

ATARI II

VOLUME 3
Feb. 1991

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INTERFACE

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Basically Speaking

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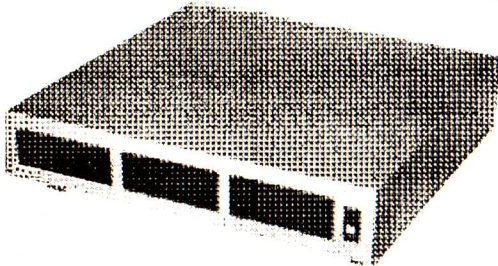
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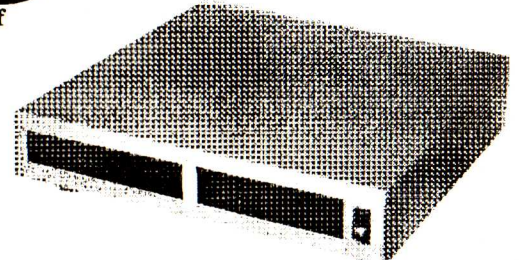
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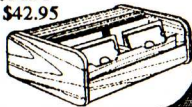
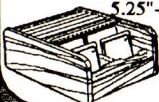
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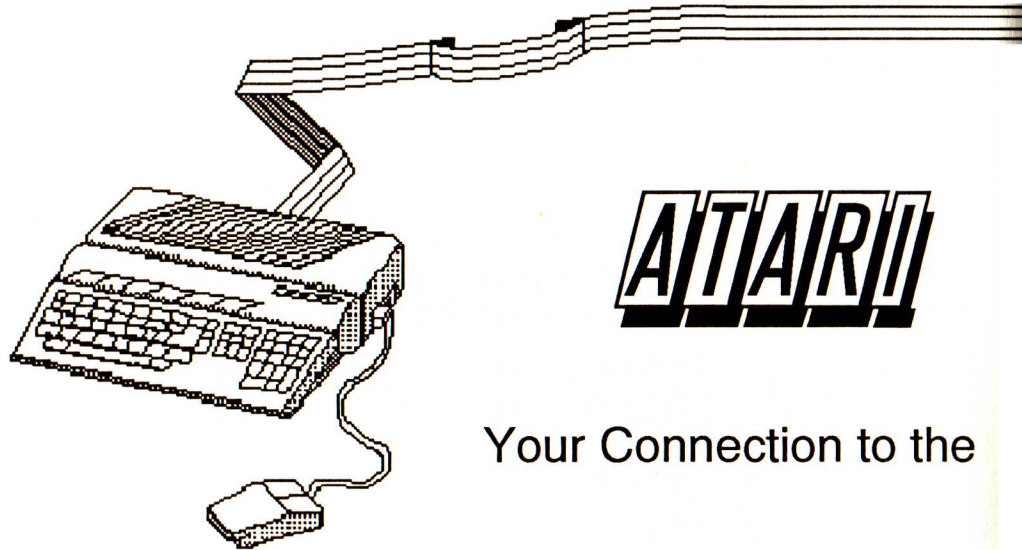
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Volume 3

Your Connection to the

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Atari Interface Magazine is a monthly publication that also serves as an official newsletter of several independent Atari user groups and is not affiliated with Atari Corp. in any way. AIM is published by Unicorn Publications, 3487 Braeburn Circle, Ann Arbor, MI 48108, (313) 973-8825 voice, (313) 973-9137 BBS. A subscription to AIM is included in membership in any participating club or may be obtained directly from Unicorn Publications.

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INTERFACE



Atari Users Community

Number 2

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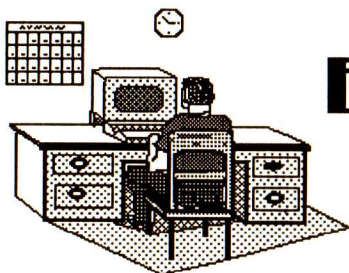
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On the Cover

Gribni's NeoDesk 3, a major upgrade to an already great product.

Managing Editor: Patricia Snyder-Rayl
Editor: Bill Rayl
Artwork: Migraph, Steve Volker, S. Kendrick

AIM is produced on an Atari Mega STE 4, HP Laserjet II with PacificPage Postscript cartridge, PageStream and Calamus.



EDITORIAL RAMBLINGS

We'd like to thank all the people who shared with us their thoughts on how we can improve the magazine to better suit their needs. The majority of votes we got were to keep the cost and mailing procedures the same and continue to expand and improve the publication itself.

Coming in second was moving to second class mail to get the magazine to our readers in a more timely fashion. Part of the delays for the last few issues have been either at our end or with our printer, not totally because of the mail. Although on the East and West Coast, the mail does seem to move slower than other parts of the country. Moving to second class means more cost and paperwork on our part, and, at least in Michigan, no increase in delivery speed. We can increase the timeliness by working harder on our end.

Also, we got quite a bit of positive feedback on starting up an 8bit Disk of the Month. We'll be doing

this with the next issue! For those interested in subscribing to such a disk, the cost is \$50, the same as the ST Disk. Participating clubs should contact us for their special rate. Right now, we're planning on making this a "flippy" disk formatted at single density.

Be on the lookout for our new PC and Spectre disks as well! Soon we'll have a library of public domain software to work with your PC emulator and your MAC emulator!

AIM has gone international! With the addition of the Windsor Atari User Group out of Ontario, Canada, AIM is now serving clubs outside the US. Not to mention being distributed across the globe soon! That should happen with either this issue or March's issue.

At the beginning of January, we traveled to the 3rd Annual 16Bit Computer Faire in London, England to introduce AIM to European Atarians. We'll have photos of this Atari/Amiga show next month!

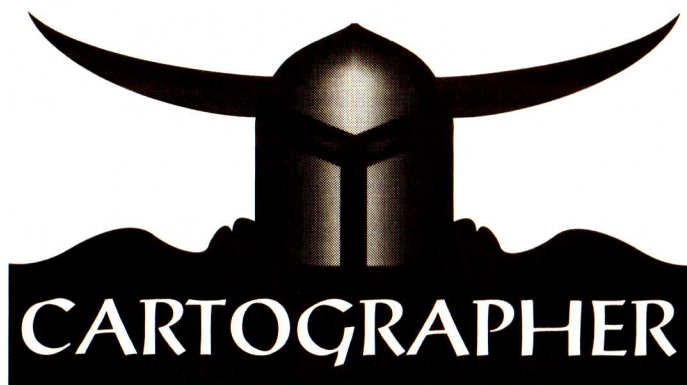
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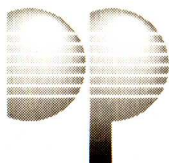
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From The Reader's



Viewpoint

Dear Editor

After having owned the WordUp word processor from NeoCept, for the past two years, I wanted to alert you and the Atari-using public to beware of this unbelievably shady and fly-by-night operation.

What basically has happened is the company has left me stranded without a prayer. I purchased the last two updates, which were riddled with problems too numerous to mention. After getting nowhere with the rude people in customer support, I decided to use the prod-

uct the best way that I could, despite the features that I originally purchased the product for in the first place never did work (and to this day still don't!).

Well, I figured that's the way it goes...you win some; you lose some. Until, that is, in March of this year when I applied for the Version 3.0 update. Can you believe that when I received the upgrade in August (a little late), the disks I got back were blank! So, I sent them back.

A month later, they came back, still blank! So I sent them back again, with a letter asking what the heck was going on (I couldn't reach them by phone, no one seems to ever be there....), and ten days ago, I received the disks back, again, all blank and one of them destroyed!

Is this the way companies you invest a considerable amount of money in should treat their customers?

Not to mention that I have two years of work files in the WordUp format, so switching now would be catastrophic! I still can't reach them by phone or mail. What the heck is going on here, anyway?

I also think

everyone should know that Mike Fulton, president of NeoCept, has gone to work for Atari Corporation, and he has dumped WordUp, his customer support and basically his integrity and business ethics. (No one is supposed to know this information, but I figure, what the hell, it's from a reliable source, and I'm sick and tired of the treatment I've gotten from NeoCept.)

So, if you have any word on this situation, please let me and others know, as I feel like I've really been ripped off from these pompous guys. The program crashes and cursor-chatters like you wouldn't believe. (It took me forever to write this letter on it!) And anyone thinking about buying WordUp—Don't Do it! You'll really be sorry you did.

Thanks for listening,
John-Paul
1905 E. First Apt. D
Long Beach, CA 90802-6126

[Eds: John, we're sorry to hear you're having such problems with NeoCept and WordUp. We contacted Mike Fulton at Atari. He promised to contact Shelby Moore, who is the president of NeoCept, not Mike as you stated. Unfortunately, Shelby has not contacted us to explain what is happening currently with NeoCept.

Recently, patches to WordUp have been uploaded to GENIE, but there has been no official statement. There've been many comments from WordUp users talking about difficulties with the software and delays in getting upgrades.

You may wish to take WordFlair up on their 1/2 off offer on their fine document processor! See the ad on page 1 for more details.]

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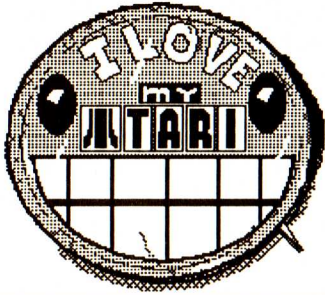
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ATARI BULLETIN BOARD

by Bill & Pattie Rayl

Atari News

The TT has gained FCC Class A certification. Atari can now sell the new 68030-based 32MHz machine to business customers here in the US. Atari has reportedly shipped a number of TTs to VARs here in the US, and the retail price is around \$3000 US. UNIX for the TT is expected to be shown at the Hannover show later this year, with US availability by the third quarter of 1991.

Jerry Pournelle, author of Byte magazine's *Chaos Manor* column, has been sent a TT for review/evaluation purposes. In the past, Pournelle had given some very good publicity for the ST computers in Byte.

The Mega STe has also reportedly passed FCC certification, as a Class B machine. This allows Atari to sell the computer to the general public. Along with the new SC1435 color monitor with stereo sound, this machine is (in our opinion) the best machine for the general user that Atari has ever produced.

In fact, this text is being typed in on a new Mega STe 4 right now. The CPU comes with two 9-pin serial ports, VME bus, LAN port, stereo output jacks, Blitter, detachable keyboard and internal hard drive. The keyboard is, by far, the best we've ever typed on for *any* computer.

The machine can be switched (via the Extensible Control Panel) to 16 MHz with or without cache and 8 MHz without cache for compatibility with timing sensitive ST software. The Mega STe also

comes with the "NewDesk" built in. This is the same enhanced desktop as found on the TT, and it is a major improvement.

The Mega STe should already be available by the time you read this (really!), with a suggested retail of \$1795 for 4megs with 50meg hard drive. We will have a more detailed article on the Mega STe in next month's issue of AIM!

At the winter CES in January, Atari offered use of a Portfolio to the first 100 editors responding in advance to their offer. The editors picked up their Portfolio the day before or the first day of the show, and Atari reps showed them the features and capabilities of the palmtop.

The editors returned the Portfolios by noon of the last day of the show, where all articles and such entered by the editors were transferred to disk, printed out or up-loaded directly to the editor's staff headquarters.

Atari has also made arrangements with the USO and Defense Logistics Agency to supply Lynx game kiosks for use in military recreational centers in Saudi Arabia. "...We thought the Lynx systems and game cartridges would help improve morale and would provide the men and women stationed there with a little entertainment," said Meade Ames-Kline, president of the consumer products game division.

The initial shipment of Lynx game kiosks is valued at \$50,000. Additional shipments are possible, depending on how long U.S. military personnel are stationed in the Middle East and how well the currently shipped machines are received.

Rumor of the Year for 1990

Recently, users saw the coming and going of Elie Kenan as possible head of what would become Atari North America. Kenan was seen as "Atari's Last Best Chance" to revitalize the US market. His leaving caused some developers and users to seriously doubt Atari's survival chances.

As 1990 drew to a close, a rumor from Germany indicated that Alwin Stumpf would be stepping in to take over head of Atari North America. Stumpf, Director of Atari GmbH, is a long-time Atari employee on a par with Kenan. According to a Dec. 20th report in the Frankfurt newspaper FAZ, Stumpf will soon be moving to Toronto to become head of Atari North America.

Developer News

Gadgets by Small announced specifications and pricing on their anxiously awaited 68030 upgrade for ST owners. Called the 68030 SST, the upgrade board has sockets for a 68030, math coprocessor and up to eight SIMM modules for up to 12megs memory on a Mega4.

The board also has a 32-bit 33 MHz expansion port for future add-on cards. The basic board (no 030 and no SIMMs onboard) costs only \$599. You would need to buy your own 68030 to use the board.

For \$799 (Option A), you can get the board with 16 MHz 030 and no additional memory. Option B gives you everything in Option A, plus 4 megas of onboard RAM for \$1059.

Option C (or as Dave Small calls it, the "rock-and-roll option") gives you a 32 MHz 030, 68882 coprocessor and 4megs of onboard

RAM for \$1399. Currently, the SST is designed for Mega ST owners only, but Gadgets is working on an upgrade for 520ST and 1040ST owners.

Contact Gadgets by Small, 40 W. Littleton Blvd. #210-211, Littleton, CO 80120, (303) 791-6098 8:30-2:30 Mountain on MWF, FAX: (303) 791-0253.

SofTrek has released version 1.84 of their popular TurboST software accelerator. TurboST will now run on STs equipped with 68010, 020 or 030 CPUs. The software is much faster at displaying non-byte aligned text in color and mono modes and the AUTO folder versions use less memory.

Special coding to speed up Word Perfect and Dyna Cadd are also included in this release. Owners of version 1.8 or 1.82 can upgrade free of charge by sending in their disk. Owners of older versions should send in their disks with \$5. Contact SofTrek, PO Box 5257, Winter Park, FL 32793, (407) 657-4611.

Artisan Software has announced availability of Transport, a nice utility for transferring text and executable files between the Atari ST and Portfolio. Two levels of menus give you lots of options and the online help is excellent. Transport retails for \$24.95.

Artisan also has their new edition of the Revolution Handbook. This paperback edition is designed to assist first-time computer buyers in the purchase of a computer, along with the features that made the disk-based Handbook popular. Retail is \$14.95 plus \$1.50 s/h, and \$1 from each book sold will be contributed to Atari for the purchase of Atari computers for schools. Artisan Software, PO Box 849, Manteca, CA 95336, (209) 239-1552.

Practical Solutions recently announced release of Safekey, a programmable hardware copy-protection "dongle" that connects to the ST's RS232 port. Originally designed for Lexicor Software's new products, PS is now offering this product to other software developers, first on the ST and later on the Mac and NeXT.

Depending on the model, prices for the device are between \$29 and \$49 each. For more info on obtaining a Developer's Kit, contact Practical Solutions, 1135 N. Jones Blvd., Tucson, AZ 85716, (602) 322-6100.

