting things to see and presentations made, attendance was off considerably from previous years. Some speculated that it may have been due to a drop-off of interest in the 99/4A in Canada, but the real reasons were probably politics and a lack of advertising. While the organization was generally superb, a decision by the Ottawa TI User Group to cancel newsletter exchanges prior to the show angered other Canadian user groups and many users from the rest of Ottawa and from Quebec sat it out - almost as if in protest. It would be a shame if the Ottawa TI Faire were to be discontinued - it is one of the few TI shows held in Canada and by far the most well known.

Planning ****
Attendance **
Interest ***

Boston TI Fayuh

The Boston TI Fayuh, again its fourth year, was by far the most depressing of all the TI shows. This was due to a series of accidents, miscalculations and misfortunes of the sponsoring group, the TI SIG of the BCS.

First off, veteran organizer Peter Hoddie, who by shear personality kept previous shows on track, relocated out West last year. Planning and execution suffered as a result - for instance the show date was changed several times prior to the show. As a result many New England groups were confused about the actual date. Incorrect maps also threw off many attendees - more then a few people got lost down country dirt roads following the directions provided. Finally, since the TI Fayuh was held only a week after the Ottawa TI Show, vendor participation was down with only Rave 99, Texaments, JP Software, a few local dealers, a few user groups, and representatives of Asgard Software and Comprodine attending. There was only one demonstration by Jack Sughrue, and no speakers or workshops.

Similarly, attendance was way down with figures of under 100 widely quoted. While normally such a disaster might mean the end of the road for a show, rumor has it that the organizers are thinking of throwing it again in the Fall. Vendors and attendees alike would probably breath easier if they just started planning for the next one right now, and held the next one at its normal time next year.

Planning *
Attendance *
Interest *

Lima TI Faire

The Lima TI Faire, in its third year, is almost a story of the Little Mouse that Roared. A user group with only around a dozen members managed to put on the best TI Faire of the Spring - with dozens of vendors and many hundreds of attendees (unfortunately attempts to track actual attendance were unsuccessful).

While some of the bigger vendors didn't make it (including Myarc, JP Software and Rave 99), the diversity of the others more then made up for their absence. Asgard Software, Bud Mills, OPA, Harrison Software, Disk Only Software, a representative of Comprodine, and many other local user groups and vendors made the show lively. With two rooms constantly busy with

TI Shows have an Interesting History...

The first "TI Fest" was sponsored by 99'er Magazine (the original namesake of "Home Computer Magazine" - both long departed), and was held in San Francisco in late October of 1982. This corporate sponsored event was the first and last of its kind for the 99/4A - it was a 3-day affair with dozens of seminars, as well as official TI support. Also, unlike all that followed - it was run for-profit by 99'er. A big success, attendance was measured in the thousands.

The only other "pre-October 1983" 99/4A events were the huge exhibits TI sponsored at computer shows around the country, and specifically at the CES (still one of the largest computer shows in the world). Attendees to these big money events could sometimes see and meet TI spokesman Bill Cosby, various well-endowed show girls (in the case of the Las Vegas CES), and other computer industry notables. TI certainly knew how to throw a party, even if they didn"t know how to sell computers.

The first modern TI show, and still one of the largest if not THE largest, was the Chicago TI Faire. The first was held in 1983 (just after TI announced the discontinuation of the 99/4A in fact), and despite jitters by the organizers was a tremendous success. The Chicago TI show, while not quite as large as the ones held yesteryear, still draws upwards of 500 attendees, and the largest vendors of TI and Geneve products.

Other venerable shows include the TI Fest West (held in a different city every year), the Seattle TI Faire, the Boston TI Fayuh, The New Jersey faire, and others. TI faires nowadays are decidedly more laid-back affairs - they are user group sponsored, draw smaller crowds but have a more sophisticated flavor.

TI Faires in the future are liable to become more and more a place where old friends meet and less where new ones are made.

demonstrations and discussions, attendees were often torn between attending one or the other program. Demonstrators were impressed that audiences were appreciative and attentive. Even the food served by the college cafeteria (it was held at the University of Ohio, Lima campus) was excellent.

While there weren't a large number of new product announcements at the show, there were some significant ones. Asgard showed off its new *MIDI interface* for the 99/4A and the Geneve, its *Animator* utility for Extended BASIC programmers, as well as new packages for *Page Pro* users *(Page Pro Borders* and *Page Pro Large Fonts)*. There were new packages for JoyPaint '99 from Comprodine. A new Multi-module which allows you to put multiple modules into one drew a crowd all day, and so on.

How could a show in the middle or rural Ohio succeed where shows in much larger cities failed? In a way its a combination of geography and good planning. The location, for instance, is very deceptive. While Lima is only a medium sized town with a small user group, it is only a few hours drive from large TI user communities in Ohio, Michigan and Indiana. There were also lots of people from Pennsylvania, Kentucky and Illinois. In terms of planning, in some ways the Lima group threw a "no frills" show - the only things they provided were a place, tables, rooms and demonstration systems, and a few systems to vendors. However, they didn't charge a dime to vendors or attendees (assuring lots of user group booths), Lima is very inexpensive to stay in (an excellent hotel room could be had for $40/night), and Charles Good and friends were on hand all the time with assistance and help for everyone. In a way it is an ideal way for a small group to hold a show. The atmosphere was so inviting and friendly the show was enjoyed by all.

*Planning ****
Attendance ****
Interest *****

↩

Best Show

Lima

MIDI Interface Planned

Asgard Peripherals MIDI interface brings PC and Mac capabilities to your 99/4A and Geneve...

As discussed in the previous issue of Asgard News (vol.2, no.2), Michael Maksimik has been working on a MIDI interface and software for the TI-99/4A and the Myarc Geneve 9640 since well before the last Chicago TI Faire.

As the self-imposed deadline nears, details about the package have become available. The MIDI interface for the 99/4A consists of a sophisticated cable and software. The software is cable of handling simultaneously up to 24 voices on more then one instrument. It includes (a) a basic music database program that allows the computer to capture music from the keyboard, save and load it to/from disk, and send it back to the MIDI instrument to be played, (b) a programmers interface that allows the programmer to directly encode a MIDI data stream with MIDI language commands, (c) 'patch' software for both programmers and non-programmers that support multiple keyboard patches and even on-screen conversions of instruments, (d) conversion software for changing IBM "cakewalk" MIDI files into TI format, and (e) extensive assembly language support utilities for Extended BASIC MIDI programmers. The MIDI package will also include an extensive manual as well as references to MIDI language primers and technical documents. The suggested retail for this package is estimated to be $39.95.

Additional software is also under development that will permit on-screen editing of music (a la the Music Maker™ module), compilation of MIDI music into 99/4A music (so it can be played on your computer), and even software to allow you to print out a score. These items will be sold separately and formally announced at a later date.

This MIDI interface is a unique item for the 99/4A and the Geneve that gives the our machines capabilities costing many times more on every other computer. ↩

What is MIDI?

A MIDI interface is a device that allows you to attach a properly equipped musical instrument to a computer. There are many types of MIDI instruments, from musical keyboards, to drums, sounds generators and even guitars. Amature and professional musicians use MIDI for song-writing, as an accompaniment in practice, and even in recording and performing. Confusingly enough, MIDI simultaneously refers to the type of instrument, the interface, the communications protocol, a language and even special software.

On the hardware level, depending on the machine a MIDI interface can be as simple as a cable and as complex as a special computer card. In the case of our machines, the interface consists of a sophisticated custom-designed cable that connects the MIDI instrument to any RS232 port. This is where the communications protocol comes in - it was previously believed that the 99/4A and the Geneve couldn't utilize MIDI instruments because the RS232 card couldn't talk fast enough. MIDI communicates to the computer at either 38,400 baud (bits-per-second) or 76,800 baud. It was an article of faith that the RS232 card stops just short of 38,000 baud. Michael Maksimik, the inventor of the interface, found that with a few tricks speeds up to 76,800 baud were readily sustainable.

Just being able to communicate with a MIDI keyboard isn't enough. The computer end of the setup has to be able to make some sense of what the musical instrument is saying and vice versa. MIDI instruments are actually little computers that are programmed in their own language. To complicate matters, as with different versions of BASIC, there are variations between the MIDI language found on different makers instruments - a Casio keyboard's language is different from that of a Yamaha keyboard for instance. Fortunately, the variations are slight enough where the computer can stick to certain commands and know that virtually any instrument will understand.

The software provided with a MIDI interface normally (a) allows the non-programmer to create music on the instrument, store it on the computer and re-transmit it back to the instrument to be played, (b) allows the programmer to directly modify the music commands as well as create new music from scratch on the computer end, and (c), allows all users to readily "patch" the software so that it takes advantage of special features in the instrument or instruments (you can have more then one MIDI instrument attached to a MIDI interface). This terms comes from the early days of electronic instruments when to change the sounds a "patch" had to be made to the circuit diagram by removing a wire from one connection and attaching it elsewhere (these wires were called, appropriately, "patch cords").

footers, and various display options for the data itself to be created, saved and used when and where needed.

Enhanced features include extensive changes to command file processing allowing them to be run from memory as well as from disk, and expanded command line editing functions. Changes have also been made to the database language -

• The CLOSE command has been improved
• The MODIFY COMMAND editor now displays the filename of the command file being edited as well as the line number in that file
• The SUM directive now allows the command file to store the result in a variable
• The SET directive allows output to be redirected to the screen
• The DELETE and RECALL commands accept record ranges
• String support has been expanded with the LEN and SUBSTR commands
• A READCHAR command for reading a single keystroke has been added
• A GO directive has been added for changing the current position in the database rapidly
• The new command APPEND FROM which allows allows you to append data from one database to another
• A new command AVERAGE has been added that takes the average of a database variable and allows you to store it in another variable
• The catalog option has been improved
• A "$" operator has been added that allows strings within strings to be compared
• Variables can be used in place of numbers in many places
• Support for 29 character filenames has been added,
and so on.

Finally, TI-Base 3.0 includes an improvement that allows you to modify the structure of a database without losing the data in it.

Previous owners of TI Base can get Version 3.0 for $14.95 (plus $2.50 for shipping) by returning their original disks (both the system and tutor disks) to Texaments, 53 Center Str., Patchogue, NY 11772. Phone orders evidently will not be accepted. Individuals who purchased the previous versions after April 1st are entitled to the upgrade for $2.50, the original disks and a dated sales receipt.   ⤻

New Hard Disk Controller Announced!

New firm to give Myarc monopoly competition...

■ Lima TI Show, Christopher Pratt, a principal of Electronic Systems Development Corp and its head Software Designer announced the development and impending release of the ESD Hard & Floppy Disk Controller card to a receptive audience at the Lima TI Faire on May 26th.

A completely new design, the ESD HFDC incorporates all the standard features of the Myarc device as well as provides new capabilities to users. It includes the following:

• The ESD HFDC will control up to 4 floppy and 4 80mb hard disk drives. It has two floppy drive connectors - one for internal and one for external floppy drives.

• It will format floppy disks from 90K to 1.4Mb - 90K to 1.2Mb 5 1/4" floppies and 360-1.4Mb 3 1/2" floppies. It supports sub-directories on floppies.

• It supports variable sector sizes of from 256 to 1024bytes/sector. One of the major problems the Myarc HFDC has is that it formats all hard drives at 256 bytes/sector. Most hard drives are designed to be formatted at 512 bytes per sector (the IBM standard) - hence the Myarc HFDC has to force the hard drive to read 2 sectors in the time it would normally read 1, causing timing problems and bad sectors. Hence, hard drives controlled by the ESD controller will be more reliable and have fewer bad sectors.

