ATARI INTERFACE

VOLUME 4
MAR 1992

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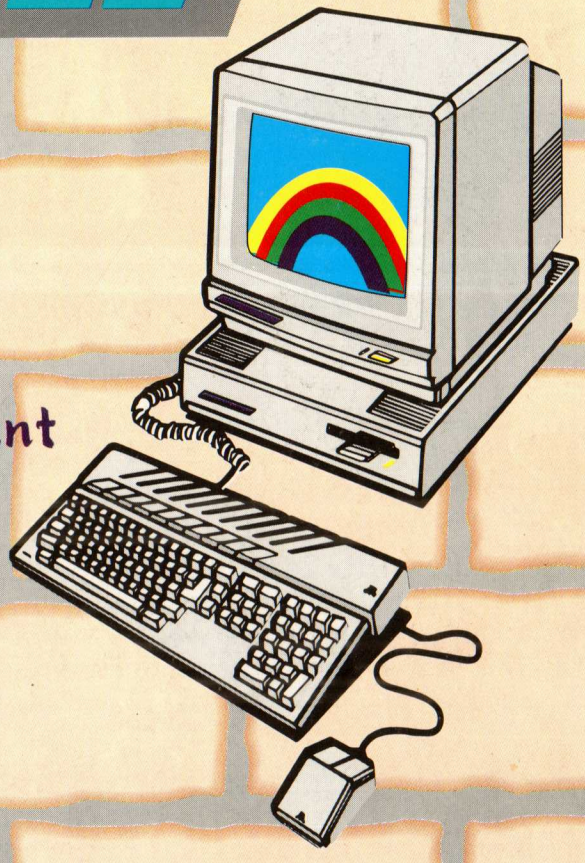

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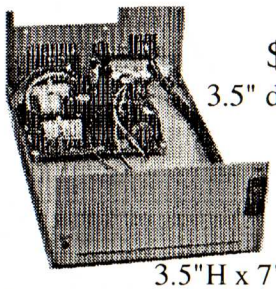

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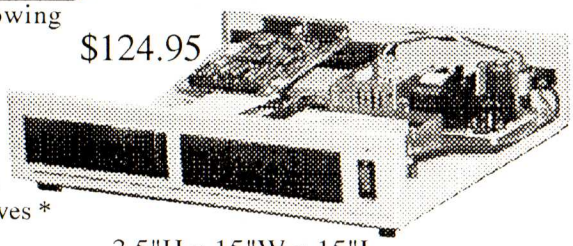

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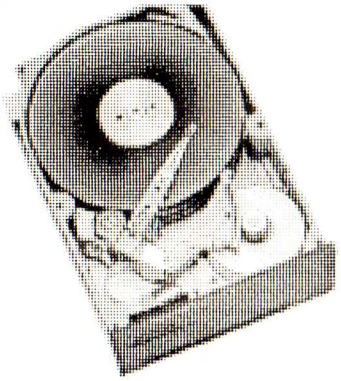

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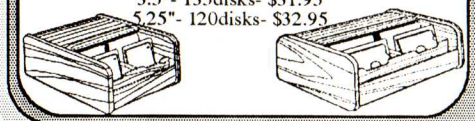

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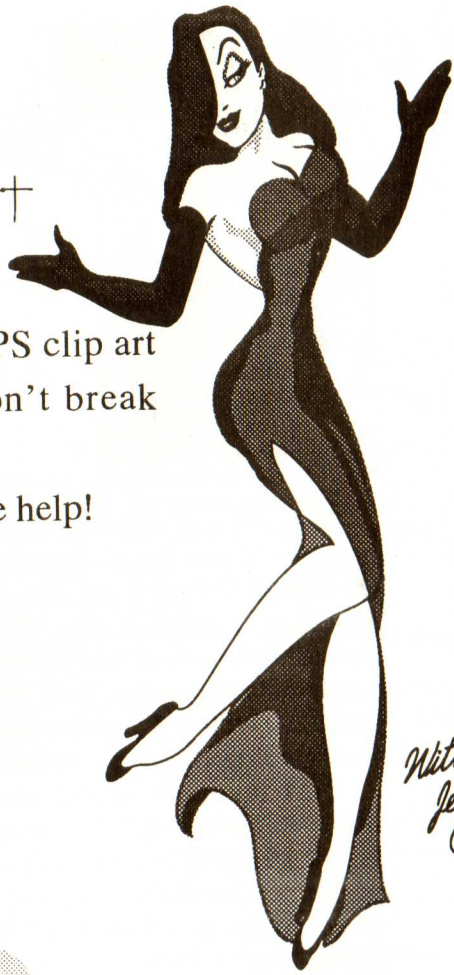

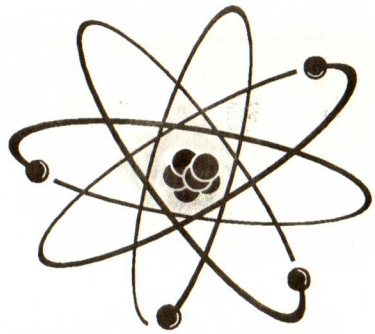

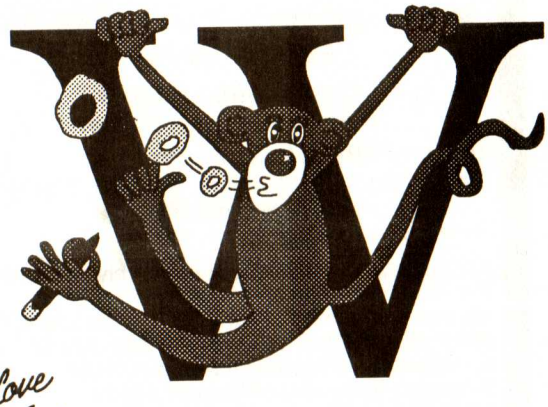

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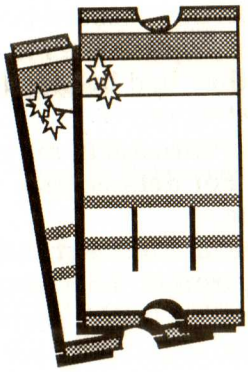

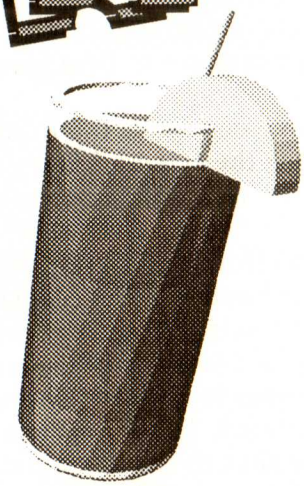

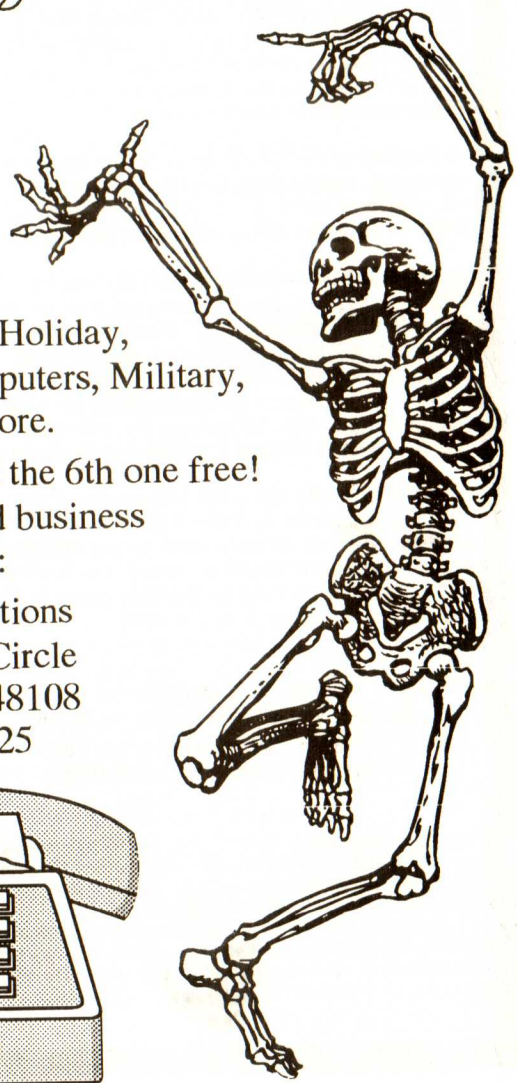

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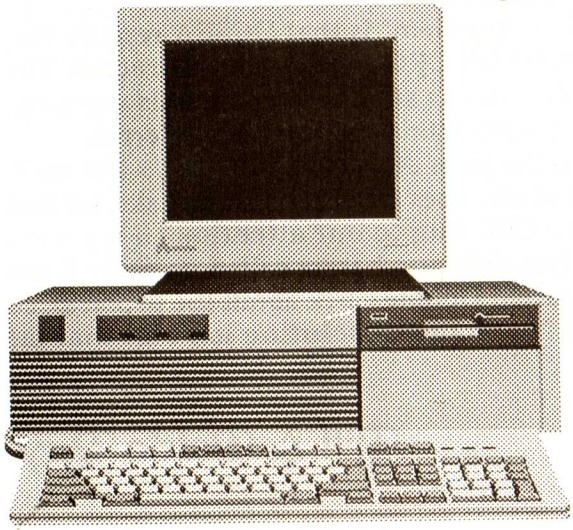

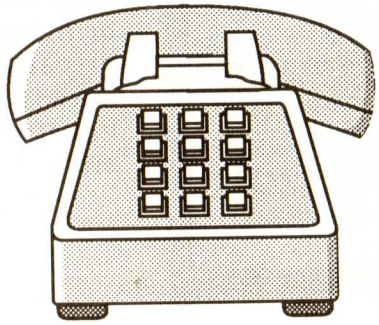

ATARI INTERFACE

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Editorial Ramblings

The focus of this month's issue is Desktop Publishing, one of the areas Atari has recently focused on for increased US support. The other major niche market for Atari is MIDI music. While they had been letting their US inroads in this market deteriorate in the recent past, indications are that Atari is once again moving strongly in the music industry. For details, read the Bulletin Board column in this issue.

Club response to our new format for the club listings has been overwhelmingly positive. This month, we've adopted yet another suggestion from a number of clubs. The clubs are now organized in the back by state, making it easier for readers to find local user groups.

In the next few months, we expect the number of Participating Clubs to break the 100 mark! (We're currently at 94 and many more clubs have recently contacted us.)

We've gotten a few calls from purchasers of recent ST Disks of the Month who have experienced a couple problems with the DCSEA self-extracting archives. First, not all the files contained in some of the archives are being extracted. This seems to occur whenever files of a certain size are encountered. To get past this problem, simply re-extract the files to the same path and answer "n" when asked if you want to overwrite the files already extracted.

The second "problem" is that DCSEA reports that very large files fail CRC check when extracted. The solution to this one is simply to *ignore* this warning. The files are perfectly fine and run without error.

Thanks to the guys at Suzy.B.Software, a PD mail-order firm that also uses DCSEA on their disks, for first bringing the CRC bug to our attention so we were prepared when disk purchasers called us. Suzy.B has already contacted Double Click about the problem, so hopefully a "permanent" solution isn't all that far away.

Bill & Pattie Rayl

Volume 4

ATARI INTERFACE

Your Connection to the User Community

March 1992

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On the Cover

DTP Building Blocks:
Graphic background from Soft-Logik's Image Club collection.
Clip Art from Computer Safari's Clipables collections.
Converted Mega ST system, courtesy CodeHead's Avant Vector.

From The Reader's Viewpoint

Dear AIM:

In response to Jerry Bridgman's article "Shaded 80-Column Fonts," I'd like to answer a couple of his questions.

First, "How is it possible for the XEP-80 to produce a higher resolution mode through the joystick port."

It doesn't matter whether it is through the joystick port, the SIO port, the PBI port or as a mode in the computer. The normal video output only has 320 dots across the screen. The XEP80 *hardware* does 640.

Divide by 80 and you get 8 dots per character, same as the standard 40-column mode. The 8-bit hardware can't generate anything higher, as this would require at least 16K of RAM, the total memory in the early models (and it would need a video oscillator twice the current speed, or 7.16 MHz).

The second reply has to do with saving RAM for a character set under BASIC and running into a screen display problem with Turbo BASIC.

The problem is not with the language, but the hardware. Jerry is trying to open a Graphics 15 mode screen. This takes 8K of RAM for the screen and display list. The Antic processes data to be displayed, but it can only count up to 4,095. This means it can't count over any 4K boundary. A "Load Memory Scan" command must be used to restart Antic at the next 4K boundary.

Since the OS is written to set up the screen on 4K boundaries, dropping the safe RAM by 1K won't work. If someone needs safe RAM when using an 8K screen, they lower RAMTOP(106) by 16 pages (with Atari BASIC, this changes to 144 pages). The 4K space is then used for GR.0 screens, character sets, data and assembly routines. You can even locate Player/Missile graphics data there.

Or, you can set up GR.15, then lower location 106 to 124 and put the font under the Graphics screen at Page 36, all in safe RAM. All of these numbers are different for Turbo BASIC as it loads into low RAM as a program rather than high RAM as a cartridge.

The original 8-bits had two plug-in cards—the Bit 3 (excellent) and the Austin-Franklin (excellent, but it overheated). The XEP-80 is the only full view type I know of for the XL/XE.

When I write software, I generally use multiple screens to get around not having 80 columns. This is usually fine, as the 40-column screens are easy to read and the user is not faced with too much data to sort through.

I use Paperclip for word processing, since it lets me work in a 40-column window on a virtual screen up to 132 characters wide. The preview window lets me scroll around the whole page.

Rick Detlefsen,
Austin ACE

Dear AIM:

Hi! I'm a German exchange student living in the USA for a short period of time (till next July) to improve my English. I'm also a great Atari ST fan and member of a famous German Atari ST Demo Crew (named S.B.F.).

Where I'm coming from, the PC (IBM and compatibles) is becoming the number one computer. The Atari ST and Commodore Amiga are sharing 2nd place, followed by the C-64. In Europe, we have a real ST scene, especially in France, the UK and Germany. Europe is still a very good source for high quality software like games, professional tools and great Public Domain software.

About S.B.F., we are one of more than a hundred groups all over Europe well known for their demos. By demos, I don't mean demos of application programs like 1ST Word Plus or Tempus... we're making demos to show what the Atari ST really can do, without additional hardware. You only need an ST and a color monitor.

Some examples include perfect vertical and horizontal hardware scrolling, 4096 colors at the same time on the screen and 4-channel (stereo) sound like the Amiga!

You ever heard about the Overscan hardware modification which makes it possible to use the full screen of the monitor without the ugly borders? Nowadays, good demos are showing this is possible without expensive hardware.

All this and much more is happening with Assembly language and a very good knowledge of the internals of the ST. We, the S.B.F., are swapping a lot of this demo-stuff and other very good PD software (also made by Demo groups). For example, we have an excellent 4-channel stereo soundtracker and more than 100 disks filled with all kinds of digital music for this soundtracker.

We want to spread this PD software without making a profit because one of our goals is to show other ST users what STs can really do so they stay interested and don't change to other systems. It's really fun to collect these demos. Most of them are pretty good entertainment, because it's an embarrassment for a group to produce a boring or badly made demo.

My big request to all ST owners in the Melbourne, Florida, area is to contact me and help spread this software, because I didn't have the chance to bring my ST to the US. If anyone can help me, I promise you

the newest demos and other very good PD software for *free!*

My address is Heiko Rödelsperger, c/o Konig family, 655 Ebony St., Melbourne, FL 32935.

Dear AIM:

I'm a devoted Atari 8-bit user who recently discovered your quality publication through my local user group, SDACE. I was a member of SDACE some years before, but I allowed my membership to lapse when the group began to orient itself to the 16-bit machines.

Late last year, I read an article about SDACE in a local computer magazine which mentioned the existence of your publication and its articles of interest to Atari 8-bit users. I have since rejoined SDACE and am now pleased to receive AIM through my membership. It has helped to fill in the void left by the demise of Analog and Antic magazines.

I am very impressed with your efforts and am writing to inquire as to the availability of back issues. I am interested in obtaining back issues because I feel AIM will be a worthwhile addition to my collection. If back issues are available, please give me any information I need to order them, such as price and issues available. Thank you.

Jim Thompson
San Diego, CA

[Eds: Jim—We're pleased that you like the magazine and that we helped reunite you with your local user group. As for back issues, we do have some, but not all of our past issues are available. We're (slowly) putting together an inventory of what is available (including Michigan Atari Magazine issues back to December 1987). Along with this, we are doing an index of all articles appearing in those issues. As soon as these monumental tasks are completed, we will be sending these lists to you (and others who have requested it). Then, you can order back issues from us for what is available or xerox copies of articles in magazines not on the back issue list.]

Dear AIM:

I have just finished reading my first copy of Atari Interface. As one who will probably never go beyond an 8-bit computer, I was pleased to see the large amount of space devoted to the classic Atari. My only objection is that most of the information concerns games and expansion.

Many times I have visited offices and looked at an expensive computer system with the cursor winking at the operator. If I ask what the machine will do, they usually show me one program that they punch up and tell me how they use it. Beyond that, they know nothing about the use of the machine.

I purchased my 800XL because when I visited a user group, I found that several members were using their equipment to run a business.

I have adapted my equipment for use in running several small water systems. There are several thousand of these systems in operation that should be using the same computer system. I have made several presentations to this effect, but no one has ever followed up on the leads I gave them.

I would like to see Atari Interface publish reports by individuals who are using the Classic for business.

My Classic contains two XF551 drives. I have obtained SpartaDOS X and several other DOS programs to use these drives, but to date, none of them have worked to my satisfaction. Can anyone suggest a DOS that is as simple to use as 2.5 that can be used with the double sided capability of the XF551?

Harry Wolferth

[Eds: If you're looking for a menu-based DOS fully compatible with DOS 2.5, MyDOS is an excellent choice. It's available on the online services and many BBS systems or user groups. The author is Bob Puff, president of CSS, and you can contact him directly at (716) 586-5545.

ATTENTION 8-BIT USERS!!!

Do you bemoan the loss of *ANTIC* and *ANALOG?*
Do you wish there were still an *8-Bit only* magazine just for the "classic" Atari 800/XL/XE machines?
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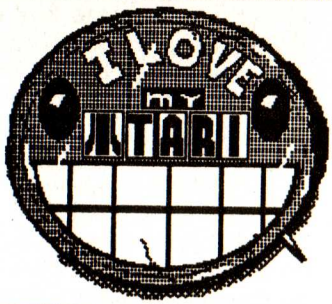


ATARI BULLETIN BOARD

Greg Pratt, President of Atari's Computer division, resigned in January from his position at Atari to join up with Creative Labs, maker of the Sound Blaster card for PC systems. Don Mandell, VP of Sales, has taken over most of Pratt's responsibilities. According to sources at Atari, Pratt's leaving should in no way adversely affect Atari's current growth efforts.

Atari has officially announced the signing of a deal with the General Electric Service Center network. Through this agreement, Atari owners will be able to have their computers repaired at GE Service Centers across the US and Canada. Product service programs are currently being developed jointly by Atari and GE and are expected to go in effect sometime in March. The program will service MIDI musicians and dealers, as well as provide for mail-in service with 1-day or 10-day turnarounds. There are 250 GE service centers in the US and Canada.

TOS and 1.44MB Drives

Bill Rehbock announced that Atari is making all of the released TOS development information available for purchase by the general public. "We are making the kit available to fulfill the needs of programmers who already have purchased a third-party development package, Atari owners who are curious about the 'nuts and bolts' of the operating system, and anyone else who wants to have a detailed understanding of TOS software development," Rehbock said.

Users can purchase the entire documentation package for $150. This includes one year of technical support from Atari via the private Atari Developer RoundTable on GEnie (online time costs not included), six issues of the bi-monthly developer newsletter ATARI.RSC and one year of ongoing developer kit upgrades. If you wish to renew after one year, the fee is only $40.

For information on only certain aspects of Atari TOS computers, Atari is also selling sections of the documentation separately. Everything from back issues of the developer newsletter (since 1985) to release notes for the new STBook is available. For more information, contact Gail Bacani at Atari Corp., 1196 Borregas Avenue, Sunnyvale, CA 94086, phone: (408) 745-2022.

TOS 2.06 chips are now shipping and dealers should have them by the time you read this. For Mega/STE owners, the upgrade is as simple as taking the old TOS chips out and popping in the new ones. A few STE owners may have a slightly more complicated installation.

Atari's Bill Rehbock said,"These are 32-pin EPROM packages. There are some STEs with 28-pin masked ROMs that are either soldered in or in 28-pin sockets that will have to be removed and 32-pin sockets [must be] installed. I am giving advanced notice to dealers and users so that people aren't surprised when they open up their STE to 'pop the chips in.' A very good percentage of STEs in the field have the 32-pin EPROMs, and it will be just a swap. When going from the 28-pin package to the 32-pin package, there are solder pads that need to be altered. Instructions will ship with the ROMs."

Retail pricing on the two chip set is $60. (Owners of ST and Mega computers who wish to upgrade to TOS 2.06 should contact CodeHead Software to purchase their TEC board. Call them at 213-386-5735 for details.)

High density (1.44 meg) floppy drive kits are also now shipping from Atari for MegaSTE and TT owners! The pricing is $139 for the MegaSTE and $149 for the TT. The kits include 1.44MB floppy drive, Atari's AJAX high density controller and the corresponding TOS, either 2.06 for Mega/STEs or 3.06 for TTs. For more details on the TOS or disk drive upgrades, contact your local Atari dealer.

Atari Music

Atari announced at the NAMM show that it has formed a new business division, called Atari Music. This division is headed by James Grunke and indicates Atari's serious commitment to building a better relationship with MIDI developers and retailers. Public relations for Atari Music is being handled by D.K. Sweet.

James Grunke stated, "This division consists of a cooperative group of dealers, developers and sales representatives. The function of this group will be marketing, sales and development support. The first salvo we're firing is the FOSTEX Co-op ad. This co-op ad combines C-Lab, Dr.T's and Steinberg/Jones along with FOSTEX and Atari in a major advertising, Public Relations and sales effort."

FOSTEX Support

The deal with FOSTEX is an important one which breaks new ground for Atari in the MIDI industry. Using FOSTEX multi-track recorders, Atari computers can now be used—via sequencing programs—to control all the recorders functions from *within* the sequencing environment.

Steinberg has upgraded its CUBASE sequencing software to use the remote control capabilities of FOSTEX's G16 and G24 multi-track recorders. CUBASE now can control not only the basic G16/G24 tape functions like play, start, record, fast-forward and rewind, but

you can also auto-locate to any position, program punch-in and punch-out markers, strip SMPTE to tape and put tracks in and out of record.

Not to be outdone, C-LAB Software announced integration between Notator/Creator 3.1 and the new FOSTEX machines. Notator/Creator, with over 60,000 users worldwide, is available exclusively for the Atari series of coputers, and provides integrated realtime sequencing and notation capabilities. With version 3.1, the analog recording of vocals, guitars, bass and more become controllable via the digital world of realtime MIDI sequencing. Once connected, the user need never touch the FOSTEX recorder again, except to change a reel of tape.

C-LAB Software is distributed in the US by Ensoniq Corp. For more information, contact them at 155 Great Valley Parkway, Malvern, PA 19355 (215) 647-3930. Steinburg/Jones is at 17700 Raymer, Suite 1001, Northridge, CA 91325, phone: (818) 993-4091.

Also announced at NAMM was the formation of the Music Developer Council, apparently to combine efforts with marketing and development directions.

James Grunke added, "Another major, significant development is Mike Groh's organization of a National Sales Force. This will be a major benefit to all the Atari Community. Many of the reps have extensive music and pro audio backgrounds. And we're looking to cross pollinate DTP and other markets within the music channels."

Calamus SL

ISD Marketing has announced the release of Calamus SL. SL marks the transformation of Calamus from a desktop publishing program to a DTP environment. With its new modular design, Calamus puts you in the center of an ever-expanding universe of DTP tools.

The modular concept means you can purchase exactly what you need today, with the knowledge that additional modules are available when and if you require them.

The basic Calamus SL package contains a new 600-page manual and eight standard modules. For a limited time, ISD Marketing is bundling the PKS Write wordprocessor module and Raster Generator graphics module with the package. Additionally, ISD will throw in two AGFA Compugraphic font families—CG Times and CG Triumvirate (or equivalent if you already own those).

Available for separate purchase are the Speed Line (auto-tracer), Color Separation and Vector Graphic Editor modules. Speed Line brings monochrome autotracing to Calamus, converting raster images into vector graphics and costs $49.95. The Color Separation module supports CYMK, CMY and IHS color separation, as well as the ability to support new models such as Pantone, HKS and Truecolor, once available. This module costs $49.95. The Vector Graphic Editor module allows creation and editing of monochrome or color vector graphics, editing of polylines for irregular text flow and more and costs $99.95.

Calamus SL has a retail price of $795. Registered Calamus 1.09N owners can upgrade for $200. For more information, contact ISD Marketing, 2800 John Street Unit # 15, Markham, Ontario Canada L3R 0E2, phone: (416) 479-1880.

Crazy Dots

Gribnif Software has announced they will soon be selling the "Crazy Dots" video display adapter, developed by TKR in Germany, for the Atari Mega ST, MegaSTE, and TT. The card supports resolutions up to 1,664x1,200 pixels, and can display up to 256 different colors (from a palette of 16.7 million colors) or gray levels at once. A variety of VGA and Multi-sync monitors can be used with the adapter. A "Video Application Slot" allows for future expansion options such as Genlocking and Truecolor display.

Crazy Dots is available in two models. The Megabus model is designed to fit into the original MegaST computers and costs $949. The VME model for MegaSTE and TT computers is available for $999. Gribnif Software, PO Box 350, Hadley, MA 01035, phone: (413) 584-7887.

New Taylor Ridge Book

Taylor Ridge Books has announced release of The ST Assembly Language Workshop, Volume 1. The book is a novice's guide to assembly language programming on the Atari ST line of computers and is written by Clayton Walnum, author of C-manship Complete.

The 260-page book covers the basics of assembly language programming, programming style and technique, a complete 68000 instruction reference and more. Volume 2, scheduled for release later this year, will cover GEM programming and Volume 3 will tackle various advanced topics.

The ST Assembly Language Workshop, Volume 1 comes with a disk containing all sample programs and assorted additional files. It is priced at $24.95, plus $3 shipping and handling. Taylor Ridge Books, PO Box 48, Manchester, CT 06040, phone: (203) 643-9673.

CorCom Folds

CorCom Software Products, producer of Abbreviator ST, has closed their doors. Rather than let a good product die unsupported, Kyle Cordes has turned marketing of Abbreviator ST over to It's All Relative. IAR is the producer of It's All Relative, a popular geneology program for the ST. IAR, 2233 Keeven Lane, Florissant, MO 63031.

ST Informer Split

Most of the ST Informer staff has left the magazine to create a new publication, called Atari Advantage. Apparently, the dispute was over who actually owned ST Informer. Brian Gockley, of Computers Etc. in Connecticut, has replaced Mike Lindsay as ST Informer's Editor-in-Chief. The first issue of ST Informer with the new staff has already been released. Informer has changed to standard magazine format rather than its old tabloid newspaper format, but is still printed on newsprint (similar to AtariUser).

As for Mike Lindsay and the other former Informers, Atari Advantage is scheduled to go to press on Feb. 15th. Atari Advantage is offering a free sample copy to anyone who writes them at Atari Advantage Magazine, P.O. Box 803, Merlin, OR 97532. Subscription rates to Atari Advantage are $22. Call (503) 476-3578 for details.

Right on Target

David Plotkin
Contributing Editor

As with anything else, you need to learn how to be an effective desktop publisher. This takes training and practice.

When I was a teenager in the 1970's, I was a member of an Explorer Post in Monterey, California. For those of you who aren't aware of it, the Explorers are part of the Boy Scouts of America. They are older scouts interested in directing their efforts at some special skill or specialty. In the case of Explorer Post 70, the specialty was photography.

To raise money, each summer "Photopost" 70 did a yearbook for the local Boy Scout camp where I taught survival skills and archery. We would get pictures of the various activities around camp and group shots of all the Boy Scout troops who came up to stay a week at the camp. We took orders all through the summer from the scouts. Several weeks after the end of the summer camping season, we would mail out the yearbooks to our customers.

Those weeks between the end of camping season and the mailing out of the yearbooks were extremely busy, as we put together the yearbooks and got them printed. Since I was one of the officers of the Post, a lot of that work fell to me. It was my first exposure to publishing, and it wasn't a whole lot of fun.

Not only did we have to develop and print hundreds of pictures, but we had to borrow time at a printshop to use their light-tables. These are large translucent sheets of glass with a light behind them. It was on these tables that we did our paste-up. We would laboriously type out the text in columns, then arrange it on the page and paste it in place.

Of course, sometimes we "missed" when we set up the column widths and would then have to retype the text in narrower or wider columns. Once this was all done, we had to paste everything together, page after laborious page.

The whole process was time-consuming and tedious. I remember wondering at the time whether it was worth it—there must be an easier way to earn money! Selling candy, maybe.

Obviously all this took place before the advent of personal computers. The phrase "desktop publishing" came about to describe the process wherein almost everything that had formerly been done by hand could now be done by computer. Desktop publishing allowed the computer to do the tedious and laborious (there's that word again) parts of the layout, while you concentrate on the creative portions. Changing a layout, narrowing a column, moving a chunk of text from here to there became a matter of point-and-click.

People who have come on the publishing scene since the early 80's take this sort of thing almost for granted—those of us who tried publishing prior to "desktop" publishing know just what an incredible boon computers are.

Hardware...

As with many other tasks that have been computerized, desktop publishing has proceeded through a number of phases, and we are by no means done yet. The phases could, in large part, be measured by the power of affordable computers and the capabilities of affordable printers.

With the early 8-bit computers, such as the Atari 400/800/XL/XE series, desktop publishing was pretty limited. You could select some fonts and lay out single pages for posters and cards, but multiple columns and other sophisticated effects were out of reach. Software such as Typesetter, Pagemaker and The PrintShop were available to do page layout.

The next big phase came about when computers took the big jump from 8-bit processors (such as the 800's 6502) to 16-bit processors (such as the ST's 68000). Not only did the processing power of

these new machines allow for the massive calculations necessary to handle things such as graphics and multiple columns, but the new processors also could address much more memory.

Desktop publishing requires large amounts of memory to hold the information and display it on the screen looking as closely as possible to the way it will print out. The more powerful processors could also handle the higher resolution graphics necessary.

Of course, with desktop publishing, more is always better—more memory, bigger screens, higher resolution, more fonts. Serious desktop publishers have purchased the bulk of the 19" Moniterm monitors that can show two pages at once. Contrast this to the 12" monochrome monitor, that shows only a portion of one page at any given time. Moniterm monitors only work with Megas, so a typical ST desktop publishing setup consists of a Mega (with 4 meg of memory) a Moniterm monitor, and a laser printer.

Let's talk about laser printers for a moment. Lasers are really the *only* choice for desktop publishing. Their 300 dots/inch resolution looks almost as good as the professional typesetters such as the Linotronic 1200. They are also generally pretty fast—though they slow down considerably when you add graphics to a page. However, they are faster, quieter and of higher quality than dot matrix printers.

The real problem with laser printers for a long time was their cost. Several years ago, a very basic laser printer cost around $2000. In order to do a lot of graphics, though, you had to add memory to the printer. This is because a laser printer must compose the entire page in its own memory before it prints it out. About 2.5 megs is necessary to do a full page of graphics at 300 dots/inch. The laser printer must also have its own microprocessor. This cost put a real laser out of the reach of most Atari desktop publishers.

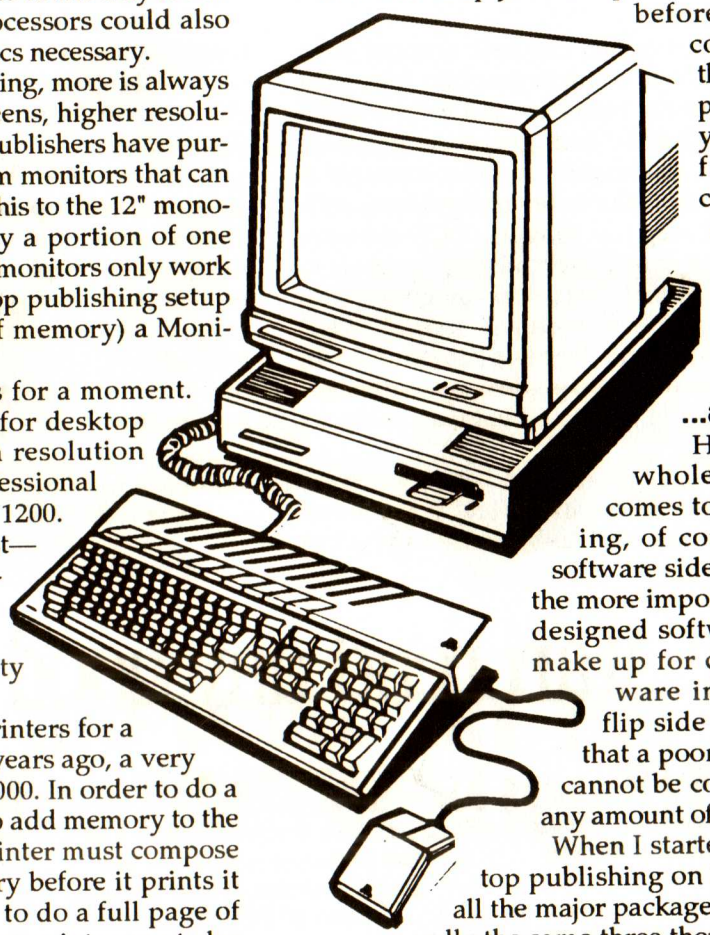
Then Atari came along and announced a "low cost" laser printer. They got the cost down by using the microprocessor and memory in the ST instead of duplicating these items in the printer.

As with most of the rest of Atari engineering, they got it *almost* right. The problem was that, with this design, the Atari laser printers can work only with Atari computers. Then, there was the nonsense that the laser printer had to be on all the time, even when you weren't using it. And, of course, they could only work with Megas with lots of memory, of which there weren't that many around at the time.

At any rate, there was a lengthy delay between announcement and delivery of the laser printer—just long enough for the cost of other laser printers to come way down. This occurred because of a number of manufacturing advances that lowered the production costs of these printers as well as the fact that both memory and microprocessor costs took a sudden nosedive.

Today, you can buy a fully equipped 8ppm laser printer for under $1000. The HP DeskJet (quiet, 300 dots/inch, but slower than a laser) sells on the street for $399. The advantage of an HP laser over an Atari is the fact that you can hook other computers up to it and it works with 1 and 2 meg Ataris.

It also frees up your computer to continue working before the printing is complete because the printer does the page set up outside your ST. Drivers for HP and HP compatible lasers are available for all ST Desktop publishing packages available today.



...and Software

Hardware is not the whole picture when it comes to desktop publishing, of course. In fact, the software side of things is by far the more important. An elegantly designed software package can make up for quite a few hardware inadequacies. The flip side of this, though, is that a poor software package cannot be compensated for by any amount of hardware!