Wordflair II is available from Goldleaf Publishing. The new version includes a spell checker and thesaurus, enhanced database facility, improved interface and faster handling of graphics. Wordflair II has a suggested retail of \$149.95 and upgrades from previous versions are \$50.

Users of 1ST Word Plus, Microsoft Write, WordUp or Word Writer ST can purchase Wordflair II for only \$75 until February 15. Send in the original disks for your current word processor with the check or money order. (Wordflair requires at least one meg of memory.) Goldleaf Publishing, 700 Larkspur Landing Circle, Suite 199, Larkspur, CA 94939, (415) 381-7717.

Show Information

Bob Brodie, Atari's User Group Manager, is working on his 1991 schedule for user group visits and shows. He requests that any user groups planning a show in 1991 should contact his ASAP to get on the calendar.

Your event should be scheduled at least 30 days from any other event. If in the same geographic region (such as the West Coast or Midwest), your event should be scheduled at least 90 days from any other. By following these rules, Atari will be able to better support all shows.

Currently, scheduled user group sponsored shows include the Windsor/Detroit International AtariFest on May 4-5, Glendale Atari Faire in September and WAACE AtariFest on Oct. 12-13. Bob Brodie says he's heard "rumblings of shows" in Vancouver, Chicago, Erie PA and Boston for 1991.

Call Bob Brodie at (408) 745-2052 to get on the calendar and to find out if your planned dates conflict before your club is firmly committed.

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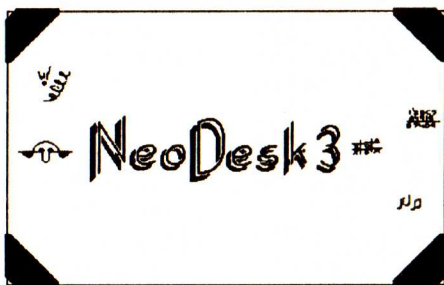
You get 13 (for the price of 12) exciting issues of **ST Informer** Monthly tabloid that is packed with the latest Atari news, reviews, commentary and PD offerings, plus a FREE disk for only \$18. Choose a FREE disk from our PD Catalog sent with your subscription acknowledgement. Mail this coupon today, or call (503) 476-0071 FAX(503) 479-1825 and charge it to your charge card. Mention Current Notes for 13 for 12 offer.

ST Informer



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Bill Pike (PAC)

Review copy loaned by IB Computers of Beaverton, OR.

A lot of people have been waiting for this one. The people at Gribnif Software, in their competition with Double Click, have put everything including the kitchen, bathroom and laundry sink into this program.

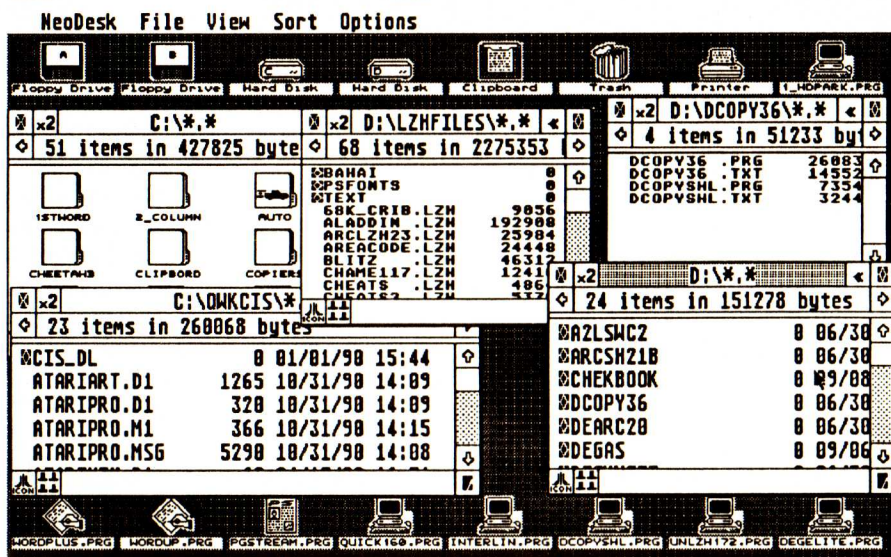
I think they added a few other things just for good measure. They should have named the program "Everything You Always Wanted to Do from a Desktop and More."

Using NeoDesk

People with just a floppy drive and 512K are able to use this program without a problem; however, keeping up with the disk swapping can be a real pain. With less than 2 megs of memory, you will need to use the option that unloads NeoDesk from memory when you run a program. This requires you to reload the main part of the program from disk each time you wish to return to the desktop. This isn't a great problem for those with a hard drive or second floppy drive.

People with 2-4 megs can leave the full program resident, unless using a program that really sucks up the memory.

The equipment I am using consists of a 1 meg 520ST with switchable TOS 1.0 and 1.4 (yes, I hacked it), an ICD hard drive and boot software version 4.84, both monochrome and color monitors, stand-alone printer spooler and an Epson FX-80 Printer.



This is the basic NeoDesktop, showing five open windows. Note that each window can have a different display regarding icons and font sizes. Also note the icons on the desktop at the bottom of the screen. By clicking on these icons (all from different paths) you can run the programs.

I also have a number of ACCesory and AUTO programs installed together in various combinations. I guess what I am trying to tell you is that NeoDesk works fine with all of them in a lot of combinations. This is one well-behaved program.

Near-Perfect NeoDesk

The only glaring fault I can find is with the manual. The "Index" for the 128-page manual consists of two pages. Come on now, don't tell me you can only find two pages of stuff someone would want to find quickly!

You can look at the table of contents in the front, but trying to find what you want in those eight pages can be a real pain.

OK, enough of the preliminaries. Let's get down to what NeoDesk 3 will and won't do: There is a Clipboard, which is actually a

variable size RAMdisk used to hold a file in the computer's memory while you switch disks. Files can be moved between the Clipboard and any disk at will (if you took the write protect off the disk to begin with).

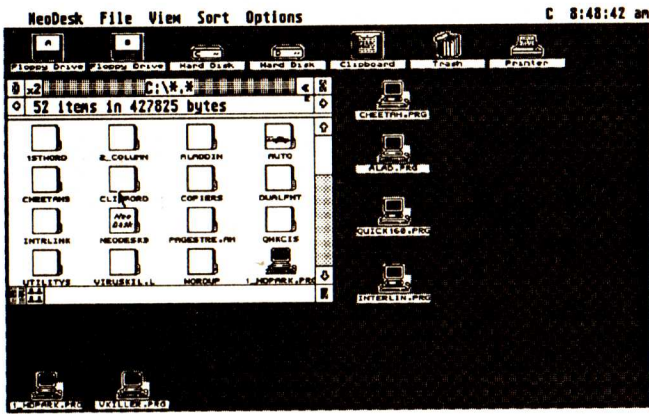
You can leave a note to yourself on the desktop. Maybe the last time you called a BBS or to remind you of an anniversary or when your taxes need to be done by.

NeoDesk and Icons

Icons for commonly used programs can be placed on the desktop and the names changed to reflect the program names rather than the filenames. The programs can be run from the desktop.

A custom icon, even differently colored, can be assigned individually to any file or folder. This works well for low and medium resolution, but the colors don't





Icons/files can be dragged onto the desktop and they will stay there even if you close the directory window from which they were dragged. You are able to click on the icon and run that program. Please note the 'C' in next to the clock display. That tells you the "Caps Lock" is on. The 'C' disappears when Caps Lock is off.

come across very well in high res (Ha, Ha). You can use an existing icon or construct your own. An icon editor comes with the program, allowing you to modify existing icons or design totally new ones if you don't quite like anything provided on the main disk or the extras disk.

Directory windows can be split so one shows the upper half of the window—or a folder's contents in that window—while the other window shows a totally different area of the directory. The windows scroll independently.

A button on each window lets you "select all" files in the window, even those not shown onscreen, for multi-file operations.

You can independently set the display type (show as icons, small text or large text), location, size and sort options for any of the seven—yes, that is seven—windows available. However, if you have seven windows open and you call an application that uses a window, making a total of eight open windows, just count the bombs on the screen and re-boot.

There is an accessory that gives your system a recoverable trashcan. This puts the deleted files into a hidden area and you can recover the files at a later time or junk them totally. Using this option will make you hit the dreaded "disk full" error if you don't empty the trashcan from time to time.

A full Control Panel accessory is included that lets you set just about everything except when the wife or kids will interrupt you.

The *smart* file copier is one of the nicest features of this program. No more multi-disk swapping. It uses the free memory of the computer to load all the files it can, then writes them out in "one swell foop."

You can also create/assign a macro (a series of operations on the desktop) to a unique key. Then, the computer will repeat these operations for you each time you press the key combination. This can be used for opening windows, copying/deleting files, executing programs, et cetera.

If you drag a single file or group of data files to an icon of a program on the desktop, the program will be run using that/those files as parameters.

There is a system search feature that allows you to find that missing file...you know, the one you saved in a hurry but don't remember just where you saved it.

You can print a complete directory listing of any window and you can optionally include the contents of folders as part of the printout.

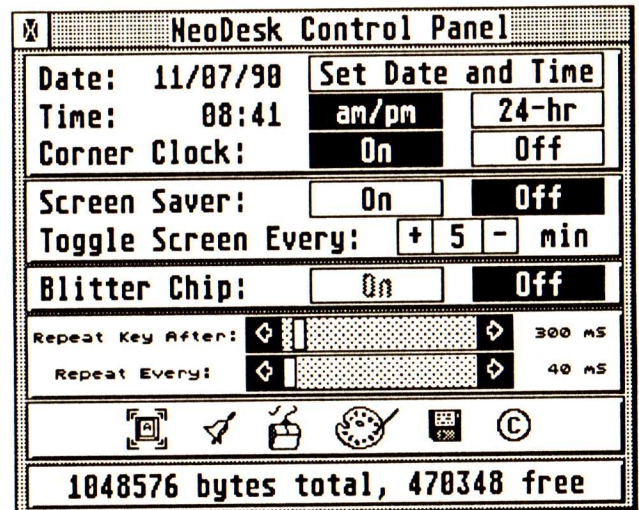
You can even set a window to display only those files with a particular extender. Now where did all those .DOC files go?

The Disk Copier is another real goody. It detects the format of the source disk and then formats the destination disk to match. You can even copy identical hard drive partitions to each other.

This is another good one. The Disk Formatter will format in 80, 81 or 82 tracks and 9 or 10 sectors/track in twisted or non-twisted format. Here is the good part: NeoDesk starts formatting from the inside of the disk and works its way out, so the directories and FAT say "bye bye" last. If you accidentally start to format a valuable disk, you might be able to break out of the format and recover your data. I, however, would never use this feature. (HA HA!)

You are able to view files in a window without them being sorted. In other words, the files are listed in the order in which they were written to the disk. This is very nice for reorganizing programs in the AUTO folder. Just move the files back and forth between the clipboard and the disk to get the order you want.

A Degas or NeoChrome picture can be put on the desktop so you have something to look at other than a green screen (or whatever color you tell NeoDesk to set). No, the program doesn't have a check for an



This is the Control Panel accessory. Here you can set key repeat speed, repeat interval, mouse click speed, disk drive types and lots of other goodies.

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Listed above are a sampling of the systems available. Prices also reflect various cabinet/power supply configurations (over 60 configurations are available) All Units: Average Access Time: 24ms to 34m. Larger units are available (special order only). All units compatible with Specire GCR, AT/PC Speed and SuperCharger.

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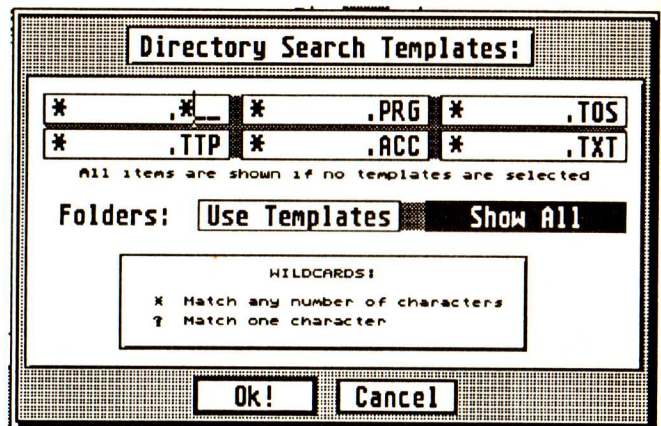
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NeoDesk allows you to define which files are displayed in a given directory window.

X-Rated picture, so if you (or your kid) put one there and your wife sees it... enough said.

Finally *all* desktop commands have "Hot Key" combinations.

Like I said in the beginning, the people at Gribnif put everything in this program. A few of the features I use all the time, some of the features I use some of the time, many I hardly ever use, and a lot I probably never will use. However, it is much better to have something there and never use it than to need something and not have it available.

The only problems I can find with NeoDesk 3 are the price—\$69.95—and the manual, specifically the index and a few other things. The cost for NeoDesk is about \$20-\$30 higher than DC Desktop.

Meanwhile, back to the manual. Many times the manual will reference a different section while talking about a particular feature. If the writer could have given page numbers to go to, it would have made it much easier to understand what they were talking about.

The organization of the documentation also leaves a few things to be desired. When I started reading the book (Yes, I always read the manual before I mess around with the program, don't you?), I was jumping all over the place trying to find out just what they were talking about. This and the lack of a usable index were the only things that put me off from the program.

The program itself is very well done and highly useful, even for those with a minimal system. (Remember all the disk swaps when you had to copy files with one disk drive?) For those with a full-blown system, "Oh Boy! It's Party Time!" All screen resolutions are supported and everything you learned using the original Atari desktop passes over to NeoDesk 3.

With so many features available at once, I felt like Alice at the Mad Hatter's Tea Party for awhile, but that passed. If you are looking for a *much more powerful desktop*, you should consider NeoDesk 3. The price is a bit high, but the program is well worth it. The folks at Gribnif Software have a winner here.

Deluxe Paint ST

Steve Kendrick

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Bif Bitmap has been your friend for quite awhile, but sometimes he can be, well, such a.... Like the time when you both decided to buy home computers. You became the proud owner of a 520ST, while he opted for one of those others—the one with the friendly Spanish name and all the pretty colors.

You knew you made a good choice, but Bif just couldn't pass up any chance to one-up you at every turn. "Well, *my* computer has great stereo sound." As soon as one is available, you install a Tweety Board. "Well, *my* computer accepts a BridgeBoard that lets me emulate IBM compatibles." Finally you can sleep at night knowing your shiny, new Supercharger and Spectre GCR even that score, with style.

Still, Bif never relents. He always manages to counter every addition to your proud Atari system that makes it just as capable as his machine, never mind the great applications like Calamus and LDW Power that leave his machine in the dust.