• The card is 100% TI compatible.

• The card is a more reliable design. Heat dissipation is not a problem (it has numerous heat sinks and uses surface mounting for all chips) unlike the Myarc HFDC. Finally, in terms of circuit design, the ESD HFDC is essentially an IBM hard and floppy disk controller interfaced to the 99/4A bus. Since the vast majority of the design is time tested and reliable (there are millions of cards

with this design used by PCs), and incorporates little new circuitry, the overall unit will be much more reliable in general.

• There are no dip switches on the card. CRU locations are set in software and stored on the card.

• The ESD card utilizes a newer version of the Western Digital controller used by the Myarc HFDC that is more bug-free.

• The Hard Disk manager included functions along the lines of the Disk Utilities package from John Birdwell. It also may contain support for the Asgard Mouse in its initial version.

• Various hard disk management commands are available from BASIC and Extended BASIC for cataloging the hard drive "on the fly", changing the DSK1 emulation outside of the disk manager, etc.

This ESD HFDC is expected to carry a suggested retail price of $250.00. The card is currently in the initial production stage (samples are being produced of the final card), and the disk management software is being written. While no specific delivery date is projected, quantities should be available before the next Chicago TI Faire in November.

Currently, ESD Corp. has no official mailing address, however they are located in the Washington DC Metropolitan area, and any inquiries sent to Reflections will be forwarded to them.   ⤻
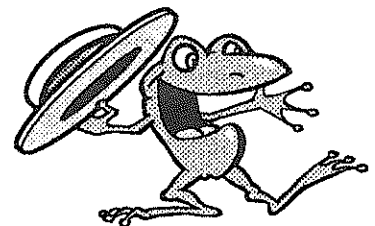
Press on Hold!

Release of this important program put on indefinate hold...

■ Rockville, MD. Asgard Software announced on June 4th that development of *Press*, the much talked-about word processor for the TI-99/4A and the Geneve, was put on indefinite hold. While Christopher Bobbitt, President of Asgard, stated that it may never appear, he did say "There is still a chance that Charles might give me a call someday and say 'Hey - I just found that problem with Press...'"

Chris Bobbitt explained, "From it's original conception, Press has been one of if not the largest software project for the TI-99/4A since TI discontinued the 4A in 1983. The program was large by even IBM or Macintosh standards - over 120K of assembly language code - hundreds of thousands of lines. Even by superhuman standards - this is the sort of project that typically takes 'man years' to complete. Considering the technical difficulties associated with making it run on both the TI-99/4A and the Geneve, as well as taking advantage of dozens of peripherals for each, in some ways its amazing that Charles got as far as he did into the project. Press has broken new ground in dozens of ways - from memory management to display management to file management.

"While Charles hasn't given me exact reasons why the program hasn't been finished - I personally believe it is because the program tries to do too many new things at the same time. The problem from the beginning is that the program is too complex to be understood in its entirety by a single person - even a person with Charles' prodigious programming talents."

"The TI community has attached almost mythic importance to this program over the last two years - I've heard many people say that 'waiting for *Press*' was the only reason they still owned a TI-99/4A. Geneve owners have repeatedly painted it as the savior for this embattled computer - the program that was going to 'make' the Geneve. While I'm flattered, I really don't think our community is going to live or die by this one program. While *Press* promised to revolutionize word processing - the most popular application of our computer - we still have a large selection of good word processing programs. It's not as if there is no word processing software for our machine. Even if we can't release *Press*, Asgard Software can at least extend the capabilities of the word processors we have. Our *Spell It!* spelling checker is just the first program in a series that will bring the *TI-Writer* standard up to modern day expectations. If we can't bring *Press* to the TI community, we can at least bring ideas from it - *Spell It!* is comparable in every way to the spelling checker we planned for *Press*."

"Also, I wouldn't be surprised if others will begin working on new word processors for the 99/4A in earnest now that they don't have to compete with the idea that *Press* will be competing with them. *Press* set a benchmark for word processing that was even too high for it to hurdle - raising expectations that even it couldn't evidently meet. Unfortunately it had the effect of stifling competition. Now other companies, and even Asgard Software, will be free to work on word processors that may be less spectacular, but imminently more 'do-able'."

Asgard Software at the same time returned all orders received for the program still on file, as well as provided the option to the few people that actually payed for the program at its announcement in Chicago in 1988 the option of a refund or a credit. No other checks or money orders received for this program were ever cashed - no charge cards charged.

Over the last 2 years *Press* has generated much interest, and more than a little controversy. While Asgard Software made many attempts to keep customers up to date, they relied heavily on word of mouth, letters and phone calls, and articles in TI publications to get the word out about the project. This was a source of irritation to some who would have preferred direct mailings of progress reports. Hopefully, the letters forwarded to all customers will be adequate.   ↵

Cassette Book Available

Mickey Schmitt, the author of numerous adventure games and the book "The Adventure Reference Guide", the bible for TI adventure gamers, recently began marketing a book for cassette users called "Getting the Most From Your Cassette System". This 52 page professionally typeset book contains an excellent collection of articles on using a cassette system to its full potential - by someone who used one for years. To order a copy send $9.95 plus $2.00 S&H ($4.00 Airmail) to Mickey Schmitt, 196 Broadway Ave., Lower Burrell, PA 15068.   ↵

Triton Catalog Plans Set

■ Menlo Park, CA.

Triton Products Corp., the largest TI-99/4A and Myarc Geneve 9640 products support company announced that they were eliminating their annual Spring and Summer Clearance catalogs to concentrate on their more profitable Fall catalog. Mailed to over 100,000 TI-99/4A users, this catalog constitutes the most far-reaching publication in the TI community.

Triton, a division of Mediagenics Inc. (formerly known as Activision), is one of the larger entertainment software companies. They currently produce everything from cartridges for Nintendo and Sega game machines to business software for the Macintosh.

It is rumored that Mediagenics is unwilling to invest too much in a "dead" computer - Triton has had to eliminate most technical support because the lady who used to manage it quit to have a baby and Triton hasn't been authorized to fill her position. From all accounts, however, Triton is a stable enterprise with substantial sales in the TI community.   ↵

80-Column Card Release Imminent

■ Rockville, MD

Asgard Peripherals has announced its intention of bringing the Mechatronics 80-column card back to North America TI-99/4A users after a 9-month hiatus.

This device, which can be installed on the TI-99/4A console even by a relatively inexperienced user, will with appropriate software and a monitor display 80-column text on the screen as well as high-resolution graphics. The card utilizes an upgraded version of the TMS9918A video display microprocessor in the 99/4A, known as the V9938 - which is manufactured by Yamaha Corp. The V9938 is 100% compatible with the TMS9918A, and as a result a 99/4A equipped with a Mechatronics card is 100% compatible with all TI software. Any software specifically designed for use with an 80-column card (and at this writing there are dozens of programs that are so-designed) will recognize when the Mechatronics card is installed and automatically work in 80-columns.

This device was originally introduced by Mechatronics almost 3 years ago. However, that company went bankrupt last year and the rights have been sold to another German firm, which has improved the design substantially. The Mechatronics 80-column card previously required an expensive Analog RGB monitor. The revised card will take advantage of less-expensive 80-column composite monitors. Additionally, the card will include much more reliable internal software written by Barry Boone (author of *Archiver* and other programs), and a much better written manual.

This 80-column device is the easiest to install video upgrade available for the TI-99/4A. Upgrading to 80-columns with this enhancement requires no modifications to your console beyond removing the video chip already installed and plugging in a special connector in its place. This device simply plugs in the side (a la the Speech

Synthesizer), and you can attach other peripherals into it. Plug your monitor cable into the special connector in the back and you instantly have a beautiful, high resolution display.

A number of fairware and public domain 80-column card programs comes packaged with the Mechatronics card - including the 80-column version of the *Funnelweb* word processor, an 80-column version of *Multiplan*, the 80-column compatible *Telco* terminal emulator, and the *G99* graphics package that allows the Mechatronics to display high-resolution pictures taken from the Amiga, Macs and PCs. Additionally, purchasers are entitled to discounts on 80-column Asgard Software products *(PrEditor, Spell It!, Hardmaster, etc.)*. 80-column compatible software is also offered by JP Software and other TI-99/4A vendors. Custom monitor cables are available.

Finally, while the original card retailed for over $250, Asgard Peripherals will be selling it for $200, plus $10.00 S&H ($20.00 Airmail). Considering the cost of acquiring another computer capable of displaying the high-quality, VGA and Amiga-like graphics possible with the Mechatronics 80-column card and its 9938 video processor, it makes more sense to upgrade your TI then to buy another machine and start all over. This device will help carry your TI into the '90s with style.

This product carries a 90-day warranty. Most parts are socketed hence it can be serviced after 90-days by any reasonably competent technician, or returned to us for servicing for the cost of parts plus labor.

Currently, Asgard Peripherals is accepting orders for this device. It is expected that it will be shipping to customers within two months. Any checks sent for this device will not be cashed, or charge cards charged until the item is shipped.   ↵

Geneve Corner
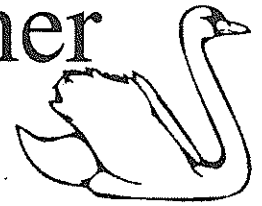
In the last 6 months the news has had its ups and downs for the Geneve owner. On the plus side the Geneve has been selling very well for both the few dealers remaining and Triton. This was in large part spurred by steep price reductions from Myarc - the Geneve with a Myarc Mouse and the My-Art drawing program can be ordered from Disk Only Software (301-340-7179) for $400 plus Shipping and handling. At the same time, the suggested retail of the Myarc HFDC has also been drastically reduced - again DOS has the best price at $200 plus S&H.

On the negative side, while Geneves and HFDCs are being sold at this price they are hard to get. Demand is much higher then supply at the moment and DOS has lengthy backorder lists. Furthermore, the HFDC is still prone to unreliability - even on the TI-99/4A and particularly on the Geneve (oddly enough).

On the 99/4A end, many HFDCs are unable to control more then 2 hard drives - the 3rd hard drive connector doesn't work on most cards. Additionally, the device functions very irregularly as a floppy disk drive controller - even TI-99/4A users often use a Corcomp or Myarc FDC with their HFDC for controlling floppies. The situation is positively abysmal on the Geneve - Myarc has released version 0.97H of the HFDC compatible versions of M-DOS, but while the compatibility with the HFDC has increased, for the most part that version of M-DOS is incompatible with every other program. Most users use M-DOS 1.14, but that version doesn't allow direct access to the hard drive in M-DOS. Furthermore, from a programmers standpoint the HFDC is a nightmare - the DSR calls meticulously documented in the HFDC manual are so much fertilizer when the HFDC is used on the Geneve, and Myarc hasn't provided any addendum documentation explaining the changes. While it is possible to use the HFDC with software that only uses high-level file access, anything requiring lower level access to the HFDC simply bombs out even in GPL mode.

Myarc has a difficult job ahead of it. They have to produce a version of M-DOS that is not only compatible with the current widely used version, but also functions well with the HFDC, and includes comparable documentation for programmers. Ideally, DSRs should run under this version of M-DOS exactly as they do on the 99/4A, but if they have to be changed, Myarc should provide documentation detailing this.

We'll let you know when they have their act together.