When I started out doing desktop publishing on the ST, I looked at all the major packages. There were basically the same three then as there are now: Timeworks Publisher ST, Soft-Logik's PageStream and Calamus. My choice was Publisher ST—it combined an ease of use that Calamus lacked with a stability (no crashes) that PageStream couldn't touch.

But, where Publisher ST has been unchanged in the years it has been available, the developers of Calamus and PageStream have continued to improve their packages, adding features, fonts, graphics, etc. Both are now powerhouse packages. PageStream in particular has advanced to the point that there are things that are impossible or difficult to do with other packages (including Mac and PC packages) that PageStream handles with ease. I will not go into the details here (this is covered very well in other places in this issue of AIM), but it is this software excellence that has brought the ST to the forefront of desktop publishing and kept it there.

Other Considerations

As the ST and its more capable brother, the TT, have matured, there has been a general advance in the

level of power present in the desktop publishing community. No longer is the "normal" computer a 520 or 1040. Two meg and 4 meg (and bigger, with the TT) machines abound. So, too, do accelerators, with the new 68030 accelerators starting to take a real foothold. What this advancing level of power has done is make it more reasonable to write and market software that requires the extra power.

Examples of this abound. The new scanner software makes it possible to bring in graphics for use in your publications. But the hardware and software necessary to handle 300 dots/inch greyscale graphics (such as photos) is considerable. Another example is Migraph's OCR (optical character recognition) software that requires 2 meg just to work. OCR software takes scanned images of text (which is just graphics to the computer) and attempts to convert those graphics into actual ASCII text. Over the last few years OCR has gotten better and better, and the price has come down to be within reach of the average desktop publisher. OCR is a boon to people who need to bring in blocks of text where the only version is a paper copy.

Some of the new graphics manipulation software that is being imported from Europe lets you convert between graphics format (such as bit images to vector) as well as do sophisticated drawings. CodeHead's Avant Vector is a good example of this. Again, significant amounts of memory are needed, and it doesn't hurt to have a fast processor either. As I said earlier, however, these commodities have become less and less rare in the ST community at large, and in the desktop publishing community in particular.

I have one last thought to leave you with before turning you loose. There is a critical piece that goes with desktop publishing that has nothing to do with either hardware or software. That piece is expertise—"knowhow."

Don't be under the impression that you can become an expert desktop publisher by buying the hardware and software. You can't. In fact, you may have seen the work of people who erroneously believed this to be true. As with anything else, you need to learn how to be an effective desktop publisher. This takes training and practice. The computer—whether an ST or another one—is just a tool to automate the difficult and tedious parts of the job. It is no more a substitute for knowing what you are doing than having a word processor is a substitute for being a good writer.

See you next month!

Has your Atari read any good books lately?

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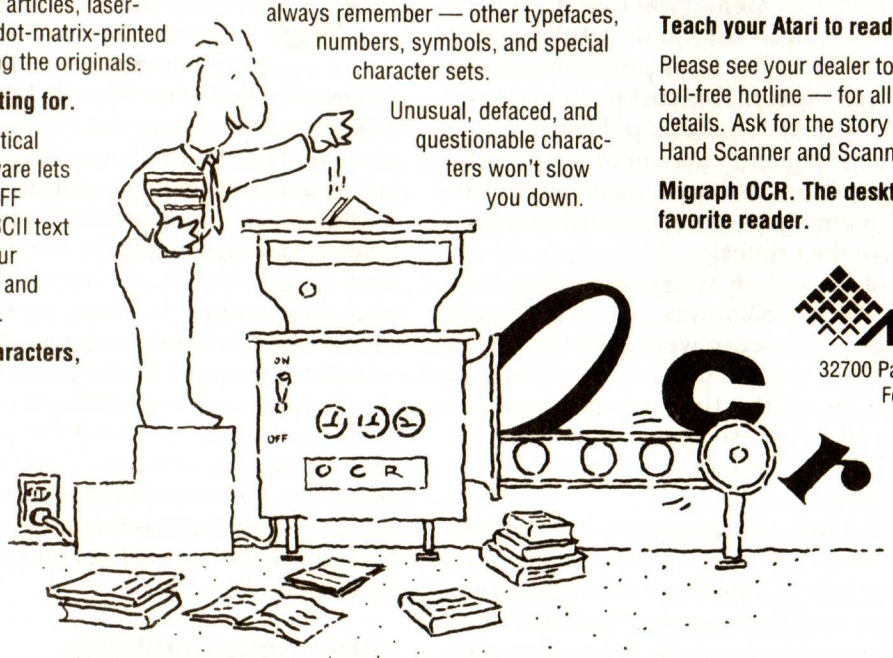

Migraph OCR uses context-sensitive lexicons (for English, French, Dutch, and German) to make intelligent, time-saving decisions as it processes your text.

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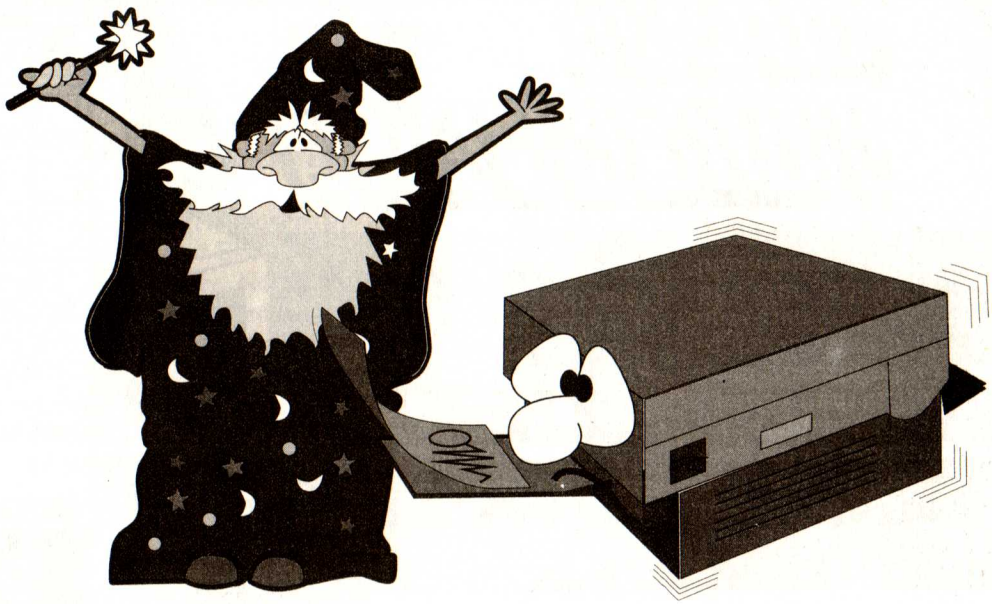

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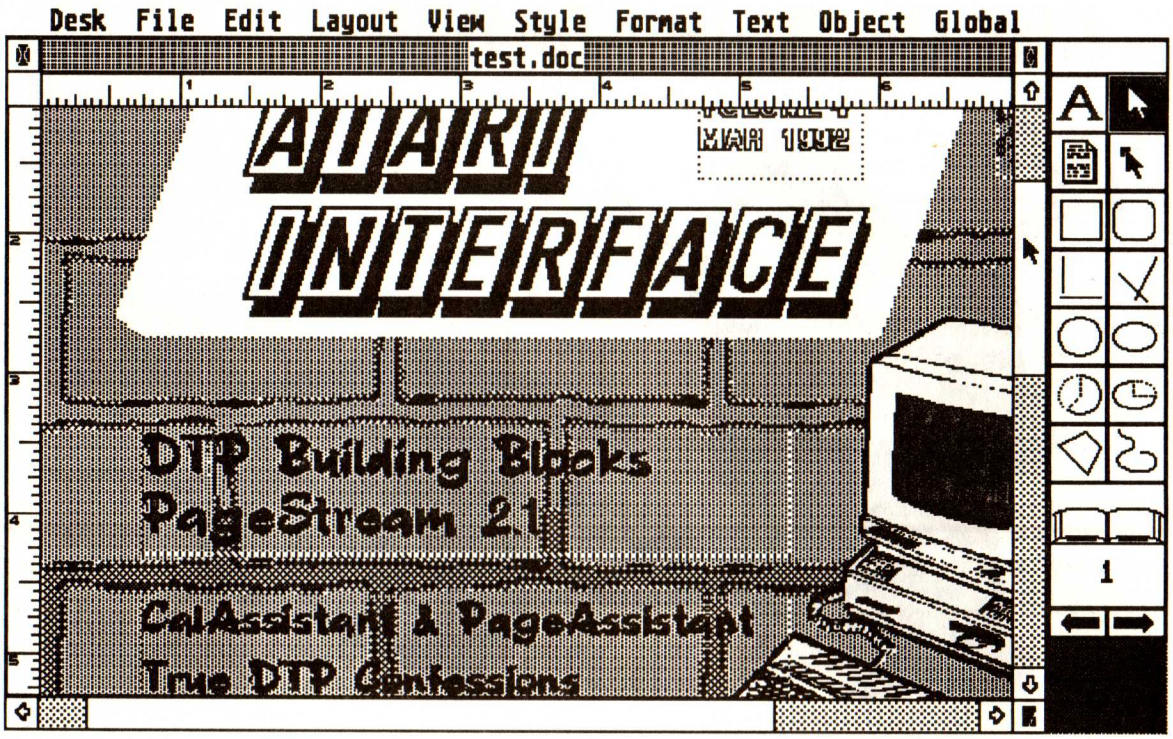


PageStream 2.1

Patricia Snyder-Rayl

An issue about DeskTop Publishing (DTP) wouldn't be complete without an article about a DTP package. This article deals with Soft-Logik's PageStream. While ISD Marketing's Calamus SL is now shipping, we have not yet received it. Hopefully, there will be a review of Calamus SL in a month or two.

As old Atari ST owners know, Soft-Logik's DTP program was originally called Publishing Partner. As clunkly as Publishing Partner looks today compared to PageStream, it was a revolutionary package. Bill and I cut our "DTP teeth" and first started publishing Michigan Atari Magazine (the precursor to the magazine you're now reading) with it.

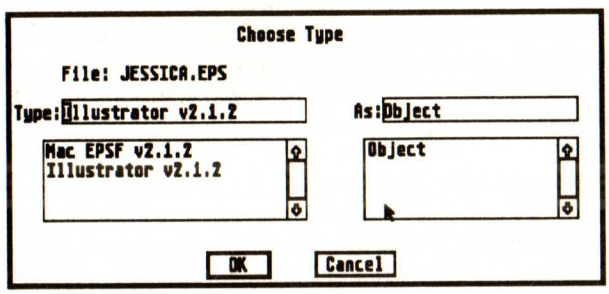
PageStream has come a long way from Publishing Partner! PageStream 2.1 allows users to print PostScript fonts and clip art to non-PostScript printers, use Adobe Type 1 and Compugraphic fonts, bleed objects off the page and a whole lot more!

PostScript Fonts and Clip Art

The biggest improvement over PageStream 1.8 is the addition of Type 1 and Compugraphic fonts. This means Atari owners can now choose from literally thousands of IBM and Macintosh PostScript fonts. There are hundreds of sources for both commercial and public domain/shareware Adobe Type 1 fonts—available on CD ROMs, removable media and floppy disks, not to mention online services. (As an aside, when Atari releases MetaDOS, anyone with a true SCSI port, whether on a TT or ICD host adaptor, can use Mac High Sierra CD ROMs full of EPS clip art and PostScript fonts.)

Additionally, Soft-Logik has given users the ability to print those PostScript fonts and EPS (Encapsulated PostScript) clip art to ANY printer. No more need to run UltraScript with an Atari laser printer to use those great fonts and clip art. Any Hewlett Packard DeskJet or LaserJet, as well as 24-pin or 9-pin printer, can print quality "PostScript" output through the new version of PageStream.

Older versions of PageStream imported EPS clip



art, but PageStream 2.1 has gone one better by allowing editing of Adobe Illustrator EPS! This means vector graphics created or compatible with Illustrator can be colorized and taken apart piece by piece.

In fact, this was how the EPS clip art on this issue's cover was colorized. The brick pattern was ungrouped, and then the brick rectangles were colored in our specific shade of reddish brown. This process was repeated with the Mega ST system and the DTP tools, using various colors from the PageStream color palette. These were all originally black and white graphics, but PageStream 2.1 and its Illustrator import module allowed us to change that.

Color Definition

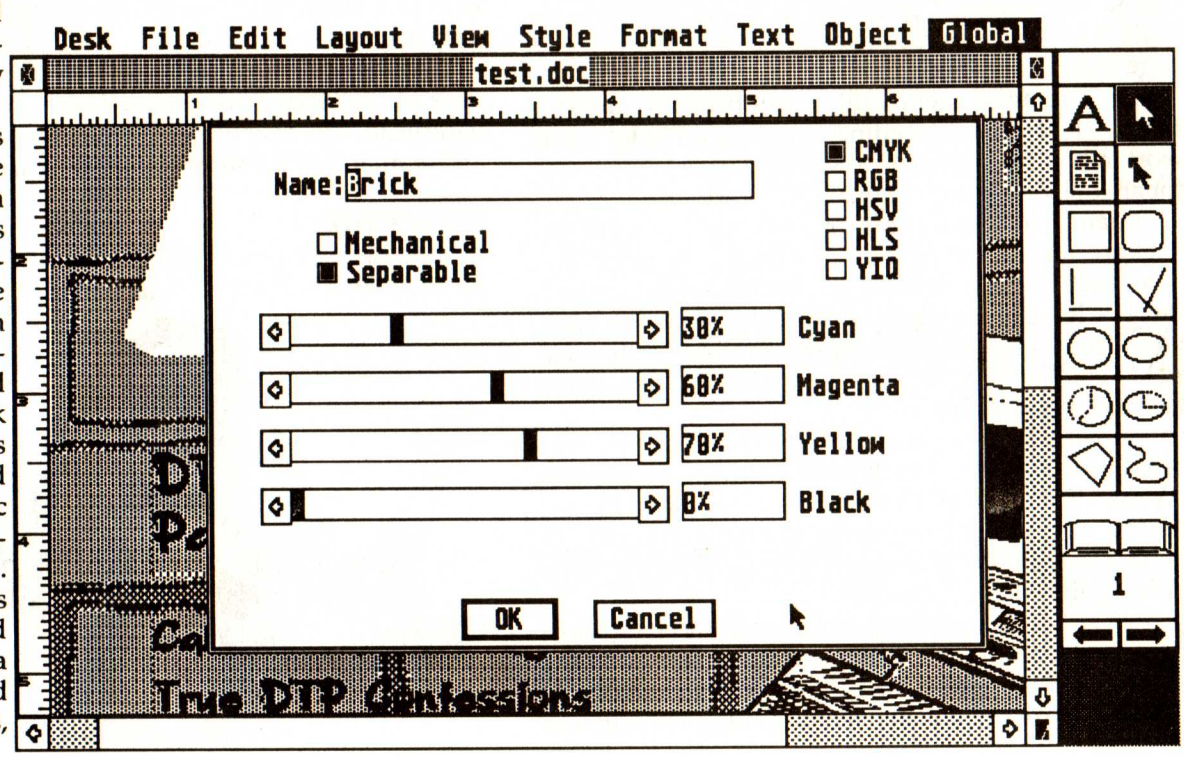
By our specific color shade, I mean our own color! That's another feature of PageStream. PageStream ships with a palette of 14 pre-defined colors and an additional palette of 64 colors based on the Crayola crayons colors is available (We'll include it on this month's ST Disk).

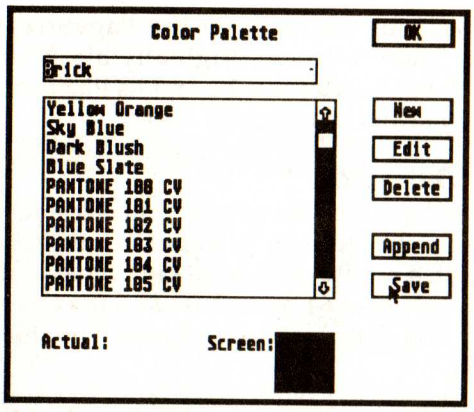
Using the Edit Color Palette feature, you can create your own colors. We use a book called Computer Color: 10,000 Computer-Generated Process Colors (by Michael and Pat Rogondino) to add colors to the PageStream palette. The book then gives the CMYK (Cyan, Magenta, Yellow and Black) values that combine to create the chosen color.

The ability to define colors by CMYK percentages is an important addition to PageStream. This allows you to not only use standard books such as the one mentioned above, but also to create Pantone colors. The Pantone Matching System (PMS) is the standard color matching system used by printers for "spot color" or "adornment color."

There are two ways to get Pantone colors into your PageStream color palette. First, Pantone color charts/books are available through many sources. Most graphics supply stores, and many mainstream bookstores, carry them. These charts give you the Pantone color number along with the CMYK percentages. Using the percentages, you can manually add these colors to PageStream.

The other, and far simpler, alternative is to load an





EPS graphic that already contains the Pantone color definitions. While the PageStream manual details the process of saving these Pantone colors to you new palette, PageStream does not come with such a graphic. This month's ST Disk contains an EPS graphic with all 700+ Pantone colors pre-defined. You will still want to pick up a Pantone color chart—at a cost of around $45—in order to effectively use these colors.

Graphics

In addition to EPS clip art, PageStream allows import of GEM, IMG, PCX (IBM picture format), GIF, TIFF (standard for scanning) and MacPaint, as well as ProDraw Clip, AEgis, IFF and IFF DR2D (Amiga picture formats). This really gives a lot of variety. And, even though you can't see the colors displayed on the screen in the bitmap formats, PageStream accepts 24-bit color graphics in the formats listed above that support it.

Bleeding

Because PageStream 2.1 now allows you to set up a "bleed workspace," graphics and text can now be placed so they extend past the edge of the printed page (called bleeding).

The average PageStream owner probably doesn't have a lot of use for bleeding, but we use it a lot when working on the covers of AIM and it's very important for anyone doing professional DTP work.

Again, this feature was important in layout of the background on the cover this month. The graphic—from Soft-Logik's Volume 18 (Backgrounds) in their Image Club clip art library—was enlarged to the point where it overran the edges of the page on the left and right side. In older versions of PageStream, this would have been impossible to do.

One unexpected benefit we got from defining this bleed area is easier detection of spurious "empty text objects." These are just empty text cursors that appear on the page somehow—most likely from trying to move the right GEM window bar up or down when viewing the document page.

I've noticed PageStream has trouble knowing when I've gone over the right edge of the window to the scroll bar. So much so, that I've taken to changing to the object (arrow) pointer when moving the window around the page instead of staying in text pointer mode.

If I stay in text mode and click on the scroll bar, PageStream sometimes thinks I'm still in the page window. So, it creates a text object *under* the scroll bar, in the bleed area. While these generally don't cause any problems, cleaning them up is now fairly easy.

Other New Features

Another new feature of 2.1 is the ability to create Bezier curves. This option gives you nice, smooth curves. This is particularly useful for making text run around circular bitmap objects or in creating artwork in PageStream.

Also, you can now create pages up to 1200x1200 feet. I haven't actually done that, mostly because our laser printer doesn't have a paper tray that size! Actually, this feature would be used in conjunction with PageStream's Tiling option to create posters, signs or even billboards. The Soft-Logik poster of Image Club fonts/clip art is 17x22 in size and is an excellent example of can be done.

Lastly, a new feature to PageStream 2.1 that I haven't used is the ability to make templates. These work almost the same as documents and are a great help if you regularly use the same exact layout. Once you make a template, you don't have to recreate all the work.

For example, if you want to make a letterhead, you could lay out the company logo and address and any other pertinent information, including text columns. Then you could save the document as a template. Later, you (or anyone else) would load in the template as you would a document, and start writing the letter or whatever on the letterhead. The template is loaded in as an untitled document, so it can never be accidentally overwritten.

This template feature could be very useful for any type of standard forms layouts such as invoices and letterhead. It is also useful if you publish a newsletter and want to use the same format from issue to issue.

Speed Tips

One of the biggest complaints when PageStream 2.1 first came out was how slow it was redrawing the

screen. We experienced this problem, but resolved it with the advice of Soft-Logik's Mike Loader who recommends deleting the import/export modules you won't be using in PageStream. PageStream loads all those modules into memory when it boots up, and all this spare baggage only slows the system down. If you have TOS 1.4 or higher, it is recommended that you also set the Fast Bit on the modules you do use. This will allow them to load faster.

Also, the more fonts you have installed—especially Type 1 fonts—the slower the system can become when using many of them. This is partly because of the way PageStream 2.1 caches fonts in memory and partly because of PageStream's improved font display. You now get extremely good font display, but you pay a price in screen redraw time.

By removing unused import/export modules and carefully planning the way you install and use fonts, you can dramatically improve the screen redraw speed of PageStream 2.1. Of course, any of the available hardware accelerators will also help tremendously, and PageStream is *very* nice on a 32MHz TT.

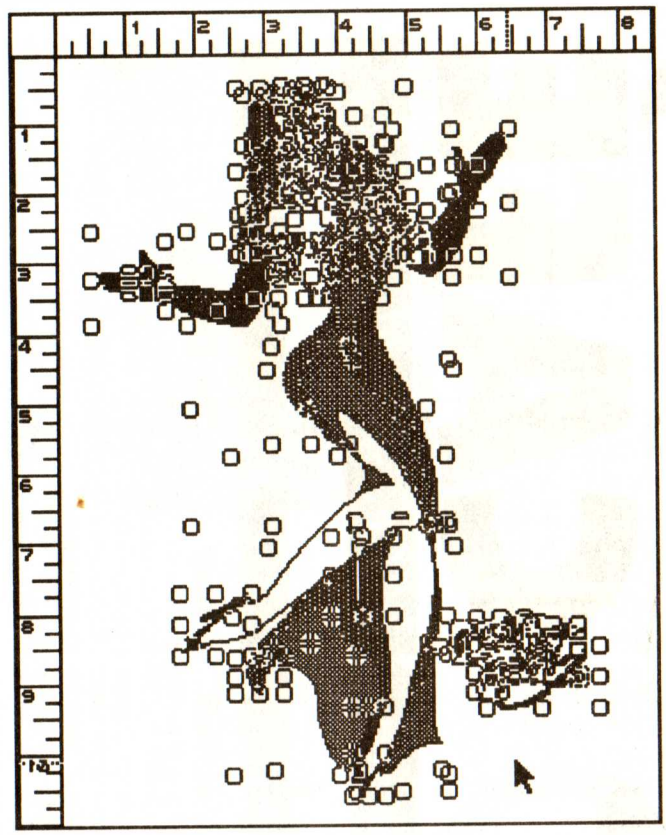
Another tip for PageStreamers outputting to PostScript printers only deals with the Compugraphic fonts. PageStream comes with Times, Triumvirate (Helvetica) and Garamond Compugraphic fonts. But, if you're outputting to PostScript printers, those printers have Times and Helvetica as internal fonts. PageStream will use those internal fonts instead of downloading the Times and Triumvirate font info.

So, if you are using a PostScript printer, you might as well not install those two Compugraphic fonts. This will also speed up PageStream 2.1 a small amount. Unfortunately, this does cause some problems if you regularly accept PageStream 2.1 documents from other people who *do* use these fonts.

Miscellaneous Observations

Finally, if you plan to do any color printing directly to a color PostScript printer, you need to know something that isn't covered in the manual. If you used PageStream 1.8, you know there used to be separate drivers for Linotron, color and "normal" printers. PageStream 2.1 has only one driver for all three.

The manual says PageStream will output color if



the No Separation option is selected in the Print dialog. There is actually one other thing that needs to be done for PostScript color printing. You must enter the word *color* in lower case in the Special text field of the Printer Configuration dialog.

We ran a detailed review of PageStream 1.8 in the Fall of 1990 and the December 1990 issue had an article dealing specifically with color DTP using PageStream. If you're interested in more details, you can look up those articles or see PageStream at your local Atari dealer. Also, Soft-Logik can be reached at (800) 829-8608 for sales, (314) 894-0431 for technical support or via their BBS at (314) 894-0057 (3/12/24/9600). Soft-Logik also maintains online support in their RoundTable on GEnie and in the AtariVendor and AmigaVendor Forums on CompuServe.

Bill and I use PageStream to produce this monthly publication and various other DTP jobs, so we're pretty familiar with its nuts and bolts. However, because of that familiarity, I may have overlooked the simple things because they are so commonplace to me. If you are interested in solving a particular problem you're having with PageStream, drop us a Letter to the Editor spelling out what you're trying to do, and what results you have or haven't been getting. We may be able to help.

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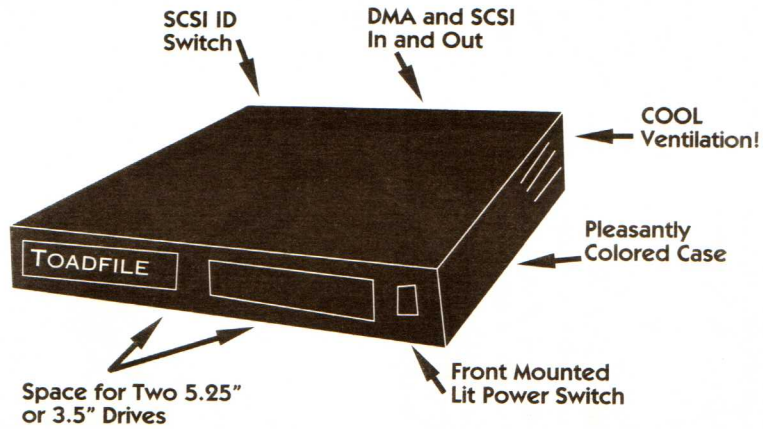

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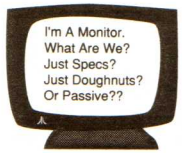

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☛ The Atari ST's have always been finicky about monitors. With a seemingly endless array of color monitors on the market (at reasonable prices, too), why should we be bound to Atari brand color monitors? That's a good question. The answer is that the Atari uses *analog* RGB and until very recently, *TTL (digital)* RGB was the norm. Now that the analog systems of VGA and Super VGA are more popular, the analog RGB monitors those systems require are more popular too. So you'd think the problem would be solved. Lo, a quandary still exists. Now, the mainstream monitors are too fast for the Atari's to use! Most VGA and Super VGA monitors have a fixed horizontal scan rate of 31.5KHz, and the Atari runs at 15.75KHz. So, while the RGB standard has changed in our favor, the speed issue is still boxing us in. So when you boil all this down, you get a relatively small set of monitors which will actually work on an ST. This set includes the Atari SC1224 (12") and SC1435 (14") monitors, a few "multisync" monitors (which have the ability to lower their horizontal sync rate to 15.75KHz), and the handful of monitors that, for whatever reason, were made with compatible specifications. We sell them all. If you like the Atari name brand monitors, (including the new SC1435 14" color monitor and the SM1438 14" monochrome monitor) that's cool — we have them. We also have great deals on multisync and other compatible monitors, like the Magnavox 1CM135 and our own refurbished *Toad-RGB* color monitors. So weigh the options and see what fits you best. Any questions? Call the chef!

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True (DTP) Confessions

Ralph C. Turner

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Here's a confession I've never made in public before: the camera-ready copy for my first Atari ST Book was produced on a Macintosh computer. Before you brand me a traitor, let me give an explanation. While I'm at it, I'll also tell you about some of the complications I faced during the course of self-publishing three different books.

Although I wrote the first book on my 1040 ST (using Regent Word II for some of the chapters, and Microsoft Write for the rest), I owned, at that time, only a dot-matrix printer (a Panasonic KX-P1092). I wanted to send laser-quality, camera-ready output to the printing company I'd chosen, but I wasn't ready to spend what seemed like a lot of money to buy my own laser printer for the ST.

For my next book (not yet completed), I decided to work on the cover...

After all, most of my friends had already told me I was a fool to be writing a computer book about anything other than IBM computers. I worried that I wouldn't ever recoup the cost of printing a thousand copies of the Atari ST Book, let alone make enough to cover the cost of a laser printer.

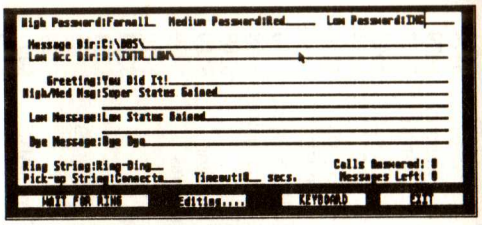
The solution was to use the Apple LaserWriter printer at the company I worked for. Although I could have brought my 1040 ST to work and connected the LaserWriter directly to it, I decided to do the page composition on one of the Macintosh computers at work. I had been using Aldus Pagemaker (on the Mac) to create advertisements, but I was worried that doing the whole book in that program would be a complicated task. Therefore, I decided to try to simplify the job by doing the project in Microsoft Word (on the Mac).

Transfer to the Mac

Since I didn't own a Macintosh emulator for the ST, and since the Macintosh at work couldn't read ST disks, I used two modems to transfer the book from my 1040 ST at home to the Mac at work.

But there was a problem. I was able to use the Macintosh equipment at work, provided I did so in the evening, when no one else was there. If I could have elicited the help of someone at work, I could have stayed at home to operate my ST's modem, while the person at work operated the Mac's modem. Instead, I had to figure out some way to perform the whole operation myself.

Before leaving home, I hooked my Avatex 1200 modem to the ST and ran the Interlink telecommunications program on my ST, then set up that program's "Answer Mode," which turns Interlink into a mini-BBS. I designated the word "Farmall" as the password for the answer mode, then drove the two miles to work.



There, I hooked a modem up to the Mac, ran the Red Rider telecommunications program, and had the modem dial my home phone. The phone rang, my ST picked up the line, Interlink asked for the password, I typed it in.....and nothing happened.

To make a long story longer, I ended up driving back and forth between home and work at least six times before I discovered the proper parameters and settings to make the transfer work. I had saved (on my ST) each chapter in its own ASCII file, so I ended up transferring 17 files from the ST to the Mac.

Document Size

Once in the Mac, I loaded the files

into Microsoft Word. It was there that I made my first major mistake: I decided to create one big file containing the whole 158-page book. This resulted, later on, in delayed printing (in other words, it took a heck of a long time to print) and, at times, corrupted printing.

After I had done all the page layout in Word, and after I had printed the whole book, I found certain mistakes on selected pages. But after correcting a mistake, (say, on page 148) then telling the printer to print the corrected page, the page would emerge with one or two words missing that should have been at the beginning or end of the page.

Apparently, the 158-page document was too large for the program (or too large for the computer's memory, or something) and the mere act of making an alteration that was deep into the file messed up the pagination. (Of course, to be fair to Microsoft Word, it should be noted that the Macintosh/Laserwriter combination was not known for its speed, at least in comparison with, say, an Atari laser.)

It was a real headache, but I worked around the problem by creating a new, one-page document containing just the page that I wanted to reprint. If I had to do it over again, I would make each chapter its own document in the word processor.

Soliciting Print Bids

After soliciting bids on the print job (the highest bid was twice the amount of the lowest bid), I finally decided on a large book printing company 180 miles away from where I live, but in the same state. I'm the sort of person who worries about everything that can go wrong, and I reasoned that, if the printer messed up the job but wouldn't return my deposit, it'd be easier to sue them if they were in-state.

I remember vividly the moment I hung up the telephone, having just told the printer to go ahead and start the job. As soon as I was off the phone, I started shouting "Rebel yells" and jumping up and down. I hadn't been that excited in a long time, and it was wonderful knowing that "the die had finally been cast."

In typical Midwest fashion, the printer had agreed to do the job with 1/3 down, the remainder to be due one month after delivery. He didn't perform a credit check, as far as I know, but rather, apparently, relied on his reaction to the sound of my voice. We had been dealing with each other only on the phone.

A few weeks later, I received the call that the books were done, and I decided to make the 360 mile round trip in my car to pick up the books. I think the printer thought I was crazy, since everybody else uses UPS or a freight company. But I was afraid that the job might have been botched up, and that if so, it'd be better to find out *before* the books were shipped.

Proof It Before You Pay

Sitting in one of the executive's offices at the printing company, I took my time checking each page of the book. I made sure each page was in order, and that the contents of each page was positioned properly. Although I had received proofs a week before, I was still nervous. But everything was OK, and I stuffed the boxes of books into the car and headed home.

Have you ever loaded a car with 1,000 pounds of baggage? Well, I'll never do that again. I ruined the car's shocks and springs during that harrowing drive, and I now rely on truckers or UPS.

The DTP Program

Soon after completing the first book, I decided I needed my own desktop publishing program, to be run on the ST. I tried Timeworks' DTP, found it was cumbersome on a floppy drive system, built myself a hard drive system, then discovered Timeworks was still not to my liking. The single most important thing a DTP program must provide me is good output (what does the page look like when it comes out of the printer?), and Timeworks didn't satisfy me.

Many people recommended PageStream, but I bought Calamus. It was sort of hard to learn how to use and the manual was a little strange, but once I got the hang of it, I loved it. And I still do. It's a superb DTP program.

The HP DeskJet

By the time I wrote the second book, I owned a Hewlett Packard DeskJet inkjet printer, but still didn't

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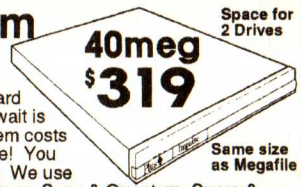

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own a laser printer. My plan was to use the DeskJet at home during the page layout process (using Calamus). Then, when I was finally ready to make the final copies of each page, I planned to drive 150 miles to the closest Atari laser printer that could be rented.

I had promised the printer I'd get the copy to him on Monday, and two days before (Saturday), I arrived at the Atari store that had the Atari laser. The printing went fine until halfway through the book, at which point the laser ran out of toner. The store didn't have any more.

I drove home and completed the job on the DeskJet. So, the second book was done partly on an Atari laser, partly on a DeskJet. Actually, the comparison between these two printers is interesting. Although the Atari laser did a much better job on most of the text, the thin lines that constitute the outlined letters at the beginning of each chapter were done better on the DeskJet. Of course, the Atari laser was lightning fast, and the DeskJet's smearable ink provided a potential problem. (Hewlett Packard supposedly has non-smearable ink now.)

The HP LaserJet III

For the third book, I bit the bullet and bought a laser printer. Although I was sorry to forgo the Atari laser's speed, I decided to buy Hewlett Packard's LaserJet III. Its output is superb, and it works beautifully with Calamus (but of course, so does the Atari laser).

Define Keyboard Layout

By the way, among a number of Calamus features that I like, I especially appreciate the fact that the program allows you to define your own keyboard layout. Although I have nothing against using the mouse, I *don't* particularly like a program that *forces* me to use the mouse to make menu pull-down choices for commonly performed tasks. I'd rather use the keyboard.

Calamus allows me to assign any task or function of the program to any function key (with shifted function keys, that means 20 possibilities) or to any "Alternate-plus-any key" combination (that provides an additional 56 or so possibilities). The assignment is done by using a word processor to edit a file called CALAMUS.HLP.

```
Desk  File  Edit  Search  Character  Paragraph
P:\CALAMUS.HLP
Page 1

  #8257 "Double page display"
  #8258 "Page overview"
  #8260 "Set user defined size"
  #8262 "Use whole screen"          F4
  #8264 "Help messages on/off"
  #8265 "Load fonts"                f2
  #8266 "Delete all help lines"
  #8267 "Show free memory etc."
  #8268 "Enable/disable virtual copies"  v
  #8270 "Set search paths"
```

Flash, the telecommunications program, also allows program functions to be assigned to specific keys, and I wish more program were like Calamus and Flash.