Finally, when you come home with an STe, with its built-in stereo sound and 4,096 color palette, you get a miserly concession: "I guess the ST has evolved into a system I might consider. But, for all the enhancements it has, it will never get the type of software that will make use of the hardware! I bet you can't even show me a decent paint program like Deluxe Paint III that I have on my system!"

At Long Last!

You chuckle to yourself, a moment of triumph! You pull out the bag that hides your brand-new copy of Deluxe Paint ST, pop the shrink-wrap, and boot your system. You read the catchy blurb on the back of the box, and rely on the Dpaint name to provide the quality and features you need: extended STe palette support, file-compatibility with other computer hardware, a horde of drawing and animation tools.

A quick glance at the reference card and you are easily making Bezier curves and fancy gradient fills. You think to yourself, "looking good so far," hoping your demo will have the intended effect. It works when Bif grumbles, "Hand me that there mouse, and let me check this out myself."

First Impressions of Dpaint

Dpaint ST is distributed by Electronic Arts on three single sided, non copy-protected disks. The main program disk is the one most extensively used; the other two contain examples of pictures and animations created with Dpaint, as well as some tutorial files useful in the walk-thru lessons in the documentation.

Filling out the package are a reference pamphlet and 200+ page spiral-bound manual. Although the package is clearly designed for both American and European distribution (notably, British spellings), the software design team (Artistech Development) is American and this is thankfully reflected in the package design.

Much recent software is designed around the "get-going-now" philosophy: a minimal reading of

the documentation and installation instructions is all that is required to launch the application and do some productive work. Dpaint is no exception to this trend.

The main "work screen" is split in half by a menu bar where tools are selected. The top half of the screen is a window on to the full drawing screen, and the bottom half is divided into a zoom window and control box. The drawing tools can be used either in the full-size or zoom window. Further interaction with the program is controlled through sub-menus. All of this should be familiar to some extent to users of other ST paint programs.

Tools of the Trade

Most interactions with Dpaint are through left- or right-clicking menu bar selections. Left-clicking [selecting] a menu item activates either the default tool or the one last chosen, while a right click activates the appropriate sub-menu for that tool. When using a drawing tool in a drawing area, the left button draws with the foreground color, and the right button uses the previously-selected background color.

This use of the mouse buttons is central to the operation of Dpaint, and is both intuitive and consistent throughout the whole program. Hence, you spend less time trying to remember how the mouse-buttons behave under each option and more time creatively using the program.

All the tools are available on the menu bar, and most are selectable with keyboard equivalents. I am going to assume a basic knowledge on the reader's part about

paint programs and focus on the unique features of Dpaint.

Drawing: The basic drawing tools for creating freehand shapes, lines and a variety of boxes and circles, work as one might expect. There are quite a few user-controllable functions in each icon's sub-menu, such as brush width and segmentation (stippling). There is also a tool for producing Bezier curves which is surprisingly simple to use. A left-click selects the starting point, end point and two control points. The curve's shape is determined by the location of these points—to produce any curve merely involves dragging the four points until the desired shape is achieved, then fixing them to the screen by right clicking.

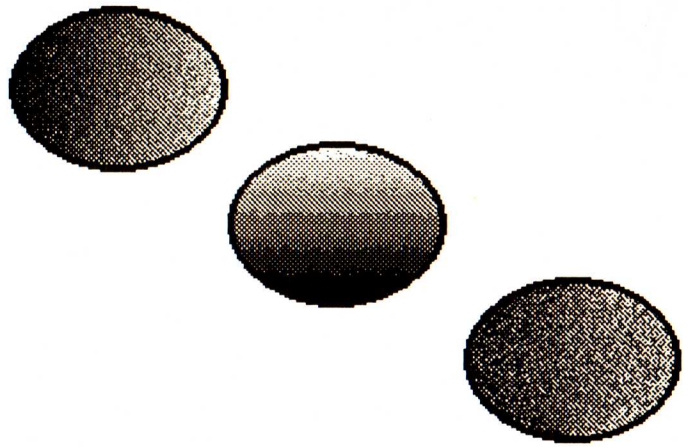
Airbrush: Another familiar paint tool, it produces a random spray of dots on the screen. Controls which select the size and intensity of spray are available from the sub-menu, as well as a palette control, which allows the user to individually control a selected group of colors as well as their spray rate. For example, if you are painting clouds, you might use the palette control to create a spray that is mostly white, with a lesser saturation of greys or other colors.

Fills: This tool allows the user to flood any enclosed shape with a color. Fills can be solid, dithered (a checkerboard effect using foreground and background colors), pattern or gradient. Gradient fills are one of the more powerful features of the program and are used to produce 3D, metallic and lighting effects. Sliders and buttons designate the blurring between color bands, the angle of the gradient and whether the fill conforms to the object shape.

Text: Many programs allow the typing of text on the work screen. DPaint ST also allows a wide variety of choices about the style of text you use. Text can be in the standard Atari system font or chosen from the many proportional, scalable, even multi-color fonts provided on the distribution disk. There are even provisions to edit or create your own fonts!

Define Brush: This icon has a three-fold use. The first is the "grabbing" of a section of screen to define a brush shape for stamping or painting the work area. The second use duplicates the "block" function of other paint programs, allowing various manipulations of the selected brush (see below) and the loading/saving of brush information. Brushes can be sized, rotated, skewed and manipulated in a wide variety of ways. Brushes can be carved (lassoed) with a selectable option—you can pick up an irregularly shaped portion of the screen for use as a Brush, instead of being forced to select a square or rectangular screen block. Thirdly, many of the Animation facilities of Dpaint ST rely on a selected Brush to do their work—more on this later.

Brush Mode "FX": This tool determines the painting behavior of the selected brush. You can simply draw on the screen with the selected color. Dpaint also allows you to smear or half-smear colors, cycle through a range of color, filter (shading of all colors



into a selected color), blend intermediate shades between the brush and painting area, tint (change painted area to a color closer to that of the selected brush) or smooth. The smooth mode is perhaps the most powerful—painting along any border between highly contrasting colors causes the placement of intermediate shades under the brush. This causes an "anti-aliasing" effect, reducing the "jaggies" or stair-step effect common in computer-created pictures. The intermediate shades reduce the perception of noticeable, individual pixels in a picture.

Magnify: Selecting this icon toggles the magnify/zoom window. Options available include setting the magnification (from 2 to 16 times), magnifier position (which can be scrolled about the painting area with arrow buttons or the cursor keys) and segmentation—each pixel is enclosed with a border for clarity.

Color: The palette sub-menu controls color with either RGB or HSV (hue, saturation and value) sliders. Colors can also be copied from one to another, spread across a range (selecting a start and end value re-maps all colors between to intermediate shades). You can also swap and remap colors. Color ranges are designated in this dialogue box as well. Range information is used in color cycling animation and for tools such as gradient fill. There are four separate range buttons, and each can contain entirely different color group and color cycling information. A stencil tool allows "fixing" of either a range of colors or the current picture, preventing unwanted painting changes. If a range of colors is designated, no drawing will "stick" to the selected colors until the stencil is deactivated. The background (current picture) can be fixed, so that any changes made to it can be erased with no damage to the original work.

Miscellaneous Tools: Mirror causes the mirroring of what you draw. You designate a point or line of symmetry as vertical, horizontal, diagonal or a given point on the screen. Selecting grid confines the brush's movement to an invisible grid. Dpaint can load or save in its own format [IFF] or can load/save single frames in any standard ST format: Degas, Degas Elite or NeoChrome. Also available is an option allowing you to format disks, copy/move/delete files and so

on. UNDO takes back the last change to the picture. Finally, the CLR button will wipe the workscreen clean to your selected background color or to the background fixed with the Stencil tool.

Animation: All of Dpaint's animation capabilities are controlled through two tools. The tweening tool allows sizing, rotation or distortion of a selected brush about the x, y or z axis. These transformations are performed with respect to a user-definable origin/vanishing point. These transformations can be confined to a single frame or designated across a range of animation frames. The animation tool governs the other animation functions. Dpaint ST uses page-flipping: each screen consists of one frame of animation, and continuous motion is created by the sequential display of animation frames.

Strolling About

After working with Dpaint ST for any length of time, several things become noticeable. First, you can't stray far from your keyboard. If you don't use the Magnify window, you can reclaim most of the drawing space it consumes, but if you call any of the Sub-Menu functions the window re-appears. After you make your selection, you can toggle the display off again with a press of the spacebar. Conversely, you can dispense with the menu bar entirely; most of the tools have a keyboard equivalent. Most users will probably rely on the menu bar until they memorize the keyboard commands.

While I can't fault the authors in this design philosophy, it leaves me wishing I had either a third mouse button for toggling the menu bar or a third arm (one to move the mouse, one to push the letter keys and a third to push the ALT key!)

Other parts of the user interface are better. Mouse pointer response is the best I have seen for any ST paint program. With a few exceptions noted below, the user doesn't bump into any unwelcome deviations from the "ST way" of doing things. The learning curve is very low—any typical user could putter away with the program with a minimal examination of the manual.

With the wide variety of tools available, one sometimes gets the feeling the software is doing *most* of the

work! No other program makes the production of smooth curves or shaded objects as effortless. Experienced computer artists will feel they are getting the most out of their computer's graphics horsepower without wrestling with a bulky or confusing user interface. Novices will enjoy the ability to produce interesting designs without hours of tedious editing.

This strength of interface extends to the animation and other sophisticated tools. Many of the functions available in Dpaint can be found in other ST packages, but *none* have been available in *one* package! No longer must the ST artist learn the quirks of one program's interface then un-learn them when booting another package, or master the arcana of different (and non-compatible) file formats.

If the user feels the need, he/she can save their work in any of the common ST file formats without a separate conversion utility, or in IFF format, which is easily accepted by Amiga and MS-DOS systems. Dpaint ST is a winner on all counts—not only does the user purchase one of the best paint programs for the ST, they get a full-powered animation program at the same time.

Finally, I would like to express my gratitude to the authors of the manual. All information the user might need is readily available in the Reference section, and all of the software tools are walked-through in the Tutorial section. The layout is neat and logical, writing is clear and concise and the index is accurate and complete! If more manuals were written like this, piracy would vanish overnight.

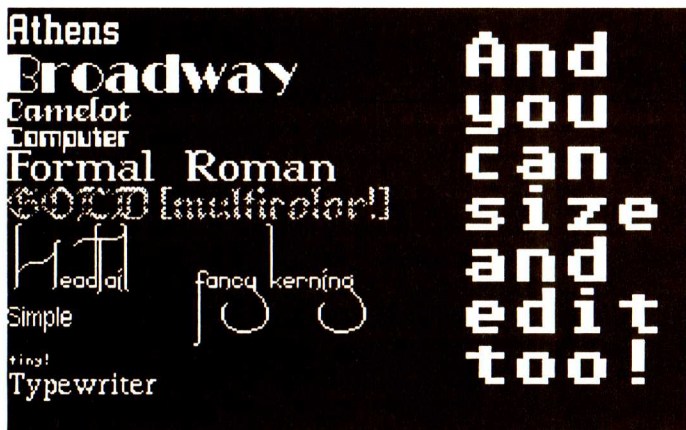
I had the misfortune of learning Dpaint III for the Amiga with its reference manual. It was written by the software's author, and although it had many more pages than Dpaint ST's manual, it was rambling in many places and often incomplete or inaccurate in describing the use of its functions. Who wants to wade through 250+ pages of "Let's play with this feature to learn how it works" when a simple and concise explanation would be more helpful?

Mona Lisa has a Wart

Dpaint ST is an excellent application, but it is not "insanely great." One of its biggest flaws is its 'robustness'. It seems very intolerant of sharing memory with any desk accessories or AUTO programs. I have had it crash when the only resident program was my ICD Hard Drive booter software (the solution was to turn ICD's cache off). While there might be some programs out there that can live happily with Dpaint, I have given up trying. Not that having desk ACCs would matter—Dpaint is a TOS application.

I do wish I could use Little Green Selector and MaxiFile instead of Dpaint's thin offerings. While anyone who uses an Amiga would know that a "parent" button backs out of a subdirectory and a "drives" button brings up a drive/partition selector, most ST users (quite reasonably) expect to use the more familiar GEM file selector or their own favorite replace-





ment. Dpaint's own replacements for these file functions could bear a closer resemblance to the ST norm.

Other flaws are minor. Despite the manual's claims, saving a file with IFF Byte Run Compression does not make an Amiga-compatible file. You should use the separate convert utility for that or save in an ST-compatible format. This software supports low resolution *only*. While I don't think many artists use medium resolution, I do artwork in high resolution and wish this program did as well. Support of other ST animation formats would also be welcome. Finally, it would be nice if the Magnify window were sizable or followed the mouse pointer more smoothly when scrolling around the drawing area.

I don't consider any of these faults crippling. Most users have already cultivated a "save often" habit, and the program seems reasonably stable when not overly taxed.

Keeping Up with the Joneses

ST users have long suffered comparisons with that "other" system. There is no doubt the other's custom graphics coprocessors give special effects and graphics modes that make Atari users envious. But, let me assure you, these internal differences do not handicap Dpaint ST when compared to its counterparts on other platforms. Aside from the inherent differences in graphics modes, the "common standard" of 320x200 pixels with 16 colors is identical on both machines: animations created on the Amiga and Atari ST are indistinguishable and readily converted.

After having used an Amiga and Dpaint III in software graphics development for several months, I can say with confidence that the utility of both systems are equivalent. The Amiga may get the nod for speed in some operations, such as brush sizing or complicated fills; the ST's interface seems less clunky and more intuitive. Most other differences are cosmetic and minor. The ST even gets a small advantage in memory: the minimum requirement for animation on the Amiga is one megabyte, but Atari users can create simple animations with just 512K!

Odds and Ends

Included with Dpaint ST are three small utility programs. The first lets you print your works on a variety of black & white or color printers. I have tested the Hewlett Packard laser driver and it seems adequate. I saw the utility printing in color at a recent Atari Show (on an HP PaintJet) and the output was quite impressive. There are printer drivers for most dot matrix printers as well. Controls let you adjust the type of greyscaling and palette—if your picture is made of hues close to the same brightness, the palette must be adjusted or you will get a uniformly-grey, unsatisfactory printout. Options seem sufficient for most users, although most desktop publishing programs, such as PageStream, will do a better job.

Also on the disk are utilities for converting non-ST IFF files to Amiga IFFs and a stand-alone program for viewing pictures and animations (a must if you have limited memory and want to view the larger animations). Each program works as it should.

The Big Picture

I am definitely pleased with this package. It fulfills every expectation I had when I purchased it, and even gave some surprises—I did not expect Amiga-quality animation abilities on my ST with such little effort! Whether you buy it will be your decision. If you use one of the older ST paint programs, you will enjoy the many new drawing tools and might find the animation tools a welcome bonus.

If you have interest in animation on your ST but have found learning software like Cyber Paint intimidating, the friendliness of Dpaint's interface is worth a look. The integration of these functions in one package is reason enough for consideration. Whether you are a mouse Rembrandt or have trouble drawing a straight line with a ruler, Dpaint has something to offer.