Comprodine Acquires Great Lakes Products

As if in answer to our question in the previous Asgard News - "Where is Great Lakes Software?" - Comprodine has announced they are the exclusive distributors of all Great Lakes Software products. Accompanying the acquisition of such TI favorites as Certificate Maker 99 and JoyPaint 99, Comprodine has reduced the price of these programs to $10.00 each and introduced several new companions for JoyPaint users. For more information contact Comprodine at 1949 Evergreen Ave., Fullerton, CA 92635,or call (714) 990-4577.

Misc.

NORTH CAROLINA USER GROUP FORMS

A New user group has been formed for TI-99/4A users in the Ft. Bragg, NC area. For more information contact CW2 Richard Sammons, HLM 782nd Mt. Bn., Ft. Bragg, NC 28307.

RAMBO SOFTWARE PLANNED

OPA plans to soon release a mailing list program designed to work with a RAMBO equipped Horizon RAM-disk. This package allows thousands of entries to be stored simultaneously in memory and sorted instantly. Menu driven. Contact OPA, 432 Jarvis Str. #502, Toronto, Ontario Canada M4Y 2H

Rumors

Stuff about Myarc's future plans, Triad, and more...

Next Generation Geneve rumored

The grapevine has been buzzing, and its unofficially confirmed that Myarc is planning an upgraded version of the Geneve soon. The new Geneve will feature an increased clock speed (18Mhz), which will increase its speed by 50%, as well as a 9958 video processor upgrade (see previous issue of Asgard News for information about this chip). Plans have firmed up partially because of the release, oddly enough, of the *Asgard Mouse*. The 9958 has no built-in mouse support, and the lack of an alternative was a serious roadblock towards incorporating this new video processor in the machine. Additionally, few people would be interested in the upgrade if it only increased the clock speed. Because the *Asgard Mouse* works from the RS232 port, it has effectively solved the problem the 9958 posed to Myarc. Myarc has contacted Mike Maksimik regarding interfacing the *Asgard Mouse* into M-DOS on a basic level - current mouse software for the Geneve would then automatically work with the *Asgard Mouse*. The only remaining consideration for Myarc now is that there are hundreds of *Myarc Mouse* owners that are going to be mad about buying a new mouse if they upgrade the machine.

Charlton, Hoddie & Dodd form "Bluestreak Software"

The principal partners in JP Software, as well as one of their best programmers have recently formed "Bluestreak Software" - a software company devoted to producing software for the Apple Macintosh and PC compatible computers. Among the "best and brightest" for Myarc, Paul Charlton is the author of *M-DOS*, Mike Dodd of *MDM5*, and J. Peter Hoddie of *My-Word* and various other Geneve utilities. While there is no word on how this will impact on JP Software or their committment to the Geneve world, it does coincide with an unusually slow release period for JP Software with the only new product an update to *First Base*, by Warren Agee.

XB Popularity on Wane?

The *Missing Link*, a well-received enhancement package for Extended BASIC users, has reportedly sold only moderately, despite heavy promotion by manufacturer Texaments and good reviews from most reviewers. Fairware Extended BASIC enhancement packages have also done generally poorly lately. It seems that few people are programming in *Extended BASIC* any more. Too bad these packages weren't available 5 years ago.

Triad release Imminent?

Triad, the integrated package by Wayne Stith to be offered by JP Software, is reportedly nearing completion. This package features an advanced terminal emulator with its own language as well as a TI-Writer-like word processor that takes advantage of many Geneve features. A Geneve-specific package, it is nevertheless expected to be quite popular when released. It will be Wayne's second big contribution lately - he and his wife had a child just recently.

Dijit Dropping 80-columns?

In a story worthy of "Perils of Pauline", numerous rumors have been flying around to the effect that Dijit plans to discontinue their 80-column card after numerous problems correcting incompatibilities with various other devices and software packages. At the same time, rumors are also circulating that they aren't *really* planning to do anything of the sort! Who's right?

Little Bits

• It is rumored that an individual or individuals in Florida are working on yet another Hard & Floppy Disk Controller. This market could be crowded by the end of the year.

• 80-column cards may be forthcoming from one or more established TI hardware vendors. The recent rapid increase in 80-column compatible software is increasing demand dramatically.

Editorial

The Past, the Present, the Future, and other stuff..

Well, its no secret - this magazine is 3 months late. Not only that, its *different!* Before I get into that, however, let me explain what happened.

The Past

About 6 months ago I hired an editor to put this thing together. About 4 months ago she decided she really didn't want this job after all. Oh well. About the same time she threw it back in my lap Asgard was going through one of our occasional mini-crisis.

Periodically, things go to you-know-where in a handbasket around here. In March we were trying to get our development schedule back to something approximating a schedule (Spring is the time when we start projects for release in the Fall and finish up projects that should have been finished last Fall). At the same time Asgard Peripherals was born (see news article in this issue), we started grappling with the issue of *Press* (ditto), and we were overwhelmed with orders (and I'm not going to complain about that one little bit - *please*, we never have *too many* orders). The long and the short of it was that I had too much to do and too little time, and I was tearing my hair out getting it all done at once. As a consequence, nothing was getting done.

Whenever I get into this state my reaction is to sit back, prioritize everything, and do one thing at a time after another until they are all done. For better or worse, the next issue of *Asgard News* wasn't at the top of the list (after all, most people didn't get the last issue until January, right?). Well, I'm happy to say most everything is out of the way, but by the time I looked up to notice 3 months had passed. So, after a frantic 2 weeks I've pulled this thing together (I never have to worry about a shortage of material - all my friends say I should have been a professor because I can lecture for hours about any imaginable subject <smile>).

The Present

At this point, I can imagine you are asking yourself, "Self, what's with all of this *Reflections* stuff?". Well, apparently too many of you out there didn't notice that I was having a little name-changing contest. Why did I say they didn't notice? Because only 6 people bothered to enter it. Maybe if I'd offered $1000 instead of just a measly $100 more people would have sent an entry, but its too late. The winner is (drum roll please), Shirley Slicer of Purdom, KS. I'd also like to thank the following for sending an entry: Sr. Pat Taylor of

Asgard News Revised

Story, Pages A1-A3

Table of Contents

Dubuque, IA; Roscoe Heavener of Edgewater, FL; Anthony Consola of Plainfield, IL; Don Alexander of Macon, GA; and Robert Mendez of Fillmore, CA. Just for the heck of it, I've extended the subscription of everyone who entered the contest by an issue. Maybe next time more people will take these contests seriously.

How was the winner chosen? In some ways it was a process of elimination. Firstly, I had to eliminate all the entries that contained the name "TI" prominently in them (exa. 'TI News'). TI is a registered trademark, and well I hate going to court. Next, I eliminated all the technical sounding ones - this magazine isn't designed to appeal solely to the technically literate. Among the entries that were left, I made a very subjective judgement. I chosen *Reflections* because of the neat visual pun I could get out of it (note the title of the magazine shows the letters 'ti' in shadow - "Reflections on TI", get it?). Bad jokes aside, I thought the name suggested what the magazine was really about - news and views on our community.

The Future

You'll also note something odd about this issue - its a magazine within a magazine. Don't worry - this was done on purpose. One of the big reasons I changed the name of the magazine was that with user group newsletters dropping like flies and news coverage of the 4A diminishing, I felt the TI & 9640 community needed another general-interest magazine to fill the void. Asgard News has been drifting in that direction for a while, but the name implied it was one big ad for Asgard Software/Publishing/Peripheral products. While a good portion of the magazine *was* devoted to that kind of information, the majority (as much as 70%) wasn't.

The name change was designed to accent this new independence. I still have a lot of Asgard-specific information, but that has for the most part been segregated into the "Asgard News" section. You will note some Asgard articles in the *Reflections* part - but even my harshest critics have to admit that Asgard does some newsworthy things sometimes - I only tried to put the most newsworthy items in *Reflections*.

This situation will continue for at least the next issue - the general interest articles, commentaries, news bits, tutorials, etc. will be in *Reflections*, and the Asgard-specific stuff will be in *Asgard News*. At that point, I have to make a decision whether to spin off Asgard News into an occasional periodical, or to continue including it within *Reflections*. PLEASE, if you have any opinion at all on the subject call, write, Email, or carrier-pigeon me and tell me about it.

Other Stuff

Finally, the part you've all been waiting for (no doubt) - my editorial.

Lately I've been seeing a distressing sight - a number of talented people have started drifting away from the 99/4A and Geneve. An attitude is starting to permeate the software developer part of the community - a malaise if you will.

Why now? Well, for one thing an increasing number of people are just plain tired of the problems and delays with the Geneve, and are giving up the community altogether. This includes some of the original developers of the Geneve. After all, M-DOS *still* isn't done, the HFDC is *still* buggy, etc.

Another problem seems to be that some developers have convinced themselves that the market has disappeared - that TI users are abandoning the computer in droves and there's no hope. Balderdash!

While the TI-99/4A certainly doesn't have the "easy money" that you'll find in the PC and Apple worlds (and if you believe there is "easy money" anywhere, I'd like to talk to you about the exciting speculation prospects in certain bridge properties), there are a number of things to be said about it from the developer's point of view:

(a) The TI community is a mature market. You can reasonably assume that most users will know what a cartridge is and how to plug it into the cartridge port, how the disk drive is used, etc. The more assumptions like that you can make the shorter the manual that you have to write (and hey, lots of TI software producers can get away with writing practically no manual and letting poor users tell each other how to use it!).

(b) TI users are in it generally for fun (and profit). PC users are generally only in it for the profit part. Ever go to a PC user group meeting? Generally they consist of a bunch of dweeby lawyers sitting around trying to suck knowledge out of the one guy there that read and understood the Lotus or DBASE manual (or at least claims to). PC user groups are boring and PC users generally are too. TI user groups are sometimes boring (after all, you do get the guy who drones on about heat sink problems with Myarc equipment), but things get exciting when they start playing the game of "Who can we draft into doing the newsletter *this* month".

(c) And if you think TI user groups are exciting, wait till you go to a TI faire. Without a doubt you've never seen an odder collection of individuals in your life. However, that's *good!* It's eclectic, it broadens the mind, it exposes you to people your mother warned you about, and you've never seen more people enjoy each others company more in your life. Birds of a feather you know. PC shows are all corporate love-ins, and generally as exciting as chipped beef on toast.

(d) TI users are about the most honest people you'll ever meet. In the last 5 years I've received all of about 5-6 bad checks out of tens of thousands received. Why? See "b" for an explanation. (Now, if everyone starts sending rubber checks after reading this I'll be extremely

disappointed). TI users are very good people.

(e) Finally, the hardware is still exciting. The 99/4A (and the Geneve) are the cheapest computers around in which you can simultaneously have speech, color graphics, animation, music, sound effects, and text in the same program. I was just reading that Apple considers their new $8000 Mac IIfx a great advance because for the first time it has separate processors to handle the keyboard, sound, the disk drives and the screen. BIG DEAL - the TI-99/4A was doing that in 1979 (and even then only for $1000)! How can Apple call this a big breakthrough 11 years after TI did it in a $50 home computer? Give me a break.. You can still do neat things on the 4A that are a bear to do anywhere else, at a fraction of the cost. Even 9900 assembly language is more pleasant then most any other.