Reducing is Better than 1 to 1

For the third book, I deliberately made the camera-ready copy larger than the ultimate size of the book's pages. Specifically, although a page in the book was going to be 8.5x5.5 inches, I made the printing area on my camera-ready copy approximately 10.5x6.5 inches. In the process of photographing these pages, my printing company had to reduce them, but the reduction process resulted in more sharply defined characters and images.

Linotronic Images

The covers of all three books were linotronic images: for the first two books, I hired a professional graphic artist who created his work on a Macintosh and gave me a Macintosh floppy disk with a Pagemaker file on it. I took the disk to a printing shop, and the cover was printed on the Linotronic (the Linotronic for the second book cost about $20).

For the third book, I used Calamus to do the work myself. I sent the Calamus file to a printing service bureau on the West Coast, and they returned the Linotronic image to me by Federal Express (the image cost about $15.00).

For my next book (not yet completed), I decided to work on the cover even before writing a single word of text. I now have the cover done, and I like to look at it each day before I start writing. It allows me to visualize the finished product, and that can be useful, especially with a project that can take a year or more to complete!

Ralph C. Turner is the author of three books about the Atari ST and TT computers: "The Atari ST Book of Tips, Instructions, Secrets and Hints," "Intermediate and Advanced Atari ST Topics," and "Turner's Third Book of Atari ST Topics," all published by Index Legalis, P.O. Box 1822-68, Fairfield, IA 52556; (515) 472-2293. This column is copyrighted 1992 by Ralph C. Turner.

Turner's Third Book of Atari ST Topics covers connecting musical instruments to the MIDI ports, modems, the TT030, telecommunications software, laser printers, BBSs, database transfers, CompuServe & GEnie, public domain & shareware programs, null-modems, MIDI keyboards, and much more. Also available: *The Atari ST Book*, and *Atari ST Subjects*. Each book, $16.95 + shipping (US:1 or 2 bks, add $2.00; $3.00 for 3 bks). (Canada: add $3.50 for 1, $4.75 for 2, $6.50 for 3 bks). Index Legalis, PO Box 1822-67, Fairfield, IA 52556. Ph: (515)472-2293

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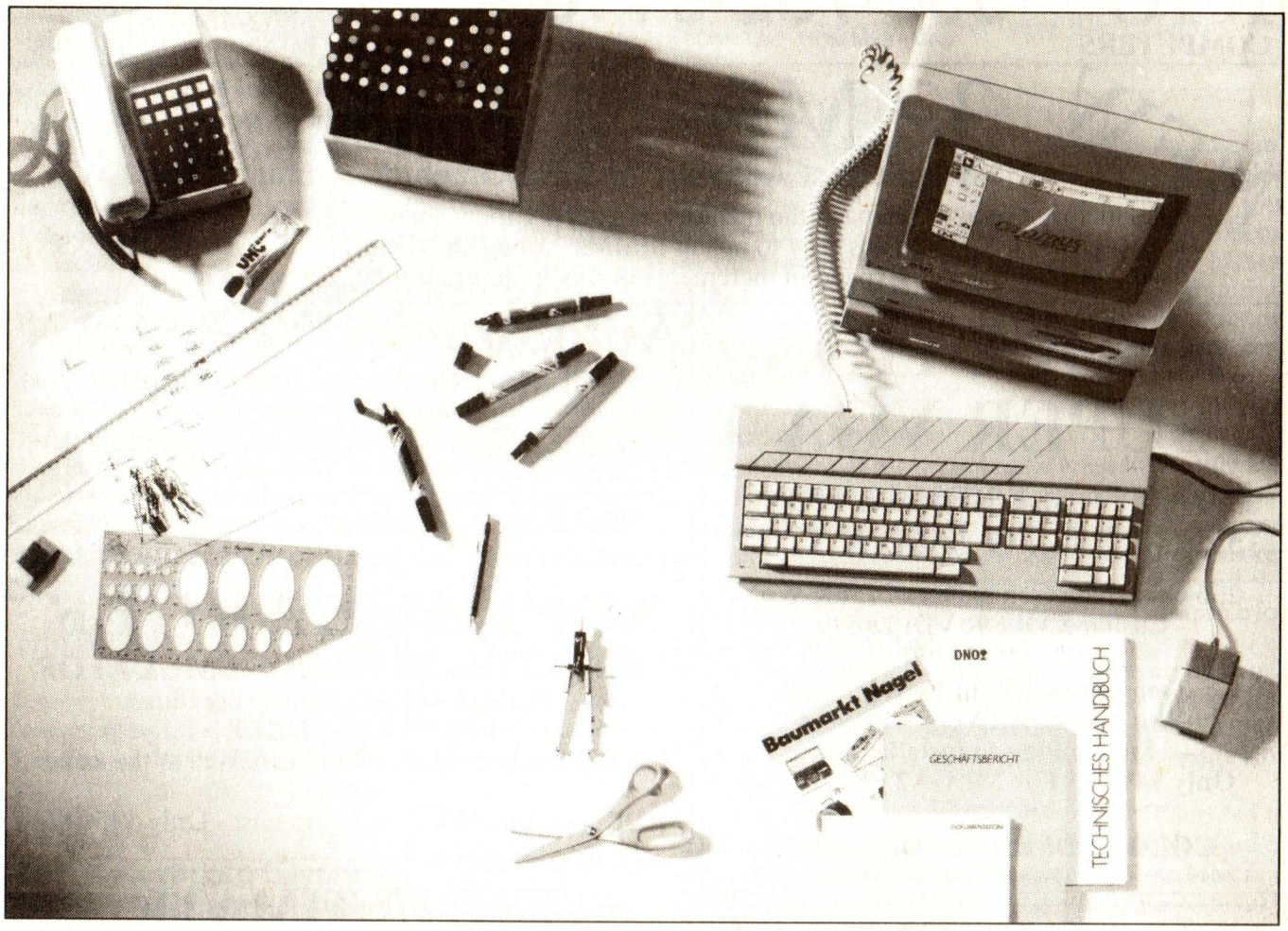


DTP Building Blocks

Bill &
Pattie Rayl

Excellent DTP packages like Calamus and PageStream have been available to ST/TT owners for years. Until recently, though, the ST lacked many of the DTP tools that Mac and IBM owners enjoy. These "DTP building blocks" are the foundation necessary for a complete DTP environment—B&W and color scanning software/hardware, OCR software and vector graphics drawing programs to name a few examples.

If you've chosen an ST or TT for your DTP work, you no longer need to wish you had the tools available to those other guys. They're here on the ST and they're available now, many of them at prices well below what Mac or IBM owners pay.

In this article, we'll try to outline what's available in the various general categories of Fonts, Font Editors/Designers, Clip Art/Graphics, Scanning and Drawing. We'll rap up with a look at some of the new, high-end products being released. Ready? Well, let's go, then!

Fonts

Once you get into DTP work, it seems you never can get enough fonts. Sure, you can get by with a few of the traditional fonts, but what about those special occasions? Like doing a brochure for a local Star Trek convention—sure would be nice to have a Trek-type and a Klingon font (Computer Safari has both).

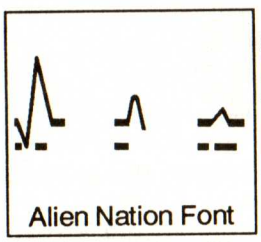
AIM in Klingon Font

PageStream and Calamus users have never lacked good font support. There are about a dozen different sources from which fonts can be purchased at very reasonable prices. For the absolute highest quality fonts, Soft-Logik and ISD Marketing both sell superb font packages for their respective DTP programs.

ISD has a full line of AGFA Compugraphic fonts ranging from $99.95 to $299.95 per disk (all prices in this article are in US dollars). ISD is currently running a "buy one get one free" special on these fonts!

Soft-Logik is marketing packages of Type 1 fonts designed by Image Club, one of the premier Macintosh font producers. Their Starter, Newsletter, Designer and Classic font sets contain a total of 48 popular fonts that are perfect for most DTP jobs. If you're looking for a specialty font, though, you can pick from 600 Type 1 fonts. Each font is available for just $25 per weight/style. Best of all, Soft-Logik is promoting these fonts with a "buy one get one free" limited offer, as well!

ISD and Soft-Logik don't have a monopoly on high quality fonts, though! For excellent body type fonts for Calamus, Cherry Fonts (now marketed by the CodeHeads) can't be beat. Other good Calamus font sources include Mainstream Fonts and Ideal West.


Alien Nation Font

If you're looking for PageStream fonts or you use both PageStream and Calamus, you'll want to pick up a few packages from MegaType, Computer Safari, Dennis Palumbo, MS Designs, Fonts by Guber and FontAbility. These companies all produce great headline and specialty fonts, as well as some of the more down to earth font families. Most of their fonts have Calamus and PageStream versions.

MegaType and Computer Safari have both recently released Type 1 font packages for use with PageStream 2.1. Computer Safari has an incredible $119.95 deal on a package of 250 Type 1 fonts! We've been showcasing the MegaType Faces Paks in our DTP Resource section for the past few issues.

If you want to keep abreast of the ever-growing list of font vendors and font packages available, we suggest you get a copy of the Calamus Font Resource Guide. The Guide focuses on Calamus, but also covers PageStream fonts. It's put together by Page Design & Consulting Service of Holland Landing, Ontario, Canada and is distributed by PDC of Lynnwood, WA.

Font Editors/Designers

The "average" DTP user may never have the desire or need to resort to creating a font for some special purpose. Being able to manipulate or create your own fonts can be important, though, especially in a commercial DTP environment. Many magazine publishers or advertising copy design firms have a font design artist on their design staff.

Here, the ST has also had excellent support for some time. The premier font design program for Calamus is the Genus font editor. Genus allows editing of all Calamus fonts, including the AGFA Compugraphic fonts sold by ISD. Options include the ability to load bitmap images (IMG or DEGAS formats) for character tracing, as well as the ability to load two fonts and swap characters between them. Genus also gives you the ability to convert PageStream fonts to Calamus format, as well as import and export CVG vector graphic files. CodeHead Software has recently taken over distribution of this excellent program. Retail price for Genus is $175.

On the PageStream side, MegaType has a number of offerings. Font Designer ($124.95) supports import of DEGAS or IMG bitmaps for tracing, a "segment" feature for building parts libraries to speed font design and font templates. With Font Designer, you can create Type 3 (PageStream) format fonts.

One step up, Font Designer Plus ($249.95) adds the

PageStream and Calamus Fonts
by Dennis Palumbo

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DISK 2 Basketville
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ability to create Type 1 fonts with hinting, as well as Type 3 fonts. FD+ can output directly to a PostScript printer for testing your output, as well as save your font characters to disk as EPS graphics. The package includes Type 1 Converter ($39.95 separately), a program to convert any PostScript Type 1 font into Font Designer's internal ECF format.

For DTPers who only want to convert fonts between Calamus and PageStream formats, MegaType offers FontVerter. At $49.95, this package gives you everything you need to transfer fonts from Calamus to PageStream, or vice versa. Users of both DTP packages will find this tool indispensable!

Another useful PageStream font tool from MegaType is Bit Maker ($39.95). Bit Maker automatically creates screen fonts (in 12, 24 and 36 point sizes for the ST and 14 point for Amiga) from the DMF file created by Font Designer, FontVerter or Soft-Logik's own Shareware editor.

Clip Art/Graphics

Sources for line art and bitmap graphics have been available almost since the ST was released. It has taken some time, though, for high quality graphics—the kind usable in professional DTP layouts—to be available for the Atari.

The first company to release commercial quality bitmap IMGs and vector graphic (GEM) clip art was Migraph. Migraph was, and still is, a leader in the DTP support market for the Atari. They were the first to release a hand scanner with editing software and the first to market vector graphics editing software.

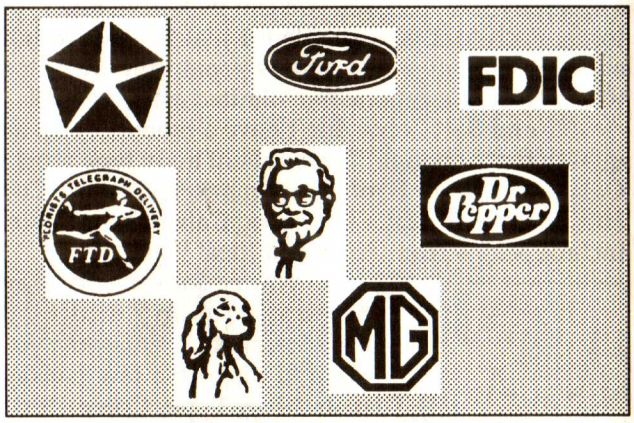
Migraph's DrawArt and ScanArt packages pioneered the ST professional clip art market. With the release of Calamus Outline Art, ISD also began selling professional clip art disks, in both GEM and CVG (Calamus Vector Graphic) formats.

IMG Bitmaps

Today, the Atari DTPer has a multitude of high quality clip art choices, and the options are expanding. For bitmap, scanned IMG graphics, Electronic Spinster is the ultimate source. Their recent catalog contains hundreds of IMG clip art disks, and they are adding many vector graphic (GEM, EPS and CVG) disks. Electronic Spinster sells their IMG disks for $15 for each volume (4 disks) or three for $40. Vector graphic disks currently range from $12 to $25.

CHQ, Inc. is another source for quality IMG disks. They have over 50 DS/DD disks with IMGs for nearly any occasion. At $12.50 per disk, you really can't go wrong.

Sterling Connection, a company most known for its spreadsheet templates, has released Logo Library, a



collection of over 600 company logos and over 450 graphic symbols in IMG format. These 300 dpi graphics come on six disks, along with a 72-page manual displaying all the images. While some of the images are small and may need touching up, the whole package is only $39.95.

Vector Graphics

Vector graphics—EPS, GEM or CVG formats—give the best quality output at any resolution. Because these graphics are resolution independent, they can be enlarged or reduced without any ill effects. On linotronic output (1270 dpi or higher), these graphics can be quite impressive.

For Calamus Vector Graphics, the two best sources are ISD and Electronic Spinster. There are not very many new packages being released in the GEM format. ISD, Migraph and Electronic Spinster are the best places to turn for those.

Time Savers!

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LogoLibrary consists of over 1060 images for desktop publishing. Includes over 600 printer's logos for business advertising, stationery, etc. In addition there are 460 symbols and graphics for charts, posters, shirt designs, signs, etc. All images are hi-res 300 dpi graphics in .IMG format for PageStream, Touch-Up, Calamus, Publisher ST. 6 d/s disks & 72 page directory. $39.95.

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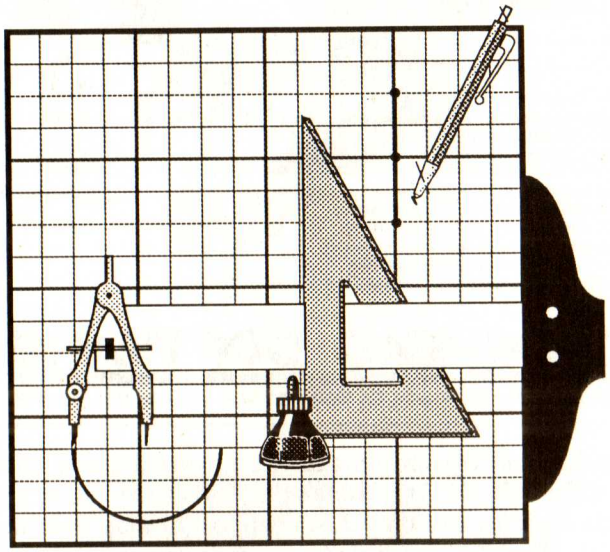
Encapsulated PostScript (EPS) is, by far, the most widely supported vector graphics format. With PageStream 2.1's ability to edit Illustrator EPS files and print them to *any* printer, a whole new world has opened up. And, companies have moved to support the demand.

Computer Safari released their Professional Logo Series of over 30 images over a year ago. They were the first to offer EPS clip art. A recent flyer from Computer Safari had the package listed for only $18.88.

By far, the biggest market for EPS clip art has been for the Macintosh. So, it should be no surprise that ST developers have begun licensing these Mac EPS clip art packages and releasing them on ST disks. Again, Computer Safari led the way with Clipables, over 600



professional EPS graphics on 17 disks licensed from C.A.R. Inc. Some months back, Computer Safari ran a special on this package for only $124.88, but the price is probably a bit higher now.

Not to be outdone, Soft-Logik is marketing 21 different volumes of Image Club clip art. Each volume has a specific theme, such as World Maps or Celebrity Caricatures. The brick background used on this month's cover came from Volume 18, Backgrounds. Prices may vary for individual volumes, so contact Soft-Logik for details.

AlohaFonts, primarily an Amiga developer, has released their Eclips I and II packages of EPS graphics for the ST. While these graphics are not Illustrator-compatible and cannot be taken apart/colored in PageStream, they are very high quality and cover a wide variety of topics. Eclips I has over 300 graphics, while Eclips II contains over 200 illustrations. At $99 per volume, Eclips II works out to 50¢ per graphic and Eclips I even less expensive!

Other sources for EPS clip art are available in the Macintosh and IBM world and even the Amiga market. Most of these companies producing EPS clip art sell the packages on IBM 3.5" disks. Spectre GCR owners have the added ability to directly use Macintosh disks. Check out recent magazines catering to those computers or pick up the latest DTP magazines to find out more about these sources.

Bitmap to Vector

If you already have a library of bitmap graphics—DEGAS, IMG, IFF, TIFF, et cetera—you might want to think about converting this library to vector images.

The first bitmap to vector convertor to hit the ST market was Silhouette from Maxwell CPU. Silhouette is actually a vector graphics drawing program with autotracing capabilities, so it's more than just a conversion utility. The program can load DEGAS, IMG, MacPaint or TNY format bitmaps, as well as GEM metafiles. Silhouette's autotracing function uses b-spline or Bezier smoothing. Graphics can be saved as IMG bitmaps, DXF (CAD format), GEM or EPS vectors. At $94.95, Silhouette is a good bargain.

At the high end of the market, both in price and performance, is Avant Vector. Sold in the US by CodeHead Software, Avant Vector is packed with features. It has all the drawing/editing capabilities of Silhouette and a few more besides. Avant Vector can load DEGAS, IMG, IFF, TIFF and other bitmap graphic formats. It can import or export in Calamus CVG, GEM/3 and EPS vector graphic formats. No matter what DTP package you use, Avant Vector won't let

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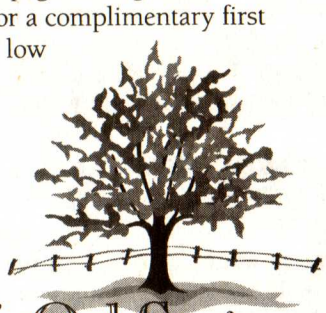

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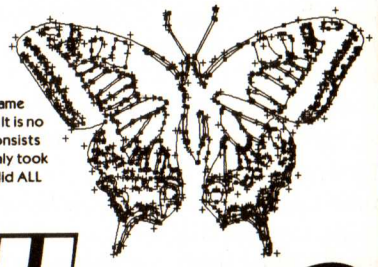
OakSprings Software

This small butterfly is unremarkable. The others are a new species you can breed on your Atari computer.

Automatic vectoring has arrived.

To the left is a pixel-based .IMG picture. In other words, the picture is made up of dots. It's a 58k file. The image can't be enlarged much more than this without the ragged edges showing. (In fact, they're showing already.)



To the right is a snapshot of the same image after it has been vectored. It is no longer made up of dots. It now consists of lines and bézier curves. This only took a few minutes and Avant Vector did ALL the work for you.

AVANT VECTOR

Avant Vector is a cutting-edge graphics tool that's fast, easy to use and surprisingly versatile.

The large butterfly wing on the right is a vector image created by Avant Vector. Using "automatic tracing," a bit image graphic (the smaller butterfly) was converted to a vector graphic, resulting in the smooth output you see here.

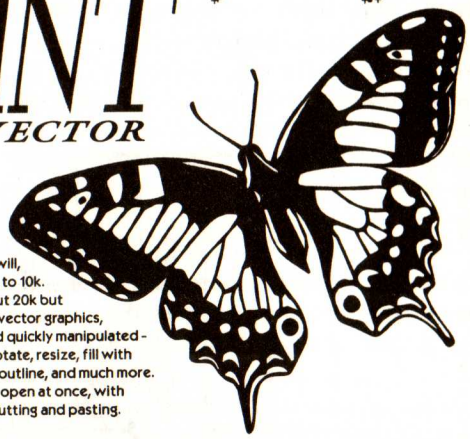
Vector graphics have big advantages over bit image graphics - they make much smaller files, and they can be scaled to any size without losing resolution or looking blocky. And Avant Vector's tracing routines are highly sophisticated; in a recent review of 7 Mac, PC, and ST auto-tracing programs, Avant Vector was rated best of the bunch! This means there's less editing after tracing an image, and you get more work done in a shorter time.

Avant Vector supports .PI3, .PC3, .IMG, .BLD, .PIC or .PAC formats. You can trace Mac, PC or Amiga graphics, in .TIF, .IMG or .IFF formats. The plotter version (Avant Plot) can also load and save HP plotter files.

No matter which DTP package you use, Avant Vector is a wonderful companion. It creates .CVG files for Outline, Calamus or Repro Studio. And .GEM files for use in programs that support GEM3 metafiles. Avant Plot allows EPS importing and exporting, and a full range of professional plotting, drawing and cutting options.

Since Avant Vector is a full featured vector graphics package, you can touch up any picture you've auto-traced, or draw pictures from scratch - with an intuitive, speedy interface you'll learn in a matter of minutes!

Call or write CodeHead Software for more information about Avant Vector (and its amazing cousin, Repro Studio). Special introductory pricing is available until December 31, 1991. Act now and save!



This is the .CVG vector version: it can now be enlarged or reduced at will, and the file size is down to 10k. The .GEM version is about 20k but otherwise identical. As vector graphics, the images are easily and quickly manipulated - you can stretch, skew, rotate, resize, fill with gray scale percentages, outline, and much more. Up to 7 windows can be open at once, with clipboard features for cutting and pasting.

CODEHEAD SOFTWARE

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you down. Avant Vector currently retails for $495.

If you're just looking for a program to convert bitmaps to vector images, Gribnif Software has Convector. Convector doesn't contain the drawing and editing capabilities of Avant Vector or Silhouette. Instead, it is more focused on graphic conversion and has a retail of $99.95. As of this writing, Convector has not yet begun shipping and we have no details on what graphics formats are supported.

All these programs mentioned above deal with monochrome/grayscale images only. Silhouette and Avant Vector both have "fill" functions, but they do not support color.

For PageStream users, adding color to Illustrator EPS graphics is a fairly easy process. With the imminent release of Calamus SL, ISD has also announced availability of a Vector Graphic Editor module for $99.95. This module allows creation or editing of vector graphics, including the ability to add color.

Drawing Packages

When it comes to DTP, a typical drawing package like DEGAS just isn't enough. When dealing with bitmap images, you need a program that can handle high resolution scanned images and/or vector graphics. For color DTP work, you really need 256+ color and high resolution support.

Finding a drawing package that supported both bitmap and vector graphics was pretty tough until recently. In fact, Migraph's Easy Draw (GEM) and ISD's Outline Art (CVG) were the only available vector graphic options, and they don't support bitmap graphics. Now, thanks to a couple German imports, you have a choice of packages.

Arabesque Professional, marketed by Gribnif Software, supports IMG, IFF, DEGAS, NeoChrome and Doodle bitmap formats. On the vector side, you can load and save GEM/3 and Calamus CVG graphics, as well as use Arabesque's own compression format. Suggested retail is $199.95.

Competing head-to-head with Arabesque is MegaPaint Professional from CodeHead Software. MegaPaint itself supports IMG, PCX, Degas and STAD format bitmaps an Calamus CVG vector graphics. Add-on modules for MegaPaint (recently released to the public) add the ability to import DEGAS Elite and TNY format pictures, as well as interface to the Scan Lite scanning software from WizWorks!. Retail price for MegaPaint is $175.

Both programs are very powerful and highly sophisticated monochrome graphics tools. For Calamus owners, either one is a good buy. PageStream owners will have to look elsewhere for EPS support, but the CodeHeads have indicated that an external EPS module for MegaPaint isn't out of the question.

ISD's Outline Art, with a retail of $289.95, does come with a utility to convert CVG files to PostScript ASCII EPS graphics. While you cannot view, edit or

colorize these images in PageStream, they do load in and work fine.

There is currently no vector drawing program available that saves EPS graphics, let alone Illustrator-compatible ones. For that ability at this time, you must either use Macintosh tools via Spectre GCR or opt for one of the bitmap to vector conversion utilities.

Image Scanning

Migraph introduced the ST community to the joys of scanning with their Touch-Up and hand scanner combo. Aside from Migraph, only Navarone (with their Canon flatbed scanner interface) was supporting this important part of the DTP scene.

A newcomer to the scene, WizWorks!, released MultiViewer (Graphica). MVG supported a number of hand scanners via external modules and was an instant hit. The latest release from WizWorks! is Scan Lite. Existing graphics programs can be updated to interface with Scan Lite, turning your paint program into a graphic scanning package! As mentioned above, MegaPaint Professional already supports Scan Lite via an external module.

MegaPaint also directly supports the PrintTechnik Universal Scanner and Professional Scanner 2, as well as the HAWK CP14 scanner. These scanners, along with their ST-specific drivers, are not generally available in the US.

Color Graphics

In the color arena, the only bitmap drawing package available for practical DTP work is Prism Paint from Lexicor. Prism Paint supports the ISAC (Dover Research) and Matrix color boards, as well as the TT resolutions. The ability to output IFF or GIF bitmap graphics allows Prism Paint illustrations to be directly imported into PageStream. Retail price on Prism Paint is $79.95, but RIO is currently selling it for only $49.95!

High-End Color

A few years ago, color DTP was just starting to emerge as a force to be reckoned with. Today, good color DTP tools are available for any serious DTP platform. These tools, while carrying a hefty price tag, perform some pretty incredible things that make them well worth the cost.

For color scanning, the only option currently available to US ST/TT owners is from Goldleaf Publishing. They have a package which includes Epson ES 300C 24-bit color flatbed scanner, scanning software (from 3K Computerbild in Germany) and interface. For those not up on the terminology, 24-bit color graphics can have 16.7 million colors. Retail price for the package is $2100. While the ES300C can be purchased from many sources for around $1300, Goldleaf does not sell the interface and software separately. The interface plugs into the serial *and* parallel ports of the ST/TT.

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For touch up and editing of 24-bit color images on the ST or TT, there are currently three professional packages—two available now from Goldleaf and another, from ISD, shipping shortly.

3K's Retouche Professional CD is available now from Goldleaf Publishing. The software can deal with 256 colors from a 16.7 million color palette at one time. The software has full color correction and separation support built-in. Retouche uses its own proprietary "screening" method and can handle resolutions up to 394 LPI. (To give you an example for comparison, photos in magazines are usually produced at around 120-133 LPI, newspaper photos at around 85 LPI).

Retouche CD is specifically designed for creating, editing and reproducing halftone and color pictures for imagesetter output. It does *not* support PostScript. With a retail price of $1,999.95, the package is targeted to professional design studios, service bureaus and large magazines or advertising agencies. Basically, if you can afford to have an imagesetter (approximately $30,000) on-site, Retouche CD is a good front-end to it.

For smaller firms, Goldleaf has a package called Didot Professional. While Didot is actually a page layout program (like PageStream), it actually has many bitmap and vector graphic editing capabilities. Didot Professional includes a vector graphics editor and can combine scanned images with vectors. you can even "texturize" vector graphics with natural surfaces like marble or wood. Again, unfortunately, Didot does not support PostScript, so you can't just output your pages or graphics to a local service bureau. Didot outputs in a format usable with Retouche Professional. Suggested retail is $999.

The color image manipulation program for "the rest of us" is tms Cranach Studio, soon to be released in North America by ISD Marketing. Cranach Studio is perfect for retouching, enhancing or color correcting 24-bit images or editing grayscale pictures. The modular package can import and export a wide variety of graphic formats and is compatible with Calamus SL. It can even do 4-color (or 3-color CMY or RGB) color separations.

The Draw and Paint modules for tms Cranach Studio offers crayon, watercolor, airbrush, lacquer and other special effects. You can take advantage of paint functions to simulate fingerpainting or oil painting. As an add-on module, tms Vector Studio provides autotracing bitmap to vector conversion, as well as vector to bitmap—including color support! This package has not yet begun shipping and suggested retail has not been announced. We have, however, seen it in action and it is *impressive!*

Observations

It's been a long time coming, but the ST and TT platforms finally have all the tools needed for a professional DTP environment. Some of these tools are only now reaching the market. They aren't as "mature" as some packages available in the Mac or IBM market, but they do stack up favorably against them. And, it seems that the general DTP community is starting to take notice.

At the recent Seybold Electronic Publishing show, Atari made a big impact. With a spotlight article in the Seybold Report, followed by coverage in the latest issue of Business Publishing, Atari has the attention of some important and influential people in the DTP marketplace. Hopefully, Atari can keep that attention focused!

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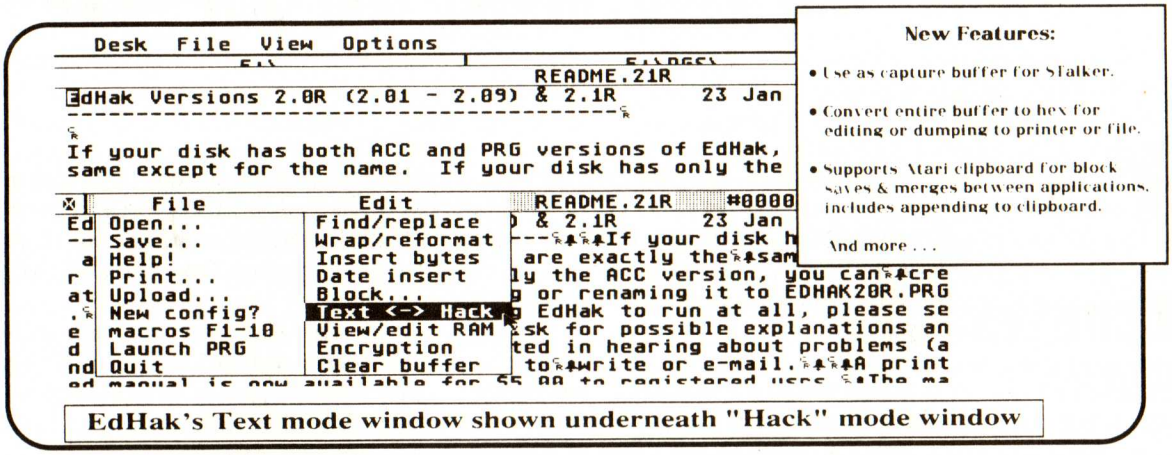

EdHak's Text mode window shown underneath "Hack" mode window

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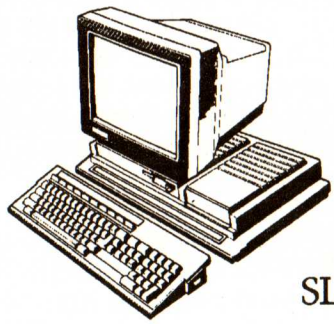

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Running with the Stars

Interviews with Greg Wrenn and Jon Willig

Bob Komives
(FRAUG)

[First published in The Lilly Pad, newsletter of the Front Range Atari Users' Group. Reprinted with permission. Greg is a Lockheed engineer working with NASA; Jon is the Atari dealer who sold NASA Greg's New TT030.]

"I just sold a TT to NASA," Jon Willig said as he hung up the telephone.

After more than ten years of having no Atari Dealer within seventy miles of my home and office, I enthusiastically walk the seven blocks to Run PC since it opened here in Fort Collins, Colorado earlier this year. I had found Jon, the owner, to be competent and believable. Yet, I did not want to believe him on this one. Nobody buys Atari computers. Almost nobody has seen a real TT.

We local Atarians found RUN PC quickly—but the National Aeronautics and Space Administration? He finally convinced me. Then, my disbelief turned to curiosity. We all know it takes either a strength of conviction or a touch of rebellion to use Atari computers for serious work these days. What does it take to open a store or a high-tech bureaucracy to Atari computers. Why not ask?

I gave Greg Wrenn, the recipient of NASA's TT, some time to use his machine before calling him to satisfy my curiosity. Then, I walked over again to Run PC where I got a brief, but insightful, interview with Jon. Greg's answers to my questions have to hearten the most discouraged Atarian.

In a high-powered environment where IBM PCs and compatibles have been mostly discarded in favor of Macs and Sun workstations, three Atari 1040 STs and one bright new Atari TT030 have found a niche and held it well.

Jon's words will be most encouraging if they prove to sound a successful counter attack by Atari in the American market. Run PC sits across the street from an 18,000-student technical university, Colorado State. Jon did his homework before becoming one of Atari's newest dealers and AEGIS Strategic Partners.

He and Atari face the same lull in the computer market that has hit the big guys hard. Jon is realistic about the risks, but also enthusiastic and optimistic. Enough said by me. Greg and Jon speak for themselves.

Komives: Greg, as I understand it, your new system is an Atari TT030 with 8 megabytes of RAM (4 in ST and 4 in TT Fast RAM), a 50 megabyte hard drive, the high resolution PTC1426 color monitor and a Spectre GCR Macintosh emulator.

Greg Wrenn: Yes, that is correct.

What do you and your computers do for NASA?

I work for Lockheed Engineering and Sciences Company at NASA's Langley Research Center in Hampton, Virginia. I'm a staff engineer in a section called Multidisciplinary Analysis and Optimization. We use an awful lot of computer systems here, mostly UNIX. We develop computer programs and, more importantly, methods to design aircraft or spacecraft structures that use all the various engineering disciplines. We're concerned at the moment with aerodynamics, structures and performance.

Do you personally use the TT030 system?

Yes.

How did you come to pick ATARI?

Well, I've been an Atari user for quite a few years. We have three 1040 STs in the office here, too. We wanted something with high resolution and more speed, so we convinced our NASA people to let us purchase the TT. We would not have purchased another Atari if we had not been able to get something at this level. Every piece of

equipment we have here is owned by the government. It has to be on their approval that we purchase anything.

How do you use the 1040s?

We convinced NASA to let us buy those—primarily to use as dumb terminals to the NASA mainframe computers. We also do all of our word processing on them, some FORTRAN program development, spreadsheets, and database—the generic office-type work. We use the LDW Power spreadsheet, which turns out to be a really good choice. We use Prospero FORTRAN. For word processing on the 1040s, we used WordPerfect and, more recently, Wordflair II.

Are you pleased with Wordflair II?

Yes. It's not particularly good on the 1040s, because we have the color monitors. The resolution is not particularly good with those. On the TT, it is a wonderful program. I've thrown away WordPerfect. I don't intend to use that anymore.

Do you run mostly in the Mac emulation mode or Atari mode?

It turns out that I use the Mac mode very little—mainly because it is not quite perfected for the TT yet. I can run some things off the floppy disk, but it does not recognize the internal hard drive of the TT. I sent David Small a FAX to see if I can be high on his list of people who desperately need his first 3.1 software, but I don't have any idea when this will be out.