Please support this product with a purchase if you plan to use it. Let's hope the ST community shows the software manufacturers that it is worthwhile to market powerful applications like this for our machine.



[Steve Kendrick is a freelance graphic artist/writer working in the computer community. He can be reached for questions or correspondence at 546 Madison Avenue, Apt. 3, Albany, NY 12208]

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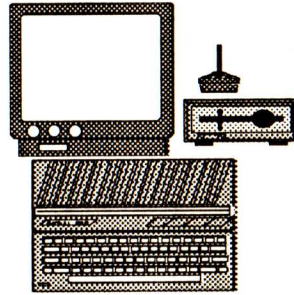
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PIA Upgrade



Charles Hughes

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So, you're a hacker are you? Well, then this upgrade is for you. If you aren't a hacker, well, have a try at it anyway. This upgrade can be done on any 8-bit computer, but these instructions only cover the 800XL and 130XE machines.

Performing this upgrade gives you a second PIA chip in your computer. You are probably wondering just what a second PIA chip can do for you. The answer is—anything you could do with the first, only better! Some possible uses are listed at the end of this article.

First, here are some standard precautions. Opening your machine voids any warranty you may have. CMOS chips hate static, so ground yourself before working on your computer. Finally, the author of this text and the publishers of this magazine are not responsible for what you do to your computer. If you aren't proficient at soldering, don't know a socket from an IC or feel you are a total incompetent when it comes to the inside of your computer, then *don't touch!*

Parts List

- 1 65C21 [PIA chip. There are several versions of the PIA chip. Any of the following will work: 6520, 65C20, 65C21, 6820, 6821 and, of course, C014795 (Atari's chip #)].
- 1 74F139 (Dual 2:4 decoder)
- 1 74F138 (3:8 decoder)
- 1 16-pin IC socket
- 1 small perfboard, about 2" x 3"
- Wire (lots of it, Radio Shack #278-372; 24 gauge, 4 conductor telephone wire works great)
- Phillips screwdriver
- Pair of needlenose pliers
- Rosin Core solder
- Soldering Iron (25 to 30 watt)
- Desoldering Iron (or solder sucker but do not use solder braid)
- IC Puller, etc
- Several small cups for holding screws

Most XE computers will also need:
1 16-pin IC socket
1 40-pin IC socket

What to Do

Completely disconnect all cords, cartridges and other items not permanently attached to your computer. Lay them to the side so they can be reattached when you are finished.

Find a place in your house to do the actual work—it should be well lit, have a power outlet nearby and be safe from "accidents" (like little kids interested in the pretty parts of your computer). Sit down, put your computer on the table (bench, workspace, whatever).

Turn your computer over. Remove the Phillips screws that hold the bottom cover on. Place the

screws in a cup. Don't lose the screws, they are a pain to replace.

Ok, here is the first fun part—turn your computer back over and gently lift off the top. Place the top somewhere safe. Note: On the XL series, the keyboard may be attached to the top. Take the keyboard and slowly lift up. You will find it is attached by a ribbon cable. Pull this cable free of the main board and then place the keyboard with the top.

Locate the screws spaced around the motherboard that hold it onto the bottom. Remove these screws and put them in a second cup. Note: Some machines aren't attached with screws, you can just lift the motherboard free of the bottom case.

Pull the motherboard free of the bottom case. This is a little difficult, but if you do it slowly and carefully you won't hurt anything. Put the bottom cover to one side.

Now, it's time to remove the metal shields. On some models, the metal shields are attached by screws. Remove these to remove the shields. On other models, the shields are held on by little metal tabs. Using the pliers, twist the little metal tabs to release the top metal shield. Remove the top and bottom metal shields and place them to the side.

Place the motherboard, chip side up, in front of you. Position the motherboard so the joystick ports are to your right. Look at the 40-pin IC's and locate the one that has "6520" and/or "C014795" printed on it somewhere. This is the PIA chip already installed in your computer. In the 130XE, it is near the joystick ports. In the 800XL, it is the rightmost chip

nearest you.

Look around the board for a small 16-pin IC with "74LS138" printed on it. This IC enables the PIA when it is accessed by the CPU. On the 130XE, this IC is just below the PIA. On the 800XL, this chip is the second IC down from the cartridge port.

Remember where these are...we'll be coming back to them.

Out with the Old

Now comes an easy or hard part depending on the machine you have—removing the PIA from the motherboard. If the PIA is socketed, this is easy. Just use a small screwdriver to pry up each end a little at a time until you manage to free the entire chip. If the PIA is soldered in, pull out the desoldering iron. Desolder the PIA and solder in a 40-pin socket.

Remove the 74LS138 chip same as you removed the PIA. Solder in a 16-pin socket if necessary. Place the 74F138 in the socket. Put the 74LS138 in a safe place. You might be able to use it for some project in the future, but you won't need it for this one.

Take the new PIA (called PIA1 from now on) and bend pins 16 and 23 up so they stick straight out from the sides of the chip. Note: If you have a memory upgrade that uses other pins on the old PIA, you can bend up the same ones on PIA1 and reattach the wires there.

Take the PIA you just removed (called PIA2 from now on) and bend pins 2-19, 23 and 37-40 straight out the same way. Place PIA2 on top of PIA1 so that all the pins not bent up on PIA2 touch the same pins on PIA1. Solder pins 1, 20-22 and 24-36 of PIA2 to the same pins on PIA1. Put this set of chips to the side for now.

Creating a Circuit Board

Now we have to create the minor circuit needed for the upgrade. Take the perfboard you have and put the 16-pin socket on it. The best place for it is in the upper left corner of the board.

There is a notch in the black plastic of the chip. This indicates the placement of the IC chip. Holding the socket so that the notch is away from you, pin 1 is the first pin on the left-hand side, pin 2 is the one below it, etc. all the way to pin 8, the last pin on that side. On the right-hand side, opposite pin 8 is pin 9, opposite pin 7 is pin 10, etc. all the way to pin 16 which is opposite pin 1.

Cut seven pieces of wire about eight inches long and strip off about a one quarter inch of insulation on each end of all the wires. Solder one end of each wire to pins 1-5, 8 and 16.

Take the wire you soldered to pin 8 and solder the other end to pin 8 of the 74F138 you located earlier. If you prefer, you can solder wires that would attach to the 74F138 to the back of the motherboard. Just make sure you solder them to the correct pins of the '138 socket.

Solder the wire from pin 16 to pin 16 of the 74F138.

Solder the wire from pin 1 to pin 12 of the 74F138.

Solder the wire from pin 4 to pin 23 of PIA1. Solder the wire from pin 5 to pin 23 of PIA2. Insert the stacked PIAs into the PIA socket.

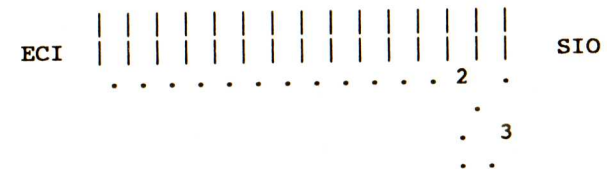
Take the 74F139 chip and place it in the 16-pin socket so that the notch in the chip is pointing in the same direction as the notch in the socket.

You now have two wires left unconnected. These two wires need to be connected to address lines A2 and A3. You can connect these wires to A2 and A3 anywhere you like, but the easiest place to solder these wires is to the ANTIC chip. Find the chip labeled "C021697." This is the ANTIC.

Solder the wire that comes from pin 2 of the 16-pin socket to pin 11 of the ANTIC chip (address line A2). Solder the wire that comes from pin 3 of the 16-pin socket to pin 10 of the ANTIC chip (address line A3).

Another place to get these lines is from the parallel bus. On the 800XL in the upper left-hand corner are a pair of IC chips. The top chip is BASIC, the chip beneath it is the OS ROM. To the right of the OS ROM is a line of solder points. The first point is A2, the second is A3.

If you have a 130XE, look at the cartridge port. It should look like this:



This is a really rough drawing. The | indicate pins on the cartridge port, the . are solder points, the 2 is the solder point for A2 and the 3 is the solder point for A3. Just melt the solder at these points and stick the appropriate wire into the solder while it is still molten. ECI is the small connector to the right of the cartridge slot, while SIO is the 13-pin SIO connector to the left of the cartridge slot.

1200XL, 600XL, 65XE and XEGS owners are on their own. I do not have any of these machines available to find suitable solder points. I believe the 600XL is identical to the 800XL as far as the parallel bus is concerned, so you may be able to find the solder points in the same place. Remember, however, that soldering to the ANTIC chip will work regardless of the machine.

You need to put the perfboard in a safe place. If it is just hanging in midair, let it keep hanging for now but don't let any of the pins touch anything else. Check all your connections and make sure you have followed all the steps above.

You have now finished all the necessary wiring. Now you have to test the finished product. Don't bother putting it all back together yet, just grab the bottom case of the computer and lay the motherboard in it. Plug in a BASIC cartridge (if you don't have any memory upgrades, you don't need to use a BASIC

cartridge). Connect the video cable and power cord. Turn on the computer. If you don't get a "READY" prompt and a blue screen, turn off the computer immediately and recheck all your work.

If you do get a "READY" prompt and blue screen, type in the following program:

```
10 P1=54016:P2=54020
20 ?PEEK(P1),PEEK(P1+1),PEEK(P2),PEEK(P2+1)
30 GOTO 20
```

RUN the program. The first two numbers shouldn't change. The next two numbers may change and *won't* be exactly the same as the first two. If you stick a joystick in port 0 or 1, you can vary the second number. If the numbers are all the same or all of them keep changing, turn off the computer, remove the power cord and recheck all your connections.

That's all there is to it! Reassemble your computer in reverse order of the way you disassembled it. :) Of course, you'll need to do something with the perf-board. Cover the pins of the 16-pin socket with an insulator (electrical tape or pieces of antistatic foam work well for this). Turn the board over slowly and push it face down in an open space on the motherboard. You should then be able to put the metal shield back on. If you can't, don't worry about it unless you get TV interference. If you get TV interference, move the computer further from the TV. :)

You now have a second PIA chip located at addresses 54020-54023 (\$D304-\$D307). Here is the pinout of a 6520 (6521, 6821, 65C21, 6821B, etc):

Pin		Function
1	GND	This connects to the system ground.
2-9	PA0-PA7	These are the port A pins.
10-17	PB0-PB7	These are the port B pins.
18	CB1	This is control line 1 of port B.
19	CB2	This is control line 2 of port B.
20	POWER	Connects to the system (+5 volts).
21	R/W	This is the system read/write line. The line above the write indicates that writes occur when the line goes low (0 volts).
22	CS0	Chip select 0.
23	CS2	Chip select 2. This is an inverted signal - the chip is selected whenever CS2 goes low.
24	CS1	Chip select 1.
25	E	This is the system clock line.
26-33	D0-D7 RESET	These are the system data lines 34 When this line is pulled low the chip performs a reset. This reset forces all pins to input.
35-36	A0-A1	These are address lines A0 & A1 from the system bus.
37	IRQA	Port A IRQ.
38	IRQB	Port B IRQ.
39	CA2	This is control line 2 of port A.
40	CA1	This is control line 1 of port B.

And here is a short memory map of the new PIA.

PIA2: 6520 CHIP

54020 \$D304 PORT2A

(R/W) Controls the port A pins on the second PIA. Writes to direction control if bit 2 of PACTL2 is zero. This port should be used for memory upgrades. To access any bank of extended memory using this port, the extra lines needed for the memory should be attached in order starting at pin 2. A routine to access the extended memory is given below:

BASIC

```
X =INT(BANK_NUMBER/4)
P2=BANK_NUMBER-X*4
Q =PEEK(54017)
Y =Q-INT(Q/4)*4
Z =INT(Q/32)*32
P1=Z+32+X*4+Y
POKE 54020,P2:POKE 54017,P1
```

Assembly Language

```
LDA BANK      ; Load the bank number
TAX          ; Save it for future use
LSR         ; Divide by 4
LSR
TAY         ; Save the upper bank control #
TXA        ; Reload original bank number
AND #%00000011 ; Mask out rest of bank number
ASL        ; Mult by 4 to get into position
ASL
STA TEMP    ; Save again
LDA PORTB1  ; ($D301, 54017) Load the normal
            ; bank control
AND #%11100011 ; Zero out old bank control bits
CLC
ADC TEMP    ; Add new bank control bits in.
STA PORTB1  ; Select extended RAM and lowest
            ; 2 bits of the bank number.
TYA        ; Get the upper 6 bits
STA PORTA2  ; Store upper 6 bits of bank #.
            ; 8 bits worth of banks is
            ; 256 - 16K banks = 4 Megabytes.
```

54021 \$D305 PORT2B

(R/W) Controls the port B pins on the second PIA. Writes to direction control if bit 2 of PACTL2 is zero. This port should be used as a parallel port. The most likely use would be a centronics printer port.

54022 \$D306 PACTL2

(R/W) This is the PORT2A controller. Check out "Mapping The Atari" or a datasheet on the 6520 PIA for more information on this.

54023 \$D307 PBCTL2

(R/W) This is the PORT2B controller. Check out "Mapping The Atari" or a datasheet on the 6520 PIA for more information on this.

Questions, Questions...

Here are some questions that will probably be asked about this upgrade and the answers to them.

Why use two address lines to select only two PIAs?

Several reasons—the specific chip used (74F139) is a DUAL 2:4 decoder. This means, using two address lines, it can select four PIAs. If you want yet another PIA, just solder it on top of the others. Then run a wire from pin 6 of the 16-pin socket to pin 23 of the new PIA and you have a third PIA. A fourth PIA works the same, except the wire comes from pin 7 of the 16-pin socket. Also, most memory upgrades use a 74LS138 or 74LS139. Since we only use one of the two 2:4 decoders in the 74F139, and all memory upgrades (except my monster 4 MEG one!) use the equivalent of one 2:4 decoder, we can remove the other chip and rewire the memory upgrade so it uses our 74F139.

Why use a perfboard? Why not just put the 74F139 on the motherboard someplace?

Easy question. The reason for this is so you can add other circuits to the perfboard and not lose access to any of the chips on the motherboard. The perfboard has enough space to hold the ICs needed for any upgrade and that is what I use it for in my computer.

Why did you replace the 74LS138 on the motherboard with a 74F139?

Because the 74LS138 was too *slow*. My first attempt at this upgrade frustrated me so much I quit for a few weeks in order to avoid attacking my computer with a sledgehammer.

Future Project

Here are some possible hardware projects to make use of your new PIA:

Restore the two missing joystick ports. This isn't difficult, but currently no software except that which you write yourself would work. You can add two joystick ports almost identical to those the 400/800 had.