All in all, while no one will get rich writing software for the 99/4A, there are other things to life then money - friends, the respect of your peers, enjoying what you do, the thrill of bouncing checks to buy groceries, and staying up to 3AM programming AND chatting with your friends on the phone at the same time, etc. Seriously, its the only job I've ever had that I looked forward to going to every day. Yes, writing software for the 4A isn't an easy road - some things about it are downright archaic, but it certainly beats writing the 500th spreadsheet available for the PC, and competing with the other 499 already released.

↵
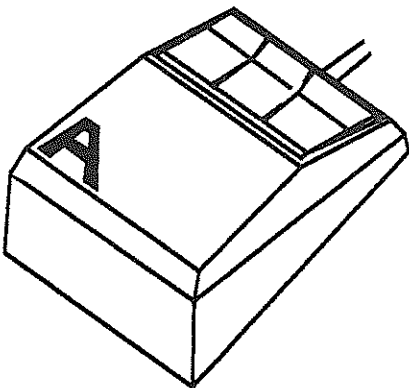
News

Asgard Peripherals, Demo Disks, Page Pro update and more

Asgard Peripherals Launched

On April 1, 1990, Asgard Software formed a subsidiary, Asgard Peripherals, devoted to creating, manufacturing and distributing hardware peripherals for the TI-99/4A and Myarc Geneve 9640 computers. While Asgard Software has been in the hardware business for some time (since the release of its first module), this has been an ancillary part of its business. With the formation of Asgard Peripherals, one of the primary foci of the business will be extending the capabilities of our machines through various peripherals.

In a departure from other hardware manufacturers, Asgard Peripherals intends to focus (at least in the short term), on interfacing existing equipment to the 99/4A and the Geneve, as well as working on joint ventures with other hardware manufacturers to more quickly bring products to the TI community. This includes marketing agreements with the firm that purchased Mechatronics, and eventually with other hardware manufacturers on other projects.

Anyone who has purchased a piece of hardware is aware that the software in the device can make the difference between it being usable or only useful as a doorstop. Because Asgard Peripherals is affiliated with Asgard Software, the firm is more capable in providing critical software support than many other hardware manufacturers. Because it is affiliated with Asgard Publishing, which has facilities and experience in producing books and magazines, it is able to produce extensive documentation and provide after-sale support in

the form of free publications. Asgard Peripherals has the potential of becoming one of the larger TI peripheral manufacturers.

Currently, the firm has one product in production (the *Asgard Mouse*) and 3 others in development. They are strongly interested in hearing from individuals, user groups or firms who are working on peripherals for the TI-99/4A or the Myarc Geneve 9640, or who are interested in joint-ventures in developing, manufacturing or marketing peripherals.

For more information, contact Asgard Peripherals at P.O. Box 10697, Rockville, MD 20849, (703)255-3085.

Free Demo disks available

Want to know more about Asgard Software products? Would you like to give a demonstration of some of our more recent offerings at your user group meeting? Asgard Software has available to any qualified user group officer free demonstration disks of some of our more recent releases - including *The Animator, Rock Runner, Picasso,* and soon *Spell It!.* If you'd like to receive these disks free of charge send a postcard with your name, address, your user group name and your affiliation to: Asgard Software, P.O. Box 10306, Rockville, MD 20849.

Hardmaster bug fixed

The initial release of *Hardmaster* seems to have had a small problem with handling hard disk drive of less then 20Mb in size (and occasionally with larger ones). As with many large problems of this sort, the solution is so small and insignificant you'd think it shouldn't have caused a problem in the first place.

If you'd like to affect the correction yourself, make a copy of the program onto a newly initialized disk and follow the instructions below. Otherwise, return your program disk and $1.00 S&H to Asgard Software.

Using Hardmaster (of course), EDit the 10th sector of the file HM (which can be found by using the DIrectory command on the disk containing the copy of Hardmaster since DI lists the sectors that contain a given file). Change offset byte >BC in the file from 1110 to 1A10. If you are using the 80-column version, edit the 11th sector of the file HM80 and change the bytes at >22 from 1110 to 1A10.

Page Pro Updated

A surprising number of Page Pro 99 users apparently don't know that Page Pro 99 is currently in version 1.6. This version contains significant changes over the previous version - including a cataloging function, support for "clipping" parts of the page as a picture, a high-resolution print mode superior to any other graphics package, and much more.

Page Pro 99 users can obtain the current version by returning their Program disk and $4.00 to Asgard Software, P.O. Box 10306, Rockville, MD 20849.

Non-registered users should really register their purchase - if you lost your warranty card send a postcard with the warranty information in its place. Registered users automatically receive free of charge a quarterly newsletter that talks about some of the support packages released for the program, contains occasional tutorials and quite a bit of general information.

Asgard On-Line Support Available

Asgard has recently opened up special sections on both Compuserve's TI Forum and GEnie's TI Roundtable for the support of Asgard customers. These sections contain additional utilities and graphics files for downloading, help files and tutorials, and announcements about new products and services available.

If you are on Compuserve, you can gain access to the Asgard Section (DL16) by leaving a message to our ID, 72561,3241. Any questions or comments can also be directed at that ID by sending a message via Email or in the TI Forum itself.

On GEnie, send a message to C.BOBBITT for access to Library 38 - a section devoted primarily to Page Pro 99 users but also open to Pix Pro owners and users of other products. Questions or comments can be addressed to Asgard in Section 7 of the TI Roundtable message area.

Asgard also maintains an ID on Delphi, C_BOBBITT. Questions and comments can be addressed to same. ✧

Current Versions

This listing contains only the products that have been updated. Any products offered that aren't listed have not been updated since their release. Send to Asgard Software for information about obtaining updated software.

Program	Vers.	Last Upd.
Balloon Wars	1.15	1/1/86
High Gravity	2.3	5/1/88
Legends	1.1	4/1/88
Legends II	1.0	7/1/89
Font Writer II	2.0	8/15/87
Picasso 2.0	2.0	11/1/89
Cal. Maker	1.05	6/1/88
Music Pro	1.2	11/1/89
Page Pro 99	1.6	1/7/90
Recipe Writer	2.0	5/1/87
Sched. Mngr	1.3	7/1/89
Stamp Mngr	1.1	5/1/86
Typewriter	1.2	11/1/89
EZ-Keys Plus	2.0	8/15/88
Pre-Scan It!	1.1	10/1/86
PrEditor	1.2	12/1/88
Spell It!	1.05	6/10/90
TOD Editor	3.0	3/1/87

Asgard Book Shelf
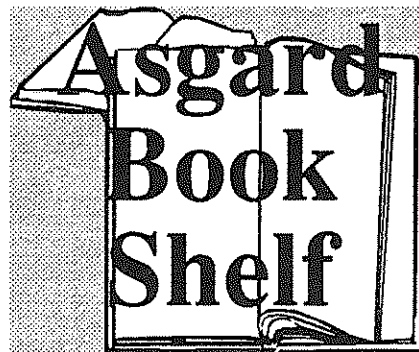
This area is provided as a service to Asgard News subscribers that do not have access to the user group libraries or telecommunications services available to other users. Send orders to Asgard News, P.O. Box 10697, Rockville, MD 20849.

Picasso 1.4

This is an excellent drawing package for the TI-99/4A and Myarc Geneve 9640. This program features a drawing area over 3 times the size of other drawing packages, and much more. $3.00

RAG-Writer

An upgrade to TI-Writer by Art Green. Includes a completely revised editor and formatter. Numerous new features. $3.00

RAG-Multiplan

An upgrade for Microsoft Multiplan, also by Art Green. Much faster then the original! Requires Multiplan $3.00

Telco

The best freeware terminal emulation package available Extensively documented - by Charles Earl. $4.00

QDFC

A "Quick and Dirty Columnizer" that converts a TI-Writer text file into 2 formatted columns. By Chris Bobbitt. $3.00

Textloader

A package from Paragon Computing that allows you to convert TI-Writer files into Extended BASIC programs. Excellent for the XB programmer. $3.00

All Prices quoted included shipping and handling. Please all 2-8 weeks for delivery.

New Products

Six months is a long time between issues - as a result there are more then a few new things to talk about.

To order an item or items send a check or money order for the amount indicated, and add $2.00 S&H per order in the U.S., $3.00 to Canada, or $4.00 for Airmail. Send all orders to:

Asgard Software
P.O. Box 10306
Rockville, MD 20849
(703)255-3085

The Animator

The Animator, by Brad Snyder, is a fascinating program that makes animation on the TI-99/4A and the Geneve simple and even fun!

While other programs allow you to generate animation sequences, none other allow you to do so with such ease, and put the results to such good use.

An Extended BASIC programmers delight!

With The Animator, Extended BASIC programmers can create highly detailed demonstrations and games with dozens or even hundreds of simultaneously animated objects in mere hours instead of days or weeks. The compact, fast and efficient assembly code included allows all this to happen in the background while your Extended BASIC program takes care of the rest.

You create your animation frames and define their sequence in The Animator editor, convert them to Extended BASIC format in *The Animator Converter* (which will also allow you to import in TI-Artist artwork), and then combine them with the package of Assembly routines included to animate your creations. Your Extended BASIC program only has to concentrate on logic, interacting with the user, etc. Your resulting program can be distributed any way you like with no legal strings attached - create games and demonstrations for your friends, to distribute as freeware, or even sell commercially. What's more, the comprehensive manual includes a complete step-by-step description of the process used to create and include animation sequences into Extended BASIC - any half-way experienced Extended BASIC programmer can create animated scenes quickly and easily heretofore only possible in Assembly language.

Fun for Young and Old!

While Extended BASIC programmers will certainly appreciate the utility of *The Animator*, anyone who has ever marveled at the artistry of Disney cartoons or just wanted to play games with the computer will find *The Animator* provides endless hours of enjoyment.

With nothing more then a joystick and a few keyboard commands you can easily create up to 20 frame animation sequences, displayed in any order you like with any combination of repetitions of groups of frames. The results can be as simple as a cat running across the screen and as complex as the limits of your imagination. The results can be ani-

mated in several sizes, and even simultaneously up to 16 times on the screen!

The Details

The Animator includes an extensive manual that details how to use the programs in this package, as well as provides practical information for the user and the programmer. Over 2 years in development, this package is extremely well-tested, and guaranteed to work on both the TI-99/4A and the Myarc Geneve. The two-disks provided include numerous examples of both animation sequences and Extended BASIC programs with animation included in them.

The Animator requires at a minimum 32K, Extended BASIC and one disk drive. A printer (any kind) is recommended, but not required. Suggested retail $14.95.

Spell It!

Introducing the best thing next to your word processor, the *Spell It!* spelling checker by Jim Reiss and Asgard Software.

Spell It! brings spell checking on the TI-99/4A and Myarc Geneve 9640 into the '90s with all the features and speed of modern PC and Macintosh spellers. With *Spell It!* you'll never have to worry about embarrassing spelling mistakes again in your *TI-Writer, RAG-Writer, BA-Writer, Funnelweb, My-Word,* or *WordWriter* documents. Compatible with any word processor that can store documents in the TI standard text format (display/variable 80 files), *Spell It!* for the first time makes checking your spelling on the 4A easier than writing the words in the first place.

Among other things, *Spell It!* is many times faster than any other TI spelling checker, it makes corrections directly to your text file so you don't have to return to the editor, lets you view the context the word is used in, allows you to add words as you check text files to a user dictionary limited only

by available disk space, has no limit on text file size, lets you scan through the dictionary if you aren't sure of a spelling, and even supports foreign language character sets.