Do you have other Macs in the office?

All of our secretaries use Macs, and at least half of the people in the building who have personal computers on their desks have Macs. We have very few IBM PC-type machines left. Most everybody else uses Sun workstations or MicroVAXes.

What are your priority uses once you get Mac emulation working?

The main purpose is to take work that has been published previously that is on our secretaries' Macs (text or graphics or both) and bring it into PageStream, the desktop publishing software for the Atari.

Is PageStream your principal program for the TT030?

Yes, I use PageStream, and then Wordflair for the simpler documents. I currently use Easy Draw for the graphics, but I am in the market for a higher performing graphics program. I just got the demo for Avant Vector and am checking that out while inquiring about some of the others. I also use LDW Power. Those are the programs that I am going to be using and am already using for any publishing work I do. We write a couple of papers a year. I need to get them printed on our QMS PS410 PostScript printer and photo-ready for publishers. I should also mention that I communicate with all of NASA's Cray and VAX computer systems using my Atari as a terminal. I use Uniterm, a public domain program. It's one of the best I've seen. It's especially useful for me because it emulates the necessary terminals and the VAX-type keyboard very well.

Are you pleased with PageStream?

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Yes, I am. The more I use it, the more I learn about it. I haven't actually gone all the way through the document that we are working on now, but I am getting better with it. I really do like it. There are a couple little features that it would be nice to add, but I think those have already been brought up to Soft-Logik.

How do other people react when they come by and see you working on an Atari?

The people in my group have all been exposed to Atari for three or four years now. They know what it can do, and they're really pleased. The outsiders who walk in and see this on my desk kind of give me an odd look. The experienced users, the so-called experts, just make a few comments and ask "Why would you buy such a thing as that? Why didn't you buy a Mac?" Others are more open minded about it—the secretaries in particular. They say, "Oh, that's nice. It looks a lot like a Mac." The bottom line is that I usually tell them it does most everything as good as a Mac or any other computer for about half the price.

The purchasers at NASA must be pleased with the savings.

I don't know that they pay close attention to the good deal you think you're giving them. It doesn't matter. I'm happy. They're happy. That's all that counts.

Are you networked to any other systems?

The TT030 itself is not networked to anything. When we get some software to use the Appletalk LAN port, depending on how good the software is, I can connect it to our secretaries' network of Macs.

What is the future for you and your TT030. Will you upgrade to UNIX?

I probably wouldn't—although, we use a lot of Sun workstations here. We have Ethernet networks in the building that are connected to NASA. If I were to get an Ethernet card and software that would allow me to use this as an X-Windows terminal, that's probably the only reason I would get UNIX. All of our Suns are switching over to X-Windows. The TT would not do me very much good as a stand-alone UNIX machine if it does not have a FORTRAN compiler.

Are you generally pleased with the system?

Yes, I am. It runs good, looks good. Compared to the 1040ST's color monitor, this is wonderful. I would probably throw away the Macintosh emulator completely if I could get two more pieces of high-end graphic software for this machine.

One is something that does graphs, ala Cricket Graph. It allows you to input numbers, essentially like a spreadsheet without calculations, and then generate all kinds of graphs. It lets you annotate them with different fonts, and also freehand in some lines. I need that for a lot of my technical reports. I haven't been able to find anything like that for the Atari.

The other thing I need is something to represent equations for technical reports. My favorite program of this type on the Mac is called the Expressionist. It's just a desk accessory that lets you produce the functions and symbols necessary for an equation. Once you've finished entering the equation, it lets you cut it and insert it into your document. As a desk accessory, even a stand-alone program, if you could just create a metafile or something that could be imported into at least a few of the word processing programs on the TT, that would help.

Do you see your office buying more TTs in the future?

In my immediate group, there are four people in this Lockheed building and another three or four that are one-half mile away at NASA. I think that if the next Spectre software behaves as well as most MacIIs behave, the TT is a real good candidate for our future Mac purchases. I know of only one other person in the group who would be interested in buying one as an Atari. He has used this one some. Our NASA division is switching over to Suns almost exclusively. We don't care that much for the desktop publishing capabilities of the Sun—what I've seen of it so far. So, we will be keeping at least one machine like this around to do our reports on. I guess, it all depends. If we demonstrate that this thing just runs circles around the Sun for desktop publishing, then perhaps we will get at least one more.

Might you upgrade your 1040STs with accelerators?

I don't think so. We already upgraded them to 2.5 megabytes. They're almost four years old now. After using TOS 3.05 on the TT, I almost prefer it to Neo-Desk—which we all use here. In any future machines I would like to see that new TOS. If we are going to buy more, they will probably be TTs.

Do you have any final thoughts?

I can tell you that this is probably 1000 percent more reliable out of the box than any Mac we purchased here. When our secretaries first converted to Macs, we bought, I think, eight machines. Four of them had to be sent back because they just didn't work. Over the year, the other four have had some kind of a failure that required a maintenance person to come in to fix it. We haven't had any problems with any of the Ataris we have here—except the one 1040ST that got flooded when the roof leaked.

A Talk with Run PC Owner

Komives: What attracts you to a market which many of your competitors see to be dying?

Jon Willig: Primarily, it's the hardware. As a long-time Atari user myself, I always realized what an incredible value Atari computers have always been, and still are. As an educational dealer, I can offer my customers a complete, powerful and user-friendly system for under $600. No other system we sell [Jon also handles some PC clones] can offer the same amount of functionality for under $1000.

I also feel very good about the reliability of the product. I have experienced far fewer problems with Atari equipment than any other alternative on the market. Finally, the Atari is a much simpler platform to support—in terms of the time we must dedicate to

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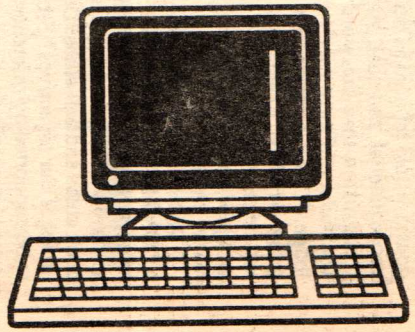

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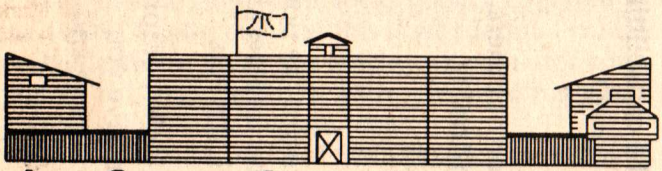
PRESIDENTIAL PONDERINGS by Alvan Sherrill

Is your user group a club? It comes so trippingly off the tongue. Our Club. The Club. The Club's PD Library. The Club's newsletter. It is not uncommon. Even our beloved AIM uses "participating clubs" and "participating user groups" interchangably. Are "club" and "group" synonymous? I would suggest that they are not! And AAAUA is certainly a club in the accepted sense of the word. If the term "club" did not detract from what AAAUA is and does, I would let it go as being inconsequential. However, it is inconsequential, as I shall attempt to illustrate. I say this in the full recognition that the word "club" is firmly entrenched in the vocabulary of most user groups and it may prove difficult to dislodge. "Club" is even a part of some user group's name. Each user group will have to decide if "club" describes their activities or not and whether they decide to eliminate the word in reference to their group or not. Those with "Club" as part of their name may have a harder choice.

Webster describes a club as "...a group of people associated for a COMMON PURPOSE OR MUTUAL ADVANTAGE (emphasis mine) usually in an organization that meets regularly:..."Sounds ok so far. Let's see, we have sewing clubs, bridge clubs, stamp clubs, book clubs and ball clubs. Do we fit in this category? Are these the limits of our objectives? From my own experience which appears to be supported by references, "club" seems to apply to groups organized primarily for the mutual benefit of its members. Our objectives are for the mutual benefit of our members, but, we also have objectives which place us on a higher plane than a self-serving "club". Our objectives include providing a service to the community and society. We welcome the opportunity to speak before civic and educational organizations and welcome young members into our user group to help them not only to better understand their computers, but also improve themselves in a number of personal ways such as language, art, music, writing, public speaking, mathematics, and other academic disciplines. We support the family and help provide guidance and assistance to the members. I therefore submit that we do what a club does, but a whole lot more! We are an educational association or group dedicated to community service and education, with our interests and activities centered around computers, specifically the Atari computer. Each user group may want to consider similar objectives. In short, the objectives of AAAUA include, but are not limited to the study and support of the Atari 8-bit computer. The Alamo Area Atari User Association is a user group. We are not a club. If this describes YOUR user group, will you join me in purging the word "club" from our vocabulary in referrence to a computer user group?



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The January meeting began with additional nominatons for offices and names were added and withdrawn for several of the offices. After the additional nominations voting was done by a show of hands after the nominees left the room.

The following is the results of the elections.

President	Bob Kelley
Vice-President	Barry Tracy
Treasurer	Kim Stahn
8-Bit Librarian	Phil Volkert
16-Bit Librarian	Jim Keller
Secretary/Newsletter	Mark Garrison

Once the formal business was out of the way the remainder of the meeting was the annual Gamefest. Several of the members brought machines to the meeting. There were nine STs and one 8-bit computer being used. Six of the STs were used for MIDI MAZE II and the original MIDI MAZE. The other computers were used for head to head FLIGHT OF THE INTRUDER, and assorted single player games. Karl Fadus brought an animation of a police chase that I believe was done using DELUXE PAINT.

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AEL—PO BOX 34183 LOUISVILLE KY 40232
Atari Scene! BBS (502) 456-4292
Dues: $20/yr per family
Meetings: 2nd Saturday, 11:30 A.M. Central Jefferson County Government Center 7201 Outer Loop
DC (8-bit) Sig meetings 1st Wednesday, 7:30 P.M., Leader: Rich Link
ASTRO (ST) Sig meetings 4th Wednesday, 7:30 P.M., Leader: Jan Wilt
Mailed subscriptions to AELien Transmissions, our newsletter, are available for $1.74/yr. (6 issues) for members.

ASTMUM
ATARI ST/MEGA USERS (Montreal)

Our users' group consists of MIDI musicians, composers, videographers, artists, writers, technicians, students, teachers and business people. We also welcome new members, interested in learning about the ST/MEGA (even STE, MEGA STE and TT) models, and their applications, before purchasing.

Founded in 1987, ASTMUM provides its productivity-minded members with technical support, training and emergency assistance (24-Hour, Repair Hotline), laser printing and graphics services, as well as discounts (through participating dealers) on original software, computer hardware and music industry-related equipment.

To benefit its members, and the visiting public, our group has participated in these shows and expositions:

CEGEP Rosemont AtariFest, Montreal, September '88 WORLD OF ATARI, Dearborn, MI USA, June '89 PRODUCTION '90, Montreal, May '90 SIIM '90, Montreal, June '90 Windsor/Detroit International AtariFest, May '91 PRODUCTION '91, Montreal, June '91 SIIM '91, Montreal, June '91 WAACE AtariFest '91, Reston, VA USA, October '91 Chicago ComputerFest, Rosemont, IL USA, November '91

We have kept our members informed of Atari's progress on their most recent models (TT, MEGA STE, ST Book and STylus) through our large periodicals library, videotaped show-tours and interviews with software and hardware developers.

Encouraging members to form special interest groups, we hold monthly meetings (usually the last Sunday of each month) and offer seminars and demonstrations.

Some members teach others, in "hands-on" recording studio environments, at generous discounts. Masters of piano tuning, computer repair and instrument restoration work their magic. Incoming members are impressed by the efficacy with which our specialists troubleshoot the previously unsolvable. Even singers find help for their vocal problems!

In addition to helping ASTMUM musicians market their CDs, LPs and cassettes, at exhibitions and retail outlets, we have assembled a "sampler" cassette highlighting some of their work. You can order this extraordinary, chromium dioxide wonder (ASTMUMusic Sampler, '91-'92) for $12.00 postpaid! Please specify your choice of noise reduction: Dolby B, Dolby C, DBX or Super D (this list will get longer because at least one, new, noise reduction system will be introduced this year). Make your Money Order (in U.S. dollars if you live in the U.S.A.) payable to K. Carter-Morgan and send it to our address, below. Your return address should be complete and clearly printed.

If you use your Atari in creating or performing music, and would like help in launching and publicizing an independent release, our group may be just the ticket.

Membership information, advice, product list and sampler cassettes may be obtained by writing to: ASTMUM, Attn: K. Carter-Morgan P.O. Box 966, Station B Montreal, PQ Canada H3B 3K5 or by phoning (514) 272-6631 (voice only).

Executive Exhortations by Kest Carter-Morgan:

First, let me point out that, due to space considerations, my Chicago ComputerFest article, "MIDI IN THE MIDST", is slated to continue in the April issue.

Second, I want to thank those ASTMUM members who, in recent months, have given their time and energy in making stimulating and informative demonstrations, as well as assisting in other club functions.

Third, we are forming a Montreal AtariFest committee in order to rev the FestEngine up to speed. However, it needs fuel... so keep those cards and letters coming!

Adieu for now!

KCM (ASTMUM)

BRAG ST

Buffalo Region Atari Group for ST's

Minutes of the December 19, 1991 General Meeting

By Dane Stegman

The meeting was open by Chairman Mark Pierro at 7:35 pm. This was our annual Christmas Party. We had Christmas cookies and Egg Nog and Gum balls to hand out. We also had demos of THE SNOWMAN and SNOWBALL FIGHT by Codehead Software. MIDIMAZE games were played and people who brought their LYNX's started to play them to show the new model (LYNX II) and the original LYNX.

After the demos were shown, MIDIMAZE games and LYNX battles, we had our door prize raffle. Our first winner was Karl Miller (a new member) who won a copy holder. Our second winner was Michael R. Burkley who won a pack of Static Free Wipes for dusting off your monitor and our third winner was John Forgettee who won a 3 1/2 Diskette Storage Box. Then we had our regular raffle and our winner was Carl Barron who won a Beetle Mouse.

CUSTUG Champaign-Urbana ST Users Group

The Champaign-Urbana ST User's Group (CUSTUG) meets at 7pm on the second wednesday of each month in the Auditorium of the Urbana Free Library at the corner of Elm and Race streets in Urbana, IL. Membership dues include a subscription to AIM and ATARIUSER magazines, as well as access to our PD software library. All who are interested in the ATARI ST & TT computers are welcome.

Lee Johnson	President
Menno Rapson	Vice-President
Bill Magro	Secretary/Treasurer
Tim Brumleve	PD Librarian

Contact address: CUSTUG, PO BOX 3442, Champaign, IL 61826-3442 Contact telephone #: 217-356-7916

Layton ACE of Utah

The Layton Atari Computer Enthusiasts (L.A.C.E.) membership cost $20 per year. Privileges include the AIM Monthly Magazine, access to the 8-Bit and ST club libraries, monthly meetings, monthly AIM public domain disks, free issue of AtariUser Magazine (available at club meetings), help and friendship. If you are presently not a LACE Club member and wish to join contact the one of following persons or write to LACE, c/o Irwin Brooks, 3897 South 2275 West, Roy, UT 84067 or call (801) 731-1516.

Your 1992 elected L.A.C.E. Club Officers are:

Marshal Walker,	President	(801)545-7152
Lee Hatchell,	Vice President	(801)776-6687
Quhid Izatt,	Secretary/Treas	(801)544-4399
Richard Clark,	8-Bit Librarian	(801)825-5823
Mark Seegmiller,	ST Librarian	(801)773-8555
Dave Young,	Publicity Co	(801)776-6273
Irwin Brooks,	Publications Co	(801)731-1516

The L.A.C.E. Club Meets in the basement of the Clearfield Library every second Wednesday of the month at 7:00 p.m. Mark your calendars for the next three meetings. March 11, April 8, and May 13, 1992. SEE YOU THERE!!!

If anyone asks, tell 'em you saw their ad in AIM!

P3ACE

The Prez Sez by Steven Leser

Well, it has been an eventful first month in office. Due to a huge amount of expenditures in late 1991, the club's treasury was getting pretty low. We had an officers meeting to discuss ways to improve our cash situation. One of the things we came up with is that we would like to raise the dues to $20 per family. We have looked around at other users groups and discovered that we were among the only people charging less than $20 so we didnt feel too bad about the increase. We refuse to raise dues without a corresponding increase in services however! And, with that in mind, the SIG vice Presidents are redoubling their efforts to bring in more and better guest speakers, the Librarians are beefing up the size, and quality of offerings, and the BBS SysOp (me) is cleaning up and providing the BBS with a more polished look. Along with increasing revenue, we have decreased expenditures by trimming away some of the fat. These measures should put the club back into good economic health by mid-year. (Yuck, all of this economic talk makes me feel more like a U.S. president than a club president!)

The other thing that has kept me extraordinarily busy is that our treasurer Rick Mount has been away for the past few weeks, and I have temporarily taken over his duties as well. Talk about busy!

In one of my first few trips to the mailbox, we got a letter from a gentleman in Algeria wanting to joining the club! Neat! I will have to get a membership form and such out to him right away! Hey, AIM how many magazines do you get to send to Algeria???

Anyway, the presidency has been a tough job, as I expected it to be, but a heck of a lot of fun too! Don't forget to call Laser BBS at (719) 527-1374. We have a qwickmail system that allows you to download your new messages, and read and reply to them offline! (Neat for all but especially you long distance callers, eh?)

ST SIG Notes by Terry Quinn

There was no December ST SIG meeting so there isn't much to report. We will be having a demo of the new club BBS and the qwickmail features at an upcoming SIG meeting.

8-Bit Tid Bits by Rick Reaser

With the threat of a heavy snow, it was a wonder that anyone even showed up for the January 8-bit SIG meeting. We covered two basic items -- Selected educational programs and the new library catalog program we bought.

First we looked at a fascinating offering by Dorsett Educational Systems. It consists of a cartridge and a cassette tape. The basic program is on the cartridge, while the lessons are on cassettes. The cassettes use both tracks, one for data, which is put onto the screen and the other for voice which talks you through the lesson. Each course consists of 16 lessons or cassettes and costs $39.95 ($2.50 per 30 minute lesson). If you are interested, you can call Dorsett at (800) 843-5242.

Next, we looked at A+ Spelling by American Educational Computer, available from American Technavision. I use this program every week with my own first grader. In addition to providing its own spelling lists, up to eighth grade level, you can also type in your child's weekly spelling list from school along with a sentence using the words and misspellings. It is a great program with tons of flexibility. We also looked at some Public Domain educational programs. Some were good others were dogs. This was the lead in to a demonstration of the new disk cataloging program we bought, The File Information Program. We developed short program descriptions and used the disk that the PD educational programs were on as part of the demonstration.

The File Information Program was written by a member of the Denver Atari Club, Larry Richardson. It was written in Action! specifically for club 8-bit disk librarians. It has lots of neat features. It can read the program titles directly off the disk and also allows you to add a short description of the program as well. If now someone could only figure a way to combine the the features of SAGECAT with this excellent program. The program is $12.50, shareware. We saw it advertised in the November AIM which led us to buy it. Call the Denver Clubs BBS (303) 343-2956 and leave E-mail for Larry if you are interested. Or see our 8-bit Librarian, Roger Meston, for a demo.

Editor E-Mail by Sam Cherry

We've still got 3 1/2 inch disks available for 40 cents each or $8.00 per pack of 25. New 5 1/4 inch disks are also available for 30 cents each. If you have any questions or would like to put in a group order for labels or disks, please contact me at my new number (719) 598-7309.

Be sure to let us know if you change your address so you can continue to receive AIM. If you do move and want to continue to receive AIM, you need to tell the postman that you will pay for the forwarding of third class mail. Failing that, we always get a few extra issues of AIM mailed to the club P.O. Box in case the postman loses your copy or there is a mix up somewhere. Please check your mailing label to see if your dues are due.

See you at the next SIG meeting!

PHAST

Well, the first PHAST meeting of 1992 has come and gone. The meeting started out a little slow with only a handful of members showing up at the 10 am starting time. Somewhere around 10:40 we had around 19 members present.

The meeting started with a discussion of what the user could expect from Atari and other developers as far as the 1.44 Meg Kits and the TEC board was concerned. This discussion was then followed by a discussion and demonstration of the PHAST library by our librarian Dave Thorson. Dave talked about what was in the library and demonstrated some of the software found in the library such as Color Space, and a few other games.

Once Dave had finished with the library, our VP, informed the club that our only local dealer Computer Works was dropping the Atari and Amiga line completely. Although we will not have a local store to go to, we will have a dealer. That dealer is Richard Phillips a VAR who talked for about 20 minutes on what he had to offer our club and the Arizona community in general.Several people expressed concern about being able to get upgrades, and repairs done on their ST/STEs and our VP explained that Cory Chapman is now doing repairs, upgrades, etc... for very reasonable prices. Afterwards Brien King, our VP, gave a very informative demonstration of the new STereo Replay digitizing off of a CD player.

Once this demo was completed our President, Mike Aubrey, set up and demonstrated his new SLM605 Laser printer and his new T25 Accelerator made by Jim Allen of FAST Technologies. Needless to say, both pieces of hardware were very impressive. During the demonstrations Mike interjected several informative tidbits about Atari and the Atari community in general. At the end of the meeting everyone gathered up front to get a closer look at the equipment, get disks from the library and just to chat.

President Michael Aubrey (602) 870-8360
Vice President Brien King (602) 841-7136
Recording Secretary Adam Ceton (602) 266-2128
Treasurer Wayne Myers (602) 788-5165
Disk Librarian Dave Thorson (602) 954-6033
Cory Chapman (602) 246-6144
Richard Phillips at Analytical Computer Solutions (602) 780-4717

Our Local BBSes are: ST Base (official Club BBS) (602) 285-9246
RDS BBS (VP's BBS) (602) 841-7196
Wild Thing BBS (Recording Secretary) (602) 277-8225

RACC

ROCKFORD ATARI COMPUTER CLUB

WE'RE NOT JUST PLAYING GAMES ANYMORE!

New at RACC & LCACE

Our XANTH store has a new location. Xanth Software 1957 Harlem Road Loves Park, IL 61111 (815) 633-8300

Andy Learner has relocated in Milwaukee, and has a job, a new birthday, and is now a member of MILATARI. George Luhman has completed the enormous job of cataloging all of the 8 bit library disks, and has them all on a Disk Database. Call the BBS 815 226-2388 for club information. This is operated by his 2 boys, (HANDLES) King Arthur and Zethan. They have recently remodeled and relocated their BBS in their basement. Things keep growing and needing more room. And the calls keep coming from INDIA and other far away places.

RACC Jan. 18th meeting will have been about "Word Processing. RACC Feb. 15th meeting is scheduled to be "DESK TOP PUBLISHING". And we finally got a newsletter published. (Thanks RAY). Ray Smith our EDITOR is resigning from the ST Librarian. Dennis Renner is working hard on getting his new Migraph OCR and scanner up and running. Dennis is scheduled to demonstrate this at the Feb. 8 LCACE meeting. In this situation, reading text is more difficult than writing it.

RACC is scheduled to provide the program for the LCACE March 14 meeting in Gurnee. Come and a see the Terri, Dennis and Jake show on Educational Programs. Terri, Educational Program Design; Dennis, Transformer 8 bit to ST; Jake, 8 bit Basic Programmer. This will be a shortened version of the Seminar that got bumped from the LCACE show in Chicago.

Teachers welcome.

Sincerely,

H. Jake Olbrich

R.A.C.E.

Pres. Lewis Midyette 828-4319
Vice Pres. Eric Schofield 851-5134
Secretary Don Nelson 942-2764
St Librarian Tony Manino 851-8092
8-bit Librarian Arthur Katz 881-0247
Treasurer Robert Yates 552-7053
BBS SYSOP Robert Yates 552-7053
Galaxy BBS 552-0974

Well, so far the year is going very great, our attendance has been very good. We have had several new members, a few of these have been 8 biters. We are always happy to expand our group. So far this year we have covered Pagestream 2.1, Terminal programs,and this month we will be talking about data base programs. The next meeting will be held on Wednesday March 18that Richard B. Harrison Library on Newbern ave. Club dues are $20/ year which provides access to the Club BBS, subscription to AIM, access to the club Library. If you have any questions call Lewis Midyette 828-4319.

SCAT SUBURBAN CHICAGO ATARIANS

AN INDEPENDENT COMPUTER USERS GROUP

February 1992 SCAT club news.

Meeting on February 1, 1992, the demo will be an Atari TT with IBM and Mac emulators. We as a club have not had a production TT at one of our meeting or looked at a TT in great detail. Greg LaBrec, who works for Atari in lombard, did bring in a pre-production model in the spring of 1991. The computer being brought to the February meeting is owned by a club member.

The March 7, 1992 meeting will include a demo of an IBM program from Parsons titled Tax Edge. Al Conley will demo this program. He will run the program using PC Ditto II installed on an Atari 1040ST. I have seem this program run and it is impressive. This program also has the capability of sending by modem the tax forms to the IRS.

On tap for the April 4, 1992 meeting will be GAMES. We will have 8bit, 16bit and LYNX games. The titles have not been put in stone, but I am sure there will be something for everyone who attends. The May 2, 1992 meeting will feature the Portfolio hand held computer.

All meeting will be in the K building College of DuPage. I will try and get room K157.

A reminder from the Officers, Members dues of 20 dollars for 1992 are now payable since most membership runs out in March. If you can not come to the meeting please send the dues to our mail Box in Roselle. Hope to see you at the meetings.

Alvin Riesbeck, President

San Diego Atari Computer Enthusiasts

General Meetings are the 3rd Monday of each month at the North Park Recreation Center Social Room, 4044 Idaho Street at 7pm. ST/8-bit workshop meetings are on the 1st Thursday of each month at the North Park Adult Center, 2719 Howard Street at 7 pm. All meetings are open to the public. Annual SDACE subscription dues are $18 which includes increased BBS access, AIM subscription, SDACE newsletter subscription, and reduced rates on the Disk of the Month.

SDACE's address is PO Box 900076, San Diego, Ca 92190.

President Dan Phillips (619) 462-1289
Vice President Dean Smith (619) 582-6749
BBS - 24hrs, 300-2400 baud, 80 MB (619)689-8157

Back-to-back federal holidays (Martin Luther King Jr. Birthday and Presidents' Day) have forced us to combine our 8-bit and ST meetings for January and February. Despite the misgivings of both groups, there has been no culture shock as both 8-bitters and ST enthusiasts were forced to confront the fact that the other's computer is a very capable machine. Of course, those of us fortunate enough to own both could have told them that!

San Diego ComputorEdge magazine, a local MS-DOS-oriented publication, has asked SDACE to man several booths at the planned first San Diego Computer Fair tentatively slated for September. Members will spend the next six months planning how to put our best foot forward, and we expect to have both our ST/Mega/TT and 400/800/XL/XE platforms represented in strength. It wil be an exciting opportunity to bring the quality of Atari products before an unsuspecting public.

ComputorEdge has also been giving Atari unaccustomed attention of late, with articles detailing the future of Atari, an overview of Atari-compatible joysticks, and a history and description of Atari computers.

Beginning in March, we will revert to having two meetings monthly, on the first Thursday and third Monday. Hope to see you there!

SEVAC

SOUTHEAST VALLEY ATARI CONNECTION

The South East Valley Atari Connection meets the third Saturday of each month at the Dobson Ranch branch of the Mesa Public Library, 2425 S. Dobson Rd. Depending on meeting room availability, meetings usually begin at 10 a.m. Please call a club officer for exact time. Yearly membership is $12.00. Membership includes reduced prices on PD ST and 8-bit software libraries, Atari Interface Magazine, and club bbs.

President	Dennis LaFontaine	
Vice President	John Rojewski	(602)978-2362
Secretary	Marc Dyer	(602)897-0314
Treasurer	Lee Whiteside	(602)962-9415

BBS 24hrs, 2400bd, 70md (602)833-9216

The Saginaw/Tri-City Atari User Group meets the 2nd Saturday of the month, at 9 am, at the Rudy Zauel Memorial Library, on the corner of Center and Shattuck in Saginaw Township, Michigan. Upcoming meetings are January 11th, 1992, February 8th, 1992, March 14th, 1992, and April 11th, 1992. NOTE: We communicate by postcard with our members before each meeting to confirm the location and time of the meetings.

President	Bryant LaFreniere	(517)835-2234
ST Librarian	Jim Fleming	793-9792
Treasurer/Secretary	Marty Schmidt	792-6029
8 Bit Librarian	Ted Beauchamp	686-8872

Club dues are still only $20.00, which provides support for both the 8 Bit and ST, and full access to the club's Public Domain library, along with a year's subscription to the Atari Interface Magazine. PD disks are $3 for a double-sided disk packed full of goodies (2 for $5, what a bargain!). Check your mailing label, if you need to renew, (or haven't joined us yet!). A free PD disk is included with each new membership or renewal! DO IT NOW!

At the JANUARY MEETING:Only 5 people were present at the library for the meeting. Various members will call some inactive members to see if we can get the meeting up to at least 10 people. The people at the meeting enjoyed some good conversation on Atari-related news and advice. I hope we can get more people coming to the meeting because it is discouraging and disappointing for the people attending the meeting, especially the equipment volunteers who had to disconnect and lug their computer equipment to the meeting for nothing.

In FEBRUARY: We will decide on an agenda before the meeting. We will communicate equipment volunteers and the agenda of the meeting by a note in the postcard sent to the members before the meeting.

WAUG GENERAL MEETING MINUTES 1-14-92

The January WAUG meeting wasn't as well attended as we had hoped that it would be. Our topics that evening were Portfolio and emulators. Our guest speaker was unable to attend owing to the weather, so Mike O. began the meeting with a demo of Spectre GCR running on our club STE. When started, Spectre lets you configure the amount of memory used for Mac emulation, the type of printer (including Atari Laser), SCSI device number and other parameters for any attached hard disks, and whether or not sound is on (Spectre slows down considerably for sound). Mike showed us around the ST-like Mac HFS file system . The first Mac program that he ran was Speedometer, which thought that it was running on a Mac with 11% faster CPU speed, 94% faster disk access, and an overall rating 25% faster than a Mac Plus. Mike's own ST with an ICD Adspeed accelerator reports that it is 94% faster overall than a Mac Plus.

The X10 controller software for Mac that was demonstrated next was a far cry from the rudimentary X10 software available for the ST, so I guess that it's possible that maybe some Mac software can be worthwhile. The Mac version came complete with configurable MacPaint rooms and fixtures that could be easily programmed to do different things at times on different days. While we would probably have been more impressed by seeing Spectre run on the TT that was supposed to be at the meeting, Mike did a very good job of giving us an idea of what this emulator was capable of.

President Dave B. brought out the WAUG SX212 modem complete with Vanterm software and announced that it would be made available for any members who wished to try it out on loan. He did tell us that the Black Box hard drive interface for our 8 bit did in fact arrive, but our 130XE is still out for repairs.

Next months meeting will feature reviews of UIS III and the ST graphic program, Chronos 3D. On the schedule for March is educational programs and Dave solicited both demos and requests for this meeting from the assembled membership. April's fare will be telecom as there have been a number of new programs that have come on the market as well as the fact that KA9Q/Internet was finally figured out and put to use by some of our members. Since he did such a fine job with the emulator portion of the meeting, Mike O. also got stuck with doing the Portfolio portion of the meeting. Since it would be rather difficult to show the Portfolio's tiny screen to anyone further away than a couple of feet; its capabilities as a palmtop computer and its ability to transfer files to and from other computers, including Mac and IBM, and its wide variety of programs were the subjects of Mike's presentation.

V.P. Craig Harvey announced to the meeting that the next major Atari show would be in Toronto on April 4th and 5th. He also made available some IAAD brochures for anyone who was interested.

Mike O. as ST Librarian and Ralph S. filling in as 8 bit Librarian gave brief synopses of the contents of the featured disks from our library.

The monthly drawing was held next with the program Trivia Arcade going to the 8 bit winner and UIS III and Epyx World Karate going to the ST winners.

While the STE was still hooked up and turned on Mike O. was kind enough to give us some short demos of some of the programs that he had compiled for the library. Two new utilities disks, a ready to run game disk with some very nice STOS programs, a new library disk with a faster and more flexible version of STD Cat, and three disks full of Portfolio programs were offered for sale.

The meeting was adjourned at 9:10 PM

Respectfully submitted,Dan Cable, Secretary

WNYAUG

PRESIDENT	Mike Husband
VICE PRESIDENT	Kevin Packard
TREASURER	Dave Shane
SECRETARY	John Kasupski
AT-LARGE	Bruce Andrew
LIBRARIANS	Betty Knab
	Norm Knab
SYSOP	Don Koepf

WIZARD'S ATTIC BBS (716) 681-1654

The Western New York Atari Users' Group, based in Buffalo, New York, serves owners of Atari ES computers (ight-bit chip, ixteen-bit addressing...Atari 400, 800, Xl, XE, and XEGS!). We meet on the first Thursday of each month at: Bacon Hall, Rm. 116 East Buffalo State College 1300 Elmwood Avenue Buffalo, NY

WNYAUG members receive subscriptions to the POKEY Newsletter Disk and Atari Interface Magazine, discounted prices on disks from the WNYAUG Software Library, and access to the WNYAUG members Only section on the Wizard's Attic BBS.

All correspondence is encouraged. Our address is as follows: WNYAUG, P.O. Box 59, Buffalo, NY 14216.

WESTERN NY ATARI USERS' GROUP NOVEMBER, 1991 MEETING MINUTES

The November, 1991 meeting of WNYAUG was called to order by Mike Husband, President, at 7:30 PM in Room 116E Bacon hall on the Buffalo State College campus. The November issues of AtariUser Magazine and the POKEY Newsletter Disk were distributed.

Mike noted that Unicorn Publishing had informed him that the group was in arrears on payments for Atari Interface Magazine as well. Dave indicated that he would check his records and take proper action.

Mike noted that it had been suggested some time ago that we hold a Swap Meet at one of our meetings, and that a combined Swap Meet/Christmas Party will be conducted at our December meeting. The group agreed on two rules, namely (1) that all software offered for sale must be original (NO illegal copies), and (2) that hardware is sold on an "as-is" basis but that it is preferable for hardware to be in working condition.

Wayne Maracle Sr. has been typing in articles from old hardcopy issues of the POKEY Newsletter which nobody seems to have on disk anymore. Wayne submitted the first fruits of his labors, a disk with articles from several 1983 and 1984 POKEY issues in ARC format, which he gave to John to be put on the group's hard drive and possibly reprinted in the new POKEY Newsletter Disk.

NOTICE TO ALL MEMBERS: If anyone has ANY articles from the hardcopy issues of POKEY on disk, please speak up!!! Not only will this help us build up our library of text articles, but it will also spare Wayne from doing a lot of needless typing.

New Business: Dave informed us that his records show a current balance of $548.06, with two checks outstanding.

Dave also announced that as a by-product of the group's purchase of floppy disks in bulk quantities for use by the Librarian and newsletter Editor, WNYAUG is now able to make 5-1/4" floppy diskettes available for sale to members at the low price of just $4.00 for a package of 10 disks with write-protect tabs included. This price is lower than any available locally, and several members took advantage of it at the meeting. Members who wish to purchase disks through WNYAUG should contact Dave at 875-5350.