Add additional internal ROMs—multiple OS, BASIC and ASSEMBLER, etc. The XEGS machine has BASIC and Star Raiders built in. There are several ways this could have been done. The most likely is through use of bit 6 of port B of PIA1. Port B controls bank selection and bit 6 is the only bit unused in the 130XE, so it is the most likely candidate for controlling whether BASIC or Star Raiders is accessed. There is no reason you can't have BASIC and Star Raiders built in too. Nor is there any reason you couldn't have any cartridge built in.

Really get sick and control up to 8 megs of internal memory. This is my main reason for adding the second PIA. I bought 144 256K DRAM chips cheap, so I wanted to make a *huge* upgrade. I haven't done it yet, but I probably will add 2 MEGs right onboard my computer. (There is a use for this, see below.)

Run several "virtual" machines. Tom Hunt of MTOS

fame created a wonderful program called Snapshot. It takes a 'snapshot' of what your computer looks like and stores it in extended RAM (i.e., 16K RAMbanks found on upgraded machines and 130XEs).

Each snapshot takes up 64K (4 banks). You can then switch snapshots by pressing a few keys. You could have Textpro running, activate the Snapshot program and then be in Bobterm. The Snapshot program creates a "virtual machine" that it swaps in and out of main RAM when snapshot is activated. With Tom's help, I plan on creating a special upgrade that does in hardware what he is doing in software. So, when Snapshot is called, instead of the program actually copying the main RAM to the extended RAM, it will just swap RAM in 64K chunks. This will speed up the snapshot process and make it considerably more useful.

Add a centronics parallel printer interface. This is easier than it might sound at first. The PIA is made for exactly this type of work. A few wires, a centronics connector and some software and you have a standard printer port.

Add an RS232 port. This is an extensive project... not hard, but not anywhere near as simple as just adding the PIA. However, it would cost a lot less than an 850 interface and would work better, too.

Get rid of all the nasty switches you have stuck in various places on your computer! Except for the cold start switch of course. :) Certain upgrades require switches in order to enable/disable banks of RAM so that the switchable BASIC, ANTIC, SELFTEST and OS can be used. This is silly. Just rewire the upgrade so that it uses port A of PIA2, and you have all the extra memory you need accessible all the time. There is a catch of course...there is no software that recognizes this second PIA, *yet!* I'll have an RD.COM file for Sparta ready soon and a fix file for MYDOS when I get the chance.

SpartaDOS X is a whole other ball of wax...I can modify the RAMdisk driver I think, but since the SDX cart looks for the total memory available when it first boots, I don't think I can write a patch for it. ICD has promised to do so if this upgrade is popular enough. So let's make it popular, ok? :)

Those are just a few uses for the new PIA that I could think of off the top of my head. I am sure others will occur to me and, hopefully, to you.

If you have any questions or comments I can be reached at:

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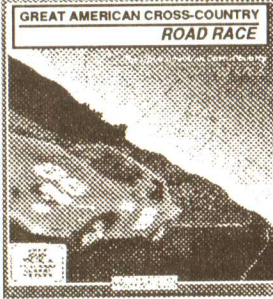
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Comparing the Casio CT-460



vs. the Yamaha PSS-680

G.L. RAY (TACE)

Most ST users, I think, are either interested in, or already involved in creating music through the MIDI ports on their ST. Either they have a friend who has a keyboard or they've seen one demonstrated at a club meeting or store.

Getting Started

But most STers are not from a musical background, and they really don't have any idea as to what type of keyboard to get, what features to look for or answers to any of a million other questions.

I am not a musician, so I can relate to the many other non-musicians out there. But I do know a lot about music and sound. I've spent over five years working the soundboard for a couple of guys who sing all over Oklahoma and the surrounding states.

They were also one of the first groups to begin using their ST computers in their music and recording in our area. I very much appreciate what the ST can do through MIDI applications. I have seen the whole assortment of music software and hardware as it has advanced over the past five years. The group has tried every new product released.

Software-wise, I have been using Music Studio '88. It is not the most sophisticated software on the market, but remember, I said that I am not a musician. I do not read music well, play a keyboard or chart scores. Therefore, I do not need all of the whistles and bells of, say, a Dr. T's KCS or a Sonus Superscore.

Getting the Hardware

But I have learned quite a bit about music through my ST, and I do see myself moving up to a more fully featured package soon. If you are a beginner, I heartily recommend Music Studio.

Now, what type of hardware do you need? As a lot of people did, I started out with a Casio CZ 101 bought used at a music store. But I wanted more features, so I sold it and looked around for quite awhile before purchasing a Casio CT-460. The CT-460 has two features that I very much wanted: it is 16 note polyphonic and it has percussion as a pre-set sound.

This means that I did not have to go out and purchase a drum machine as well as a keyboard. The instrument has 49 fullsized keys, 30 pre-set instrument voices, and 20 built in rhythms. I paid \$269 for the keyboard and I really have enjoyed it.

But I wanted more features, so I looked around for quite a while, again. My MIDI expertise had increased greatly, and I was quickly moving out of my price range.

I wanted a keyboard that had MIDI in, out and through. I wanted a keyboard that could access 16 different MIDI channels (The Casio CT-460 only accesses channels 1-4). I wanted an instrument that was multi-timbral. I wanted an instrument that has at least 100 voices to choose from. I wanted an instrument that had synth abilities, so I could create new sounds or modify the presets.

I found all of these, and more, in the Yamaha PSS-680, which I bought for \$369, well within my budget.

This, so far, has been an intro-

duction to what I really want to discuss, the comparison of these two keyboards, and maybe suggestions as to what you should look for when purchasing a keyboard for yourself.

The Casio CT-460 has been updated now, and I believe the new model number is the Casio CT-465, so some of the newer features of the Yamaha may be included in the new Casio model.

Comparing Features

First of all, when purchasing a keyboard to use with the ST, make sure that it is MIDI compatible. Look on the back of the keyboard for ports labeled MIDI. You should find at least MIDI In and MIDI Out. If you ever wish to use more than one keyboard at a time, you will also need MIDI Through. The Casio CT-460 does not have MIDI Through; the Yamaha does.

The next most important feature relates to the number of notes and instruments you can play simultaneously through your keyboard when accessed through the MIDI ports. The CT-460 is a 16 note polyphonic instrument, spread across 4 channels, like this:

Channel 1 - 6 note polyphonic
Channel 2 - 4 note polyphonic
Channel 3 - 2 note polyphonic
Channel 4 - 4 note polyphonic

What this means is that on channel one, for instance, I might play a six note chord on a piano. I might set channel two up to play a four note brass ensemble. Channel 3 might contain a two note bass lick and channel 4 might be set up as percussion playing up to four drum sounds at once.

Electronic Voices

This works very well, and I have arranged 30 or 40 songs over the past year on my Casio CT-460, in this, or similar set ups. But I would like to utilize more instruments at once, to fill the score with more instruments and give it a more professional quality. With the Casio CT-460, I am limited to four instruments and that's it.

The Yamaha PSS-680, on the other hand, is handled a little differently. Instead of allocating a certain number of notes across a limited number of channels, the PSS-680 uses what is called dynamic allocation. The PSS-680 is a 12-note polyphonic, multi-timbral keyboard, but the notes are allocated dynamically. That is, the notes are allocated across all 16 channels, as needed.

This allows you to use as many instruments and notes as you wish, across any channels you wish, as long as the total number of notes does not exceed 12 at any one time. If the total exceeds the maximum, the oldest note is dropped off. The advantage over the Casio CT-460 is that the Yamaha can play more than four instruments at once, allowing more flexibility and creativity.

The next most important thing, perhaps, is the number and quality of the pre-set voices. The Casio CT-460 has 30 preset voices across a wide range of instruments. The voices are all digitally sampled sounds and sound really good. But two of the voices are sound effects, such as honking cars and galloping horses. While these are fun for awhile, the novelty soon wears off, and you really wish you had two more instrument voices, like maybe a guitar.

The Yamaha, on the other hand, has 100 pre-set voices, ranging across an even greater variety of instruments (I had never heard of several of them). While I believe the Yamaha's voices are not as full and rich as the Casio's, the variety more than compensates for this.

The Yamaha also has various effects, such as vibrato, sustain, reverb, portamento, and chorus. And with the Yamaha, you also have the ability to modify or create and save sounds with the built-in digital synthesizer features.

Rhythms are featured on both keyboards. The Casio offers 20 rhythm choices, while the Yamaha offers 100. Both the Casio and the Yamaha offer a variety of rhythm control, but the Yamaha allows you to choose what instruments to be active on a particular rhythm. The Yamaha rhythms may also be accessed through MIDI channels 11-16. This allows quick arrangements with a one note melody line and a single note per measure to drive the pre-set rhythm chords, accompaniment and bass track.

To some people, the keyboard keys are an important factor. The Casio CT-460 wins hands down. Its 49 fullsize keys have a good feel and response, although they do not compare with higher priced keyboards. The Yamaha has 61 mini keys, which are definitely not

a joy to play upon. But, as I said, I don't play anyway, so it doesn't matter to me.

Both keyboards have record and play functions, which I don't use since I use my ST. Both keyboards can be used to drive other MIDI instruments. The Yamaha has built in drummer pads, which, like the Casio's sound effects, are fun for awhile, but really serve no useful purpose. The drum sounds on the Yamaha are much better, I think, but the documentation on using them is nonexistent.

One would need to make a keyboard chart showing what drum sound corresponds with what note to be really useful, and I have not had time to do this, as of yet. There is a chart like this provided in the Casio manual.

Finally

So, which keyboard would I recommend? If you need a keyboard which you can play yourself, buy the Casio. If you want a wider choice of instruments and rhythms, buy the Yamaha. Buy both, and have the best of both worlds. But, by all means, get started in MIDI, you'll like it.

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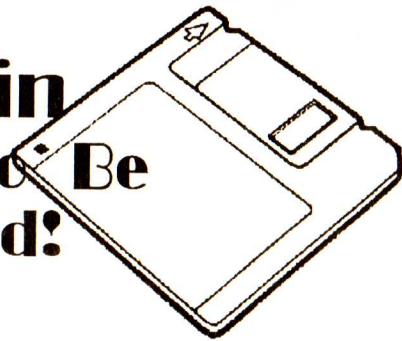
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Irwin Brooks (LACE)

Isn't it funny how some people react when you tell them your favorite desktop utility is Public Domain. Or when your friends are comparing the merits of their expensive word processors and you dazzle them with your PD's power?

I kind of get a kick out of it. Not that they wasted their money, just that there are some little known alternatives.

The power of ST commercial software is by far the best buy for your computing dollar. Compare the price of Ventura desktop publisher for the IBM PC or PageMak-

er for the Macintosh with either Calamus or Page Stream for the ST. A price ratio of 3 to 1 is not uncommon for these comparisons. The commercial Atari ST software is a bargain.

I, for one, bought my ST for this very reason. What amazes me however, is the quality of the Public Domain software making the BBS rounds these days. Programs I wouldn't have seconds thoughts of paying for are given away—*gratis!*

The only return for the authors' efforts are the recognition for a good program and the contribution they make to the continuing value the ST offers. No other rewards are evident.

The vast majority of these PD

programs aren't the kind that make you wonder if the disk space has more value. To the contrary, most are the kind that make you wonder how you could live without them.

All different kinds of PD software is available (i.e. utilities, word processors, games, etc). At this point I would love to list all the best PD programs written for the ST, but the list would be too long to publish; I'd forget some or new releases would make my list outdated. Suffice it to say there are more than I can keep track of.

Now where do I get all these great PD programs, you ask? There are lots of places that can take lots of time. For instance, try your friends, your local BBS, mail order PD disks, etc. But, the best and timeliest source I found is the monthly AIM disk.

If you or your club is not getting the monthly AIM disk then you are:

- 1) Not an ST owner
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DataFree's Memory Upgrade for the ST

Bob Retelle (MACE)

Two things a computer owner can never have too much of are memory and disk storage. On the Atari ST, expanding your disk storage is a fairly simple matter of just plugging in a new or bigger hard drive, but unfortunately, expanding your computer's memory is not that easy.

Up until the release of the TT, Atari Corp's official policy has been that none of their products' memory is expandable, including the STe. They recommend that you buy whatever system has the amount of memory you expect to ever need (which means you might as well buy a Mega ST4 in the first place).

In the never-ending quest for more memory, and to expand the non-expandable ST, designers have hacked and slashed, soldered, kludged and piggybacked.

The first popular method of adding memory, piggybacking, involved soldering more RAM chips right on top of the existing ones. This worked, and actually ended up as a very solid upgrade, but it involved the potential of destroying your ST and was a nightmare to debug if anything went wrong.

A far easier upgrade was developed which put all the RAM chips on a small printed circuit board which was then soldered to the main ST motherboard. This relieved most of the danger to the ST, but still required soldering skill for the installation.

Since most people don't have that experience with soldering, a new generation of upgrades was

introduced, the "solderless" memory upgrade board. The means of connecting these solderless boards to the ST are many, but all involve some method of pushing contacts down into sockets or onto the existing chips on the ST motherboard. Unfortunately, while it's easy to install these upgrades, none of them are fully reliable.

One solderless upgrade I've installed requires you to remove the Memory Management Unit (MMU), and push a little printed circuit board with pins sticking out the bottom into the empty MMU socket. Then the MMU chip itself goes into a socket on the new little PC board.

Another solderless upgrade leaves the MMU chip in its own original socket, but rams little pins down between the chip's legs and the socket contacts.

An upgrade like this could work just fine for months, then you might hit the Return key a little harder than usual, and pow..! Flexing the ST motherboard, moving the computer to play *MidiMaze*, or just thermal expansion may cause the little pins to loosen or make unreliable contact and there goes your data.

The solderless upgrade board I'd installed in my ST started giving me problems with intermittent crashes and data corruption, so I started looking for something more reliable.

Unfortunately, the popularity of the solderless upgrades had caused them to completely replace the earlier "solder in" so it looked as if I was going to have to put up with the crashes if I wanted more than 512K of memory.

I finally spotted what I wanted:

a Canadian company called Data-free Industries was demonstrating their new 16MHz speedup board for the ST, but I was more interested in the memory expansion board next to it.

The board allows you to expand a 520 ST to 2.5 or 4 Megs, and best of all, it solders in place. I didn't have the money to get one at the show, but I did get a flyer with their address.

Several months later, *Chaos Strikes Back* came out for the ST, and I was lost deep in the Dungeon, when pow! Bombs across the screen.... I took out the old upgrade and ordered a Datafree board.

My first impression of the Data-free memory upgrade was disappointment. The board is *not* 100% "solder-in," but uses a combination of solder and plug-in connections.

With the Datafree board, you don't have to touch the MMU chip, as those connections are soldered to the back of the ST motherboard. The Shifter chip connection is exactly the same as my old memory upgrade though.

You remove the Shifter, push a small printed circuit board into the Shifter chip socket, then plug the Shifter into a socket on the small pc board. I decided to install the board anyway, as it looked better than what I'd been using.