Finally, *Spell It!* is available in three versions - SS/SD and DS/DD disk versions with over 25,000 words, and a hard-disk version with over 250,000 words. The proprietary SmartCheck™ algorithm in *Spell It!* makes this equivalent to a dictionary several times as large since *Spell It!* doesn't have to wade through the plural and possessive versions of words often found in other spelling checker dictionaries.

Requires at a minimum 32K, one SS/SD disk drive and *TI-Writer* or a compatible. Recommended system of at least one DS/DD disk drive. Provided unprotected and RAM-disk compatible. Configurable for 80-columns on the TI-99/4A and Geneve.

Spell It! is available in three versions:

SS/SD disk version
(3 disks), 25,000 words -
$24.95
DS/DD disk version
(1 disk), 25,000 words-
$19.95
HFDC version (7 disks),
250,000+ words -
$34.95

SPELL IT! COMMON QUESTIONS & ANSWERS

Q. How does *Spell It!* compare in speed to other spelling checkers?
A. It is many times faster than any other spelling checker for the 99/4A or the Geneve.

Q. How do you run *Spell It!?*
A. Can be run directly from most word processors, from the Editor/Assembler and TI Extended BASIC modules, and on the Geneve through Barry Boone's EXEC utility.

Q. What word processors is it compatible with?
A. It will work with any word processor that can produce a Display/Variable-80 format file - *TI-Writer, Funnelweb, RAG Writer, BA-Writer, QS-Writer,* *Word-Writer, My-Word,* etc.

Q. Do you have to re-load the program after checking a document?
A. You can check the spelling of any number of text files, of any length, one after the other without leaving the program.

Q. Does it have *any* limit on the text files?
A. It is limited by the number of unique words that can be stored in memory at once. One of the reasons *Spell It!* is faster is that unlike other 4A spelling checkers it only checks a word against the dictionary once, even if it appears in the text file 100 times! The program can store between 1-3000 unique words in memory (depending on length). This should pose no problems - the average scientific doctoral dissertation only has about 2000 unique words in it, including jargon. The average letter has considerably less.

Q. How does the program work?
A. When you first run it you give it the filename of the docume t to be checked. It then builds a list in memory of all the unique words in that document. It then checks them against the dictionary and generates a list of words not found in the dictionary. You can then go through the words one by one and either add them to the user dictionary, view the context the word was used in (the word itself is highlighted), have the program guess how the word should be spelled, or enter in the correct spelling. You can go back and forth through the list until you've made all your changes. When you are finished, the program creates a corrected version of your text file automatically.

Q. How do you know if a word is properly spelled?
A. When a spelling mistake is found, you can view the block of text the word was found in - you don't have to guess the context the word was used in. If you still aren't sure of the spelling of a word you can look it up in *Spell It!'s* own dictionary - it will generate a list of words that the word might be at the touch of a key.

Q. How do you add words to your user dictionary?
A. Correctly spelled words in your document not found in the dictionary (proper names, etc.) can be added to your user dictionary "on the fly" as you go through the list of words in your text file that the program couldn't find in the dictionary. Your user dictionary is limited only by your available disk space.

Q. Do you have to re-enter the word processor to make the spelling changes to your document?
A. *Spell It!* automatically creates a corrected version of your text file - you don't have to load your Editor to correct misspellings. Simply print our or format and print the corrected file. Furthermore, the case of the word is preserved exactly (if you misspelled an acronym, for instance, it will make your correction also entirely in upper case).

Q. Is *Spell It!* compatible with the latest hardware?
A. *Spell It!* can be configured to take advantage of special hardware on your computer system - it can use 80-column displays (or 80-columns on the Geneve), RAM-disks and hard-disks, and other new equipment. You can even tell *Spell It!* to look for your text files or its dictionary on a specific disk drive or hard-disk sub-directory!

Q. How does the *Spell It!* dictionary compare to others?
A. For one thing, Spell It! features the proprietary SmartCheck™ algorithm - it knows the English language and automatically understands common suffixes (-ed, -ing, possessives, etc.). This means that the *Spell It!* dictionary is comparable to one almost twice its size on other computers. Other spelling checkers have to include as many as a dozen permutations of a word in their dictionaries (for example: help, helps, helped, helping, etc.), taking large amounts of valuable disk space. Because of SmartCheck™, we are able to offer the versatility of a much larger dictionary, with comparable or better checking speed, in less disk space.

Rattlesnake Bend

A new adventure by Mickey Schmitt (author of *Oliver's Twist* and *The Adventure Reference Guide*), *Rattlesnake Bend* is a romp through the Old West for the serious adventure player. To quote the manual...

"I don't believe it! Just look who's back. If it ain't Kidd Poncho Dias, the sharpest adventurer in the West. What brings ya ta these parts ... Ya wouldn't by chance be out looking ta capture Santiago Escondido, the most deceitful (and unpredictable) bandit in all of Santa Diablo. 'Heard tell he was last seen headin' out towards Rattlesnake Bend, which means he ..."

With a Very Difficult rating (on par with "Savage Island"), *Rattlesnake Bend* is a refreshing departure from standard adventures. Available on disk and cassette. Suggested Retail $8.95.

Castle Darkholm

Set in a Gothic castle, this two-part adventure by Randy Cook (both parts included) combines elements of Mary Shelley novels and sword & sorcery epics. To quote from the introduction...

"Greetings unto you, Oh Champion,

You have been chosen for your courage, skill and intellect to perform a duty. A duty upon which the outcome of many lives depend. It is with grave regret that we must call you into this danger. A great shadow has fallen upon the face of the Earth. The sun fears his name, and the moon is near death by his presence. An unholy curse of a man known as Baron Manfred

Ritter Von Darkholm has risen from the grave to prey upon mortal man. Already a score of innocent souls have died by his deeds. We must stop the slaughter... You must stop the slaughter.

We, the Council of Elders, do charge you with a task, a holy mission. Destroy the sinister Von Darkholm. Let it be known that the Lord Bishop has already dispatched a priest skilled in the dealings of the undead to the stronghold of the non-living abomination. Watch for this priest. He will aid you as you will aid him.

Go now to Castle Darkholm. His evil must not be allowed to spread. God speed and protection.

The High Council of Elders"

This original game is rated moderate in difficulty. Available on disk and cassette. Suggested Retail $8.95.

Edu-Pack

Edu-Pack is a unique experiment in educational software for the TI-99/4A - three different educational games in one package, by David Bishop.

Letter Land, an educational game for children ages 3 and up, is a deceptively simple game that teaches the alphabet to young children. Using the concept of pattern matching, the child has to match the letter on the spaceship to the letter floating by on the screen. At the same time *Letter Land* also teaches the concept of the alphabet and its order, and at higher levels numbers and special keys on the keyboard.

Speed Key is a program for children aged 5 and up. As with *Letter Land, Speed Key* uses deceptively simple methods to teach typing speed and accuracy. In fact, this game is also an excellent exercise for adults who need to brush up on their typing. While it doesn't give statistics related to accuracy and actual typing speed

as the Typing Tutor™ module from Texas Instruments Inc., it is a good way to practice typing. For children, its use of colorful block graphics is sure to attract attention and sustain interest.

Finally, **Giving** is a unique educational game for 2 children that teaches co-operation. The ability to work in a team towards a common goal is a concept that even some adults have difficulty with, and has never been properly addressed in educational programming. This interesting game teaches the concept and practice of the group effort.

Edu-Pack is available on Module for the TI-99/4A, and on disk for Geneve users. It has a suggested retail price of $19.95.

Asgard Mouse

The *Asgard Mouse*, by Michael Maksimik, is a high-quality, solidly-constructed 3-button mouse compatible with both the TI-99/4A and the Myarc Geneve 9640. Easy to install (simply attach to the RS232 port on either computer), this mouse is a must for the next generation of TI and Geneve software.

This capable critter includes software for using it with *TI-Artist* and *TI-Artist Plus*, and for interfacing it to your Extended BASIC and Assembly programs. Other software packages are being designed for use with the package, and an inexpensive, thorough developers package is also available for third-party developers.

The *Asgard Mouse* requires a disk system, 32K and an RS232.

Finally, the *Asgard Mouse* carries a lifetime warranty, and a suggested retail price of $49.95. Shipping and handling is $5.00 in the U.S., $6.00 to Canada, and $10.00 Airmail. "Y" Cables are also available for $18.00 plus S&H.

Page Pro Stuff

In the last 6 months Asgard Software has released the following Page Pro 99 related companions and utilities:

Page Pro Pics

Each package has a suggested retail of $6.95.

Vol #8 - People 2 - A collection of 32 "People" pictures - presidents, sports figures, etc.
Vol #9 - Christmas - A collection of 40 pictures celebrating this happy holiday.
Vol #10 - Publishing Tools 2 - A selection of 37 pictures for use in flyers, business, etc. Features more borders, credit card symbols and more.
Vol #11 - Hebrew - A package containing 10 large pictures of Jewish religious life as well as a complete Hebrew large font.

Page Pro Titles

Volumes #1&2 - A collection of large titling stored as pictures for use in flyers, forms, announcements, etc. Each title is designed to be generic enough for common usage, phrases like "User Group", "Happy Holidays", etc. predominate. Each volume $6.95, both volumes for $11.95.

Page Pro Templates

A collection of pre-made pages for use as templates in creating your own works, or which can be customized and used as-is. Each volume has a suggested retail of $6.95, or any three for $17.95.

Vol #1 - Birthday Cards 1
This 2-disk package by Virginia Davis contains 5 different birthday cards and 23 new pictures.
Vol #2 - Birthday Cards 2
A 2-disk set that includes 8 new cards and 40 pictures. Mostly cards for children. By V. Davis.
Vol #3 - Get Well Cards 1
One disk containing 5 different 'get well' cards and 22 new pictures. By. V. Davis.
Vol #4 - Get Well Cards 2

Another package by Virginia Davis that includes 2 disks with 8 cards and 41 pictures.
Vol #5 - Assorted Cards 1
A 2 disk set containing Fathers Day, Mothers Day, Anniversaries, Valentines day, Thanksgiving, Easter, Friendship and Cheer-Up cards. 38 pictures. By Virginia Davis
Vol #6 - Assorted Cards 2
Two disks containing Sympathy, Hello, St. Patricks, Halloween, Easter, Thank you, Love, and Cheer-up cards. 36 Pictures. By V. Davis.
Vol #7 - Assorted Cards 3
A disk by Mel Bragg containing a generic card, 3 Christmas cards, a 'till we meet again' card and a get well card. 19 pictures.
Vol #8 - Invitations 1
A two disk package containing invitations to parties, business events and more. By V. Davis.
Vol #9 - Envelopes 1
A Unique disk containing generic and example envelopes that can be printed, folded and taped and used to mail letters or cards. Includes 12 new fonts and 18 pictures. By Mel Bragg.

Page Pro Large Fonts

A package by Paul Scheidemantle containing 16 "headline" fonts for *Page Pro* and a utility that allows you to turn your phrases into pictures containing the phrase in the headline font of your choice. Perfect for newsletter editors or anyone who needs large, bold type on a page. Suggested retail $7.95.

Page Pro Borders

A collection of over 30 borders for *Page Pro 99* stored as large fonts by Mel Bragg. Suggested retail $7.95.

These items, and others, are detailed in *Page Pro Times* - a quarterly magazine distributed free to all registered *Page Pro 99* users.

✧

Ask Asgard

Returned Materials?

What is your policy on returned material, which is either defective or doesn't live up to claims?