John passed around a copy of a flyer he created using The Newsroom, advertising our upcoming Swap Meet/Christmas party. In order to maximize participation in this event, it was decided to extend mailing of this flyer to those former WNYAUG members that we are able to locate in the area. We were planning to contact ex-members anyway, so by doing this we will be killing two birds with one stone. John will compare listed addresses for former members with listings in the local telephone directory to come up with a list for the mailing.

Christine Hess advised us that she plans to contribute to the Swap Meet by baking Christmas cookies and offering them for sale by the dozen at the Swap Meet, then donating the profits to the group.

Program Demonstrations: Mike began the demo portion of the meeting by showing the group three different hockey game programs. The programs were displayed in chronological order from oldest to newest so that we could observe how the programs became more sophisticated as programmers' abilities improved with time.

The first program was simply titled "Hockey" (Gamma Software, 1981). This game can be played by two players or, on a 400 or 800, four players. Each side has three skaters and a goaltender, and play on a rather small rink, both ends of which are visible on the screen throughout the game. Play action was nice for an early implementation of hockey on the Atari, but the graphics left something to be desired and there was no option for a single player to play against the computer.

The second program was "Major Hockey League" (Thorn EMI Video, 1983). This game also requires either two or four players, with no option for a single player to play against the computer. However, the graphics are somewhat better, and the game uses a full-length rink with horizontal scrolling to center the screen on the end of the rink that the puck is in. The play is better (you can even knock the opposing players down!), but the goaltenders in this game are TOTALLY USELESS: It is virtually impossible for the goalie to make a "save" in this game.

Following the hockey demos, Mike showed the Antic Graphics Converter, a utility that works with Graphics 7, 7-1/2, and 8 pictures. Mike is looking for artwork in this format, so if you have a collection of same, bring them to a meeting or F-Mail them to Wildstar on the Wizard's Attic.

(Editor's Note: I have a BASIC routine to display GR.8 and GR.9 pictures in a program, so if Mike gets any good response to his request, you may see the results in some future POKEYs.)

Following the break, Mike showed the Disk Of The Month, a collection of public domain game programs assembled by Librarian Betty Knab. After watching Mike attempt to play WORM.BAS we discovered that he is not the expert game player that he would like us to believe he is. Stick to Archon, Mike!

The Split Club drawing was then held. At last we have some genuine competition for Kevin Packard! Doug Tolkacz was this month's winner, which makes him 2-for-2 in Split Club drawings.

The meeting was adjourned at 10:15 PM, after which Dave did an informal demonstration of a home-built EPROM blower. A formal demo of this device had been planned, but was squeezed out due to time constraints. The formal demo of the EPROM blower will be presented at a future meeting.

November 8, 1991 John Kasupski, Secretary

WESTERN NY ATARI USERS' GROUP DECEMBER, 1991 MEETING MINUTES

The December, 1991 meeting of WNYAUG was called to order by Mike Husband, President, at 7:35 PM. The business portion of the meeting was limited, for two reasons, one being the fact that we wanted to conduct a Christmas party and Swap meet, and the second being that "Old Man Winter" picked our meeting date to rear his ugly head and dump some extremely rotten weather on us.

Those of us who did brave the elements, received the December issue of AtariUser Magazine and a copy of the POKEY Newsletter Disk, while Mike announced that there would be no January meeting because Buff State College was going to be closed on our regular meeting date.Our regular meeting for February will NOT be affected, there WILL be a regular meeting on February 6, 1992.

Treasurer Dave Shane reported that our account balance now stands at $820.81 with a few checks still outstanding. This balance also includes the refund for the club's 40Mb hard drive (The original died under warranty, and the dealer's replacement never

had a chance to die because it didn't work when we received it!). We will now seek a suitable replacement.

The kickoff of the membership drive was discussed. Over the past month WNYAUG has mailed over a hundred letters to former members of the group to see if they are still interested in their Atari ES (8-bit) machines. We did get some favorable response from a few members, although the inclement weather definitely put a damper on most response we would have gotten in terms of people attending the meeting. However, we did get one new member immediately as a result of the letters we sent. Daniel Soborowski is again a member in good standing. Welcome Back! Dan works nights, but his wife and son attended the meeting and made some new acquaintances. We look forward to seeing the Soborowski family more often.

Copies of the 1991 WNYAUG Informative Survey were distributed. The purpose of this survey is chiefly to allow users of Atari ES (8-bit) equipment to provide us with feedback about the way in which they use their systems. The information we obtain will hopefully go a long way toward helping the officers plan meetings during the upcoming year, and so, all members who received the survey are urged to PLEASE complete them and get them back to the Secretary, either at the February meeting or in the mail.

Our SysOp, Don K!, confirmed what many of us had known for a few days already, namely that The Wizard's Attic BBS was temporarily down. The problem stems from a dead hard drive (like the flu, this seems to be going around nowadays), and Don hopes to have the board back online within a few days, although the capacity will be reduced until the dead drive his 40Mb MiniScribe) is repaired or replaced.

Business was then set aside while we took advantage of the free coffee and conducted the Swap Meet (such as it was, with the weather limiting the turnout). Among other things, an XEP-80 and AtariWriter Plus 80 changed hands, another member got a line on a Star SG-10 printer, another got Flight Simulator II (only to discover it won't run on an XF-551 drive...XF-551 owners WATCH OUT FOR THIS!), some more blank disks were sold through the group's bulk disk purchase offer (members may buy a package of 10 disks for $4.00), and the members got to exchange some small (and some not-so-small) talk as well.

A split club jackpot drawing was held, and your humble Secretary/Editor made off with the loot this time around, though the weather undoubtedly reduced the size of my "take" <grin>.

It has already been suggested that we try the Swap Meet idea again sometime this spring, when cold and snow are less likely to reduce participation as they did this time. If you think this is a good idea, let the officers know (the comments area in Section 4 of the 1991 Survey is a good way to do this).

Also, I noticed (too late) that the copies of the surveys handed out at the meetings were stapled together in the wrong order. Hopefully this won't confuse anyone too much. All the pages are there, but the second of the five pages should have been last. This merely proves that our Treasurer is human after all, despite what you may think when you see his computer system.The formal meeting was adjourned at about 9:40 PM. As usual, many of those in attendance stayed around awhile and visited with one another, exchanging ideas, information, bouquets, brickbats, and all the other neat stuff that you miss out on if you don't attend our meetings.

For many, this decision is voluntary. For others, it's mandatory - some members work nights and can't attend meetings. But this month, in two instances illness kept members from attending. Best wishes for a speedy recovery, therefore, to Christine Hess (A.K.A. Mother Goose), who's in K.M.H. recovering from acute bronchial pneumonia, and also to Kevin Packard (a.k.a. The PACK), the nature of whose illness is not known to me but whose presence was missed nonetheless.

December 6, 1991 J. Kasupski, Secretary

PRESIDENT'S NOTES by Mike Husband,

The Western New York Atari Users' Group will be having it's first ever (that I can remember) Great December Christmas Party and SWAP Meet. Having never been to one myself, I hope it is a great success. If we have a good turnout for this event, it WILL be so. Plus it should be a good time for all. More on this in next month's article.

We will be needing an audit in the future. What this entails is that the user group knows the whereabouts of all its equipment. The group just has to have it written down. The User Group has had many pieces of equipment misplaced over the years. I don't want to see equipment & things get misplaced like they have been a long time ago.

Our POKEY Newsletter Disk may be getting a little thinner, article wise that is. Our Secretary & POKEY Newsletter Editor has a work obligation that will impair his abilities to impart the same amount of his free time into the POKEY Newsletter. If no one pulls in the slack it might show. I am hoping that it won't.

I also would like to thank our POKEY Newsletter Editor for clearing up the misunderstanding about our licensing agreement with ICD and the POKEY Newsletter program.

Thursday, December 5,1991 our first annual Christmas Party and SWAP meet was held. We had a good turnout and a new member joined the club. The weather was awful. Next year it will be bigger and better.

I have been in contact with AIM magazine, we should all be getting an issue soon!!!

The Club received a package from DORSETT Education Systems, Inc., "The Talking Tapes that Teach". They sent the club a cartridge and a cassette tape. I tried to demonstrate them at the December Meeting. I needed an ATARI 410 or 1010 Cassette Recorder and did not have one. I will demonstrate The Dorsett Education System at the February 6,1992 meeting. DORSETT is closing out the Atari line of their inventory. I believe the club should add some of these fine products to our Library. The club can not get all the tapes but a few would be nice. I am going to be typing up an inventory list of the products which are still available.

John Kasupski, our Newsletter Editor and resident Writing Machine, did an outstanding job on the December Pokey Newsletter Disk.

I demonstrated three different hockey game programs at the November 7, 1991 meeting. There was some misinformation about these programs in the December POKEY Newsletter, November Meeting Minutes. I blame myself for the misinformation. I did not know our Secretary was taking notes and I forgot to mention some of the features of the Games. The first program was "Hockey" by Gamma Software, 1981). The second program was "Major Hockey League" (Thorn EMI Video, 1983). The third Program was "Showdown Hockey" by (Aussemware, 1991). I have an article which lists all the options available in each program.

An Atari User CALLED me from out of state wondering why the WIZARDS ATTIC BBS was consistently busy. I informed him that the BBS hard drive had crashed and was being repaired out in California. He informed me that the ATARI clubs in his area were hit hard by apathy. He gets AIM Magazine at his local bookstore which receives only TWO copies a MONTH!!!

I am looking for an electronics part called a THERMISTOR. It should decrease in resistance as the temperature increases. Many catalogs and manuals list the resistance at 25 degrees Celsius in Ohms, I do not know this value. I know that it MUST BE a 1 MEG THERMISTOR and have a range from -5 degrees Celsius to 45 degrees Celsius. Any help would be greatly apperciated in this quest.

(Note: Remember to KEEP the First Thursday in the Month of April OPEN on your Calendar. This will be the Western New York Atari Users' Group Second Annual (10th Year) Anniversary Party. It will be even better the second time around!!!))

I hope that one of our members and newest writers for the POKEY Newsletter Disk, Christine Hess, is feeling better after her run in with Acute Bronchitis and Pneumonia.

STAR TREK VI was GREAT!!!

teaching our customers how to get their new systems to fulfill the intended purpose. There is no disk-based operating system to fumble with, no multi-layer operating systems to install, no command line interface to contend with. It simply works. Most people purchase a computer to make their life easier, not more complicated.

Where do Atari computers fit into Run PC's product line?

Essentially, I see the Atari platform as a cost effective alternative to the Apple Mac or IBM clone in the general market—and the platform of choice in some specific market niches. The strengths of the Atari platform make it the logical choice in the music, desktop publishing and educational markets. That is not to say that the ST/TT is not capable of satisfying the needs of the general business market. On the contrary, we run the entire business on a MEGA ST4. However, segmenting the market based on your strengths is a fundamental marketing strategy, and one which I believe Atari is realizing.

In what areas do you use your ST to run your business?

The MEGA ST4 is used daily, mostly as a desktop publishing platform. This machine, along with an Atari SLM804 laser printer, a Migraph scanner, Calamus, PageStream and Touch-up, provides me with all the tools necessary to create professional camera-ready promotional materials. The MEGA is also used for all of our inventory control and invoicing.

What do you see in your future and Atari's?

I think with the introduction of the new products, and lower prices on current products, Atari is on the road to recovery. They have repositioned themselves and will be a major contender in the personal computer market. The dealer program has recently undergone reorganization, and I have found Atari to be very responsive. Both Atari's pricing and product elements are currently sound. It may take some time to rebuild the distribution system, but many new dealers are being added. The key will be to focus on specific markets—for both Atari and its dealers.

Bob Komives is a land-use planning consultant who has used Atari computers since 1980.

Greg Wrenn is a Staff Engineer with Lockheed Engineering and Sciences Company at NASA, Langley Research Center, and Jon Willigis the owner of Run PC, located at 524 W. Laurel #2, Fort Collins, CO 80521, (303) 493-5565, 1-800-326-2344.

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Ralph Turner's Third Book of Atari ST Topics

Tom Brantmeier

Index Legalis has recently published Ralph Turner's third book of helpful information for Atari ST users. This third book, like his second one, covers a variety of all new topics in detail. Several of these new topics were of particular interest to me.

In his characteristically clear and concise style, he gives us the necessaries of laser printers, MIDI, modem use, file transfers, upgrading to TOS 1.4, Public Domain and Shareware software, an introduction to the Atari TT and Mega/STE, and a few miscellaneous topics (including an information packed "test" of what you know about the ST and Atari).

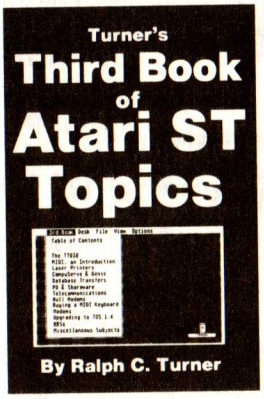
MIDI Chapters

I was particularly grateful to have so much well organized information about MIDI all in one place. Mr. Turner devotes three chapters to MIDI. The first is an introduction that clearly describes some important aspects of the subject. He starts you with a straightforward definition and a brief history of MIDI and then works you through "channels" to "reception modes." This chapter gives you a sound footing in MIDI from which to work.

The second chapter details what you need to get started and even works you through buying an electronic keyboard. This chapter is where you learn about "degree of polyphony," "multitimbral capability," and MIDI In, Out and Thru, among many other things.

The third chapter describes how to use a sequencing program step-by-step. The program Mr. Turner uses as an example is one of the best and most accessible 16-voice Public Domain sequencers available.

This is the one by Henry Cosh of England. Mr. Turner's concise description allows you to have a completed 4-track recording by the time you're through.



I have had my keyboard for a couple years, and though I had learned a great deal about it, I hadn't taken the time to learn all of the MIDI features. I mostly like to spend what little spare time I have in playing. Since the keyboard's MIDI instructions were sparse, I missed some of the less used MIDI features, until I read "Atari ST Topics."

TOS 1.4 Details

I am also very thankful for Mr. Turner's description of TOS 1.4. Nowhere else has the virtues of TOS 1.4 been so clearly delineated. My ST was in the shop getting a memory upgrade when I read this part of the book, and I immediately called and requested the TOS upgrade. Now that I have TOS 1.4, I love it!

Telecommunications

Telecommunications has always been one of the more daunting elements of computing. Mr. Turner presents four compelling reasons why someone would desire to get into telecommunications and he covers all the pertinent details from cables to baud rate. He explains modem settings, file transfer protocols and discusses other aspects of telecommunication programs.

To make you confident and make it perfectly clear, he runs you through a call to a bulletin board step-by-step. I've watched an experienced BBS user friend of mine call up a BBS for his Mac and saw him goof up the process twice, costing him five minutes in long distance charges. So, a hand-held walk-

through is very comforting for a cost-conscious person like myself.

Although I like the detailed coverage of several topics in this book, and they were some that I was interested in, I would also have liked some coverage on the new products out for the ST. Like scanners and the new monitors, etc. There's a lot of variables in these products and they could add a lot to a person's computability. Unfortunately, at this time, the only place to find out about these products is in the ads.

Mr. Turner has an incredible facility to explain complex computer material in a way that a beginner can understand, yet he's thorough enough that experienced users will better understand what they're doing after reading his books. Mr. Turner has the ability to immerse himself in a subject and get to know it well. More importantly, he has the uncommon ability to express this understanding clearly and concisely. I think Mr. Turner's talents would be very much appreciated in writing the manuals for some commercial programs.

"Atari ST Topics" is certainly another important and highly readable addition to the library of any ST computer owner who wants to get more out of one of the most versatile computers on the market.

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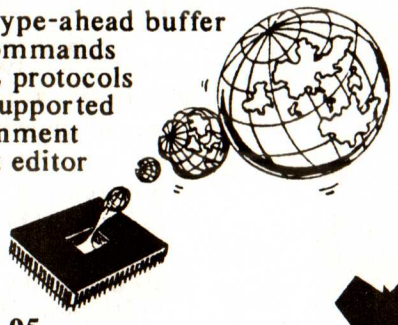

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A Second Look

Jerry Belfor (FRAUG)

[This review first appeared in The Lily Pad, a publication of the Front Range Atari Users' Group (FRAUG) in Fort Collins, CO. Jerry Belfor is president of that club.]

I previously had the good fortune to review Ralph Turner's books "The Atari ST Book" (September, 1988 Lily Pad) and "Atari ST Subjects" (March, 1990 Lily Pad). After the second book, I thought Mr. Turner was done. After all, what else was there to write about?

What else? How about MIDI, modeming, and the differences between the TT, Mega STe, and the ST. All this, and more, can be found in Turner's "Third Book of Atari ST Topics."

This book, like the previous two, is written for the non-expert. The information is clear and understandable. I would especially recommend the book if you are new to either MIDI or modeming, as these two topics fill a total of eight of the 16 chapters in the book.

Included in the MIDI chapters are topics such as how MIDI and word processing are similar, a history and explanation of MIDI, how to get started in MIDI and how to buy a synthesizer. The modeming chapters include what a modem is, how to connect one, communication programs, terminal settings and information on connecting and using a general BBS and both CompuServe and GEnie. Wow!

But that's not all, folks. There is information on TOS 1.4, laser printers, transferring files between databases, and more. There is even a trivia quiz (which I did fair on) in the middle of the book for a nice break.

As I said in my previous reviews, I think Mr. Turner's first two books definitely belong on the bookshelf of all Atari ST users, and this book should be there also, especially for those interested in MIDI and/or modeming. The other topics covered are also of value and the book is certainly worth buying. Our favorite local Atari dealer, Run PC, even has it in stock.

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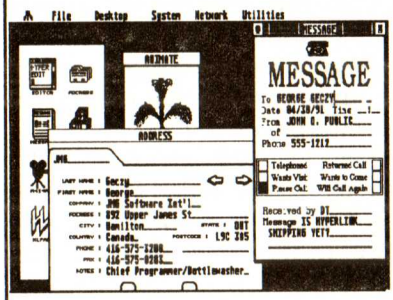
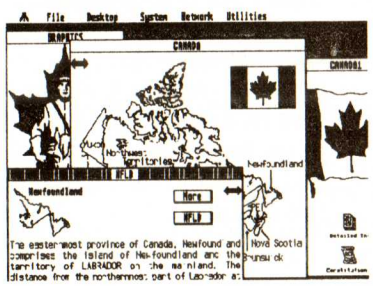


As a simple example of a Relational Data-Base, HyperLINK can be set up to "link" any given field in a data-base with a field in another data-base. In the Message HAP for instance, there is a link to the Address HAP and HyperLINK performs a search for a matching record.

Example # 1 : The Canada HAP



One of the most popular, and common uses for any Multi Media product is Education. The Canada HAP illustrated here, is an example of how Text, Data, Graphics, and Sound can be combined for an interactive educational tool. eg. Click on a Province get a text file on that Province etc.

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CalAssistant

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DTP Help from Spar Systems

Bill Rayl

The included tips and hints can make you more productive and improve your layout skills. This fact alone makes the software well worth the purchase price.

Calamus and PageStream are two of the best desktop publishing packages available for any computer platform. But, for the "average" user, these programs can seem a bit intimidating. Both programs are very complex and powerful, but it takes a significant time investment to learn how to harness that power.

Spar Systems offers two desk accessories that can help you master PageStream or Calamus. These accessories give you a quick online reference to all the features hidden away in Calamus and PageStream, along with some very useful tips and hints for getting the most from your DTP package.

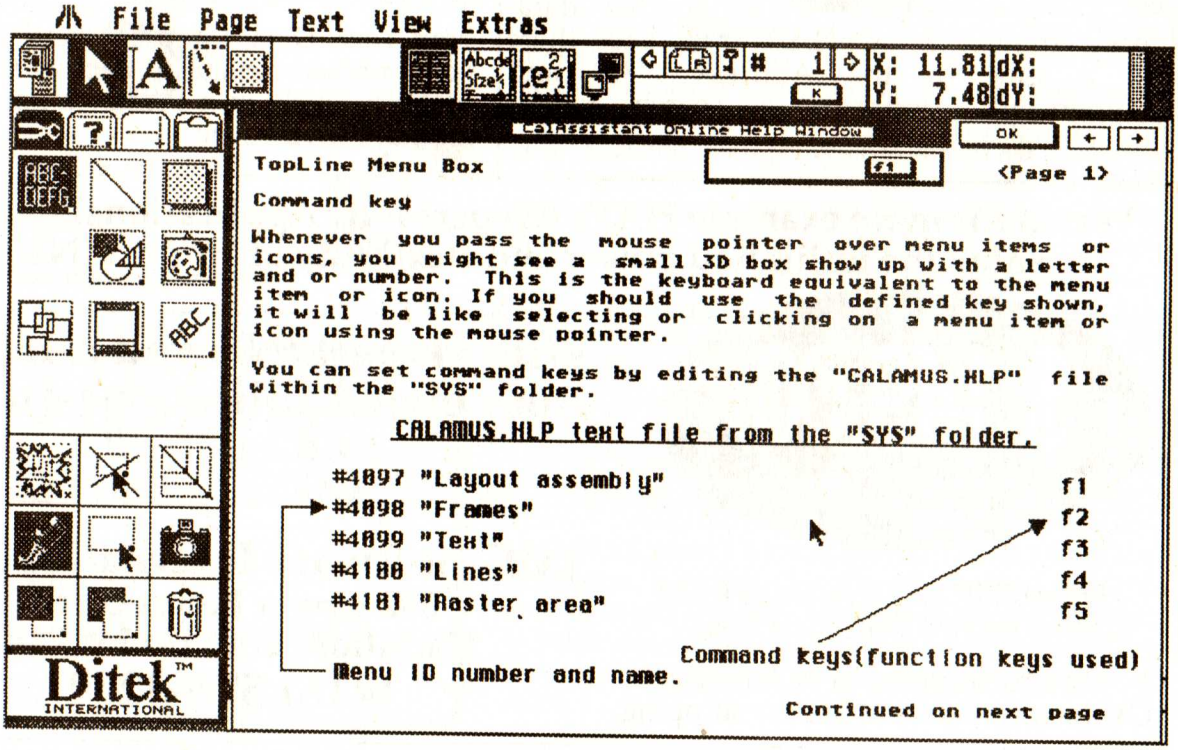
CalAssistant

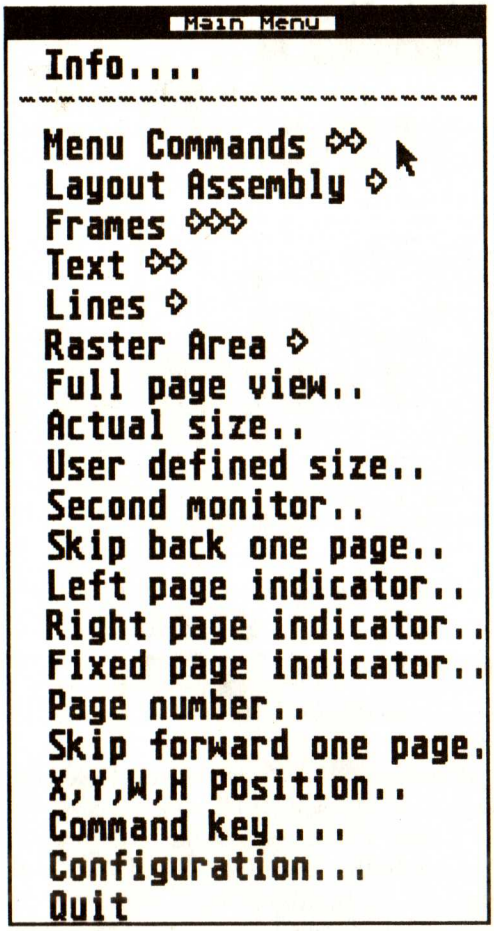
Spar Systems first released CalAssistant in early 1991. Since then, the program has been updated several times, and a version for Calamus SL is currently in the works.

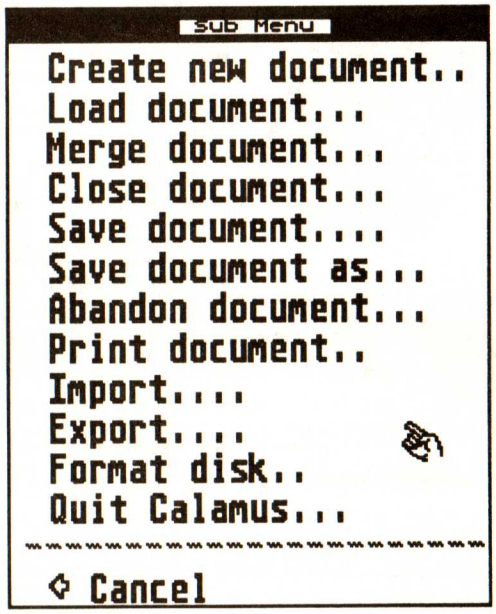
You can think of CalAssistant as an online manual for Calamus. As a desk accessory, CalAssistant is always available right when you need it—during your DTP session at the point you have a problem!

The software is very easy to install and a breeze to use. A system with 2MB of RAM and hard drive is highly recommended. CalAssistant can, however, be booted from floppy or used on even 512K systems. However, on low memory machines, you won't be able to use CalAssistant while in Calamus. CalAssistant takes up about 90K of memory—not much considering what you get! CalAssistant, like Calamus, only works in ST monochrome resolution. Unlike Calamus, however, CalAssistant does not support big screen monitors like the Moniterm.

CalAssistant is designed around a "submenu" approach similar to Calamus itself, only CalAssistant doesn't directly use the Calamus icons. Instead, you







select text items from a menu. Then, CalAssistant either presents you with textual and visual help for that item or takes you to a submenu.

The actual text items found on the submenus are based on the "Help Messages" defined within Calamus. In Calamus, these messages appear in the upper right corner of the screen, assuming you have Help Messages turned on.

Once you've traversed the submenus and selected the item for which you want help, CalAssistant displays one or more on-screen pages of text pertaining to your selection. Most of the time, the text is accompanied by graphics showing you the Calamus icon or illustrating some important point.

The text you're given is detailed. Usually, you are also given step-by-step instructions on how to best use the selected feature. Tips on how to save time are also included. At the end of each textual help, CalAssistant refers you to the exact page number(s) in the Calamus manual that you should turn to for more instruction.

The 20-page manual that comes with CalAssistant was created entirely in Calamus and includes an 8-page Calamus tutorial. The tutorial covers all the basics for creating a newsletter layout. It also takes you through the process of defining text columns and importing text and graphics.

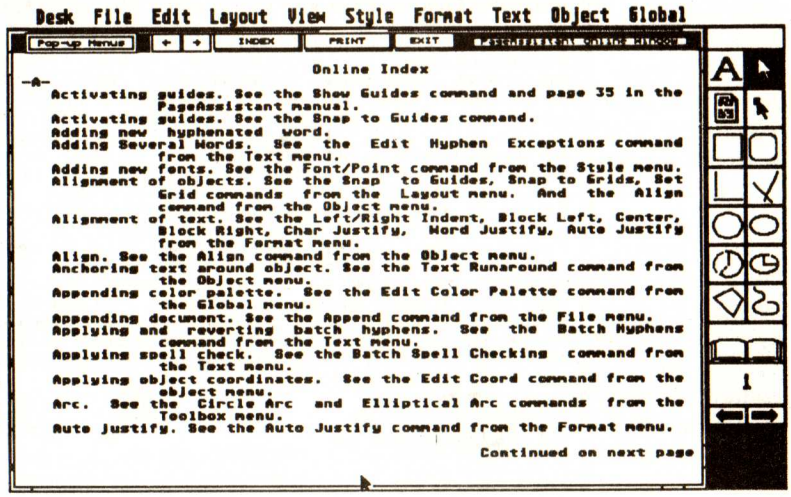
CalAssistant comes with a number of useful CDK documents, PD/Shareware utilities and a complete Helvetica font set (regular, italic, bold and bold italic).

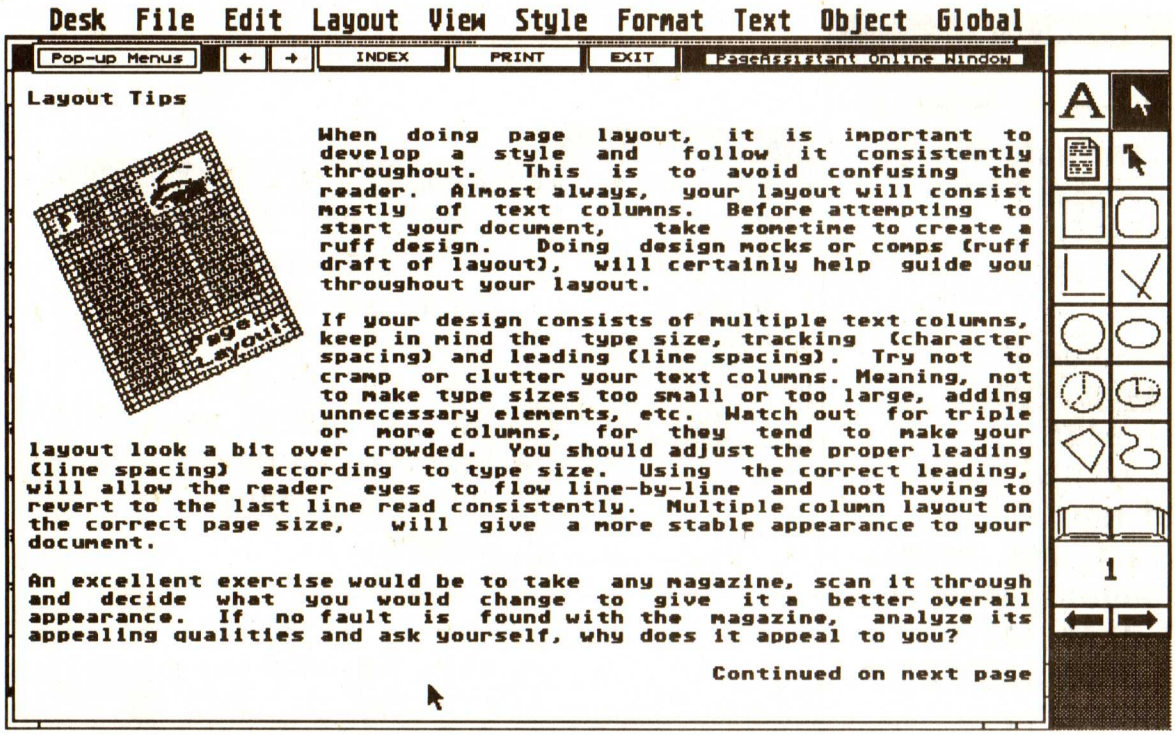
PageAssistant

For users of PageStream 2.1, Spar Systems offers PageAssistant. PageAssistant is similar in function to CalAssistant, as one would probably expect.

However, PageAssistant also has a number of additional features over CalAssistant. One of those extras is a built-in print function for obtaining hardcopy reference sheets of the help screens. PageAssistant comes with printer drivers for Epson, Panasonic, Star and JUKI 9-pin dot matrix, as well as HP and Atari lasers.

The 52-page PageAssistant manual includes discussion of color separation and macros. Each topic is





covered in detail with an accompanying tutorial. the manual is filled with excellent tips on layout, graphics, halftones and much more.

The software itself has a "Special" menu where you can get information on fonts, PostScript printing, the various mouse pointers PageStream uses, some excellent layout tips and more. On the PageAssistant disk, you also get a couple Type 1 fonts, example PageStream .DOC files and a public domain utility or two.

There is really only one problem I've come across with the software. The manual claims PageAssistant is "resolution independent" and works in TT medium (640 x 480) and high (1280 x 960) resolutions.

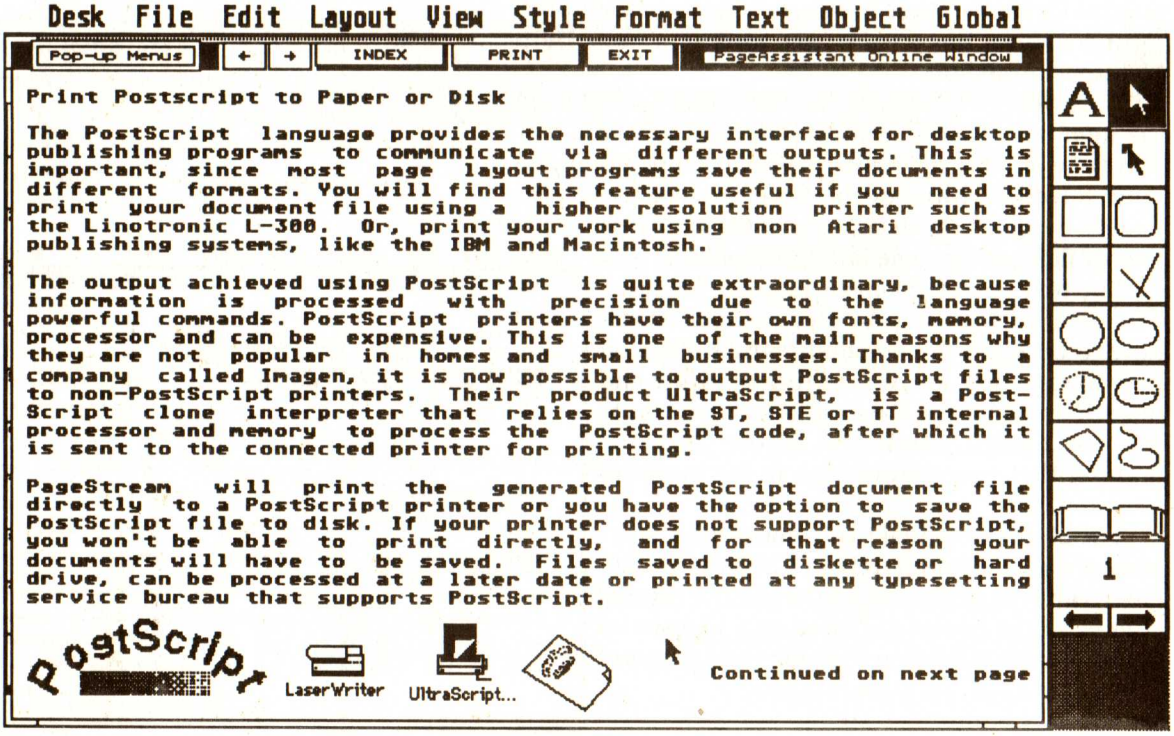
I've been able to get the software to run without problems in ST high resolution. The software works in ST medium resolutions, but the textual help does not display properly. In TT medium, PageAssistant displays help menus fine, but dies when attempting to display the helps. In ST high resolution, though, the software performs flawlessly.

Spar Systems is upgrading PageAssistant fairly regularly—they upgraded it three times before I could even get this review finished—and the display problems should be taken care of soon (possibly by the time you read this).

Conclusion

Both CalAssistant and PageAssistant are valuable additions to your DTP setup. These tools can help you unlock the power of Calamus and PageStream. For people who use both, CalAssistant *and* PageAssistant help tremendously in switching back and forth between environments. The included tips can make you more productive and improve your layout skills.

CalAssistant $34.95, PageAssistant $49.95. Spar Systems, 381 Autumn Ave, Brooklyn, NY 11208 (718) 235-3169.