Installation was quick and easy, even with the required soldering. What makes it so easy is the use of a small "template" printed circuit board that fits over the bottom of the MMU socket on the back side of the ST motherboard.

Once you get it properly oriented, it's very easy to solder it onto the MMU pins. I had to clip a

few protruding ends of component leads to get the template close enough to the motherboard, but that really wasn't a problem. Once the template is soldered to the bottom, you just bring the ribbon cable attached to it around the front of the motherboard and plug it into the main board that holds the RAM chips. Another ribbon cable leads to the Shifter chip in the small metal RF shield box, where you pull the chip, plug in a small pc board, and plug the chip into the board. The RAM board sits on top of the motherboard in any convenient place.

The installation is actually a little more compact than the other upgrade I'd used, because there's nothing directly over the MMU chip, but it's still a pretty tight fit getting the shielding and case back on. You have to adjust the position of the RAM board to clear the mounting posts of the case, and to allow the keyboard to fit properly. I've never seen the actual size of a Turbo-16 or a PC Ditto II board, but I know I'd have a hard time fitting anything else into my ST!

One very important note from the instructions: If you have a newer ST with surface mounted components, this upgrade *will not fit*. Actually, I really don't think *any* upgrade that depends on connecting directly to chips on the motherboard will work with surface mounted chips. I don't know at what point Atari started using this mounting method, so if your ST is fairly new, it might be better to open it up and check it out before ordering any upgrade. If the chips on your motherboard look very flat, and appear to be "glued" onto the surface, with no pins protruding through to the bottom of the board, you have surface mounted chips.

Another important area the instructions cover (which the instructions for my other upgrade neglected to mention), is a slight modification that has to be done to the ST motherboard if you plan to install a full 4 megs of memory. Because of the design of the ST, only a maximum of 4 megs can be addressed. Therefore, the existing 512K of RAM on the motherboard must be disabled before the new RAM can be used. The modification is simple and puts the old RAM into a "standby" state to reduce the load on the power supply.

I didn't have to worry about this modification, as I'd only bought 2 megs worth of chips to install. The Datafree board comes without RAM, which allows you to find the best price you can in a very volatile market. The upgrade board costs \$165.95 US, including shipping. The 16 1Megabit RAM chips added about \$92, and by now that cost should have dropped as the price of RAM chips continues to drop.

Incidentally, there's sometimes a bit of confusion about what chips to buy. The upgrade boards that use individual RAM chips, like the Datafree 2/4 Megabyte Memory Upgrade, use standard 1Megabit x 1 RAM chips, 150ns. If you don't know what that means, don't panic. Just tell whoever you order the chips from and they'll know. You'll need 16 to add 2 megabytes

and 32 to add 4 Megabytes of memory. RAM chips come in different "speeds," which refers to how quickly they respond to requests for data. Some computers need faster chips to keep up with the faster speed of the computer, and naturally the faster chips are more expensive.

With my new 2-1/2 meg upgrade installed, I can now run a 1/2 meg printer buffer at the same time as a 1meg RAMdisk, and still have a meg left for running programs. Best of all, I don't have to worry about disabling all but 512K to run Magic Sac or worry about whether the data in a RAMdisk will come out looking anything like the way it went in.

The system is still not 100% reliable though. It has its bad days, mainly due to the use of the "solderless" connection for the Shifter chip as far as I can tell, but overall it's far improved over any other upgrade I've seen. I recommend it very highly!

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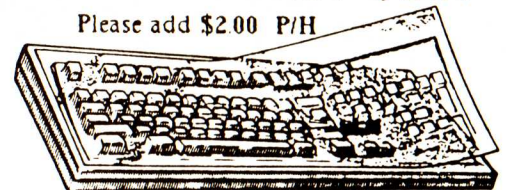
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A HINT FOR MAC65 PROGRAMMERS

John McGowan

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In the IOMAC.LIB file, it is mentioned (on page 86 of the manual for MAC/65) that PRINT to a forward reference is illegal.

This has nothing to do with a bug in MAC/65 but is based on the following fact.

It is true that OP codes which are forward referenced are always assembled (on pass one) as absolute (rather than zero page, which is why one must have any zero page equates defined before addressing them in OP codes). However, any label which is forward referenced is taken as zero, not for OP codes (which assume absolute) but for other operations... in particular for the .IF directive.

Thus:

```
.OPT OBJ
.ORG $6000
.IF TEMP<128
INC TEMP
.BYTE "small value",0
.ELSE
INC TEMP
.BYTE "large"
.ENDIF
TEMP INC $6000
TEM1 INC $6001
TEM2 INC $6002
```

will generate a *phase error*, since on pass one, TEMP (as a forward reference, and so far undefined) is taken as zero.

Thus the first part of the .IF branch is taken (TEMP<128) though the INC TEMP is evaluated using absolute addressing.

Pass one is used to determine the values of TEMP, TEM1 and TEM2.

Then, on pass two, TEMP has been defined and the second pass is taken. *Phase error!*

There is a way to avoid this. Replace the

```
.IF TEMP<128
```

with

```
.IF [TEMP<128] .AND [TEMP>0]
```

to make an explicit determination for the first pass!

The @FL and PRINT macros in the IOMAC.LIB have embedded conditional assembly which is why the forward addressing fails in the example given on page 86.

To avoid this problem, one may modify all lines that test for strings with the code

```
.IF %1<256
```

to

```
.IF [%1<256] .AND [%1>0]
```

to allow forward referencing!

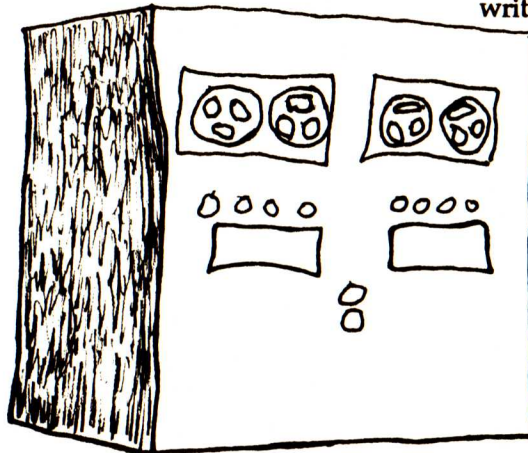
This is *not* a panacea for all conditional assembly, for it will fail on the @CV macro in the IOMAC.LIB.

For a string passed as the first parameter or for an address, %1 will not be zero...and will only have the value zero on the first pass (for which we may explicitly test).

The @CV macro, however, may load (explicitly) a value of zero. If you make the above change here, @CV ZERO (where ZERO is forward referenced to an equate of zero) will wind up doing a load from register zero, with a *phase error* due to a new reason.

The first pass uses a LDA absolute, but as ZERO is really in page zero, the second pass has a now-defined label in page zero and assembles as zero page addressing!

This is *not* a bug, but a problem with forward addressing in conditional assembly. The "fix" mentioned here *will* allow forward addressing of addresses for strings in the IOMAC.LIB and in macros you write.



Woriv



"... and when did you start feeling threatened by mini-computers?"

BASICALLY SPEAKING

Jeff Summers, ACORN

This month we will look at the usefulness of subroutines. Essentially, these are the segments of programs you see referenced by GOSUB statements in published programs.

The main purpose of a subroutine is to limit the amount of repetition in programming. This is the same reason loops were devised. The advantage of subroutines over loops is that the group of statements to be repeated may be called from anywhere in the program, thus the subroutine fills a different sort of need.

Let's take an example. For our program this month, we will draw three squares on the screen, changing the screen color each time a new square is drawn. First, let's list the steps involved:

1. Set up graphics mode
2. Draw first square
3. Change screen color
4. Get input from user (press RETURN)
5. Draw next square
6. Change screen color
7. Get input again
8. Draw final square
9. Change screen color
10. Get input from user
11. Return to text mode and end.

Now, step by step, here's a program that would accomplish our desired result:

```
10 DIM A$(1):GRAPHICS 8:COLOR 1
20 PLOT 10,10:DRAWTO 10,30:
  DRAWTO 30,30:DRAWTO 30,10:
  DRAWTO 10,10
30 SETCOLOR 2,0,0
40 INPUT A$
50 PLOT 20,20:DRAWTO 20,50:
  DRAWTO 50,50:DRAWTO 50,20:
  DRAWTO 20,20
60 SETCOLOR 2,10,4
70 INPUT A$
80 PLOT 40,40:DRAWTO 40,80:
  DRAWTO 80,80:DRAWTO 80,40:
  DRAWTO 40,40
```

```
90 SETCOLOR 2,4,6
100 INPUT A$
110 GRAPHICS 0:END
```

Okay, that doesn't look so bad. Each line does one step in the list of steps above. So, 11 steps, 11 lines of programming. The only way to do this, of course, was to make some lines compound, like the lines that actually draw the squares.

How would this look using a subroutine? The subroutine we will use will draw the squares. On entry to the subroutine, a few assumptions will be made:

1. Variable UL will contain the value for the upper and left borders.
2. Variable LR will contain the value for the lower and right borders.
3. The new color values will be in HUE and LUM.

Let's look at the new program:

```
10 GRAPHICS 8:DIM A$(1):
  SQUARE=200:COLOR 1
20 UL=10:LR=30:HUE=0:LUM=0:
  GOSUB SQUARE
```

```
30 UL=20:LR=50:HUE=10:LUM=4:
  GOSUB SQUARE
40 UL=40:LR=80:HUE=4:LUM=6:
  GOSUB SQUARE
50 GRAPHICS 0:END
200 REM SUBROUTINE TO DRAW
  SQUARE, CHANGE COLORS AND
  GET INPUT
210 PLOT UL,UL:DRAWTO UL,DL:
  DRAWTO DL,DL:DRAWTO DL,UL:
  DRAWTO UL,UL
220 SETCOLOR 2,HUE,LUM
230 INPUT A$
240 RETURN
```

I chose to name the subroutine for readability. ATARI Basic allows you to GOTO or GOSUB to a variable name—in this case "SQUARE," which held the first line number of the subroutine. The RETURN in line 240 lets the computer know this is the end of the routine and it should resume processing from where the GOSUB left off.

The important thing to note is that although there were differing sets of data, the part of the program where the square is drawn needed to be written only once, a big time and space saver.

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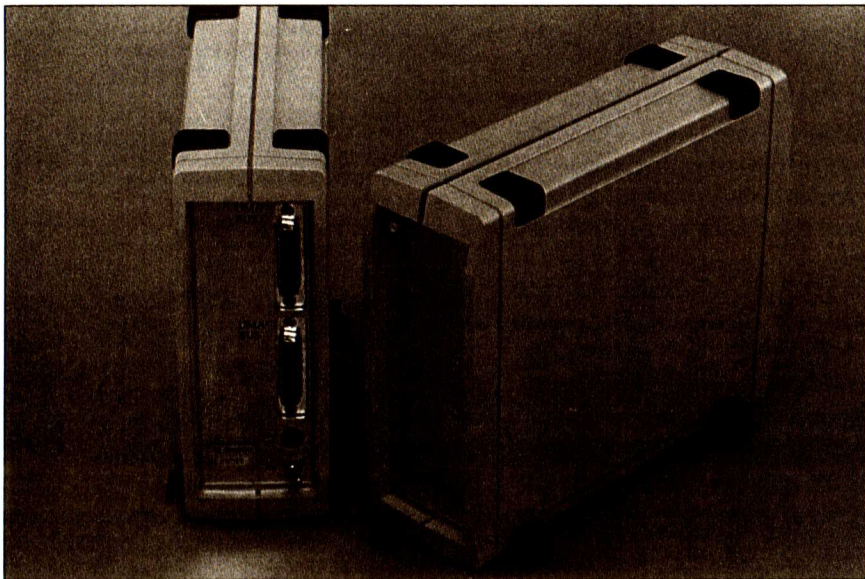
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dBMAN TipSTER #4

MOUSING YOUR WAY AROUND IN PROGRAMS

Peter Killian (OACES)

This is the first of what I hope will be many articles on some of the ST specifics of dBMAN. One of the best features of dBMAN for STers is the ease with which you can program some mouse functions like pull-down menus and selecting from a list of features.

Normally dBMAN does not feature much mousability. It is not a GEM-driven program with its own menus, being primarily based on a program that predates even IBM and compatible machines—where mice were not only absent, but unheard of.

Mouse features do show up, though, with some of the add-on features, such as the report writer and assistant. The assistant is especially GEM-like, with most actions selectable *only* with the mouse from pull-down menus like you would see on the desktop.

These menus are not quite as comfortable as those you would probably find in other, more standard GEM programs, since they often switch back from mouse to keyboard after you choose the main action from the mouse menu. Also, there is no usage of graphic objects, icons, dialog or alert boxes (though these can be partly simulated).

Despite the limitations, I find the ease with which I can create pull-down and other simple mouse menus refreshing.

There are three basic functions in dBMAN programming to ask for a mouse-driven choice: PMENU(), MMENU() and SEL-FILE(). You will, of course, have to

use other commands/functions as well to actually get results from the choice, but these are the building blocks we will start with.

And by the way, for those who might not have already guessed, I have been using the term "pull-down" menus because dBMAN calls them that and named the function PMENU() based on that name.

This is primarily a throw-back to the IBM world where menus do *not* "drop down" automatically when you run the mouse past them. Instead you have to press and hold a mouse button or some key from the keyboard to see what is on any of the menus.

Now, some of you may be wondering why we would even want to use the mouse with a system

that was not generally designed for it. Well, even those who are mouse-phobic generally warm up to the little rodent when used consistently (unlike the aforementioned add-ons to dBMAN).

Also, with a little bit of creativeness, you can have other normally computer-phobic people (maybe even your spouse!) using this sophisticated and powerful system without even knowing it! Besides, I found I often wanted to get to a desk accessory without leaving dBMAN, but I didn't want to have to use one of those monster add-on programs.

Here is a simple program that does nothing more than allow that and also lets you return to the dBMAN interpreter or the desktop at the touch of a button:

```
* Accessory access
SET DEFAULT SYSTEM TO D:\dBMAN\
SET DEFAULT TO
SET DB3 ON
vtitle = " FILE "
vitem1 = " RETURN to dBMAN Interpreter | OPEN Database | QUIT
to Desktop "
vdel = "| "
DO WHILE .T.
  CLEAR
  @ 3, 3 SAY " COPYRIGHT 1990"
  @ 3,57 SAY " by Peter R. Killian"
  @ 2, 1 TO 4,78
  @ 6, 3 SAY "ACCESSORIES"
  @ 7, 3 SAY " at your "
  @ 8, 3 SAY " command "
  @ 6,67 SAY " Use MOUSE "
  @ 7,67 SAY " to "
  @ 8,67 SAY " select "
  @ 5, 1 TO 9,15
  @ 5,66 TO 9,78
  ASSIGN PMENU('|', vtitle, vitem1)
  DO CASE
    CASE PMENU() = 1
      DO CASE
        CASE VMENU() = 1          && Exit to dBMAN interpreter
          CLEAR
          ? "RETURNING . . ."
          EXIT
        CASE VMENU() = 2        && QUIT to desktop
          QUIT
        OTHERWISE
          CLEAR
          @ 10, 0 SAY CENTER("ILLEGAL entry from MENU 1!",80)
          ASSIGN MMENU(12,37,1,4,1,vdel," OK")
      ENDCASE
    ENDCASE
  ENDDO
SET DEFAULT SYSTEM TO D:\dBMAN\
RETURN
```

Notice in addition to the "pull-down" menu, I also used a more common mouse menu with MMENU. The way I used it, you get something like an alert box that has no frame, except for around the single allowed response. The mouse pointer will appear as soon as either the PMENU() or MMENU() functions are invoked and will disappear as soon as you select an option with the mouse. It does not stay gone with this program unless you choose one of the exits, of course, since I have the program reexecute the PMENU() function until you do choose one of the exits.