W. S. Dixon
Royal Oak, MI

Glad you asked! Programs that are defective can be returned to us as soon as the defect is discovered for an immediate replacement. If you call ahead we'll endeavor to send out a replacement ahead of time. All our products carry a lifetime warranty. As for programs that don't live up to expectations, we never make claims in our advertisements that a program will do something it doesn't. Read our ads carefully before you order anything. However, if you are unable to use the program because of equipment incompatibilities, etc., we will gladly give you a refund or a credit.

Utility Confusion

What is the *Page Pro Utilities* package and how does it differ from the "Utilities" that I got with my *Page Pro 99* package. Also, is there a utility to go from *Calendar Maker 99* to *Page Pro 99?*

Sr. Pat Taylor
Dubuque, IA

The Page Pro Utilities package (granted, somewhat confusingly named), is a collection of additional utilities for Page Pro by P. Scheidemantle and Ed Johnson. It includes the Page Pro Enlarger, the Page Pro Flipper and a Line Font Editor. The "Utilities" that come with Page Pro are the TI-Artist converters and the Columnizer.

As for going from Calendar Maker 99 to Page Pro 99, I never thought of that - you are the first to ask! Will let you know what we can do later. ✧

How ICs are Made, Part 1

By Steve Elliott

should be, thus making the base material positive.

What exactly are IC chips? They are integrated circuits. IC's are now used in virtually all electronic equipment, in many appliances and in our automobiles. As the name implies, many components are integrated onto a tiny chip of material, miniaturizing circuits while increasing speed of operation, thus their popularity. But how do they work? In this 2 part article I will explain how they work and also how they are made. In part one I will explain some of the physics of IC chips, and discuss a device known as a transistor. This will give you the basics needed for part 2, IC's and how they are made.

As you know all matter is made of atoms. An atom consists of a nucleus with electrons in an orbit about the center nucleus. Actually, electrons spin about the center in more than one orbit (ring). Each atom's first ring likes to have 2 electrons present if it can. Ring two prefers 8 electrons, ring three 18 electrons, and ring four 8 electrons. (We will stop at 4 orbits). See Figure 1 below.
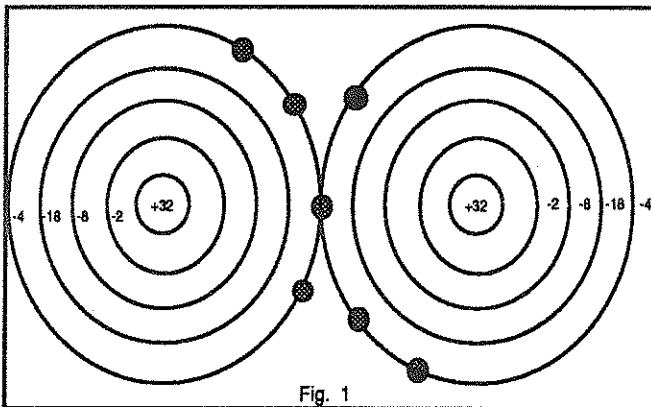
Fig. 1

This diagram depicts an atom of germanium. Notice ring four only contains 4 electrons. (Only 32 are available in a germanium atom.) Rings 1,2, and 3 fill up to their liking and only 4 are left for the outer ring. This outer ring is called the *valence* ring.

This valence ring would like to have 8 electrons in it. If you look at Figure 2 you will see a crystal lattice of germanium. This lattice network is laid out so the valence rings share electrons, thus each atom's valence ring contains

8 electrons (think 3 dimensional, this is a 2D drawing) and they are very happy. This is called a *covalent bond*.
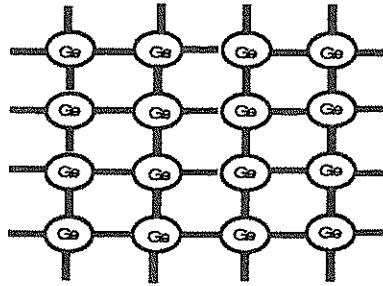

Figure 2

This material is very stable. It is neither a conductor nor an insulator, hence the name semi-conductor. Other materials that make great semi-conductors are carbon, selenium and silicon. (All their atoms also contain 4 valence electrons). Germanium and silicon are the most prevalent and are easily made pure. You will see why this is important a little later.

OK enough physics. Let's make a transistor.

In order to get current to flow through this material we have to make it impure to our specifications. An atom of Antimony (or Arsenic or Phosphorus) contains 5 valence electrons. We can dope the base material with Antimony and make it a negative material. There will be an extra electron floating about with no place to bond. (Remember the happy covalent bond? With 5 valence electrons there is a free electron; free to move about within the material). We can dope the base material with Aluminum (or Boron or Gallium or Indium) whose valence ring contains only 3 electrons. This makes the molecule one electron short. We can say there is a "hole" where an electron
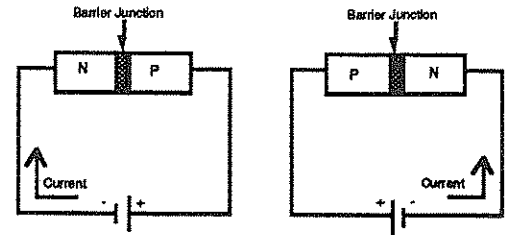
Figure 3

Take a look at Figure 3. I have connected (or bonded) a P (positive) and an N (negative) type material together. At the exact junction of the two materials the electrons and holes combine setting up a *barrier voltage* . The device will find its equilibrium point and just sit there. If we apply an external voltage, say a battery, we can overcome this barrier voltage and current will flow

So you say, " Big deal, you have current through this PN thing." Well OK let's expand a little. (By the way this PN thing is called a diode, and can be used to limit current in only one direction). Let's make a device with a PNP or an NPN as shown in figure 4.
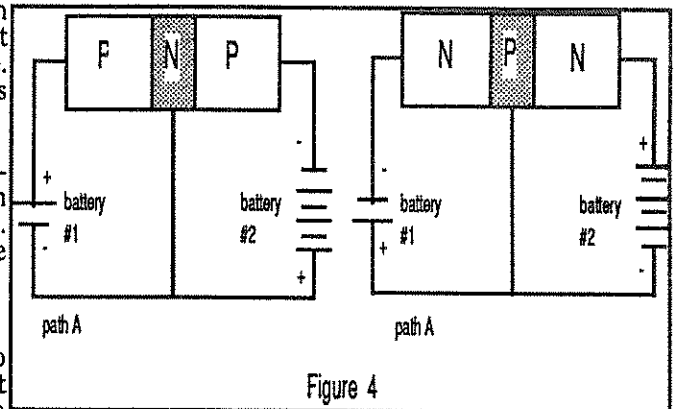

Figure 4

This is your basic Transistor. Battery 1 (in path A) overcomes the barrier voltage and battery 2 supplies the voltage to get electrons or holes to flow through the device. A small voltage can control current flow and with some other essential parts needed to complete the circuit it is easy to turn the current flow on and off by toggling battery 1. This on and off can be 1 or 0 and now it's starting to sound like a computer. Well, if we pack a ton of these onto a little chip, and add a bunch of chips together, it will be a computer.

This brings us to the next issue's article where we will make some of these IC chips. With the knowledge you now have IC's will be easy to understand. ↩

Harry's Corner

THE Tiger's TALE
by HARRY BRASHER
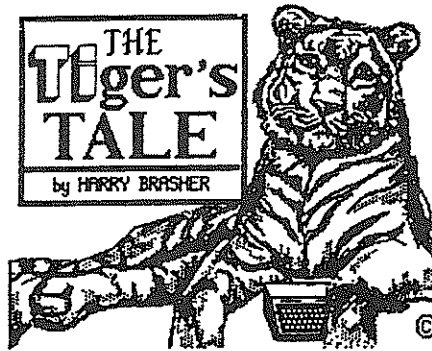
There is a very serious problem in our community that must be discussed. The subject is Company/Fairware/Networks/End user. That's a big, nasty subject, but I don't know how to make it simple. All four of those items are having an effect on one another, and the bottom line is a powder keg. Let me explain my feelings.

I was totally shocked when I opened up the December issue of MicroPendium and discovered a blazing ad on the second page for the *TIPS* graphic system. *TIPS* has been one of the most unique packages handed to this community in quite some time. I'm not going into detail about it, but simply put, it is a compressed system of graphic images that have been ported over to our system from PUBLIC DOMAIN graphics. The gentleman that created the system did so for FREE, that is to say, he wanted NOTHING for it. All we had to do was download it from the networks, pass it around, throw it up in the air, what-ever! There are NO FEES IMPOSED. All we needed to do was say thanks for a fantastic effort.

The ad I saw was selling the system of eleven flippy disks for just a postage and handling charge of $39.95 Postage and handling charge? Well, yes, that's what it has to be since the *TIPS* system is FREE and PUBLIC DOMAIN. At .25 per disk, and $2.40 for postage (both, high estimates) plus packaging, another .50, I figure that adds up to $34.30 for the handling. Hell, I'll even allow for copying, the full page ad spread out over the orders, etc. Lets drop it to $25.00 for handling.... Oh, son of a gun, I made a mistake, I just looked back at the ad and found that the $39.95 doesn't include postage and handling, that's extra. Well, dog gone it, what column of our ledger are we going to use for all that left over money anyway. I guess we're gonna have to call it PROFIT.

Are you getting the feeling that something is wrong here?
This is not a new problem. Every fairware author in the community is having fits about it, and unfortunately, they can't do ANYTHING about it. They can put specific notices about it on the front of the software... no good. As long as it says freeware, or fairware, or contribution, anybody can do whatever they want with it legally. The fairware author has only two alternatives. He can quit programming, or, he can go commercial. The latter of those two alternatives is good for Texaments, Asgard, Comprodine, JP, or anybody else that looks for program authors. It's not good for the networks (Genie, Compuserve, Delphi) because one of the main attractions for them is the downloads. That's why people pay to go on them, that's a hard cruel fact. If fairware authors all go commercial, then there's no downloads. EVERYBODY suffers, everybody pays, and in case you haven't noticed lately, there are precious few 99/4A downloads.

Now, to further complicate this story, I would like to point out that my job is on the line here, at least with MicroPendium. I think the scenario would go as follows: "Hi John, this is .... calling. If you don't dump Harry Brashear's column, I'm going to pull my eight pages of ads for the next two or three months."

Now I don't have any idea what eight pages of ads cost in Micro, but let me take a wild guess... a thousand dollars plus. That prints the magazine, period! How long so you think I'm going to last? Yes sir folks, we have a real problem here. I have an idea, why don't we all refuse to buy fairware from that company? Oops, I forgot, the company in question has to stay in business, or there may not be a MicroPendium. It's an interesting can of worms, isn't it?

Ok, let's soften the blow. The company ALWAYS puts the authors name, address, and requested donation on a title screen of the fairware, or at least that's what I have been told. I have seen some of those disks, and can confirm that. Far be it for me to complain about $4.95 for a program, (all the rest of the advertised disks are this price)or in some cases a series of programs. Maybe the price is justified in some depraved way, as long as the buyer is still willing to pay the REAL author what HE wants. What I do object to, is something that is FREE to the community from one person, and it makes someone else a fortune.

Now, let's also assume that this is a GOOD way of getting an authors fairware advertised and out to the community. If this is true, then the community is to blame for not sending the requested amount to the author. If they did, then the author would be happy, and keep making fairware for the company, and the network download libraries. The company would keep advertising in Micro, I could keep my job, and Asgard, Texaments, Comprodine etc. couldn't find any disgruntled authors and, hence, be out of business in a year.