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Data Analysis with Your Atari Classic 8-bit

Michael Dalto

The Challenge: Use an Atari Classic 8-bit to determine if variations in experimental data occurred by chance alone by using *t*-test analysis for dependent samples. The BASIC program accompanying this article works on all 8-bit Atari computers with 48K, compatible printer and disk drive.

Data can be analyzed from any experiment based on two sets of observations that are paired either because subjects are matched or because the same subject is measured twice. In this type of experimental design, the paired measurements from control and test groups of the same experiment differ only with respect to the parameter being examined. Any variation due to individual differences cancel, making the results more meaningful.

Background

This program determines the validity of the null hypothesis, which states there is no difference between the mean values from two sets of paired measurements. The decision concerning the acceptance or rejection of the null hypothesis is made by comparing a test magnitude calculated from experimental data with a test distribution.

The test distribution employed in this program is a two-tailed *t*-distribution. Since *t*-distributions are used when the sample size is 30 or less, up to 30 paired measurements may be analyzed by this program. The value of the *t*-distribution which is to be compared against a calculated test value is affected by the confidence level which the operator selects. This is the probability of rejecting the null hypothesis when it is true. For scientific purposes, a probability error of less than five percent should be used.

Getting Started

When the program is run, it initially presents the user with a probability selection menu. The probability of error chosen will be used by the program until reset. The user is then presented with a main menu from which several options may be selected.

The "Analysis Of Data" option alternately enables or disables printing of intermediate values used in the calculation of the test value. The "End Program" option terminates the program. The "Probability Reset" option returns the program to the probability selection menu.

The "Recall Data" and "Store Data" options are similar in their operation. When either option is selected, a file directory is displayed and a line from the program will be listed followed by a "Ready" prompt. At this point, the user has been returned to Atari BASIC. The listed program line may now be edited and saved to the filename being recalled or stored. After editing, press the return key and type "Cont" to proceed with the program.

The contents of a recalled file will be printed before returning the user to the main menu. Once a file has been recalled, the program will be reset to whatever probability of error was stored in the file. The probability reset option should then be used to change this value if needed. After storing files, the program returns to the main menu.

The "Return To Continue" option allows the user to input the next data set.

Input of Data

The program allows for entering of a report title. If a previous data set was analyzed, the displayed title may be edited. The number of paired measurements to be analyzed must be entered before the input of data. For each paired measurement, a number is assigned. After entering data, the program allows for correction of any erroneous entries. The paired measurement number is used to refer to the particular measurement(s) to be corrected. If a non-numeric character is input, the routine is aborted and the user is returned to the main menu.

Report Generation

The program generates a report which can be easily pasted into a laboratory notebook. The first section of the report consists of the title and a list of the paired measurements entered into the program. If the data analysis option was selected, the next section of the report consists of all the intermediate values calculated for the generation of the test value.

The last section indicates the null hypothesis tested. This is followed by a comparison of the test value and the table value, with a concluding statement indicating if a difference exists between the pairs of measurements. If the observed variations in data values occurred by chance, no difference exists between measurements.

NOTE: Whenever the } character appears in this listing, it indicates that you should enter the ESC-SHIFT-CLEAR combination—press Escape, then hold down the Shift key while pressing the Clear key.

Inverse text (white text with black backgrounds) should be entered by pressing the Reverse Video Mode Key at the start of the text, then once again after you've typed the text in.

```
100 REM . TTEST FOR DEPENDENT SAMPLES
110 REM .        BY MICHAEL DALTO
120 REM
130 REM *****INITIALIZATION SECTION*****
140 DIM W(31):DIM K(31):DIM TABLE(30,4)
150 REM . W=THE FIRST COMPONENT OF PAIRED MEASUREMENT
160 REM . K=THE SECOND COMPONENT OF PAIRED MEASUREMENT
170 REM . TABLE=STORED STUDENT t-DISTRIBUTION
180 DIM A$(1):DIM B$(1):DIM ID$(100):DIM C$(25):
    DIM D$(25):DIM E$(25):DIM P$(3)
190 DIM LN$(40):DIM Q(15):DIM FILENAME$(20):
    DIM WW$(20):DIM KK$(20)
200 REM . A$ AND B$ = CONDITIONAL STATEMENTS
CONCERNING PROGRAM OPERATION
210 REM . ID$ = DATA IDENTIFICATION
220 REM . C$,D$,E$ AND P$ = OUTPUT STATEMENTS
230 REM . LN$, Q$, FILENAME$, WW$ AND KK$ = FOR FILE
    HANDLING SUBROUTINES
240 REM *****ENTER STUDENT T-DISTRIBUTION*****
250 FOR ROW=1 TO 30
260 FOR COL=1 TO 4
270 READ TABLE
280 LET TABLE(ROW,COL)=TABLE
290 NEXT COL:NEXT ROW
300 REM .  10%     5%     2%      1%
310 REM .  ___     __     __      __
320 DATA 6.314,12.706,31.821,63.657
330 DATA 2.920,4.303,6.965,9.925
340 DATA 2.353,3.182,4.541,5.841
350 DATA 2.132,2.776,3.747,4.604
360 DATA 2.015,2.571,3.365,4.032
370 DATA 1.943,2.447,3.143,3.707
380 DATA 1.895,2.365,2.998,3.499
390 DATA 1.860,2.306,2.896,3.355
400 DATA 1.833,2.262,2.821,3.250
410 DATA 1.812,2.228,2.764,3.169
420 DATA 1.796,2.201,2.718,3.106
430 DATA 1.782,2.179,2.681,3.055
440 DATA 1.771,2.160,2.650,3.012
450 DATA 1.761,2.145,2.624,2.977
460 DATA 1.753,2.131,2.602,2.947
470 DATA 1.746,2.120,2.583,2.921
480 DATA 1.740,2.110,2.567,2.898
490 DATA 1.734,2.101,2.552,2.878
500 DATA 1.729,2.093,2.539,2.861
510 DATA 1.725,2.086,2.528,2.845
520 DATA 1.721,2.080,2.518,2.831
530 DATA 1.717,2.074,2.508,2.819
540 DATA 1.714,2.069,2.500,2.807
550 DATA 1.711,2.064,2.492,2.797
560 DATA 1.708,2.060,2.485,2.787
570 DATA 1.706,2.056,2.479,2.779
580 DATA 1.703,2.052,2.473,2.771
590 DATA 1.701,2.048,2.467,2.763
600 DATA 1.699,2.045,2.462,2.756
610 DATA 1.697,2.042,2.457,2.750
620 TRAP 32767:TRAP 630
630 ? "}":POSITION 5,2
640 ? "PROBABILITY SELECTION MENU"
650 ? "  CHOOSE CONFIDENCE LEVEL"
660 ? "               1 = 10%"
670 ? "               2 =  5%"
680 ? "               3 =  2%"
690 ? :? "         PROBABILITY NO. = ";:INPUT COL
700 IF COL<1 OR COL>4 THEN 630
710 LET A$="N":REM . SET NORMAL OPERATION MODE OF THE
    DATA ANALYSIS OUTPUT
720 GOTO 1610
730 REM *****DATA ENTRY *****
740 ? "}":POSITION 7,2
750 ? "ENTER DATA IDENTIFICATION"
760 ? :? "     ";ID$:INPUT ID$:? :?
770 TRAP 32767:TRAP 740
780 ? "HOW MANY PAIRED MEASUREMENTS ARE"
790 ? "GOING TO BE ENTERED";:INPUT A
800 IF A<2 OR A>30 THEN PRINT :? "*  ENTER AT LEAST 2
    MEASUREMENTS  *":? :GOTO 780
810 FOR I=1 TO A:?
820 IF I>A THEN ? "}":? "  TURN PRINTER ON AND RUN
    PROGRAM":POKE 752,0:END
830 ? "PAIRED MEASUREMENT NO. ";I
840 TRAP 32767:TRAP 820
850 ? "          X-VALUE = ";
860 INPUT W:LET W(I)=W:REM . FIRST MEASUREMENT OF PAIR
870 ? "          Y-VALUE = ";
880 INPUT K:LET K(I)=K:REM . 2ND MEASUREMENT OF PAIR
890 NEXT I
900 REM *****DATA ENTRY CORRECTION *****
910 ? :? "DO YOU WISH TO MAKE ANY CORRECTIONS,"
920 ? "(Y OR N)";:INPUT B$
930 IF B$="N" THEN 1050
940 ? :? "  * SELECT NON-NUMERIC CHARACTER *"
950 ? "  * TO ABORT DATA ENTRY          *"
960 TRAP 32767:TRAP 1610
970 ? :? "WHICH NUMBER PAIR MEASUREMENT"
980 ? "IS TO BE CORRECTED";:INPUT I
990 ? :? "THE X VALUE = ";
1000 INPUT W1:LET W(I)=W1
1010 ? "THE Y VALUE = ";
1020 INPUT K1:LET K(I)=K1
1030 ? :GOTO 910
1040 REM *****COMPUTATION SECTION*****
1050 LET S3=0:S4=0:REM .   INITIALIZE SUMS
1060 ? "}"
1070 POSITION 15,10:POKE 752,1:? "WORKING"
1080 FOR I=1 TO A
1090 LET D1=W(I)-K(I):REM . D1=DIFF BETWEEN THE 2
1100 LET D2=D1^2:REM . D2=THE DIFFERENCE SQUARED
1110 LET S3=D1+S3:REM .S3=SUM OF THE DIFFERENCES
1120 LET S4=D2+S4:REM .S4=SUM OF SQUARE OF DIFFERENCES
1130 NEXT I
1140 LET MD=S3/A:REM . MD=MEAN OF THE DIFFERENCES
1150 SD=SQR((S4/(A-1))-(S3^2/(A*(A-1)))):
    REM . SD=STANDARD DEVIATION
1160 LET SE=SD/SQR(A):REM . SE=STANDARD ERROR
    (VARIANCE OF THE MEAN DIFFERENCE)
1170 IF SE<>0 THEN 1220
1180 ? "}":? "  *    STANDARD ERROR = 0      *"
1190 ? "  *    TEST VALUE CAN'T BE     *"
1200 ? "  * CALCULATED FOR COMPARISON  *"
1210 GOTO 1620
1220 LET TESTV=ABS(MD)/SE:REM . TESTV=TEST VALUE
1230 REM **COMPARE TEST VALUE AGAINST T-DISTRIBUTION**
1240 LET ROW=A-1:REM . ROW=DEGREES OF FREEDOM
1250 IF TESTV>TABLE(ROW,COL) THEN C$="REJECTED":
    D$="LARGER THAN":E$="EXISTS"
1260 IF TESTV=TABLE(ROW,COL) THEN C$="ACCEPTED":
    D$="EQUAL TO":E$="DOES NOT EXIST"
1270 IF TESTV<TABLE(ROW,COL) THEN C$="ACCEPTED":
    D$="SMALLER THAN":E$="DOES NOT EXIST"
1280 REM *****OUTPUT SECTION****
1290 OPEN #4,8,0,"P:"
1300 IF COL=1 THEN P$="10%"
1310 IF COL=2 THEN P$="5%"
1320 IF COL=3 THEN P$="2%"
1330 IF COL=4 THEN P$="5%"
1340 PRINT #4;"     ";ID$
1350 PRINT #4;"    - - - - - - - - - - - - - - - - -
    - - - - - - - - - - - - - - - - - "
1360 PRINT #4:PRINT #4
1370 PRINT #4,,,"PAIRED MEASUREMENTS"
1380 PRINT #4,:FOR I=1 TO A:PRINT #4
1390 PRINT #4,,"MEASUREMENT NO.  ";I
1400 PRINT #4,"X-VALUE = ";W(I),,"Y-VALUE = ";K(I)
1410 NEXT I
1420 PRINT #4:PRINT #4
1430 IF A$="N" THEN 1510
1440 PRINT #4,,," DATA ANALYSIS"
1450 PRINT #4
1460 PRINT #4;"         1.  SUM OF THE
    DIFFERENCES = ";INT(1000*S3+0.5)/1000
1470 PRINT #4;"         2.  SUM OF THE SQUARE OF
    THE DIFFERENCES = ";INT(1000*S4+0.5)/1000
1480 PRINT #4;"         3.  MEAN OF THE DIFFERENCES
    = ";INT(1000*MD+0.5)/1000
1490 PRINT #4;"         4.  STANDARD DEVIATION = ";
    INT(1000*SD+0.5)/1000
1500 PRINT #4;"         5.  STANDARD ERROR (VARIANCE OF
    MEAN VALUE OF DIFFERENCES) = ";
    INT(1000*SE+0.5)/1000
```

```
1510 PRINT #4:PRINT #4
1520 PRINT #4;"        THE NULL HYPOTHESIS (X-Y = 0)
     IS TO BE TESTED AGAINST THE"
1530 PRINT #4;"        ALTERNATIVE (X-Y <> 0) AT A
     PROBABILITY OF ";P$
1540 PRINT #4
1550 PRINT #4;"        FOR ";ROW;" DEGREES OF FREEDOM
     THE TEST VALUE OF ";INT(1000*TESTV+0.5)/1000
1560 PRINT #4;"        IS ";D$;" THE TABLE VALUE OF ";
     TABLE(ROW,COL)
1570 PRINT #4;"        THE NULL HYPOTHESIS IS ";C$
1580 PRINT #4
1590 PRINT #4;"        A DIFFERENCE ";E$;" BETWEEN THE
     PAIRS OF MEASUREMENTS."
1600 CLOSE #4
1610 ? "}":? :?
1620 POKE 752,0:? :? "        .......MENU.......":?
1630 ? "        ANALYSIS OF DATA"
1640 ? "        END PROGRAM"
1650 ? "        PROBABILITY RESET"
1660 ? "        RECALL DATA"
1670 ? "        STORE DATA"
1680 ? "        RETURN TO CONTINUE"
1690 ? :? "ENTER SELECTION";:INPUT B$
1700 IF B$="A" AND A$="N" THEN A$="Y":GOTO 1610
1710 IF B$="A" AND A$="Y" THEN A$="Y":GOTO 1610
1720 IF B$="E" THEN PRINT "}":END
1730 IF B$="P" THEN 620
1740 IF B$="R" THEN 1780
1750 IF B$="S" THEN 1930
1760 GOTO 740
1770 REM *****FILE RETRIEVAL*****
1780 GOSUB 2080
1790 CLOSE #1:OPEN #1,4,0,FILENAME$
1800 GET #1,COL
1810 GET #1,AA:LET A$=CHR$(AA)
1820 GET #1,LEN
1830 IF LEN=0 THEN GET #1,ID:LET ID$=CHR$(ID):
     GOTO 1850
1840 FOR I=1 TO LEN:GET #1,ID:LET ID$(I)=CHR$(ID):
     NEXT I
1850 GET #1,A
1860 FOR I=1 TO A
1870 GET #1,LENWW:FOR J=1 TO LENWW:GET #1,WW:
     LET WW$(J)=CHR$(WW):NEXT J
1880 GET #1,LENKK:FOR J=1 TO LENKK:GET #1,KK:
     LET KK$(J)=CHR$(KK):NEXT J
1890 LET W(I)=VAL(WW$):LET K(I)=VAL(KK$)
1900 NEXT I
1910 CLOSE #1:GO TO 1050
1920 REM *****FILE STORAGE*****
1930 GOSUB 2080
1940 CLOSE #1:OPEN #1,8,0,FILENAME$
1950 PUT #1,COL
1960 PUT #1,ASC(A$)
1970 PUT #1,LEN(ID$)
1980 IF LEN(ID$)=0 THEN PUT #1,ASC(" "):GOTO 2000
1990 FOR I=1 TO LEN(ID$):PUT #1,ASC(ID$(I)):NEXT I
2000 PUT #1,A
2010 FOR I=1 TO A
2020 LET WW$=STR$(W(I)):LET KK$=STR$(K(I))
2030 PUT #1,LEN(WW$):FOR J=1 TO LEN(WW$):
     PUT #1,ASC(WW$(J)):NEXT J
2040 PUT #1,LEN(KK$):FOR J=1 TO LEN(KK$):
     PUT #1,ASC(KK$(J)):NEXT J
2050 NEXT I
2060 CLOSE #1:GO TO 1610
2070 REM *****FILE DIRECTORY*****
2080 LET Q=1
2090 CLOSE #1:OPEN #1,6,0,"D:*.*"
2100 TRAP 32767:TRAP 2140
2110 FOR I=Q TO Q+11:INPUT #1,LN$:? LN$(1,13);:
     INPUT #1,LN$:? ,LN$(1,13):NEXT I
2120 ? :? "CONTINUE DISPLAY (Y OR N)";:INPUT B$
2130 IF B$="Y" THEN Q=Q+11:GO TO 2110
2140 ? :? "***DIRECTORY FINISHED***"
2150 CLOSE #1
2160 ? :? "MODIFY FILE NAME, CLOSE QUOTES"
2170 ? "TYPE CONT TO PROCEED"
2180 ? "TYPE RUN TO ESCAPE DIRECTORY & RESET
     PROGRAM":?
2190 LIST 2200:END
2200 FILENAME$="D1:L"
2210 RETURN
```

(Note: This source code is included on the March '92 AIM 8-bit Disk of the Month for your convenience.)

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A-T-A-R-I

(Answers, Tips and Relevant Information)

Software Hacking

Paul Alhart (AFED)

It all began when I got my first 1200XL back in '83 and started typing in all the magazine programs I could find. There was a little voice in my head that constantly said things like "What does that CHR$(125) in line 100 do? Change it to CHR$(124) and see what happens."

Later on, as my knowledge of programing progressed, the voice got me to start tampering with commercial programs by asking "Why should you have to load a TRANSLATOR program just to get this program to run?" or "Why not make this program's default settings fit your system?" It wasn't long before I was a hard-core software hacker, modifying software for members of our computer club as well as my own software.

Like most computer clubs, ours has the usual problem of low meeting attendance during the summer months. Also, I noticed other members of our club were interested in software hacking too, even if they didn't all have the knowledge or nerve to tamper with their own favorite programs.

Putting these two facts together inspired me to write The Atari Federation Hackers' Challenge. "The Challenge" is a disk full of tricks and traps and a multi-part secret message. The idea was simple. The club sold the disk as a DOM at a regular meeting and offered fame, fortune and assorted prizes to the first person that was able to call me and quote the entire secret message correctly.

What wasn't so simple was hacking through "The Challenge." It was four months until we had a winner. Members who came to the meetings received hints. Meeting attendance set all time record highs that summer and everyone learned a little bit more about their Ataris and what makes them tick.

The Atari Federation Hackers' Challenge is included on this month's AIM 8-bit DOM as TAFHC.DCM. Use Bob Puff's DISKCOM3.UTL program from the March/April 1991 AIM DOM to decompress this file to a freshly formatted AtariDOS 2.0 compatible single density disk.

Hack away for your own enjoyment (No prizes are offered this time). I will print the solution to The Challenge here in my monthly A-T-A-R-I column a few months from now.

Your club may make a contest out of "The Challenge" or get ideas for their own Challenge. You'll be surprised how many members will show up when they are challenged. *Note: Cash awards help, too.*

Rules

There are *none*. You may use anything you have to help try and solve "The Challenge."

Requirements

The only things you *need* to solve "The Challenge" are:

An 8-bit Atari computer
A disk drive
Atari BASIC
Knowledge of your Atari and its Operating System

Tips

"The Challenge" does not write to disk and you should not either. Use a write-protect tab to be safe.

"The Challenge" is auto-booting. Boot the disk with BASIC installed. You will see a title screen after which DOS is loaded. The Atari DOS 2.0 menu will show you something is wrong. A directory listing will show the only thing on the disk is DUP.SYS and there is only 001 free sector.

Happy Hacking!

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Qwikforms & Business Forms

Patricia Snyder-Rayl

While there are many packages with clipart or fonts, there are only a couple of packages that give you ready-made PageStream documents that you can use as templates. I'll be looking at Soft-Logik's Business Forms and STerling Connection's Qwikforms. The only other documents package I know of is Idea Forms from Canada's I Koen Design, but I don't currently have that package.

Both Business Forms and Qwikforms are very easy to use. Just load the files in like you would any PageStream document. The package from Soft-Logik comes with one disk and contains 41 different documents. Qwikforms comes on four disks—two of the disks containing a total of 284 documents and the other two disks filled with IMG clipart for your forms.

Both packages have the same sort of standard business forms—Telephone message slips, Invoices,Order Forms, Purchase Orders, Job Quotes, Sales Slips, Petty Cash forms, Interoffice Memos and Statements.

COMPANY NAME
STREET ADDRESS
CITY STATE ZIP
PHONE

INVOICE

YOUR ORDER NO.	INVOICE NO.	DATE	
QTY	DESCRIPTION	UNIT	TOTAL
		SUB TOTAL	
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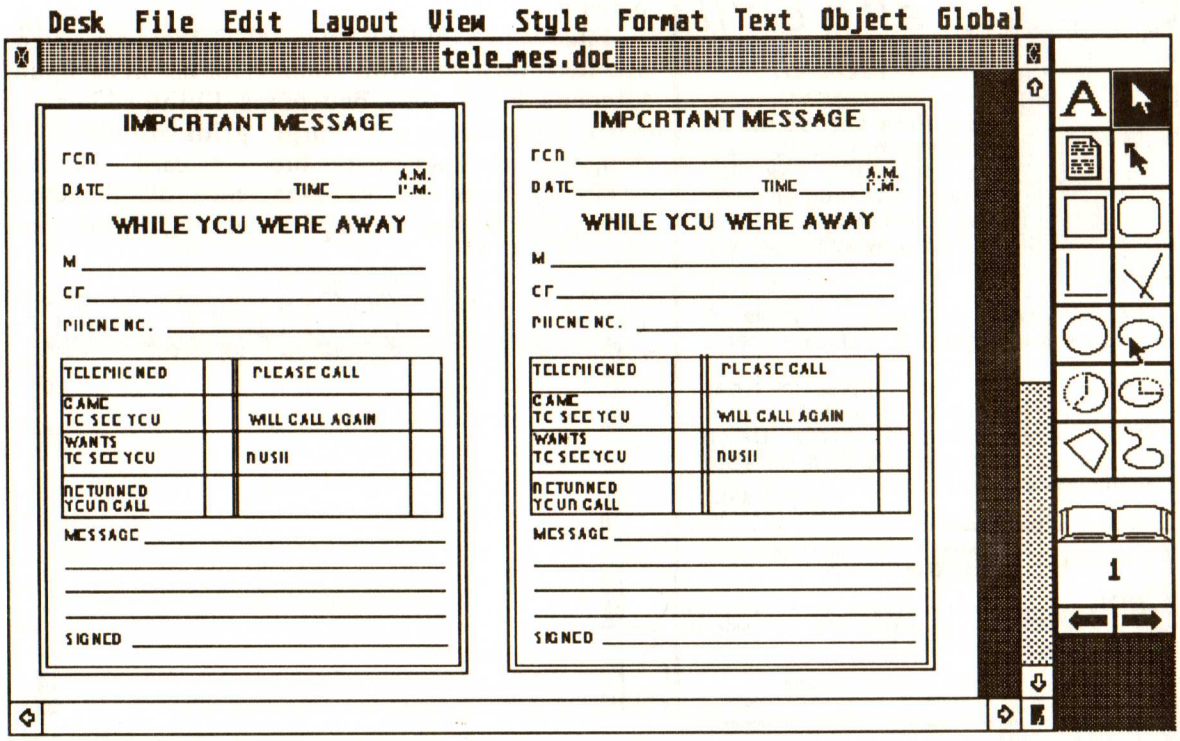
		TOTAL	

THANK YOU!



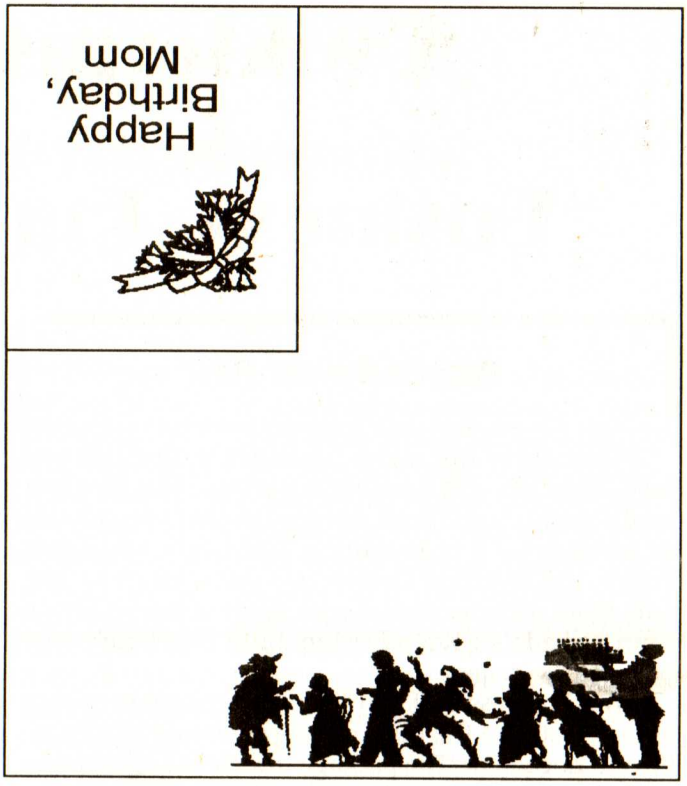
The STerling Connection's Qwikforms package goes a lot further, however. They've included Construction Estimates, Rental Applications, Inventory Forms, Return Authorizations, Accounts Payable and Receivable, and even Employee Vacation Planners.

Qwikforms also contains seven kinds of Calendars, Ledgers (General and Horizontal), Mailing Lists, Payroll Forms, Payroll Withholding Forms, Timesheets, Budget Forms, Cashflow Charts and Daily, Weekly and Yearly Planners.

Qwikforms includes some legal forms as well. These include:

- Release of Personal Injury Claims
- Bill of Sale for Assets
- Agreement to Sell Goods on Consignment
- Demand for Payment of Invoice
- Notice of Dishonored Check
- Sublet Agreement and Landlord's Notice to Terminate Tenancy
- Request for Information under Freedom of Information Act
- Last Will and Testament

Additionally, there are ready-made forms for designing an 8.5x5.5 inch booklet, the type used for most software manuals. Two- and three-column newsletters are already laid out on grids and a Tabloid (11x17 inch) newsletter is laid out on a five-column grid. Three different types of resumes are included, as

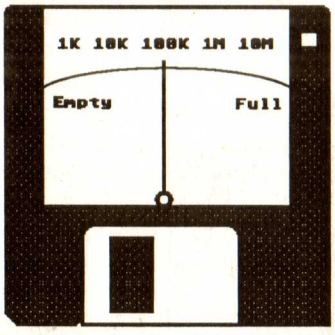


are press releases, certificates, flyers, shipping labels, raffle tickets, restaurant menus and four styles of letterhead.

Besides these DTP forms, STerling Connection has included a collection of cards: Birthday cards, invitations, wedding invitations, Valentines, Thank You and Business Appreciation cards. Accompanying these cards are 21 different frames to use as borders for your documents. These range from simple to very complex patterns.

Finally, in a folder labeled MISC, there are several architectural forms with symbols for use in designing kitchens, bathrooms, bedrooms, living rooms and more. Documents with empty grids are all set for designing your own custom brochure, card, newsletter or tabloid. There is also a management diagram chart, a stock report chart and a personal finance statement.

Don't buy another hard disk!



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Rounding these all off is a document with music staffs for writing or printing music.

So, for variety and overall utility, the Qwikforms package beats out Soft-Logik's Business Forms very easily.

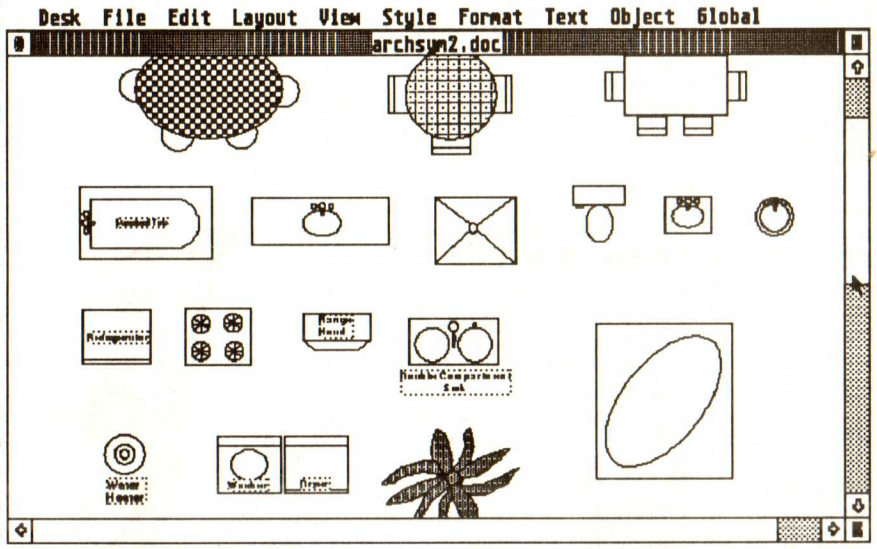
However, and this is rather subjective, Soft-Logik's forms seem to have been designed with a more professional eye. Their documents just look better than STerling Connection's. And, Soft-Logik's use of shading in certain documents was a nice touch.

The one thing I found annoying about the Qwikforms package was that many of the documents had a little text object with the file name at the top of the page. I personally couldn't understand the purpose behind this, unless it was to help you if you did a trial printout of all the forms. Otherwise, why make you delete an object telling you the name of the PageStream document you just loaded in?

Both packages will save you time and energy in trying to make standard business forms. Overall, Qwikforms from STerling Connection is a great package. It beats Soft-Logik's Business Forms hands down in quantity, but Qwikforms sacrifices some in the quality department to give you tons of forms. If you want completely polished and professional forms with zero effort, Business Forms is a better choice. Personally, I find the variety that Qwikforms gives more than makes up for small amount of effort I expend in prettying up the forms. Both packages retail for $39.95.

STerling Connection, PO Box 4850, Berkeley, CA 94704, (510) 655-2355.

Soft-Logik Publishing, 11131 South Towne Sq. Suite F, Saint Louis, MO 63123, (800) 829-8608.



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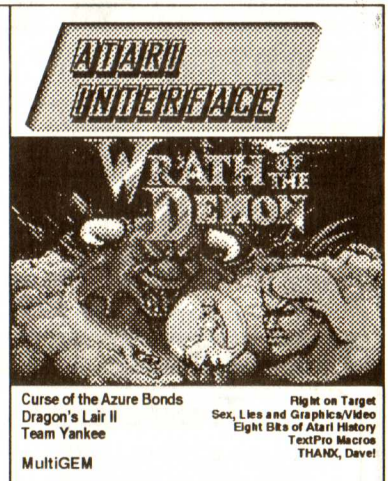

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A Star Returns...

Two special people deserve recognition. The first is my sister, **Sherry**. She has done all the shipping, every night for the last year, despite having a full time job during the day. The second, my friend **Ginger**. She's makes Rising Star shine, she takes most of the orders and keeps it running smoothly. Neither Sherry or Ginger know about their sudden fame, until this ad appears. It's my way of saying thanks and welcome back Ginger.

Douglas Hodson, Owner

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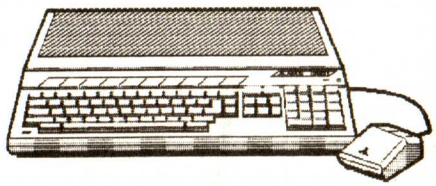

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SST STATUS

JANUARY 16, 1991

[This article was originally posted in the Gadgets by Small RoundTable on GEnie. It appears here courtesy Dave Small (thanks, Dave!).]

Howdy folks! I thought I'd let you know what's been going on with the SST, and why you're not unwrapping them by now. It's been *real* interesting, like the ancient Chinese curse, "May you live in interesting times."

They've been *so* interesting that I've not been online much; I've had some real high priority interruptions here and zero time.

Interesting Software Stuff

We had originally planned to be well into shipping the SST by now, and had the software pretty well whacked. The Beta Testers were happy. Unfortunately, I was still getting *very* odd intermittent crashes, with no rhyme or reason to them. The Beta Testers were solid.

'Twas one of those things where you crash, and there is totally no debugging information available. I wasn't getting "bombs," which would have left some "blood marks" in the $380 crash area. The system would just freeze. There are so many different things that can cause this that I was really stuck as to the problem. Were MMU tables being clobbered and we were double-bus-faulting? Was there a defect in the hard disk support software? And why were my Beta Testers not reporting problems? I replaced hardware like mad (I found a slow PAL in the process, by the way) ...didn't help.

I call these bugs "hair pullers" when I can't use hideously obscene language, because you have *no idea where to even start!* I've written well over 20,000 lines of code for this project—was it there? Were two programs fighting? Was it a conflict with TOS? Already I've worn out my welcome at the Atari software developer's group discussing possible TOS bugs that turned out not to be their problem...no callbacks there!

I pulled out my hair, then ran Minoxodil over my head to make it grow back. (See, that's how the computer biz works. You pull your hair to make money; you make money to grow your hair back). But it *is* getting mighty thin in back, as Pattie Rayl pointed out.

I did many, many sessions that ended with the sky growing light outside. Those are really bad when you have kids that must be driven to school. I played Neil Young on CD, trying to help exorcise the software.

Well, a common factor showed up that was too obvious for anyone to see at the time (because I was convinced the bug was elsewhere). The Beta Testers who ran fine were running Atari's Hard Disk software, AHDI/HDX 4.03 or 5, and I was running ICD software, 5.2 or 5.4.2. The Beta Testers had no, zero, absolutely *no bugs*. They were *astounded* that I wasn't shipping—but I kept crashing!

I started looking intensely (and I do mean with a microscope) at the hard disk software interface. I made absolutely, positively (and 12 other Federal Express advertising words) sure I was feeding ICD the proper parameters for a hard disk call, including all the rwabs() parameters in the read/write flag that most people don't know about, and the buffer=0 media-change hack, too.

You see, this was deep trouble. The manual was on its final editing pass—you know, where you clean up the places where you spell "the" as "teh" and such. And I had already written up the hard disk section believing all was well, because, at the time, I thought I was fighting an MMU bug.

Sandy was *not pleased* when I told her the manual had to be put on "hold" and could not go out for duplication. We'd

Dave Small

Sandy and I are both very sorry for the delays in getting the SST out. We sure didn't plan it this way, but it happened. I'm sorry for not keeping more up-to-date online and answering questions, but as you can see, I didn't have answers...

already been through interesting hassles on test prints of the manual. One time they got the cover SR-71A Blackbird art *reversed*, so the "USAF" was backwards—wow, I thought that would impress people a *lot!* Sandy was busy doing a good, good index on the manual (which is a *lot* of work—if you didn't know, there are professional indexers that make their living doing just that!) and I had just told her that parts of her index might change.

There are times when working with one's marital partner can be stressful. I didn't *quite* have to go sleep at the Ramada Inn after telling her I hadn't nailed the hard disk problem completely. I emphasize "quite" to show you that Sandy is really a very fine person; I told her I felt the software was okay, and I was just having some flaky machine troubles.

So, my hard disk fumble had just held up about all the shipping parts of the operation. We could not proceed on the manual without a "working" hard disk chapter; we could not make master disks, get sample duplications and get a production run. (You *must* check first items; I have been badly burned by duplications that copy, say, 9 of 10 sectors per track "because it was so obviously an IBM format disk.")