Notice how the parameters for PMENU() are nothing more than strings that are already defined. The variable 'vdel' is short for vertical delimiter, since it is the character I have used to separate vertical elements in the menu. I could have used basically any other character to separate the two possible choices, but I used the vertical bar since it is easier to see and I am a little bit used to it from other languages.

The variable 'vtitle' contains the heading for each pull-down menu, while 'vitem1' contains the choices available when you pull down the first (and in this case only) menu from the menu bar. These variable names are not magical and you can substitute other names in your own programs.

Notice that I use the PMENU() function *without* any parameters to determine which menu was pulled down and VMENU() for the specific numbered item within that pull down. This is the reason I used DO CASE as a conditional instead of IF...ENDIF. CASE makes it easier to add either more menus and/or more entries for each later (which I have in fact done on the examples which should be available on the AIM disk).

Now, for the MMENU() function, you have a few numbers along with our previously defined delimiter and the list of items to select from. In this example there is only one choice, so the list is included verbatim, but, most of the time, you will use a variable that actually holds the list as we did for PMENU(). The numbers are used to locate the menu on the screen and tell your ST just how much space to allow for the menu on the screen.

You need five numbers for this function: two to define the upper left corner for the list (text row and column), two to say how much room to allow vertically and horizontally for each item in the list, and finally one to define how many columns to allow. In our example, I allowed four spaces for the one and only item, with one row per item, and only one column allowed.

By the way, the MMENU() function is *not* a standard function for all machines you can use dBMAN with; it is specific to the ST. Nor is the final function I want to discuss listed in the standard manual. It is also not listed in the ST-specific supplemental manual! I found out about it from previous versions and examples VersaSoft provided on disk when I upgraded.

That last mouse-driven command is SELFILE()

which calls the standard file selector (or custom one like Universal Item Selector, etc. if you have one loaded). Like the previous two functions, this one takes some parameters and is invoked with the ASSIGN command. It departs from the other two after that, however.

First, you don't have to specify a delimiter since you don't pass it any list(s) to choose from. Rather you specify some characteristics you want in the list that GEMDOS will provide. This time there is some "magic" to the words used in the call. This time you have to place quotation marks around what are actually variable names. Also, because of the way that GEMDOS returns the answers, you should be sure there is extra room in both variables for longer path/file names. To my knowledge, this is the *only* place that dBMAN requires this unusual arrangement. The call looks like this:

```
ASSIGN SELFILE("path","file")
```

After selecting a file, the filename will be in the variable 'file', while 'path' will contain the path name, which does *not* necessarily include a drive letter if it wasn't specified beforehand and/or changed in making the selection.

Until next time, keep on enjoying exploring dBMAN for yourself and pass on 'goodies' you find as well. As always, you can contact me by writing to AIM, O-ACES, or leave E-MAIL on GENIE (P.Killian).

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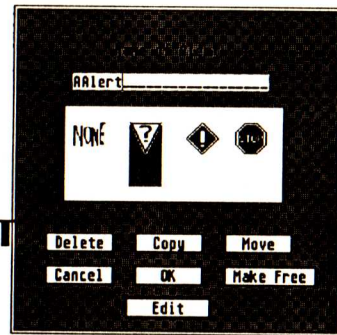
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WERCS

A COMPLETE GEM RESOURCE CONSTRUCTION SET



Earl Hill (SAGE)

We have all seen those files that go along with program files, such as WW2.RSC, the resource file for Word Writer 2.0. Sometimes, RSC files also go with ACCESSory or APPLICATION files. Resource files are special files that contain resources (what else?). WERCS is a utility to make these files.

A resource file is used by the GEM AES (Applications Environment Services) to produce Menus, Dialog and Alert Boxes, Icons, and Strings.

They are particularly handy since they can be used unchanged in all resolutions and can be used with different programs or revisions without requiring major modification—a great time saver. Furthermore, using an RSC file is easier than manual programming, but it also produces smaller files and makes code easier to maintain. It also lends itself to structured programming.

Resource files are best created with programs called Resource Construction Sets (RCS). With these tools, programmers don't even have to write the code which creates menus and places icons. These features are designed with the construction set and the mouse. To a degree, you don't even have to be a programmer. All of this is done by a process called form handling.

What's Available?

Although the software available for the Atari ST is becoming quite advanced, there is a deficiency in RCS programs comparable in

sophistication to those available for the Macintosh. For Atari, the RCS programs available are from Atari (DRI), Kuma (from England), Megamax and HiSoft. Unless you own the Atari Developer's Kit, your alternate choices are the latter ones listed.

However, there is a problem with all of these except HiSoft, in that none of them can be purchased other than as part of a language package. HiSoft WERCS, written by Dave Nutkins using FTL Modula-2, brought to us by way of MichTron, is a full-featured, powerful RCS for the rest of us.

It WERCS!

WERCS enables you to produce programs to take full advantage of GEM. WERCS is a mouse-driven RCS which permits you to easily create Dialog Boxes, Menus, Icons, and Alert Boxes. With WERCS, you can adjust size, position, border width, color and fill patterns of boxes quickly and easily. You can change the size, justification and color of text characters. Text fields are totally editable.

You can produce and edit resource files up to 64K in size. You can produce resource files for use in low, medium, and high resolution. You can have up to 16 characters per language identifier. There's an optional automatic naming feature (no need to type text and name twice).

A unique Search facility allows you to search for a particular string or language identifier within your resource file. Full cut and paste editing of objects and whole trees is supported, as well as optional character snap and text box string.

There's an integrated icon editor to design your own icons. The list of features goes on and on!

Documentation and Use

WERCS comes on a single sided disk containing the resource editor; several utility files to do tasks such as importing Degas files; plus example RSC files. It runs in all screen resolutions.

The manual begins with a discussion of WERCS resource file content (tree types and tree structures). WERCS trees are of five different types: Form (Dialog Boxes), Menu, Free String, Alert or Free Image. Of these, Forms and Menus are the most common.

Each type of tree consists of objects. You can actually have as many as 200 objects per tree. "Forms" are GEM AES object trees. An object tree is like an array of records, with each record describing an object. The objects are numerically indexed.

For example, a Dialog Box with a message, two radio buttons, and an "OK" button would be six objects altogether. Each of these is described in the terminology of human family trees—parents, children, etc.

In WERCS, there are thirteen types of objects that you can have in object trees. Most of these are some form of text or boxes or both; hopefully, no monkeys in the family tree!

WERCS does nearly all of the hard work of constructing one of these resource files for you. It keeps track of tree structure, object states (e.g., the type of box), object positions, flags, etc. All of this is under GEM and conveniently mouse driven, with selections

made from the drop-down menus. WERCS also creates the all-important header files. These headers provide the means for programs or accessories to "call" resource files, which is why you can't change the RSC name.

Header files differ depending on the programming language chosen. Resource files must match the language used to write the program, accessory or application file. The programming language for which the RSC file is intended is selected prior to actually creating the resource file. WERCS offers a choice of C, Pascal, Modula-2, Fortran, Assembler and BASIC.

The manual itself is written from two aspects, depending on the experience level of the user. It leads the "beginner" programmer through all the steps necessary to construct RSC files, proceeding from the simple to the complex. For the "expert" or professional programmer mode, it gives an in-depth discussion of the practical aspects of using WERCS. After an introductory discussion, you are walked through the use of WERCS in creating and editing trees and the handling of object levels. After becoming familiar with Dialog Boxes and Menus, you graduate to more complex trees such as Free Strings.

The remainder of the manual goes into fine details of objects, flags, programming with resources, hints and tips on resources, compiling, the use of the utility

programs, and keyboard shortcuts. It also contains helpful summary tables and example programs.

The manual itself is very well done although a little brief considering the power of WERCS and the complexity of programming resource files. It is filled with hints and cautions, both about the use of WERCS, problems with GEM and bugs in TOS. Considering the intricacy of the subject, it is very clear and informative. There is also a lot of useful general information, much of it not readily available, about GEM objects and their attributes. For the non-expert, there is a display of empathy in the explanations not ordinarily found in manuals. Commendably, the manual also has an excellent index.

In Conclusion

If you do not already have an RCS editor and want to include resource files in your programming, WERCS will do it for you. As far as RCS utilities go, it may be the only game in town, but it is a good one. WERCS represents both good value for the money and a way to get things done.

It does require some knowledge of GEM programming, and for the novice who wants to delve deeply into RSC files requires a somewhat steep learning curve, but it is a necessity for those who do not have a stand-alone RCS program.

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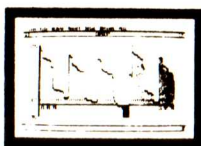
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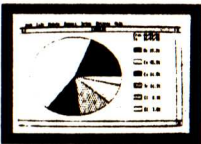
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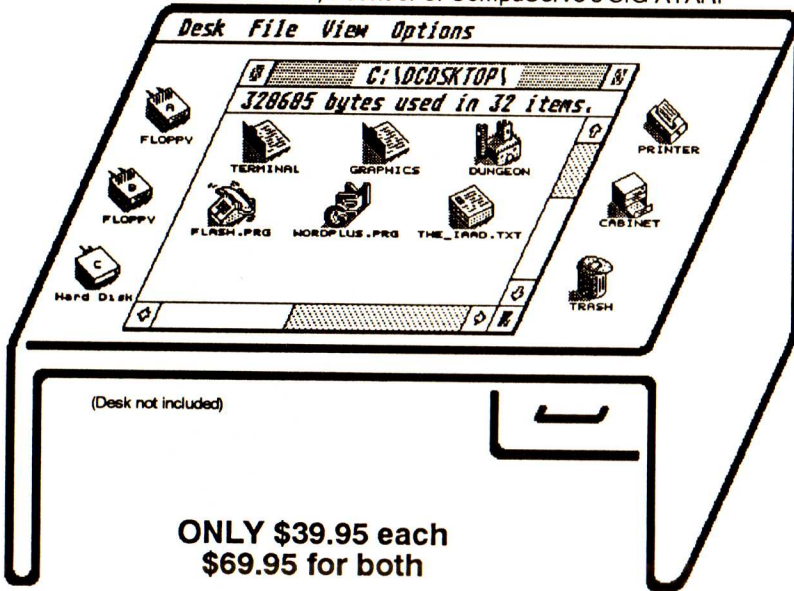


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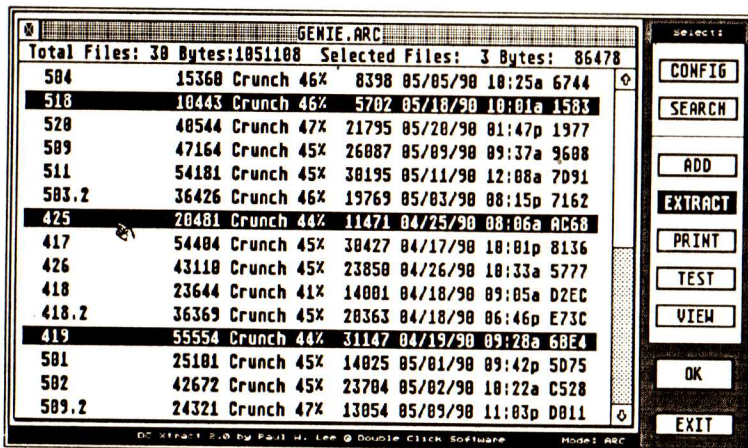
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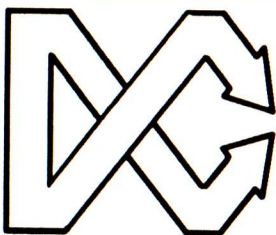
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The Kraft Tripletrack Trackball for the Atari ST

Tim Holt (ACCEPT)

I have been frustrated for a long time at all the nifty things available for the ST in Europe, such as IBM style cases made just for the ST, etc.

One of the more nagging longings I have had was to get a trackball for my ST. Ever since I saw them down at Jenkins' for the IBMs and in all those slick European magazines for the ST, I have been on the lookout.

Well, I don't have to look any longer, because Kraft Systems has very quietly come out with "Tripletrack" an extremely nice replacement for the standard ST mouse. For those of you with limited desk space, or who are like me and drag the mouse all over creation, the Tripletrack is a godsend.

The Tripletrack comes in a light grey color and is loaded with features you won't find in any mouse I've seen for the ST. The entire unit is smaller than the mousepad I had been using. Three buttons instead of the normal two are located below the trackball instead of above. The trackball and the buttons are a slightly darker grey than the rest of the box. Here is a list of features I think you will find very impressive.

The Tripletrack is designed to work with all Atari ST series computers. This includes the STe. Tripletrack also works with (get this) the Atari 400-1200 series, the Amiga and Commodore 64/128 computers. Maybe the name should be the Quadruple Track.

A small switch on the right side of the box sets which type of com-

puter the trackball will use. As mentioned before, the Tripletrack has three buttons instead of two. Two outside buttons function like the right-hand mouse button on a regular mouse. This is very nice for us lefties.

The box itself is less than two inches tall, six inches long and four inches wide. The ball is about two inches in diameter and is placed in the center of a three tier box.

The top tier has two special function keys, the middle tier contains the track ball, and the bottom tier, the one closest to you, holds the three mouse buttons. Kraft calls this "ergonomically designed." I guess that is the trackball equivalent of Farfegnugen.

Joystick Emulation

The Tripletrack can be used like a joystick! This is what separates this trackball from a regular run-of-the-mill mouse. No more need for another set of wires hanging out of your ST. All you have to do is select position 3 on the computer select switch, and you have a joystick instead of a mouse.

In this mode, the left and right buttons act as fire buttons, and the middle button is disabled. (Again, a nice benefit for the left-handed in the crowd.) And you do not have to turn off your computer to switch modes!

While in joystick emulation, the other function key, (mode key) can be set for Autofire, so that when you fire your gun or whatever, you *really* fire! The Autofire allows automatic continuous firing. You do not have to hold a button down or repeatedly press a button to get a burst of fire that should wipe out even the vilest of enemies.