Nature seems to install the checks and balances that any situation needs, even in a computer community, but oh what a tangled web it is.

Till next time.... HTB

TI, from Page 22

speech chip.
1979 - Introduced first 64K EPROM. Introduced the TI-99/4A Home Computer.
1980 - Produced first commercial single-chip 16-bit microprocessor, the 9940.
1981 - Introduced TI Logo. Introduced the TMS7000 series family of 8-bit microprocessors. Began volume production of 64K RAM chips.
1982 - Introduced signal-processing microcomputer chip.
1983 - Ceased manufacturing TI-99/4A, introduced TI Professional Computer. Introduced over 100 new CMOS components.
1984 - Introduced Explorer™ Artificial-Intelligence computer system.
1985 - Began volume production of 256K RAM integrated circuits.

More recent developments include TI's discontinuation of the TI Professional in 1987, the introduction of a line of PC compatibles in the TI Business Pro in the same year, introduction of 1Mb RAM chips and TI's first laser printer in 1988.

In the next installment in this column we'll discuss some of their more recent developments.

Jack's Jottings

By Jack Sughrue

It's been a long time between Jottings. Over a year ago I was in a car accident that resulted in lots of metal plates in my head to hold it together, and I'm still in the throes of recovery. But I'm extraordinarily lucky: the EMTs were fast, the doctors incredible, the support from so many people (including my wonderful TI Family Worldwide) just unbelievable. I want to thank all the ASGARD NEWS readers and all the other 99ers everywhere for their caring and support. It certainly made me a lot better a lot quicker.

But while I was sitting on the sidelines cursing the tree that leaped out in front of my new car, I had ample opportunity to think about my TI and what it means to me and, I assume, to a lot of other people.

Like the vast majority of the 2 1/2 million purchasers, I wanted a toy. Now we can SAY we wanted this machine for our businesses or for our professions or for our kids' education or for something specific (like word processing or database activities). But I truly think the majority of us purchasers wanted to play. I don't mean games, necessarily. I mean PLAY! Have a computer just for the FUN of it; for no particular reason, though we had to justify it to our spouses or parents or friends or kids by giving all the practical reasons why home computing with our 99s was essential "in this Electronic Age." My biggest argument almost a decade ago when I couldn't think of any legitimate reason for my early (expensive) purchases was, simply, "We are almost into the 21st Century, for crying out loud! Don't you realize that?" As if that were an answer to everything. It certainly was an effective deterrent to further discussion on the matter.

Fun is why I still keep my TI.

At work (I teach fifth grade.) we have Apple and IBM and TS machines. I also have a couple TIs. The kids inevitably choose the TIs for their free computer time. Sometimes the Apple, if there is something software specific they'd like to do. Never the IBM. The TSes they use strictly for word processing.

Why the TIs?

More options, for one thing. They can load something up from tape (like *Turtle Tracks* or *Square Pairs* or *Tiny Logo* or any of the Moonbeam Software or piles of Jim Peterson's great educational/fun stuff or *Romeo* [still one of my favorites] or any number of excellent TAPE programs, including the *Tunnel of Doom* and *Adventure* tapes. Or they can throw in a cartridge. The kids love the robotic talk of the *Spelling* series. They never tire of *Yahtzee* or *Othello* or *Video Chess*. They play the arcade cartridges like *Parsec* and *Munchman* and the educational modules like *Reading Rally* and *Stargazer* and the math series. Or perform *LOGO II* activities for hours. All of the above options (still available) are on the basic machine with tape recorder. No disk drive. (I have speech and a 32K sidecar on one machine, the P-Box and works on the other. Speech and 32 are not necessary for 99% of the good stuff on tape, though *Extended BASIC* is.)

Besides the options of tape and module on the basic setup are the options to learn how to program and how to create programs. The TI with so many built-in subprograms (CALL SOUND, CALL COLOR, etc.) and a powerful resident BASIC is easy to learn, particularly as TI provided so many simple, direct text and tape materials for learning how to use the machine. So simple even adults can do it.

There are still lots of commercial textware and tape software available. In the latest Triton catalog, for example, the following are offered for UNDER $3!: BEST OF 99er (with over 80 articles and massive amounts of type-in programs, still the best way to learn programming techniques); PROGRAMMER'S REFERENCE GUIDE TO THE TI-99/4A by Regena, the book I really grew on; COMPUTE'S FIRST BOOK OF TI GAMES, over 200 pages of dynamic programming; COMPUTE'S GUIDE TO TI-99/4A SOUND AND GRAPHICS, besides being extremely good at what the title says, it is loaded with programs; SAM'S TI-99/4A GAMES, includes 13 games, programming techniques, and a TAPE of all the programs; COMPUTE'S CREATING ARCADE GAMES FOR THE 99/4A, which provide additional programming techniques for the learner; and many more.

I have all these books in my classroom and at home. The kids at school and I still use them, still refer to them, still type in programs.

So there are a pile of options on the TI that Apple and IBM do not provide for computer buffs seeking fun and learning and hobby opportunities. Remember, if you turn on an Apple or an IBM there is nothing there. Literally. There are no tapes, no modules. You have to pop in a disk to even get BASIC. Once you have BASIC, you don't have the efficiency of the TI. Nor do you have the powerful speaking, coloring, character-making tools. Nor do you have automatic numbering. Nor resequencing. Nor...

These things we 99'ers take for granted.

Oh, I also forgot the other option, the only one that those other machines have: disk drives. The TI has all kinds of disk controllers, including hard drive. There are all kinds of artificial drives, too: Ramdisks, Supercarts, Zenoboard chips that make operation instantaneous and a joy. Supercarts, of course, are not part of those others, either.

But, apart from 40 megabyte hard drives and all the high-tech wizardry that can be a part of any TI upgrading (including the very powerful GENEVE), what about the normal, non-techie, fun-loving 99er? Once he or she decides there is a necessity to get into disk drives (and I don't think there needs to be for all the applications mentioned above and many more not mentioned), of course, another whole, large world opens up. People with modems tell me that other TI worlds are out there to explore, too. I'm quite overwhelmed with the one I got. My imagination doesn't extend to what else is out there for our little machine.

Don't get me wrong about disks: I would never want to go back to my pre-disk computing for a few good reasons: *FUNNELWEB, PLUS!, ARCHIVER, DISK UTILITIES, TI PRINT SHOP (TIPS), MUGLOADER, MAX-RLE, DM-1000,* to name a few. All of the above are Fairware or Public Domain. *FUNNELWEB* is an environment that

includes the best version out of TI-Writer (with so many options not on ANY other version that it would be impossible to list). It also includes an *Editor-Assembler* version I prefer to the cartridge and loaders for *Forth* and *C* and supercarts, among other things. *PLUS!* is an additional environment I put together that, primarily, enhances word processing, but includes so many other programs that it has gone way beyond. *ARCHIVER* lets me store MASSIVE amounts of information on disks. It also unloads such disks and does a pile of other functions. *DISK UTILITIES* is just what it says and is the best of all the disk utility disks I have encountered. *TIPS* lets you make banners, greeting cards, posters, etc. (slowly), but has provided the largest collection of graphic images (thousands) that have ever been put together for the TI. All of these images can be converted to *PAGE PRO* and *TI-ARTIST* formats (see below) for a humongous library. These images include fonts and frames as well as an alphabetical listing that prints out a huge text of pictures 40 to a page. *MUGLOADER* gives you some fabulous menu options. It loads a screen menu which lets you create and print directories, load more menus, read text files, load E/A and XB programs, and more. MAX-RLE loads graphics, colors them, prints them out, converts them from one form to another (*GRAPHX* to *TI-ARTIST*, for example). *DM-1000* is a super all-purpose disk manager (1000 times more useful than the disk manager cartridge, which may be how it got its name) that lets you manipulate disks and files in all kinds of ways, such as copy, move, format, delete, rename, protect, and so on.

All of the above can be gotten from user groups worldwide. Joining a user group is the best advice I would give anyone. I can't imagine how limited my TI opportunities would be without a user group. These can be joined through the mail. I belong to a few, including one in Australia, and my local MUNCH group in Worcester, Massachusetts. But all of the above Fairware and PD programs came from the Lima, Ohio group. (c/o Dr.^Charles Good, Box 647, Venedocia, OH 45894). Membership there of $15 a year is a best buy, newsletter is excellent, disk and TAPE libraries are extensive (and free to members). But any group, particularly a local with monthly meetings, is almost essential to anyone with an urge to find new ways to enjoy our computer.

Options are what we're talking about, and, while on the topic, I do not want to neglect the commercial enterprises that

have provided me with more options and with lots of that good old fun, which keeps TI my computer of choice in a world full of such seriousness and intensity and downright hostility.

Over all the years of writing columns about the 99, I have always voiced two major complaints: no good cribbage game and no decent *Printshop*-type software. I complain no more.

First, Arcade Action (4122 Glenway, Wawatosa, WI 53222) provides the best cribbage game you can imagine for the TI. For all you cribbage freaks (and there are many, according to the letters I've received) you can send AA $7 and get rewarded instantly.

Second, the *Printshop*-type software. Brøderbund made PS the single most-popular piece of software for any computer because it was 1) easy 2) fast and 3) gave professional results. It also had lots of utilities and fonts and images. It made banners and greeting cards and posters and (not very effectively) single-page thingies.

So, what kind of commercial software is easy, fast, and gives professional results? For me, *PAGE PRO*. I have only the original naked version, but it was the dream of a computer lifetime for me. It is easy. It is fast. The results are professional. And it's WYSIWYG (pronounced "wizzywig" and means What You See Is What You Get)! I understand the newer versions and the PP companions allow all kinds of things, including rotations for easy greeting-card making and a catalog function. Sounds good. But the original I have is perfect for newsletters, school publications (including those done entirely by students because of the ease of use), dramatic graphic letters, signs, posters, etc. The various fonts are easy to load and can be loaded into the page during creation to change the entire page's fonts in one swoop, making it very easy to test the right font for the right occasion. The graphics (Remember the thousands from *TIPS*? Well, there is also a converter in PP to use ARTIST graphics for thousands more. Also, there are PP Companions.) can be placed anywhere on a full page, can be surrounded by text of two sizes, two different fonts, anywhere on that same page, including right across graphics, and so on. Except for the word processor itself *(FUNNELWEB)*, I have found nothing so valuable to me as *PAGE PRO*. I use it even to write letters now.

Add to PP the latest *TI-ARTIST PLUS* (for the creation and manipulation of

art work) and you'll have a very effective publishing system. I have to add *CSGD* to that package for banners and labels, though I'm sure some of the utilities for PP and ARTIST will eventually permit these to operate out of the same systems.

I used to use only *GRAPHX* as my artwork program, but the latest ARTIST is much better in many, many way. Some friends of mine have written to me about *PICASSO*, but I have never seen any version of it to date. It has been highly praised by all users.

I found *The Printer's Apprentice* too difficult to work with (and impossible for my young students), and I have not seen the Comprodine "JIFFY" stuff, which I understand is excellent.

The only other essential commercial item necessary to my limited home/school computing is *TI-BASE*, the best data base of the six I have used on this machine. *BASE* and *ARTIST* are sold by Texaments, *PICASSO* and *PAGE PRO* by Asgard.