In desperation, I called up Doug (Wheeler) at ICD, who used to work here and who is no fool at all. Doug and I chatted about possibilities for bugs to show up and the _FRB buffer (a 64K disk transfer area Atari ruled Shall Exist on a TOS 2 or 3 machine) that hard disks and floppy disks worked. He gave me some very intelligent suggestions on trying to "catch the crash." In all honesty, I wish I had had Doug here during this debug; he has a devious mind that works in a different way than my devious mind, and we find more bugs that way.

I wrote a lot more software, and wrote a baby debugger (OK, I ripped part clean out of Spectre; *I was in a hurry!*) to try to catch bugs. I made self-booting floppies that rammed things into the system "Cookie Jar" at early-boot time. I pulled more hair.

I still couldn't get *any* debugger information on *where* the crashes were! If I could get that, I could look at the code and go "Aha." And the crashes were maddeningly random. I crashed a lot just loading up the debugger!

For a while, I have to tell you, I thought it was the ICD software. I eventually reached a point where I could make it bomb with 2, 3, 4 or 11 bombs fairly reliably by doing things in a certain order. (Wow! What an accomplishment! He broke it!) But this made no d*mn sense to my intuition. As I said, Doug is no fool, and he worked on that stuff with Howard.

Then, in a mad coding session, I added a *lot* more debugging code and suddenly, *BAM! All* the crashes stopped. I had added code to "catch" the 2, 3, 4 and 11 bombs, and was sitting there literally rebooting and rebooting, running Boink and NBM11 and Tempus and DB and *trying to crash,* and it wouldn't crash (to my debugger, where I could see what was wrong).

I was totally hacked off because *now I was ready* to stomp the bug, ready to see what was wrong...and it *would not crash.* I was doing every foolish thing you can do to an SST/ST to try to crash.

I'm still mad it didn't crash. It was a *wimp* way for a bug to go away and a maximum-effort way. And a very, very old thing came to mind. It was from back in CP/M days (I kid you not) when I did an 8080 emulator for a machine called the Dimension 68000. (I really ought to give that code away. Remind me. It's interesting—emulates 8080 on 68000. I learned 68000 while doing it.) Anyway, I had had a bad disk buffer problem there.

I started checking *real* carefully just where every one of the disk buffers was. Random crashouts, like I had just seen, can result when your program gets overlayed, or stepped on, by data coming in off disk. I had had that problem on the 8080 emulator, talking to the 68000 portion of the machine.

Guess what? Oh, yes, there was a problem! After getting a debugger to load (tenth try or so), I found it. One disk buffer was pointed at the heart of the disk handler code.

Adding all that debugger code had moved the rest of the code *just far enough* farther down in memory that the runtime code was no longer clobbered by a disk input to one of the disk buffers. In short, by adding debugger code, I sort of fixed the problem. (The

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true fix is making enough room for the disk buffer, of course).

I had been fooled by the stuff you need to do to write a program that stays in memory after it ends, a "terminate and stay resident." For some reason (which I could detail, but this is getting long), TOS was not telling everyone to stay the heck out of my program's section of memory. *Depending on how long the next program I loaded was,* it either did or did not kill off my disk handling code. DB was long; it killed things off. QIndex was short. It did not. The key size was 64K.

In addition, the Atari GEM Desktop was using SST RAM (TT RAM equivalent; Fast RAM) as a place to store files in memory while copying. And, you guessed it. If the file to be copied was too long, crash.

What really hacks me off is that I should have triple checked, after asking for *x* amount of memory to be locked away, that it really *did* lock it away...and all the time I spent tracing bugs that didn't exist, like with ICD's software. I had just never seen this lock-away thing fail and didn't suspect it.

And poor ICD. ICD's software was getting an "avalanche error," where things get so screwed up at the start of the avalanche that it was hopeless by the time ICD had any part to play. It was *not their fault.* The carefully traced-out calls were made, of course, with DB in there, shielding the disk handler by its sheer length from the disk.

I went and retested Atari's AHDI/HDX 3.02, 4.02, and 5, ICD 5.2.0 and 5.4.2, and Supra's 3.43 hard disk software (can you tell I was seriously not going to tell Sandy again that the hard disks were flaky?) and *all worked fine.* Oddly, Atari's 4.02 and 5 *do not require* the disk handler code—hey, guess why the Beta Testers were flying? The others do.

In fact, on Atari's software, someone seems to have done a particularly excellent error-checking job in their code. Ken, tell Min she did good, will ya?

Net result is that *now,* I have right here the master "SST Software 1.2" floppy disk and have re-written the manual to reflect all that I learned the really hard way. If you read that portion of it and it seems a little like I was stressed out while writing it, I was.

Interesting TOS

But then, a funny thing happened on the way to shipping...

Because we had been delayed in shipping while I researched the hard disk bug, suddenly TOS 2.06 became available. We looked over 2.06 (we were running 2.05, which required considerable "life support" for things like floppy disks talking to SST RAM and other patches) and 2.06 was really cool. Someone even bent Allan's arm and he kicked on the IFDEF equate that puts TT fastRAM for floppies into the code. (Thank you, someone; I owe you about a thousand chocolate chip cookies.) This was *seriously cool.* It fixed other bugs, too, but I was twitchy on the floppy code. And the funny thing was, because we had been delayed, there was still time to erase EPROMs and go for TOS 2.06 in the SST.

I spent some time Ultraviolet Erasing the EPROMs that hold TOS and tried to make some new TOS chips. When I stuck them into an SST and turned it on, they spat out, "ROM CRC ERROR ON CHIP E," or something like that. Atari or someone had built in a self-test for the ROM chips (*yeah!!*) and it was seeing a problem in the TOS ROMs. Applause for Atari on this one, folks...

So, I burned another set, and it did the same thing.

I "dropped back five and punted" (a phrase any Denver Bronco fan should know!), went to the original chips, and made a *very careful* copy of them through the EPROMMER, making every paranoid assumption I could think of. Gee, maybe the SCSI card in there for the WORM drive is conflicting. Out. Perhaps it's because it's an 8086 processor instead of an 8088 with effective faster throughput. To this raving paranoid approach, I added, yes, Neil Young: Live Rust CD, autorepeat.

These next EPROMs worked perfectly. Hokay, I said, let's find out what went wrong with those other idiot ROMs. I compare/tested them on the IBM EPROMMER system.

Identical.

I stuck both sets into the SST, read them in, and did a file compare.

Identical.

I have *never seen this* before and don't know why it happened. It could be I just happened to get two bad sets of EPROMs that used to work perfectly and killed them somehow, just a little bit, enough so they still worked, but not all the way. Except the Atari cannot see the problem, the IBM cannot see the problem...except if I plug in the bad ones. I don't know what's wrong. Help! (Doug?)

All I can think of in my bag of tricks is the EPROMMER went funny with the first burn runs, when I wasn't being paranoid, and over-voltaged the EPROMs or something else really weird, so they are slow or aged or crusty. Perhaps there is sorcery involved.

Anyway, after reporting to Sandy that I could not reliably burn EPROMs on our machine, and being nearly exiled to the couch where the cat sleeps (it just smells...great...), I could now tell her I could make them.

Miscellaneous Interesting Times

When you put the new After Dark modules on to the Mac IIfx—where the manual is being edited—and your husband (choke) forgets to tell you about the Installer, they cause a *very hard to find* crash. Yes, the manual tells you to use the Installer. Looks like the System file was getting corrupted—the thing would try to wake up and would say, "Finder has been damaged, you can use System Tools to re-make it." After re-making it a couple times and selectively killing

INITs, we narrowed it to After Dark. We completely deleted and re-installed it, right this time, and got it working.

It's so easy *after* you know the problem, but there are so many things that could be wrong. For a time it looked like a SCSI termination bug, which is no easy thing to fix *at all* on the FX—even worse than the original Mac Plus, where termination is state of the art Vodun (voodoo).

This lost Sandy three days work on the manual when the main Quark X-Press file became corrupted. The manual right now is 2.5 megabytes in length, including all the EPSF diagrams and stuff. Like I tell people, Sandy graduated Computer Science with a far better GPA than I did, and she had done a good job on backups, so it wasn't a disaster—just really annoying. It runs to around 120 8-1/2x11 pages. *We Tell All.*

Then, our 3-year old collides with an 80-pound German Shepherd and breaks his nose, as they both round the corner of the stairs. Dog flees in terror when the child cries. Off to the doctor. X rays. (Imagine how much fun this is by turning your radio to, oh, Motley Crue howling on Volume=10; Jamie is *loud!*).

Turns out his nose wasn't broken; he wasn't grown enough for the bone to be out there. It was just going to be one of those Kid's Tylenol things for a week or so. (The doctor was sure it was broken, too!) Jamie looks like me—we both have "raccoon eyes," me from lack of sleep, him from That Dog.

Cat likes sleeping on the UNIX-PC (AT&T 7300, an older machine) because it is real warm. Cat also likes the FAX machines, but we were getting mad about the number of cat hairs in the outgoing faxes (*lots* of thin vertical lines), so we "encouraged" her not to sleep on the FAX.

Cat apparently took a jump to wake up one morning, and our "out in the open" phone wiring got scrangled—the wiring is only a foot above the 7300 and has some hand-twisted "pairs" where we've had to run new phone wiring for the FAX, etc.

One side of the phone wires snagged with the ground wire I keep around for de-staticing the computers. This spazzed out the phones; they would give around half a ring, then abruptly stop. It took me a few days to find this one. We thought the snow (it has been blizzarding here several times) had, like before, seeped into the underground phone wiring and screwed it up, so we expected the Telco to find it. We expected wrong; the underground portion was fine.

If anyone technically into phones (*chuckle*—not *that* way!) wants to tell me the effect of grounding one "side" of the phone line, I would really like to know. It was eerily quiet in here. I know the 48V-6V DC part; I don't know how it relates (or *if* it does) to ground.

People tell me they got weird half-rings or busy-outs or That Phone Number Sucks messages.

As of Thursday, Jan. 16

The boards have long been done. They are starting to yawn when I walk by. Ever see a SIMM yawn? "Ship me, Dave, Ship me." Honest, they're talking. It is *not* too much Neil Young. Last night it was the DRAM controllers arguing with the SIMMs, real distracting.

The software is now at 1.2 and is going into duplication.

The manual is on final-typo-edit; we laserwrite it, then off to the printers for...well, printing! (And heaven help them if they reverse the SR71 again!) We've tried very hard to make this better than the GCR manual.

Sandy and I are both very sorry for the delays in getting the SST out. We sure didn't plan it this way, but it happened. I'm sorry for not keeping more up-to-date online and answering questions, but as you can see, I didn't have answers...until that hard disk bug was found, there was *no* shipping, for example.

It's just a hard thing to say, "Well, I still don't know what the heck is wrong" when you're the Shell Answer Man, so to speak.

I hope this detailed report on where we went off the rails and got back on them will help you out.

Non-SST Stuff

As you might imagine, when I focus this tightly on a problem, I try not to switch gears. System 7 hasn't seen a lot of work other than tracking a get-extended-parameter-RAM into location 0 and above (!!) call (which is a *big* mistake for the 680x0 processor!). I need to look into it.

The MegaTalk boards have had their defective PALs swapped out and are being tested, about 75% of the way through on that. (The serial I/O PAL was bad; we have been seeing some really bad failure rates on these chips.)

I didn't do many of the dishes; need to make that up to Sandy.

Jennifer didn't do her Mt. Fuji picture (I kid you not) until the night before, up late, and *wow* was she grouchy this morning at 6:30 AM. She's doing a report on Japan and needed to draw a landmark.

And, I grew a beard. Sandy says it isn't scratchy, quote, "anymore."

When the SST boards actually, definitely are in the mail, we'll post a note. Murphy Never Sleeps, but neither does Neil.

[Ed: On January 29, George Richardson informed us that the SST boards were only a couple days away from going out the door. Getting the manual back from the printer was the only holdup, and it was "on the way."]

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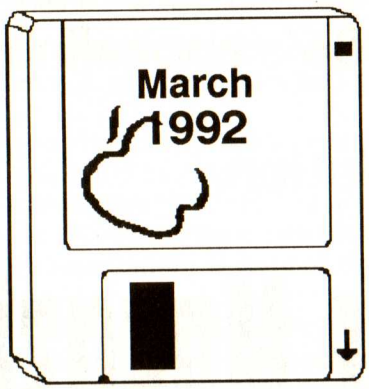


AIM Mac/Spectre Disk of the Month

Each AIM Mac/Spectre Disk of the Month is a double-sided disk packed with some of the best PD and Shareware programs available each month. The disks are available in either Macintosh or Spectre formats. All files are self-extracting Compactor Pro archives. Just double click to extract!

Here is a short description of the files contained on the March '92 Mac/Spectre Disk of the Month:

CreateTextDA—This archive contains an application that will create a Desk Accessory that displays any text you wish. Handy for keeping needed information close by.

Cute Clock DAs—This archive contains three interesting desktop clock DAs...Bugs Bunny clock, Mickey Mouse clock and RKO Radio Pictures clock.

Jack—This archive contains a very good version of an ancient game, the most recent version of which is called Pente. The object of the game is to get five of your pieces in a row while blocking your opponent (the computer) from doing the same. All the while, Jack, whose face appears at the bottom of the screen, keeps an eye (or two) on you, grins when he's winning and frowns when you block him.

LightningPaint 1.1—This archive contains a *very* nice Shareware paint program that has most of the features of the commercial programs and a few even they don't have.

Little Black Book DA—Just like the name suggests. This is an address book in a DA. Very nicely done and quite easy to use.

Notify 2.1—This archive contains a control panel device (CDEV) that uses the Macintosh notification manager to place messages you've created on the screen at whatever time you select. Great for reminding yourself to take out the garbage...or whatever.

Panasonic Printer Drivers—This archive contains two printer drivers for use with Panasonic printers. One supports 9-pin printers and the other is for 24-pin printers. I have only tested the 9-pin driver and it works *very* well for either text or graphics. To use either of these drivers, place them in your system folder and then use the Chooser DA to select. There is a setup dialog that allows you to configure the driver for your system. (Note: These drivers should also work with Epson printers)

RamDisk+2.11—This is the king of the hill as far as Mac RAMdisk programs go. You name it, it does it.... if you run from a floppy (and have the memory) you *need* this program.

Reader 1.0.8—This archive contains an aplication to read documents created by other applications. This program is somewhat limited at this time but is still useful. Drivers are included to read text files, MacPaint pictures, PICT graphics and others.

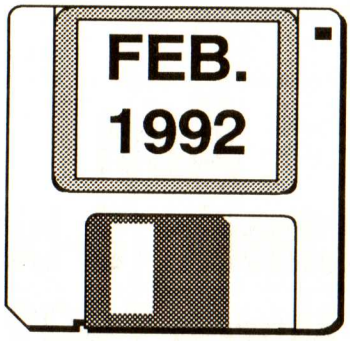
SUSAN—This archive contains a Shareware game called Susan, based on a board game of the same name. It's a pretty good strategy game, also reminiscent of Pente. In Susan, though, the object of the game is to surround one of your opponent's pieces without getting yourself boxed in.

The Billiard Parlour—A game that's quite old but still a lot of fun. Lots of different combinations from 9 ball to straight pool. If you like Billiards or pool, you'll like this game.

Note: Some of these programs are Shareware. This means that if you continue to use a program after trying it out, you are expected to pay the small fee most authors ask. Please support them.

Readers can purchase this disk by sending $6 ($5+$1 s/h) to Unicorn Publications, 3487 Braeburn Circle, Ann Arbor, MI 48108. Please specify the March '92 Mac/Spectre Disk and which format when ordering. For credit card orders, phone (313) 973-8825.

AIM ST/Mega Disk of the Month



All files on this disk are self-extracting archives created with Double Click's Self-Extracting ARC program DC SEA! To use these programs, simply double click the files. Then, click on Extract and select the drive/folder to which you want the extracted files saved. Click on Verbose to get a list of the files in each archive or Exit to abort.

Here's a short description of the files on the March '92 disk. For more complete docs, see the text files contained in most of these archives.

ARCSHL31.APP—The latest version of Charles F. Johnson's ARCShell, a GEM shell for ARC and LHARC compression utilities. New features include full support of the newest LHARC programs from Thomas Quester. Note: ARC and LHARC utilities are not included in this file. Shareware. Copyright 1989-92 Charles F. Johnson & Little Green Footballs. All Rights Reserved.

BONBON.APP—Two ACC/PRG (rename as needed) games from Germany, Breakout and Kubis (a Tetris clone). They work in ST mono or medium rez color. Note: Breakout does not seem to run as a PRG on MegaSTE or TT, but it works fine as an ACC.

B_BUNDLE.APP—Decorative border maker accessory for Calamus. Creates Calamus CVG graphics from border corners and sides. Comes with five borders and documentation telly you how to get up to 100 more! Can run as an accessory or as a program.

CRAYOLA.APP—PageStream color palette containing color definitions to match the 64 crayon set of Crayola Crayons.

DISKDIAG.APP—Examines your hard disks and warns you if it finds problems. Run it when you have problems accessing files or folders on a disk. You should also run it occasionally to detect problems before they become serious. Automatically checks all the hard disks on your system. If it finds problems, it will report information about the problems and stop. May be placed in your AUTO folder to check your disks each time you boot! FREEWARE. Courtesy of Beckemeyer Development.

FILETOOL.APP—A mouse-driven file utility that lets you copy, rename, delete and move files, create folders, etc. Shareware from the UK.

FLEABYT3.APP—Three new versions of Fleabyte calculation accessories from Henry K. van Eyken of Quebec. Fleabyte\FFS is a full function scientific calculator; Fleabyte\SF is like FFS only with support for significant digits; and Fleabyte\SX is a "standard" calculator. All three have the built-in ability to export their calculations directly into window-based GEM programs (like word processors). Full documentation and GFA BASIC source listings included.

FUJIWTCH.APP—The latest enhancements to Chet Walter's popular FujiDesk. FujiWatch gives you a mouse pointer that looks where it's going and falls to dreamland after a period of inactivity! A ticking watch replaces the boring busy bee! A spinning or rainbow Fuji adorns your menu bar. All this, and a "fix" for nasty alert boxes that appear with NO MOUSE POINTER! Configurable with enclosed ACC/PRG. ShareWare from Chet Walters @ WizWorks.

GEMVLP26.APP—A working demo of GEMvelope version 2.6, the best and most feature packed envelope printing software available for the ST/TT. Lots of features.

HDINFO12.APP—Ever tried to save a file only to find out your hard drive partition is full? HDInfo can help you avoid this situation, by renaming your hard drive icons to reflect the amount of free space available on them. From GraF/X & Dixon Development.

HSFIX.APP—A high speed modem fix for owners of TOS 1.4 or higher AND a 16MHz or faster upgrade. Stops character loss and speeds up overall performance. On the MegaSTE and TT, use this and Serial Patch 2 (SERIAL.APP on the June '91 AIM ST Disk) to correct serial port problems.

INSDATE.APP—A tiny desk accessory that sends the current system date to any open application. Great for word processing or while online. Includes source code. Freeware from the UK.

LQSET.APP—A very nice utility for controlling the multitude of printer settings available on an Epson LQ printer. Control margins, text attributes, page length, etc. PRG and ACC versions enclosed. Personal Pascal source code included. This Epson LQ version was written by Forrest Blood (JACS).

MSTE.APP—A collection of four small programs to set various Cache and Speed settings for the MegaSTE computer. All of the programs will run from the Desktop, AUTO folder and in TOS Mode. The programs are: FAST (16MHz, Cache), NORM (8MHz, No Cache), FASTNC (16MHz, No Cache) and WHATAMI (tells you your current configuration). Shareware from John Townsend.

NBM21.APP—NBM v1.2 is a benchmarking program for your ST/STe/TT. It performs a group of six tests, times them and allows you to compare the results with other machines. You can optionally choose which of the six tests to run, and can print the results. Version 1.2 includes a new set of graphics tests. Program by Jim Ness, author of QuickCIS.

PANTONE.APP—An EPS graphic containing the full Pantone color palette. Loading this graphic into PageStream 2.1 gives you access to all of these colors. The Pantone Color Matching system is trademarked by Pantone, Inc.

PGSPRNTR.APP—A set of four beta printer drivers for PageStream 2.1. These drivers support the HP DeskJet 500C, HP PaintJet XL, SpectraStar CMY and Okimate color printers.

PGS_CS.APP—This desk accessory (for PageStream 2.1) is an upgrade to PGS_AP_D which allows access to those "odd-ball" characters which normally would require complex key combinations and a chart. Includes the low-end characters (card suits, etc.). The enclosed documentation is in PageStream 2.1 format.

PINHD21.APP—PinHead version 2.1 is now compatible with ALL versions of TOS in ROM, from TOS 1.0 up to TOS 2.6/3.06. PinHead is a tiny AUTO folder utility that speeds up the loading of all programs. You won't believe how much faster your bootup goes! It's similar to TOS's "fastload bit," but completely automatic and more compatible with problem programs and accessories. PinHead 2.1 is Shareware. Copyright 1989,90,91,92 Charles F. Johnson & Little Green Footballs. All Rights Reserved.

PROCALC.APP—A calculator similar to the one included in Atari's new STBook. Supports Scientific, Binary, Octal, Decimal, Hexidecimal and Time (H:M:S) calculations. Very nice interface. TT Compatible. Runs as a PRG or ACC. Shareware from John Brochu (author of PicSwitch).

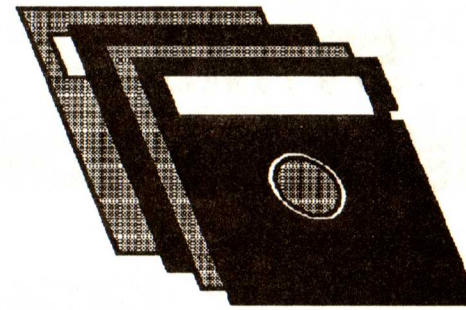
SPELLONE.APP—A very good, GEM-based spell-checker for the Atari ST. Includes a 137K dictionary of common words, and lets you add your own words to the dictionary. Another great piece of software from the UK.

TURTLE.APP—The latest version of George Woodside's excellent hard drive backup program.

UPDMAKER.APP— Update Maker compares two versions of a program and creates a binary data file of the changes. Can create a data file including just the change info if you wish to write your own updater program, or it can create a "ZAP" file including verification information, ready for use by Superzap. Superzap (included in this ARC) can use the resulting ZAP file to perform the update for you—no programming necessary! Both programs run on any ST or TT in any resolution. Freeware from Bill Aycock.

Readers can purchase this disk from their local AIM Participating user group or by sending $6 ($5 + $1 S/H) to Unicorn Publications, 3487 Braeburn Circle, Ann Arbor, MI 48108. Please specify the March '92 ST/Mega disk when ordering.

AIM
Atari Classic (8-bit) Disk
March 1992



Each AIM 8-bit Disk of the Month is a single-sided, single density "flippy" packed with software. To extract files in the ARC format, you need the UNARC.COM utility. To decompress files with a DCM extension, you need DISKCOM3.UTL. Both programs are available from most BBSes, user groups or you can purchase the April/May '91 AIM 8-bit Disk.

Here's a short description of the files on the March '92 8-bit Disk:

Side 1

BABYLON.ARC—Details on a hardware modification, called the Babylon Upgrade, that can be used to give your XL (800XL, 1200XL) a truly "persistent" RAM-based OS. Not only is this operating system able to survive anything short of turning the computer off, but it's also unchangeable once activated!

JR2.ARC—JR's BASIC Games Collection #2! Original programs, written by Jeff Payne, Jr., including Test Your Memory, Splat a Brat, Spaceship Excitement, Computer Hang Guy, Knight Rider, Fortune Teller, Guess a Number, Horse Racing and JR Math.

MAGICALC.ARC—A great new program from Paul Alhart of Atari Federation. MagiCalc XL is a four-function calculator that displays results in Decimal, Hexidecimal and Binary all at once. Best of all, MagiCalc sits in the unused 12K available on an 256K XL if booted with two single density RAMdisks. Pressing a "hot key" calls up MagiCalc and, upon exiting from the calculator, whatever process was going on when you pressed the hot key will automatically resume. This is *very* similar to the way desk accessories work on the Atari ST computers.

TAFHC.DCM—The Atari Federation Hacker's Challenge, also written by Paul Alhart, is a puzzle for all you 8-bit hackers out there. The Challenge is a disk full of tricks and traps. The object is to put together a multi-part secret message. Read Paul Alhart's A-T-A-R-I column in this issue of Atari Interface for more details. Good luck!

TTEST.ARC—A BASIC program, written by Michael Dalto, that determines if variations in experimental data occur by chance alone by using t-test analysis for dependent samples. TTEST is designed for scientific use. This program accompanies the Data Analysis with Your Atari Classic 8-bit article in this month's issue (the article is also included in this ARC).

Side 2

BIRTHDAY.ARC—A BASIC LISTing of a very nice and easy to use program for keeping track of people's birthdays. Written by Calvin Franklin of the O-ACES user group.

DIAMENU.ARC—Load BASIC programs using the DIAMOND 3.0 built in file Selector routine. This program is writen in BASIC so you must exit from the Diamond desktop and run this like any other BASIC program. A good example of how to program Diamond functions from BASIC. Written by Kevin Packard (WNYAUG). Requires Diamond GOS from Reevesoft.

ETERNAL.ARC—A BASIC game somewhat similar to a popular old 2600 game called Adventure.

MATH.DCM—Mathematical analysis programs, including intervals, roots, fixed point math, derivatives, integrals, polynomials, interpolation and more. This DISKCOM file extracts to create a SD boot disk. Simply decompress this file to a disk and reboot your system with BASIC enabled.

QUEST.ARC—An outboard command module that adds user surveys or questionnaires to AtariLink BBS 2.0 or greater. Docs included. (The complete AtariLink BBS 2.0 was contained on the Nov. '91 AIM 8-bit Disk.)

SORT.ARC—A BASIC XE program that sorts text/data files. Supports 1-250 lines of 1-38 characters each. Options include sorting in ascending or descending order and sorting with numbers having priority over letters or vice versa. Sorted lists can be printed to screen or printer, saved to a new file or appended to an existing file. Lots of other features. Note: You must have BASIC XE to run this program.

Readers can purchase this disk from the local AIM participating user group or by sending $6 ($5 +$1 s/h) to Unicorn Publications, 3487 Braeburn Circle, Ann Arbor, MI 48108. Please specify the March '92 8-bit Disk when ordering.

Alabama

Birmingham ACE
5822 5th Terrace S.
Birmingham, AL 35212
Alan Brewster (205) 591-9906
Meet: Vestavia Hills Public Library
Day: 2nd Monday Time: 7 PM
Dues: $15/Regular, $25/Advanced
CPU: Atari 8-bit and ST/TT
BBS: Matrix BBS, Co. #7, (205) 323-2016
Matrix BBS, (205) 251-2344
Misc: Advanced includes AIM 8bit or ST monthly disk

Arizona

Phoenix Area ST
PO Box 56413
Phoenix, AZ 85079
Mike Aubrey (602) 870-8360
Meet: Room #101, Devry College, 2149 W. Dunlap Ave., Phoenix, AZ.
Day: 2nd Saturday Time: 10-12PM
CPU: ST/TT
BBS: ST Base (602) 285-9246, RDS (602) 841-7196, Wild Thing (602) 277-8225

South East Valley Atari Connection
PO Box 662
Chandler, AZ 85224
Marc Dyer (602) 897-0314
Meet: Dobson Ranch Branch of Mesa Public Libraries
Day: 3rd Saturday Time: Usually 10AM
Dues: $12
CPU: Atari 8-bit and ST/TT
BBS: (602) 833-9216
Misc: Reduces ST/8-bit library prices, club BBS access.

California

ACC Encompassing Suburban Sacramento
PO Box 1354
Sacramento, CA 95812
Bob Drews (916) 423-1573
Meet: SMUD Training Building, Classroom B 1708 59th St., between Folsom Blvd. & R St., off Hwy 50.
Day: 1st Wednesday Time:7:30 PM
CPU: Atari 8-bit
BBS: ACCESS BBS (916) 428-8662

Atari Federation
PO Box 5367
Vandenberg AFB, CA 93437
Phil Rominger (805) 736-7147
Meet: Vandenberg Federal Credit Union, Vandenberg Village branch, Lompoc, CA 93436.
Day: 1st Monday Time: 7 PM
Dues: $10/single, $15/family
CPU: Atari 8-bit and ST/TT

Bay Area AUG
3691 Eastwood Circle
Santa Clara, CA 95054
Joe Fischer (408) 988-3065
Meet: Agnew Development Center Auditorium, Layfayette & Montague Exp. Santa Clara, CA.
Day: 1st Monday
Dues: $20
CPU: Atari 8-bit, ST/TT and Portfolio
BBS: (408) 986-0215

Bakersfield ACE
PO Box 40203
Bakersfield, CA 93384
Tim Hobbs (805) 837-2726
Meet: Pizza Hut, 3017 Wilson Rd., Vons Shopping Center
Day: 3rd Tuesday
Dues: $18/yr Full, $12/yr Regular, $6/yr BBS
CPU: Supports Atari 8-bit, ST/TT, Mac, IBM and Portfolio
BBS: (805) 831-5350

Diablo ACE
c/o J. Dickerson, PO Box 673
Diablo, CA 94528
Dan Howlett (510) 827-3805
Meet: Contra Costa County Water District Bldg, 1331 Concord Ave, Concord, CA.
Day: 1st Thursday Time: 7PM
Dues: $20/yr
CPU: Atari 8-bit and ST/TT

Fresno Regional Atari Computer User Support
2167 Richart Ave.
Clovis, CA 93712
Tom Hancock (209) 885-2817
Meet: Four Seasons Mobile Home Park Recreation Room, Fresno, CA.
Day: Last Saturday Time: 6PM
Dues: $20/yr or $10/semi-annually
CPU: Atari 8-bit
BBS: (209) 251-5338 3/12/2400
Misc: Membership includes club disk of the month/newsletter and AtariUser

MIDI Atari User Group
1848 N. Gramercy #302
Los Angeles, CA 90028

Real Atari Maniacs
PO Box 112
Camarillo, CA 93011
Timothy McCoy (805) 389-0059 (days)
Day: 3rd Wednesday Time:7:30PM
Dues: $25
CPU: ST/TT
BBS: (805) 987-6985
Misc: Member of ACENET consortium, active at the Glendale show.

San Diego ACE
PO Box 900076
San Diego, CA 92190
Dan Phillips (619) 462-1289
Meet: General: North Park Recreation Center Social Room, 4044 Idaho St. ST/8-bit Workshops: North Park Adult Center, 2719 Howard St.
Day: General: 3rd Mon., Workshops: 1st Thu. Time: 7PM
Dues: $18/yr
CPU: Atari 8-bit and ST/TT
BBS: (619) 689-8157 3/12/2400
Misc: SDACE newsletter, increased BBS access

San Leandro Computer Club
PO Box 1506
San Leandro, CA 94577-0374
Bob Woolley (415) 865-1672
Meet: San Leandro Community Library, 300 Estudillo Ave.
Day: Main: 1st Tue., ST: 2nd Mon. Time: 8PM
Dues: $20/yr
CPU: Atari 8-bit and ST/TT
BBS: Key System (415) 352-5528
Misc: SLCC Journal, access to print and PD/Shareware disk libraries.

Sacramento ST User Group
PO Box 214892
Sacramento, CA 95821
Mark Warner (916) 344-8320
Meet: Pac Bell Auditorium, 2700 Watt Ave.
Day: 2nd Wednesday Time:7PM
Dues: $24/yr
CPU: ST/TT
BBS: ST-Keep (916) 331-6153, (916) 729-2968
Misc: Club newsletter, free raffle ticket at each general meeting, membership disk

Salinas Valley ACE
672 E. Romie Lane
Salinas, CA 93901
Gary Klugman (408) 758-4894
Meet: Salinas Community Center
Day: 1st Tuesday Time: 7:30PM
Dues: $12/yr
CPU: ST/TT
BBS: BitStream (408) 449-2150
Misc: Raffles, free disk of the month

The Educators' Atari Club
PO Box 1024
Laytonville, CA 95454
Pete Loeser (707) 984-8048
Meet: Operates by mail, members are spread all over the world.
Dues: US: $25/yr, Foreign: Inquire
CPU: Atari 8-bit and ST/TT
Misc: TEAC newsletter. 8-bit and ST educational disk library.

Yolo Atari Club
1129 Fordham Dr.
Davis, CA 95616-0926
Eric Hays (916) 756-5496
Meet: Call or write for meeting time/place
Dues: $8/yr
Misc: PD library access, Yackity-YAC newsletter.

Colorado

Atari Clubs of Denver
5407 W. 4th Ave.
Lakewood, CO 80226
Guy McDaniel (303) 238-2366
Meet: ACD/STIG: Aurora Public Library, 14949 E. Alameda Ave. STarfleet: Pamona HS, 8101 W. Pamona Dr.
Day: ACD: 1st Tues.; STarfleet: 2nd Fri.; STIG: 3rd Tues. Time:7:00 PM
CPU: Atari 8-bit and ST/TT
BBS: (303) 343-2956 3/12/2400
Misc: ACCD is an umbrella group for ACD, Starfleet and STIG.

Pikes Peek and Poke ACE
PO Box 17779
Colorado Springs, CO 80935-7779
Steve Leser (719) 576-3357
Meet: T.J. Maxx Center at Rustic Hills
Day: 8-bit 1st Tuesday, ST 4th Thursday Time: 7-9PM both SIGs
Dues: $20/yr family
CPU: Atari 8-bit and ST/TT
BBS: Laser BBS (719) 527-1374
Misc: Club has a Hayes 300 baud and Atari SX-212 1200 baud modem for loan to members. AtariUser and AIM ST and 8-bit Disks available at each meeting.

Connecticut

Central Connecticut Computer Club
127 Pinnacle Rd.
Bristol, CT 06010
Rich Scheidel (203) 589-3738
Meet: 127 Pinnacle Rd., Bristol, CT.
Day: 3rd Wednesday Time:7:30PM
Dues: $25/yr normal, $30/yr family
CPU: Atari 8-bit and ST/TT

ST Atari Road Runners
15 John St.
Ansonia, CT 06401
Madelon Wilson (203) 735-6711
Meet: Greater New Haven State Tech. College, 88 Bassett Rd., North Haven, CT.
Day: 3rd Thursday (except August)
Dues: $20/yr
CPU: ST/TT
BBS: (203) 421-4861

Delaware

Central Delaware ACC
3117 Walnut St.
Dover, DE 19901
CPU: Atari 8-bit and ST/TT

Florida

Atari Boosters League East
PO Box 1172
Winter Park, FL 32790
Hadley Nelson (407) 671-0317
Meet: Orlando Public Library, Palm Magnolio Room 101 E. Central Blvd., Orlando FL
Day: Last Sunday of each month Time:1:30-4:30 PM
Dues: $12
CPU: Atari 8-bit and ST/TT
Misc: Access to the ABLE Program Library of User Software (ABLE PLUS) and ABLE AID newsletter.

STARgroup
2312 Ironstone Dr. E.
Jacksonville, FL 32216
S. Michael Hallack (904) 646-0567
Meet: La Miranda Apartments off Powers Ave., Jacksonville, FL.
Day: 1st and 3rd Tuesday
Dues: $15/yr
CPU: ST/TT, Macintosh and Portfolio
BBS: Lief's World (904) 573-0734
Misc: Free PD/Shareware disk library access, quarterly newsletter.

Georgia

Middle GA AUG
Rt. 1 Box 362M4 Carl Sutton Rd
Lizella, GA 31052
Jeff Vincent (912) 836-3852
Meet: Warner Robins Public Library
Day: 2nd Sunday Time: 1PM
Dues: $5/yr with newsletter optional
CPU: Atari 8-bit, ST/TT and Portfolio
Misc: Club library use is free to all paid members. Participates in annual show at local mall.

ST Atlanta Roundtable
3069 N. Brook Rd.
Chamblee, GA 30341
Rick Ostapower (404) 487-4845
Day: 3rd Monday
Dues: $30/yr
CPU: ST/TT

Illinois

Champaign-Urbana ST User Group
PO Box 3442
Champaign, IL 61820
Lee Johnson (217) 356-7916
Meet: Urbana Free Library Auditorium, corner of Elm and Race, Urbana, IL.
Day: 2nd Wednesday Time:7PM
Dues: $16/yr
CPU: ST/TT
Misc: AtariUser magazine, PD library access

Eastside AUG
2425 Crislisa Dr.
Alton, IL 62002
Hank Vize (618) 465-0342
Meet: Alton Square Mall Community Room, Alton, IL.
Day: 1st Monday Time: 7PM
Dues: $18/yr newsletter membership
CPU: Atari 8-bit and ST/TT
BBS: Eastside BBS (618) 254-6077, Garage BBS (618) 344-8466
Misc: EAUG-Log club newsletter Member of Midwest Atari Regional Coucil consortium

Galesburg AUG
55 Herring St.
Galesburg, IL 61401
Russ Watson (309) 343-6609
Meet: Community Center on Simmons St. in Galesburg, one block sourth of downtown.
Day: 2nd Monday Time: 7PM
Dues: $10/yr family, $5/yr student
CPU: Atari 8-bit and ST

Rockford ACC
5430 N. 2nd St.
Loves Park, IL 61111
Meet: Springbrook Congregational Church, off Alpine just as you make the turn onto Springbrook Rd. from Spring Creek Rd., Rockford, IL.
Day: 3rd Saturday Time: 9AM-Noon
CPU: Atari 8-bit and ST/TT
BBS: (815) 226-2388

Suburban Chicago ATarians
PO Box 72266
Roselle, IL 60172
Meet: College of Dupage, Student Resource Center on Lambert Rd. between Roosevelt and Butterfield, Glen Ellyn, IL.
Day: 1st Saturday (check SCAT BBS for changes) Time: 10AM
Dues: $20/yr family
CPU: Atari 8-bit and ST/TT
BBS: SCAT BBS (708) 231-7227

ST Atari Resource
329 Sumter Drive
Belleville, IL 62221
Dennis Guthrie (618) 235-7871
Meet: Illinois Power Bldg., 1050 West Blvd., Belleville, IL
Day: Last Monday Time: 7PM
Dues: $15/yr
CPU: ST/TT

Indiana

Atari Computer Owners Resource Network
3627 Iowa Court
Fort Wayne, IN 46815
Meet: Shawnee Branch of the Allen County Public Library
Day: 1st Saturday Time: 10AM-1PM
Dues: $18
CPU: Atari 8-bit and ST/TT
BBS: (219) 744-1396 3/12/24/9600
Misc: Three Rivers Festival, PentaCon, ICE Kid's Conference Participant.

Calumet Region Atari Group
PO Box 10995
Merrillville, IN 46411
Randy Noak (219) 663-6912
Meet: Broadway Music, Greentree Plaza, 1509 W. 81st (US-30), Merrillville, IN.
Day: 2nd Wednesday Time:7PM
Dues: $15/yr
CPU: ST/TT
Misc: ST disks $2.50 each for members, $4 non-members

Kentucky

Atari Exchange of Louisville
PO Box 34183
Louisville, KY 40232
Lawrence Estep (812) 944-8997
Meet: Central Jefferson County Government Center, 7201 Outer Loop
Day: 2nd Sat., 8bit SIG: 1st Wed., ST SIG: 4th Wed. Time: 11:30AM/SIGS: 7:30PM
Dues: $20/yr per family
CPU: Atari 8-bit and ST/TT
BBS: Atari Scene! (502) 456-4292
Misc: Members subscribe to AELien Transmissions newsletter (6 issues) for $1.74/yr.

Bluegrass Region ACE
151 Todds Rd. #240
Lexington, KY 40509
Hal Nason (606) 269-8989
Meet: Conference Room B, Lexington Free Public Library, Downtown Branch Conference Room B
Day: 3rd Tuesday Time: 7-9 PM
Dues: $15/individual, $20/family, $10/associate
CPU: Atari 8-bit and ST/TT
Misc: Associate membership includes AIM but not library access.

Michigan

Cascade ACE
PO Box 6161
Jackson, MI 49204
CPU: Atari 8-bit, ST/TT and IBM

Grand Rapids Atari Systems Supporters
624 Dickinson SE
Grand Rapids, MI 49507
Meet: Wyoming Public Library, 3350 Michael S.W., Grand Rapids, MI.
Day: 1st Wednesday Time:7PM
Dues: $22/yr
CPU: Atari 8-bit

Michigan ACE
PO Box 2785
Southfield, MI 48037
Ted Newkumet (313) 537-5298
Meet: Southfield Civic Center, Room 115, at 10-1/2 Mile and Evergreen, 1/2 mile south of the Evergreen exit on I-696.
Day: 3rd Tuesday Time: 7:30PM
Dues: $20/yr
CPU: Atari 8-bit and ST/TT
Misc: Send $2 for current ST or 8-bit disk catalog.

SALSA
PO Box 1342
Sault Ste. Marie, MI 49783
Roger Aube (705) 759-3922

Saginaw/Tri-Cities Atari User Group
4765 N. Eastman Rd.
Midland, MI 48640
Bryant LaFreniere (517) 835-2234
Meet: Rudy Zauel Memorial Library, corner of Center and Shattuck in Saginaw Township.
Day: 2nd Saturday Time: 9AM
Dues: $20/yr
CPU: Atari 8-bit and ST/TT

Misc: Free PD disk with membership/renewal, PD disks are $3 or 2 for $5. Participates in Community Fair at Fashion Square Mall each January

Washtenaw Atari User Group
42047 Hanford
Canton, MI 48187
Craig Harvey (313) 971-8576
Meet: Michigan Student Union on State St. at the corner of S. University in Ann Arbor.
Day: 2nd Tuesday Time: 7:30PM
Dues: $15/yr
CPU: Atari 8-bit and ST/TT
BBS: MOlin's Den (313) 451-0524
Misc: Monthly 8-bit and ST raffle, free ticket for members, SX212 modem available for loan.

Minnesota

Ports ACE
4835 Crosley Ave.
Duluth, MN 55804-1219
Tracy Hendershot (218) 525-1058
Meet: Duluth Radisson Hotel, check local BBSes for exact location.
Day: 3rd Sunday Time: 6:30PM
Dues: $30/yr or $9/quarter
CPU: Atari 8-bit and ST/TT
Misc: Newsletter, free ST/8-bit disk, free printer ribbon reinking, free copying of ST/8-bit PD libraries.

Missouri

ACE of St. Louis
PO Box 3508
St. Louis, MO 63143
Dick Pederson (314) 644-7168
CPU: Atari 8-bit and ST/TT

Midwest STar
1107 W. 88th St.
Kansas City, MO 64114
Gary Leach (913) 236-9643
CPU: ST/TT

Montana

Rattlesnake ACE
Box 364
Frenchtown, MT 59834
Tom Tucker (406) 626-4410
Meet: National Guard Armory, 2501 Reserve St., Missoula, MT.
Day: 3rd Sunday Time: 7PM
Dues: $16/year
CPU: Atari 8-bit and ST/TT
Misc: Membership includes free PD disk.

North Carolina

Raleigh ACE
4360 Hunters Club Dr.
Raleigh, NC 27606
Lewis Midyette (919) 828-4319
Meet: Announced on Galaxy BBS, look under Bulletins for "A word from the president of RACE"
CPU: Atari 8-bit and ST/TT
BBS: Galaxy (919) 552-0974

North Dakota

Minot Atari Computer Users Group
129-2 Sirocco Dr.
Minot AFB, ND 58704

Nebraska

Omaha ACEs
PO Box 723
Papillion, NE 68046
Pete Killian (402) 592-5427
Meet: La Vista Recreation Center, 8116 Parkview Blvd. (just off 84th St., south of Food-4-Less and east of 84th at the light.)
Day: 2nd and Last Wednesday (except Nov. & Dec.) Time: 7:30PM
CPU: Atari 8-bit and ST/TT

New Jersey

Jersey Atari Computer Society
PO Box 710
Clementon, NJ 08021
Mike Hopkins (609) 783-1423
Meet: Camden County Library
Day: 3rd Tuesday Time: 7-9PM
Dues: $24/yr (August renewal)
CPU: Atari 8-bit and ST/TT
BBS: (609) 346-1224
Misc: Between Bytes newsletter, AtariUser available at meetings Send SASE (business size) for copy of current ST or 8-bit disk catalog.

New Mexico

Albuquerque ACE
1021 Sagebrush Trail SE
Albuquerque, NM 87123
Richard Houser (505) 299-3977
Meet: Gas Company of New Mexico. 4625 Edith Blvd, Albuquerque.
Day: General: 1st Sat and 3rd Tues, 8bit: 2nd Tues Time:
Dues: $20/yr payable in January
CPU: Atari 8-bit and ST/TT
BBS: Astro BBS: (505) 260-0448
Misc: PD library access, BBS membership. Swap meet on 1st Sat. of June and December.

New York

Atari Computer Owners of Rochester NY
PO Box 24920
Rochester, NY 14624
Don Allis (716) 293-3415
Meet: Brighton HS, 1150 Winton Rd. South, Room 262S.
Day: 2nd Wednesday Time:7 PM
Dues: $20/yr (add $6 for AIM)
CPU: Atari 8-bit and ST/TT
BBS: Dimension's End (716) 436-3078 3/12/2400
Misc: ACORN Kernel newsletter, AtariUser, extra BBS access. ST Beginners and 8-bit Basically Speaking classes held before general meeting.

Buffalo Region Atari Group for STs
PO Box 1035
Buffalo, NY 14225
Mark Pierro (716) 691-7844
Meet: Erie Community College, North Campus, Room S-105 in the Student Center.
Day: 3rd Thursday Time: 7:30PM
CPU: ST/TT
Misc: Monthly raffle. Board of Directors, 1st Thurs. at Your Host Restaurant, Harlem at Sheridan, 7PM.

Capital District ACE
PO Box 1910
Schenectady, NY 12301
Bob Thompson (518) 439-5356
Meet: Computer Cellar in the Westgate Plaza, Albany, NY.
Day: ST: Last Wednesday, XL/XE: Quarterly meetings Time: 6:30PM
Dues: $20/year
CPU: Atari 8-bit and ST/TT
Misc: ST disks $2, free XL/XE library access.

Long Island AUG
PO Box 92
Islip, NY 11751
John Aalto (516) 589-6754
CPU: Atari 8-bit and ST/TT
BBS: STar Scan (516) 399-4252

Ol' Hackers AUG
3376 Ocean Harbor Dr.
Oceanside, NY 11572
Alex Pignato (516) 678-6081
Meet: Plainview-Old Bethpage Library, 999 Old Country Rd. in Plainview
Day: Usually 2nd Saturday Time:
Dues: $24/yr
CPU: Atari 8-bit ONLY!
Misc: Charter member of NEAR*US user group consortium.

Western NY AUG
PO Box 59
Buffalo, NY 14216
Mike Husband (716) 825-8486
Meet: Room 116E, Bacon Hall, State University College of Buffalo, 1300 Elmwood Ave.
Day: 1st Thursday Time: 7:30PM
Dues: $15/yr new, $12/yr renewal
CPU: Atari 8-bit
BBS: Wizard's Attic (716) 681-1654
Misc: POKEY newsletter disk

Ohio

ACC of Toledo
4487 289th
Toledo, OH 42611
Dave & Brenda Micka (419) 729-1891
Meet: Dave & Brenda Micka's home.
Day: 1st Wednesday Time:7-9 PM
CPU: Atari 8-bit and ST/TT
BBS: Disk Drive-Thru BBS, (419) 885-3441
Misc: Disks $2 8-bit, $4 ST

Ace of Columbus
1287 Dennison Ave.
Columbus, OH 43201

Cuyahoga Valley ACC
PO Box 9173
Akron, OH 44305
Don Crano (216) 376-7618
Meet: First National Bank, Mogadore, OH.
Day: 2nd & 4th Tuesday Time:7:30PM
Dues: $20 family
CPU: Atari 8-bit and Mega/ST/TT
Misc: Discounts at local computer stores, club newsletter The Password

Mid-Ohio AUG
PO Box 134
Ontario, OH 44862
Chuck Steinman (419) 529-2478 after 5PM
Meet: A&B Computers, 1151 Park Ave. W., West Park Shopping Center, Mansfield, OH.
Day: 3rd Saturday (except July) Time:7-9PM
Dues: $12/yr
CPU: Atari 8-bit and ST/TT
BBS: DataQue BBS (419) 529-5197 3/12/2400
Misc: Members can access AIM ST and 8-bit disk files on the BBS. AtariUser available free to members at A&B. Back issues of AtariUser available for $1 each.

ST Atari North Coast Enthusiasts
1174 Larkspur Dr.

Lyndhurst, OH 44124
Joseph Adato (216) 449-6881
Meet: B&G Electronics, 15729 Madison Ave., Lakewood, OH.
Day: 3rd Monday Time: 7:15PM
Dues: $12/yr with one time sign up fee of $13
CPU: ST/TT

Oklahoma

Tinker ACE
16564 SE 18th
Choctaw, OK 73020
Ron Hamilton (405) 387-5649
Meet: Moore Public Library, 225 S. Howard, just off SW 4th and I-35, Moore, OK.
Day: 1st Saturday Time: 1PM
Dues: $15 family, $7 correspondence (July renewal)
CPU: Atari 8-bit and ST/TT
BBS: TACE BBS (405) 366-1977
Misc: Will mail copies of AtariUser magazine to individuals for approx. $1 per issue.

Oregon

Atari Computer Users NETwork
2662 E. Nob Hill Dr. SE
Salem, OR 97302
Ron Purdy (503) 588-7509
Day: 4th Tuesday Time: 7 PM
Dues: $15 with AIM, $10 without
CPU: Atari 8-bit and ST/TT
BBS: Salem Public Lib. (503) 588-6130, Page BBS (503) 363-0171, The Jungle (503) 393-4274.

Central Oregon Atari Club
PO Box 6824
Bend, OR 97708
Aaron Leis (503) 388-7516
Meet: Ann Rita Conference Center (in front of the St. Charles Hospital on Neff Rd.), Bend, OR.
Day: 1st Saturday Time: 5PM
Dues: $20/yr new, $17/yr renewal, $1/yr for each additional family member.
CPU: Atari 8-bit and ST/TT

Douglas County Atari ST Enthusiasts
1033 Barager
Roseburg, OR 97470
Jim Steingrobe (503) 673-1687

Portland Atari Club
PO Box 1692
Beaverton, OR 97005
David Hunt (503) 286-6276
CPU: Atari 8-bit and ST/TT
BBS: ACE of America (503) 285-4417

Pennsylvania

Nittany Atari Personal Computer Organization
642 E. Waring Ave.
State College, PA 16801
Greg Brown (814) 238-4255
CPU: Atari 8-bit and ST/TT

Philadelphia ACS, Atari 8-bit SIG
Box 312, LaSalle Univ.
Philadelphia, PA 19141
Alice Christie (215) 521-2569
Meet: Drexel University, Room M11B, Matherson Blvd., 34th and Market St., Phil., PA.
Day: 3rd Saturday Dues: $25/year with an additional $2 for new members.
CPU: Atari 8-bit
BBS: (215) 942-9600 to 9604 (9603/4 for 300 baud)
Misc: The DataBus newsletter, AtariUser

Spectrum Atari Group of Erie
PO Box 10562
Erie, PA 16514-0562
Dennis McGuire (814) 833-4724
Meet: St. John's Lutheran Church, Erie, PA.
Day: 3rd Sunday Time: 2PM
CPU: Atari 8-bit and ST/TT

Southcentral Pennsylvania ACE
PO Box 11446
Harrisburg, PA 17108
John Slade (717) 938-3656
Meet: Camp Hill Mall Community Room
Day: 3rd Monday Time: 7:30PM
Dues: $15/yr
CPU: Atari 8-bit and ST/TT
Misc: SPACE Probes newsletter

Westmoreland Atari Computer Organization
230 Clairmont St.
North Huntingdon, PA 15642
Patty Marshall (412) 225-8637
Meet: North Huntingdown Town House, near Irwin, PA.
Day: 2nd Tuesday
Dues: $24 family
CPU: Atari 8-bit, ST/TT, Mac, IBM and Portfolio
Misc: Huge foreign PD libraries. Participates in many Atarifests in the northeast.

South Dakota

Rushmore ACE
9512-A Adams
Ellsworth AFB, SD 57706
Rick Burton (605) 642-5353
Meet: Rapid City Public Library
Day: 4th Saturday Time: 2PM
Dues: $12 basic, $15 newsletter
CPU: Atari 8-bit and ST/TT

Tennessee

Cookeville ACE
280 Capshaw Drive
Cookeville, TN 38501
Dan Hale (615) 526-8002
Meet: Putnam County Library, Cookeville, TN.
Day: 1st Saturday Time: 1PM
Dues: $10
CPU: Atari 8-bit and ST/TT
BBS: Generic BBS (615) 432-5809

Memphis Atari Systems Hobbyists
3265 Austin Peay Hwy.
Memphis, TN 38128
Randy McKinna (901) 388-3384
Meet: State Technical Institute in the Fulton Auditorium.
Day: 2nd Monday Time: 7PM
Dues: $24/yr (renewal in July)
CPU: Atari 8-bit and ST/TT
BBS: MASH COM (901) 377-1904 3/12/24

Nashville AUG
PO Box 121752
Nashville, TN 37221
Walt Sullivan (615) 228-7353
Meet: Cumberland Museum and Science Center
Day: 3rd Thursday Time: 7-10PM
Dues: $24/yr full; $12/yr associate
CPU: Atari 8-bit and ST/TT
BBS: Nashville Exchange (615) 383-0727 3/12/24/9600 Troll's Cave (615) 872-0757 12/2400

Texas

Alamo Area Atari User Association
PO Box 79-1426
San Antonio, TX 78279
Al Sherrill (512) 492-6633
Meet: Balcones Heights Community Center, 107 Glenarm, San Antonio, TX. 107 Glenarm, San Antonio
Day: 1st Tuesday of each month Time:6:30-9:30 PM
Dues: $24; Subscribing: US-$16, CAN/MEX-$36 ($14 no AIM), Other-$54 ($18 no AIM)
CPU: Atari 8-bit
Misc: Library of around 700 disks. (FR)ANTIC monthly newsletter. Swap meet and computer workshop each 3rd meeting.

Austin ACE
1601 Larkwood Dr.
Austin, TX 78723
Eve Kuniansky (512) 323-2016
Meet: Library. Pizza buffet 1st Thursday of each month 6:30-8PM.
Day: 2nd Sat. Time: 2-5PM
Dues: $24/yr Jan-Dec
CPU: Atari 8-bit, ST/TT, Portfolio and Lynx
Misc: Newsletter, C classes, library access.

ACC of El Paso Texas
245 Longhorn Court
El Paso, TX 79907
Dues: $20
CPU: Supports Atari 8-bit, ST/TT, Macintosh and IBM
BBS: STEP, (915) 755-STEP STE-EP BBS, (915) 821-9220
Misc: Discounts from Jenkins' Computers, special STE-EP access.

Golden Triangle AUG
2508 San Jacinto
Beaumont, TX 77701
Carl Neblett (409) 755-6535
Day: 1st Tuesday
Dues: $24/yr (Sept. renewal)
CPU: Atari 8-bit, ST/TT, Macintosh, IBM, MIDI
BBS: (409) 722-6526

Houston ACE
PO Box 460212
Houston, TX 77056
Bill Kithas (713) 855-0815
Meet: Health Economics Corp., 2400 West Loop S., Houston, TX.
Day: 4th Wednesday Time:6:45PM
Dues: $22/year
CPU: Atari 8-bit, ST/TT
BBS: (713) 458-9923
Misc: UPDATE ATARI newsletter, store discounts, door prizes, workshops.

ST Atari League of San Antonio
PO Box 18731
San Antonio, TX 78218-0731
Tim Hebel (512) 656-5315
Meet: Balcones Heights Community Center, 710 Glenarm, San Antonio, TX.
Day: 2nd Tuesday Time: 7-10PM
Dues: $20 w/AIM, $15 regular
CPU: ST/TT
Misc: Club newsletter, discounts, Disk of the Month for $2, New user classes.

Utah

Layton ACE
3897 S. 2275 W.
Roy, UT 84067-3515
Irwin Brooks (801) 731-1516
Meet: Clearfield Library basement, Roy, UT.
Day: 2nd Wednesday Time:7PM

Dues: $20/yr
CPU: Atari 8-bit and ST/TT

ST Users Network
PO Box 27285
Salt Lake City, UT 84127
Randy Larsen (801) 967-0209
Meet: Murry High School
Day: 3rd Wednesday Time:7PM
CPU: ST/TT
BBS: The Bolt (801) 968-3921

Washington

First ACC of Spokane
PO Box 5121
Spokane, WA 99205
Tim Osborne (509) 624-1917
Meet: Eager Beaver Computers, next to the Garland Theatre, Spokane, WA.
Day: 2nd Thursday Time: 7PM
Dues: $15/yr family
CPU: Atari 8-bit and ST/TT

Southwest Washington Atari Group
PO Box 1515
Vancouver, WA 98668
Meet: Clark County Fire District #5, Station 3 on 213 NE 120th, Vancouver, WA.
Day: Last Sunday (except July) Time:6:30PM
Dues: $12/yr
CPU: Atari 8-bit and ST/TT
BBS: Bear Cavern (206) 574-1146

CANADA -- Ontario

Kent AUG
153 Oxley Dr.
Chatham, Ontario N7L 4R3 CANADA
Channel One (519) 351-0760
Meet: North Maple Village Mall on Highway #40, just north of Chatham.
Day: 4th Tuesday, Sept-May
Dues: $20/yr
CPU: Atari 8-bit and ST/TT
BBS: KAUG BBS (519) 351-3901

National Capital AUG
15 Blueridge Court
Nepean, Ontario K2J 2J3 CANADA
Hardy Zeltins (613) 825-4196
CPU: Atari 8-bit, ST/TT, Macintosh

Thunder Bay Atari ST Enthusiasts
185 Varsity Row
Thunder Bay, Ontario P7B 5P2 CANADA
Dues: $25/yr Canadian
CPU: ST/TT

Windsor AUG
3199 McKay Ave.
Windsor, Ontario N9E 2R4 CANADA
Brian Cassidy (519) 966-0305
Meet: Roseville Gardens Community Centre, 4200 Roseville Garden Dr., Windsor, Ontario, Canada.
Day: 3rd Thursday Sept-June, except Dec. (2nd Thursday) Time:7:30PM
Dues: $25 Canadian
CPU: Atari 8-bit and ST/TT

CANADA -- Quebec

Atari ST/Mega Users of Montreal
PO Box 966, Station B
Montreal, PQ H3B 3K5 CANADA
Kest Carter-Morgan (514) 272-6631
CPU: ST/TT, MIDI Specialists
Misc: Emergency repair, laser printing & graphics services, discounts on computer and MIDI equipment, Audio Recording & Music Tech course discounts and MUCH MORE!

Montreal Atari Club Atari de Montréal
PO Box 5418
St. Laurent, PQ H4L 4Z9 CANADA
Terry Cowen (514) 696-3773
Meet: Monkland Recreational Centre, 4410 West Hill, N.D.G., Montreal, Quebec.
Day: 8-bit: 1st Thursday, ST: 3rd Thursday
Time:
Dues: $25 8-bit, $30 ST, $35 both (Canadian)
CPU: Atari 8-bit and ST/TT
Misc: Disk-based newsletter, free AIM disk access, AtariUser magazine

ENGLAND
Bournemouth and Poole AUG
248 Wimborne, Oakdale
Poole, Dorset BH1S 3EF ENGLAND
Day: 1st Friday Time: 7:30 PM
CPU: Atari 8-bit and ST/TT
Misc: 8:16 Newsletter

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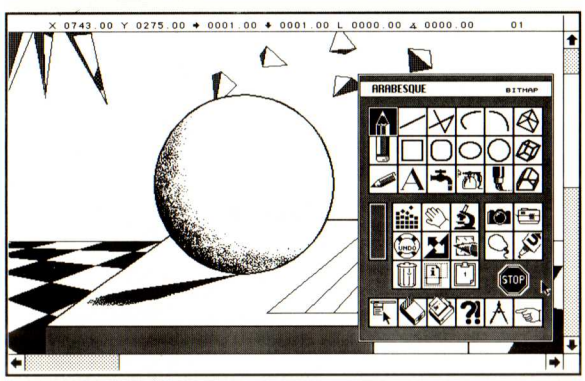

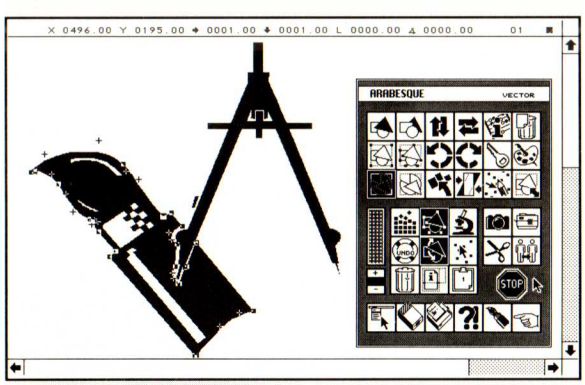

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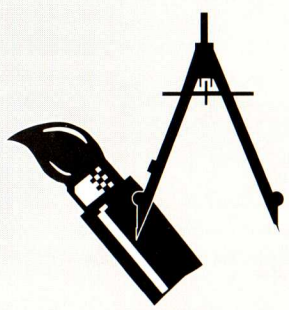

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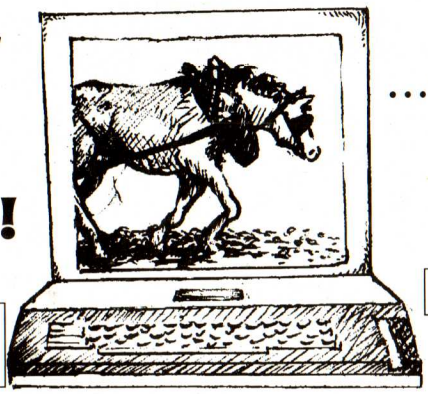

...with power products from Computer Software Services

Power Products for your XF551

$99.95 THE XF SINGLE DRIVE UPGRADE $99.95

Double the storage capacity of your XF551 with our 3.5" 720k **single drive upgrade!** Included with the upgrade is a Sony 3.5" disk drive in a 5.25" faceplate that perfectly replaces the existing 5.25" drive. The 3.5" drives are newer technology, more reliable, and easier to handle. Do NOT confuse this with public domain upgrades! The completely re-written drive OS adds these features:

- **Fixes incompatibilities** with commercial software
- **Eliminates** density **reconfiguring problems**
- Switches to second side without reconfiguring
- **Ultra Speed** I/O compatible
- Very **high speed** sector skew in US mode
- Capable of reading **IBM** and/or **ST** disks
- Compatible with 40 OR 80 track drives

Included with the upgrade is a utility program capable of reading IBM and/or ST disks, so you can import text or binary files to your 8-bit (text conversion routines are included). Minimal soldering is required; but we provide free installation for any of our products! Only $99.95 plus $8 S/H/I. If you already have a 3.5" drive, you may obtain the single drive upgrade without the Sony drive for $59.95 plus $5 S/H/I.

$139.95 THE XF DUAL DRIVE UPGRADE $139.95

Our XF Dual drive upgrade allows you to **add** a 3.5" drive to your XF551, while keeping the 5.25" mechanism. This is a totally **switchless** upgrade that turns your XF into two disk drives! The added 3.5" drive assumes the next drive number higher than the 5.25" and is totally independent, so you can copy between drives, even mixing densities! This product has all of the features of the above single drive upgrade, available for **both** drives! Complete with Sony 3.5" drive, only $139.95 plus $8 S/H/I. The upgrade without the drive is $79.95 plus $5 S/H/I. A special version to handle dual 3.5" mechanisms is available for an additional $20.

THE FLOPPY BOARD $109/149

The Floppy Board has arrived! This long-awaited Black Box add-on has been in the making for quite a while, but we've packed it with features that are worth the wait! This sophisticated device allows connection of up to four 5.25" or 3.5" floppy drives (drive sizes may be mixed). Access to these drives will be at parallel bus speed, approaching that of hard disks!

The board consists of 13 special integrated circuit chips, fully powered by the power supply of the Black Box. It has its own on-board microprocessor to take the load off the computer's processor for disk I/O. The board and fits perfectly over the Black Box (inside the custom cases!). It is not a stand-alone device; it must be used in conjunction with the Black Box.

High density disks are supported, so 1.2 meg 5.25" and 1.44 meg 3.5" drives may be connected. This is the only 8-bit controller to fully support these drives and densities! With four 3.5" 1.44 meg drives connected, you can achieve more total storage than a 5 meg hard disk! Archiver compatibility is supported! This means you can back up those titles no longer available. Although it's not as powerful as our Super Archiver, it will have the same editing power, with good backup capability.

Software included with the Floppy Board includes a utility to READ and WRITE IBM and ST disk formats! This will yield the easiest possible way to port text and data files between your 8-bit and ST or PC! This will be compatible with most all of the current formats. Also included is a high-speed sector copier designed to make extremely fast, verified copies of disks. A future upgrade to the Hard Drive Pro Backup (our hard disk backup tool) will make special use of the floppy board, and squeeze even more data on each disk than standard formats allow. It is possible to actually store 1.6 megs of data on a 1.44 meg 3.5" drive, so backing up a full 20 meg hard disks might only take 14 disks! Usage of the Floppy Board's on-board processor will allow overlapping reading and writing, making the backup really fly.

Two versions are available: the basic unit, and the Deluxe version. The basic unit provides the interface necessary for low density drives (360k for 5.25" and 720K for 3.5"), and comes with the IBM/ST transfer utility. The Deluxe version adds the high density capability, adds Archiver compatibility, AND adds the features of the Black Box Enhancer, which include a high-resolution 16 grey scale printer screen dump, and a powerful built-in sector editor, disassembler, and copier (which accesses the full 16 megs possible of hard disk partitions, and uses all available extra memory). Note: the Floppy Board replaces the ROM on the Black Box, so current Black Box Enhancers cannot be used with the Floppy Board.

The basic unit is only $109.95, and the deluxe unit is only $149.95. Add $5 for shipping/handling.

Power products for your XL/XE computer

~~$69.95~~ THE ULTRA SPEED PLUS OS ~~$69.95~~

***>> Fall special** price - **$59.95**! <<*

The Operating System that should be in every XL/XE computer! The **ULTRA SPEED PLUS** puts unbelievable speed and convenience at your fingertips. After using it a while, you'll wonder how you ever got along without it! Use **ANY DOS** to place **ULTRA HIGH SPEED** formats on your disks (with XF551 or modified 1050 drives), reconfigure and boot any drive (1-9 or even your **RAMDISK**!), sector copy single and double density disks to your RAMDISK, activate a built-in **400/800 OS** for compatibility, and much more! Below are a list of features. Only $59.95 + $5 S/H/I.

- **ULTRA SPEED SIO** for most modified drives
- **ULTRA SPEED** is toggleable
- Boot directly from RAMDISK
- Special timer circuits not required for 1 and 2 megs
- Background colors adjustable
- Reverse use of **OPTION** key
- Toggle internal **BASIC**
- Built-in drive number editor (including RAMDISK drive)
- Toggle screen off for up to 40% increase in speed
- **DOUBLE DENSITY RAMDISK** handlers
- **ENTIRE MEMORY TEST** that pinpoints defective RAM chips
- Boot any drive (1-9) on cold start
- Supports ALL XE-compatible memory upgrades up to **two megabytes**
- **THREE** Operating Systems in one **(XL/XE, 400/800, ULTRA SPEED PLUS)**
- **COLD-START** without memory loss
- Built-in mini sector copier
- **RAMDISK** exactly duplicates floppy drive so sector copying and editing are possible

$199.95 THE BLACK BOX $199.95

The **BLACK BOX** is a parallel-port device for your XL or 130XE computer that adds tremendous power to your 8-bit Atari. It is a T-shaped board with two buttons, two switches, and a set of dip switches visible from the outside. The **BLACK BOX** performs three main tasks: interface to a SASI/SCSI bus (for interface to most common hard disks), a parallel printer port, and a RS232 (modem) port. You may partition your hard disk(s) into as many drives as you wish; up to 9 may be active at any given time. By pressing one of the buttons on the **BLACK BOX**, you will enter the configuration menu, where you can re-assign drive numbers, swap partitions in and out, etc. When you exit, you will be returned to your program – undisturbed! Each hard disk partition has its own write-protect flag, and may be set to single or double density. Every hard disk may be write-protected with the flip of a switch. As an option, you may use your computer's XE RAM as a printer buffer, or order the BLACK BOX with 64K of on-board RAM.Another amazing feature of the BLACK BOX is the built-in **screen dump**. By simply pressing a button, the contents of your screen will be dumped to your printer! (You can define text or graphics modes with a switch!) The RS232 port supplies the full spec signals for added compatibility. Its handler takes up no user memory, and can handle 19,200 BAUD! A **machine language monitor** has been added to allow memory disassembly, memory/register changes, and more. The basic **BLACK BOX** unit is $199.95, and $249.95 with 64K RAM (for printer spooler). S/H/I is $8. An optional custom BLACK BOX case is available for $39.95. The Black Box is a product of Computer Software Services... Not the Black Box Corporation.

HARD DISK SYSTEMS

We offer complete, ready-to-run hard disk systems from 5 megs on up! These systems include a hard disk, Black Box, power supply, controller, cables, and software. Everything is pre-formatted and tested, so all you have to do is plug it in and boot! Prices start as low as $399. Call for the latest prices and specials!

INSTALLATION AND REPAIRS

Althoough installation of any of our products is easy, by taking advantage of our free installation offer, you can rest assured it will be done right. All you pay is the freight charges.
For repair of Atari 8-bit computers and drives at reasonable rates, contact our repair department at (716) 429-5639. All work is guaranteed, and there are no minimum estimate fees.

TWO FOR ONE DEAL!

If you have two or more of the same items needing repair and don't want to spend any money... send them to us and we'll use the parts from both defective items to make one good working unit at NO CHARGE - we'll keep the other defective one for parts! Please call before sending anything in.

We carry many other items - call for our FREE catalog!

Dealer/Distributor/User Group discounts available–call for info.

We accept VISA and Master Card. NY Residents please add sales tax.

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