Now let's say you really don't need a large data base. Just something simple, for a class list. Let's say you only need a word processor for screen work (or you have a sidecar printer). And you like playing good games or want to teach your grandchild subtraction. And, let's say you are perfectly happy with simple block graphics or *LOGO* for art work. Well, all these things are still available in tape form. Let's say you just want this machine for the simple pleasures of life. Tapes, books of programs to type, cartridges all can be purchased (at a tiny price) or borrowed from user groups.

We're back to where we started. A TI with a TV set and a tape recorder and a book or two and some new, inexpensive cartridges (XB is under $30, *LOGO II* under $15, *Personal Record Keeping* under $10, *TI Invaders, MUNCHMAN, Parsec* for under $3, for examples) can still do a lot more for you and your desire for fun and learning than any number of IBMs, ATs, IIGSes, BLFSPKs, or any other very expensive non-option.

☙

If you have any questions or comments write to:

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If you haven't used a cassette system in a while, it can be tough to go back to it. All those hard-won lessons on how to deal with cassettes usually seem to evaporate in the flush of excitement you have when you get your first disk system. However much you may dislike cassettes, though, if you are like most users you may find yourself digging up your cassette cable at some point to help a friend, or when a stash of old software is found.

If this describes you, then this article may help the next time you need to load something from a cassette. This article was compiled from information supplied by Texas Instruments and Triton Products, as well as from our own experience in the subject.

Before using/loading the program:

Review the instructions that came with the software. Be sure that you have the hardware and software needed to load the program - if the game you are loading requires the *Tunnels of Doom* module, loading it through the Extended BASIC module will do little good.

If your tape recorder has a tone control, it should be set to the highest level (most treble). Your volume control should initially be set at the intermediate volume and adjusted as described below if the program doesn't load.

Once the proper volume has been found, you may want to mark the control in that position with paint, nail polish, or something of that nature. From time to time you may encounter a tape that doesn't load at your usual volume level. If this occurs, follow the instructions for adjusting the volume below depending on the nature of the loading problem.

If you are loading BASIC or Extended BASIC programs, type **OLD CS1** after selecting the language, and follow the on-screen instructions. With other modules (such as the *Tunnels of Doom* or *Adventure* modules), either select the CS1 option or enter the name CS1 if it

asks for the device containing the game or program, and then follow the on-screen procedure.

When you are prompted to press Play on your recorder, you will initially hear (through the TV or monitor's speaker) a period of silence, and then a rhythmic, odd-sounding noise that is actually the program being loaded. If all is normal, the computer will read in the program for up to several minutes, and when done, prompt you to stop the recorder. At that point, the program will automatically start, or if in BASIC or Extended BASIC, the computer will wait for you to type **RUN** and press the ENTER key.

If the program doesn't load properly, you'll get one of the following errors:

If the computer says "NO DATA FOUND" - This usually means one of two things

    (1) The volume was *too low.*
    (2) Your computer could not locate the tone that tells it to start accepting data (the long high-pitched beep at the start of the program)

If you heard the start tone and the sound of the program being read, your cassette recorder volume is probably set too low. If that is the case, turn it up a little, rewind the tape to right before the beginning of the sound, and try again. Repeat this procedure until you don't get the "NO DATA FOUND" error (note that sometimes you will get this error if the volume is set *too high*). If you **did not** hear the start tone or the program noise, check to see if you have the correct side of the tape playing, and that the tape was properly rewound. If that isn't the case, try advancing the tape a little and reading it again in case the program isn't at the start of the tape. Check to see if your television or monitor volume isn't turned off. Finally, if all else fails, try loading in a tape you know loads to make sure it isn't the connection between your computer and cassette recorder. If you can hear your test tape, but not the noise that should be on it, it may be blank and should be returned for replacement.

If the computer says "ERROR DETECTED IN DATA" - This usually means your volume is *too loud*. Reduce your volume setting and try again. Repeat this process, reducing the volume slightly each time, as long as you encounter the "ERROR DETECTED IN DATA" message.

If the computer gives you an error after you type "RUN" - Occasionally, after typing "RUN", you will get an error message, such as "MEMORY FULL IN XXXX", "INCORRECT STATEMENT", etc. Most commonly this is caused by either the wrong language or wrong peripherals. If you get this type of error make the following checks:

(1) Is the correct language being used?
(2) Is the Memory Expansion installed if required, and the expansion unit running?
(3) Is the disk system turned off for loading and running cassette software?

When the computer is properly set up, turn off the console, turn it back on, select the correct language and re-load the program.

If you have a defective tape - If, no matter how many times you adjust the volume up or down, the program will still not load, chances are that you have a defective tape. In this event, return the tape for prompt replacement to firm you purchased it from. If it's your own tape, you may be out of luck, though. ⤵

TI Watch

Things about a certain company we all know...

TI has a long and varied history. A few years back they produced an excellent pamphlet listing some of the highlights.

"Texas Instruments Inc. is a multinational, diversified technology-based company with corporate headquarters in Dallas, Texas, and more then 50 manufacturing plants in 18 countries."

"The company was founded in 1930 to provide contract geophysical services to the petroleum industry, exploiting its extraordinary technological innovation, the reflection seismograph. TI continues as a world leader in this field through its subsidiary, Geophysical Services Inc., but in 1946 added electronic systems manufacturing and entered a new era of dynamic growth. A listing on the New York Stock Exchange in 1953 provided the stimulus of broad public ownership."

"Now, Texas Instruments is engaged in the development, manufacture and sale of a variety of products in the electrical and electronics industry for industrial, consumer and government markets. These products consist of components (semiconductors, such as integrated circuits. and electrical and electronic control devices); government electronics (such as radar, infrared surveillance systems and missile guidance and control systems); and digital products (such as minicomputers, data terminals, electronic calculators and learning aids)."

"The company also produces metallurgical materials (primarily clad metals) for use in a variety of applications, such as automotive equipment, and provides services, primarily through the electronic collection and processing of seismic data in connection with petroleum exploration."

"The business philosophy of Texas Instruments emphasizes that the company exists to create, make and market useful products and services to satisfy the needs of its customers throughout the world. The following are highlights of TI's growth:"

1930 - Commercialized its invention, the reflective seismograph, and revolutionized petroleum exploration, Corporate name was "Geophysical Services", abbreviated as GSI.
1946 - Diversified by adding electronic systems manufacturing.
1948 - Delivered TI's first airborne radar system.
1952 - Entered the transistor business with a new corporate name: "Texas Instruments Inc."
1954 - Became the first company to mass-produce germanium radio transistors; developed first commercial transistor radio; introduced the first commercial silicon transistor - the type required in space and military systems.
1958 - Announced TI invention of integrated circuit, which provides the basis for virtually all modern developments in electronics. Introduced first anti-radar missile.
1961 - Introduced first system to use integrated circuits: a miniature computer for the U.S. Air Force.
1965 - Developed clad metal for coins. Invented the semiconductor thermal printer.
1967 - Introduced TI invention: the world's first electronic handheld calculator.
1969 - Announced first data terminal to use thermal printer, the Silent 700.
1970 - Invented the "single-chip microprocessor", which today is the "brain" of a wide range of products.
1971 - Commercially introduced the microcomputer, or "miracle chip", a TI invention that includes all the elements of a complete computer in one integrated circuit.
1972 - Introduced first consumer oriented product, DataMath™ handheld calculator priced at $149.95.
1973 - Introduced first 4K bit RAM-chip, setting industry standard.
1975 - Introduced first 16-bit microprocessor family to use memory-to-memory architecture, increasing performance (the 9900).
1976 - Developed Solid State Software™ plug-in modules for pocket calculators. Introduced first 32K EPROM.
1978 - Introduced revolutionary Speak & Spell™ learning aid using synthetic

Barry's Corner

By Barry Traver

Guest Commentary
by Garry Christensen

Some time ago there appeared in almost every newsletter throughout the TI world, a number of articles condemning pirated software. These articles usually spelt out in no uncertain terms that if pirating was to continue then there would be no future for this particular computer. These articles have continued to appear intermittently in newsletters since then but the incidence has dropped off to the point where I cannot remember the last newsletter that contained one.

I wonder why that is. It caused me to take a closer look at the practices of members in this group and if this group is typical, the reason becomes clear. The incidence of pirating has dropped to a small fraction of what it was in years past. I remember once where someone would get a new programme and there would be a mad rush at the next meeting to copy it. That is replaced now by members rushing to purchase their own copy.

Think of the last time that you pirated a programme. The longer standing members would remember a time when that question would be answered with a couple of weeks or months. I will admit that I was also guilty of that crime but now, I truthfully can't remember the last incidence. It seems that I am not the only one.

Let's take this another step. When was the last time that you went through your library and erased all those old pirated disks. How many did you copy that you haven't really used. Would you miss them. If you would, why not buy one to replace it. New versions have probably been released since then anyhow so you may be missing out on some good features.

To the programme librarians, not only our's but to all those who read this newsletter. Do you have pirated software in the group library. Do you think that it should be there. Admittedly, some commercial software is purchased by or donated to the group. This software is great because it allows you to demonstrate it to the members before they buy it and I congratulate you for not distributing it.

It seems that the incidence of piracy is on the decline, not only here but in other groups as well. From those that I have talked to it seems that this trend of responsibility is occurring throughout Australia. I feel that I can send a sample of software that I intend to sell to others for testing and be confident that it will not be distributed aimlessly.

Is this occurring overseas as well. I can't answer that directly because I do not correspond with enough of them to be able to tell but I do know that those articles are not appearing in new..letters any more. Does this mean that a new feeling of fair play has descended upon the TI community. I hope so.

There are of course those who insist in resisting this change. The recent problems with *Hardmaster* being noted in particular. It seems to me that those numbers are falling fast and I look forward to a time when writing software for the TI will almost pay for the work that goes into it.

Congratulations to all the users of the TI99/4A and Geneve. Its great to be part of a close, trustworthy and responsible community.

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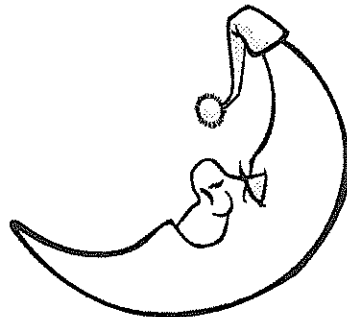
Magazine Support to start Soon

Like all divorces, it was messy. Just a few months ago *Computer Shopper* bid fairwell to its TI-99/4A (as well as C64, Atari, Adam, CP/M and Sinclair) readers, or rather told them all to 'buy a real machine'. Not-so-subtle suggestions aside, they essentially gave the boot to tens of thousands of dedicated users, and thousands more that enjoyed the multi-computer atmosphere of the periodical (interestingly enough, the TI Forum column had long been one of the highest rated articles in the magazine - read by 30-40% of subscribers). While both *MICROpendium* and *Reflections* have benefitted from new submissions from TI Forum columnist Barry Traver, both magazines don't enjoy the reduced (now non-existent) newsstand coverage the TI-99/4A now receives. However, the nascent *Computer Buyers Guide*, available in some newsstands, has decided to pick up all of the now-abandoned orphans, including our own. While decidedly not as heavy as *Computer Shopper* (literally and figuratively), *Computer Buyers Guide* benefits from an aggressive stance in the crowded computer magazine market, cheap ad rates, and by not being owned by Ziff-Davis. If you don't see *Computer Buyers Guide* at a store near you, ask for it by name. Otherwise, to subscribe, send your name and address, and $12 for 12 issues to: *Computer Buyer's Guide*, P.O. Box 55886, Birmingham, AL 35255. Or call 1-800-366-0676.

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