When you are not in joystick emulation, just switch the mode switch to 'D.' This allows the mouse to drag items, just like normal.

The locking button allows you to lock on a drag, and the drag stays on as long as the button is depressed. In Joystick mode, this button allows for continuous autofire. To deactivate the continuous autofire or drag, just depress the button. Now you have single shot activated. Either way, this is an excellent option.

Optional Footpedal

The Tripletrack has an optional footpedal that performs the same functions as the right and left mouse keys. The footpedal plugs into the top side of the Tripletrack and allows for some interesting control of programs. Feet and hands! (This option does *not* come with the Tripletrack, but can be purchased separately.)

You probably are asking yourself how well the darn thing works. Well, I like it! I must admit, using a regular mouse for four years has gotten my hand used to using my index finger to do all the work.

With the Tripletrack however, the design makes use of your index, middle and fourth digits to move the trackball. Your thumb and little finger are the ones that depress the buttons. This feels a little clunky at first, simply because you are used to doing something else. However with a little practice (about a half hour), you will feel just fine about the digit switch.

The cursor movement is exceptionally smooth and with the vari-

ous mouse accelerators around, the darn thing literally flies across the screen. Response is the best I have ever seen. And I have gone through my fair share of mice (mouses?) in my years of ST computing.

Why buy the Kraft Tripletrack? While the Atari mouse is functional, it doesn't look nice. Tripletrack looks a lot better than the Atari mouse. The options mentioned previously make this an excellent buy, and Kraft has included a nice cloth cover with the Tripletrack to keep the dust and dog hairs out while you aren't using it. Even the cover matches your ST's color!

Kraft includes a *five year warranty!* That's a pretty long time, and, if you think about it, that warranty will probably outlast your computer.

One last thought: For whatever reason, Kraft does not appear to be actively advertising this excellent product in the Atari arena. For this reason, your dealer may not know about the Tripletrack as a product for the ST. Let them know! And if you purchase this product, make sure you send the registration card and let Kraft know you are an ST user.

The Kraft Tripletrack trackball for the Atari ST is a definite *must have* for any serious ST user!

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Vampire's Empire A Bloodsucking Good Story

Gordon Totty (MACE)

Dr. Van Helsing's mother was likely not a virgin. Of course, if he was adopted, we might have to reexamine this assumption.

What this tells us is that the vampires in Vampire's Empire from DigiTek, Inc. differ from the vampires in Andy Warhol's Dracula. In the latter, the vampire required the blood of a virgin (or, if you saw the flick, "virgin"). It may also tell us that Warhol didn't know squat about vampires.

Van Helsing, who was born in 1680, had his life changed forever one memorable night in February, 1693.

This is the night he awoke at about 2 am and found a vampire sucking blood out of his mother's throat. No mention is made of Van Helsing's father. Either he was snoring, deceased or living somewhere else. In any event, it was the young Van Helsing, a mere 13-years-old, who had to try to help dear old leaking Mom. He failed.

He devoted the rest of his life to the study of vampires and a quest for the destruction of the nasty suckers. He became a vampirologist. He probably knew far more about the breed than dandy Andy ever did or imagined he did.

He was probably also one badly screwed up dude. Dr. Freud, who was born long after Van Helsing's demise, taught us a few things about how this experience might have affected a teen-aged boy.

Goodness only knows what Van Helsing did in the privacy of

motel rooms! This being a family magazine, I will not speculate on the lurid details, but you may stop reading for awhile and speculate in detail.

Van Helsing was also a prolific writer of prose and verse. The following poem is reproduced from inside the folder this game comes in. DigiTek describes it as his "Plea to the Light" and states that it came from the inside cover of his journal, circa 1753. None of his writings past the year 1753, the year of his 73rd birthday, survive today.

*The Light is my help and salvation/
Whom shall I fear?/ The Light is the strength of my life/
Of whom shall I be afraid?*

*When mine enemies and my foes,
Came upon me to eat my old flesh,
Came upon me to devour my soul (but not my garlic)/
They stumbled and fell.*

*Unto thee, O Force of Light, do I lift up my soul/
I trust in thee, let me not be discouraged,
let not mine horrible enemies triumph over me/
and teach me the way, show me the path.*

*For in time of trouble it will be my shield/
and when I walk through his evil Lair,
I will fear no one, for the Force of the Light/
and the stench of my garlic protect me.*

*I put all my trust/ in the Force of Light and its Power/
to defend all that is good in the world/
to destroy the Price (sic) of Darkness.*

*Yea hear my praise, my crying/
Hear my glorious honor and singing and/
protect me from the mad ONE that hath horns and hoofs/
and free me of my arthritis.*

Modern scholars believe that Van Helsing may have been the first to discover that poetry need not rhyme, that blank verse is art,

too. Philosophers have noted the heavy religious influence on his poetry, and wonder why it is, with all the references to light, that water is not also mentioned. Both philosophers and poets have been stumped by the reference to the "Price" of darkness.

The above poem gives you almost all of the direction you are going to get before you assume the persona of Van Helsing, a funny looking little guy, and embark upon solving the dilemmas of the Vampire's Empire.

The physical aspects of the empire are a series of stairs and platforms which you descend in your search. The documentation is scanty, and if I were not a lazy typist I could probably reproduce the other half of it in about two columns—maybe one, with small print!

The documentation consists of one 8-1/2 x 11 inch page, printed on both sides, and folded twice so that it makes eight tiny pages. Its main content is three entries from Van Helsing's Journal, one each from 1693, 1744 and 1753.

The last two pages describe your main tools: mirrors, garlic, and a magic ball. Nothing is mentioned about a wooden stake or a pistol loaded with silver bullets.

You are handicapped in your search, the object of which is to find and kill the main non-man himself, Count Dracula, king of the hickey (hickey if you are from the Northeast, love suck if you are from the Southwest)!

The Van Helsing figure is a cute little old man, gnome-like with a large head and small body. His nose is considerably bigger than mine, a comfort to me in this cruel



world of small-nosed people. (Just how do you all get enough air through those things? Don't you feel like you are suffocating?) He shuffles about noisily, and slides to a stop when you bid him to do so with your joystick, unless he is on a slippery surface.

You will be entertained in your journey by music. It is good music, but it repeats over and over and can become annoying on a long search. Of course, you can turn the sound down.

The artwork, or graphics, in this game is exceptional. There are a series of beautiful platforms, stairs, and columns furnished with trunks, candles, oil lamps, and strange stuff like eyes that pop open at odd moments. Two Amiga screens are reproduced on the folder. They appeared to me to be accurate representations of the Atari screens as well. Cute mice abound. Please don't kick them.

Frequently you will see glowing gold, with red, brown and blue accents. An hourglass on the left functions, but its meaning was not plain to me. Repeatedly, it finished draining, only to begin again.

On the right is a long, vertical, red bar. Again, meaning unknown to me, though I guess it to be a life-line. When gnomes or gargoyles "spit" (drip moisture) on Van Helsing, this bar shortens. When Van Helsing "picks up" a golden lamp, this bar lengthens. None of this is explained in the documentation. You figure it out for yourself.

The Van Helsing figure is unhurt by falls. Push the stick up and he stands up again, ready to resume the

quest. This, plus the cuteness of Van Helsing, the "monsters," other human figures and the mice (or rats), belies the "frightening atmosphere" promised on the box. I never found the Count, but expect him to be cute, too.

The search aspects of this game can be overpowering. It uses high resolution and smooth scrolling for its good artwork. It is easy on the eyes, and ears for as long as you enjoy the music. But it promises 240 different screens, and my children and I never even saw the bloody Count in our efforts to date.

Children that I have exposed to this game, two of mine and two playmates for a total of four aged 8 to 11, have been delighted with it. As usual with me, the 11-year-old boys taught me a thing or two about it that I hadn't discovered. I think that if I could line up a 13-year-old researcher we could whiz through these challenges. Well, I'm nurturing one myself; wait two more years.

You will learn this game as you might once have learned to swim: dive in, and do it. There are not even any title screens, menus or credits to delay your plunge. When Vampire's Empire finishes booting, you are confronted with the first screen. Go to it.

Another poet, not Van Helsing, once said something like, "When into life as into lakes we dive, we are lucky to come up alive." If your experience with Vampire's Empire parallels mine, you'll come up alive. Not because you are careful, but because you'll have a hard time finding the trouble you are looking for.

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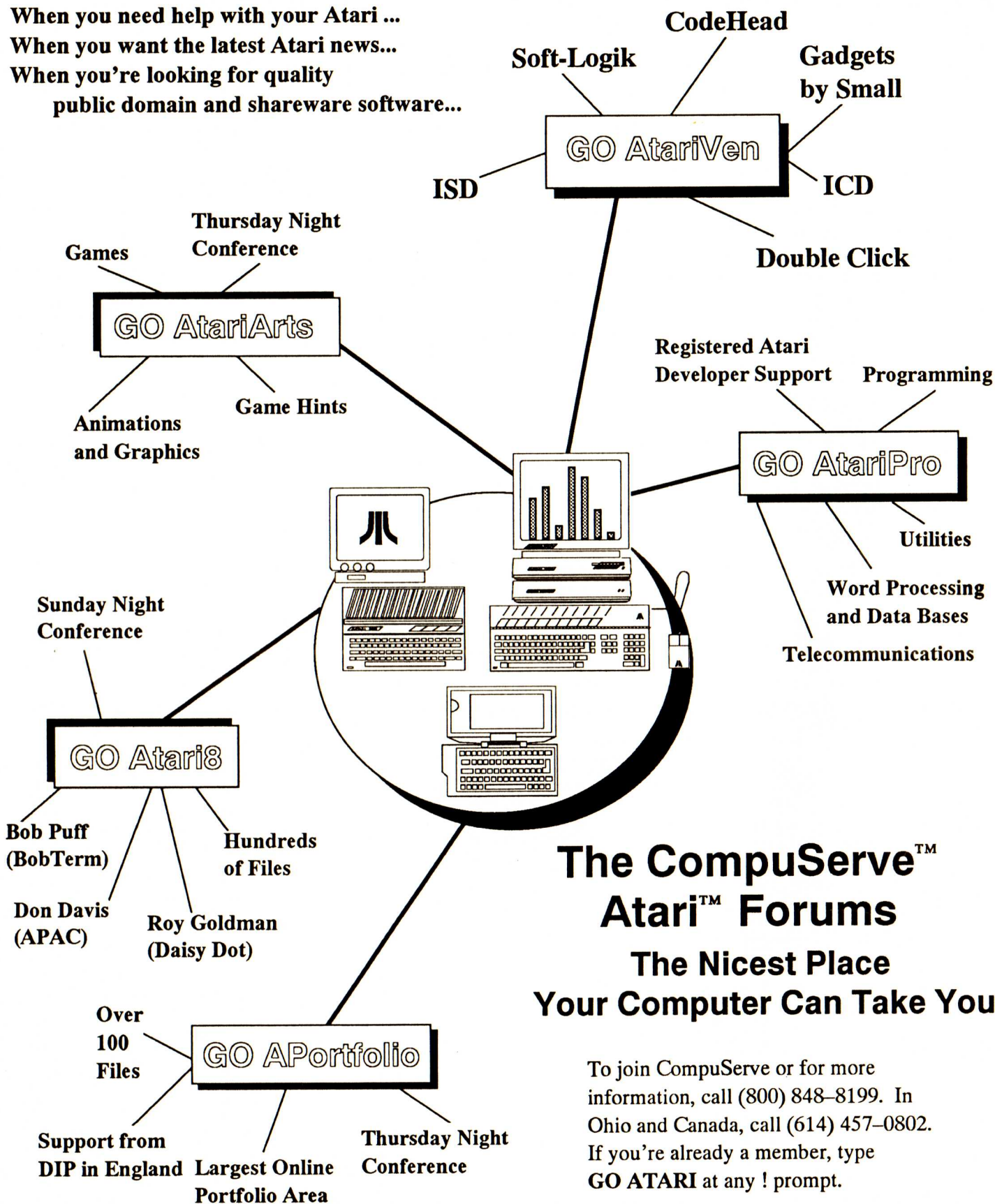
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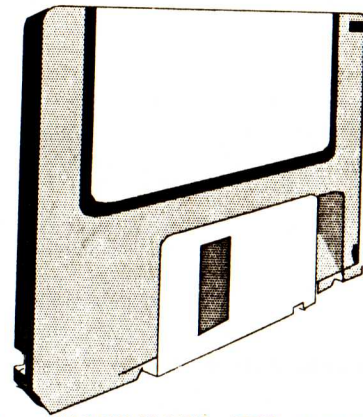


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AIM Disk of the Month

February 1991



All files on this disk are self-extracting LZH 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 February '91 disk. For more complete documentation, see the text files contained in most of these archives.

✓ **BUTTNFIX.APP**—Fixes problem of double mouse clicks when you only click once in TOS 1.4 or above. Desk accessory from Charles F. Johnson based on an idea by Gene Sothan.

✓ **CAL32.APP**—Calendar 3.2. See any month, any year from 1 to 9999. Attach 'events' to days by date or by position in month. Display events for the day, browse through events, find a specific event and more. Runs as a PRG or ACC on any ST/TT in any rez. Includes Cal-Show to display upcoming events when you boot up.

CHECKING.APP—Excellent, highly efficient checkbook program. Maintains a Payee and Memo list, along with ability to edit checks and produce reports.

✓ **COLORQLT.APP**—Simple game to help teach color matching to young children. Low rez color.

DBLPAGE3.APP—Print up to 4 pages on a single sheet of paper with an SLM804/SLM605 laser printer! Custom fonts, custom defaults, and command line support.

DBMAN_4.APP—CMD files accompanying dBMAN TipSTer #4 by Pete Gilliam.

DCFLIGHT.APP—Freeware from Double Click Software! Turns on floppy light to show access of RAMdisks, etc. Only uses 392 bytes. ST/STe/TT compatible

DCLEFTY.APP—Switches left and right mouse buttons. Great for left-handers or if your left mouse button is wearing out. Freeware from Double Click Software.

✓ **ENCRYPT.APP**—Encrypt or decrypt ANY type of file on the ST. You specify the key and the program does the rest.

FLMPLAY.APP—Plays animations in Lexicor Software's FLM format. Just select the name of the FLM file you want to play. Opening dialog box shows all keyboard commands available in the player. Written by David Ramsden and Paul Dana. Watch for some great animations on upcoming disks.

✓ **GLEE130.APP**—Graphic Library Editor 1.30. Load Deluxe Paint ST or CAD3D animations, IFF Degas or NeoChrome graphics and save them as C or GFA source code!

✓ **ICON_90A.APP**—Collection of 100 icons for NeoDesk 3. Icons for Quick ST, Double Click Utilities, Spectre, Super-Base, Turbo ST, Tempus and more.

✓ **KV_FONIC.APP**—This program introduces children to phonics. It includes 9 puzzles containing consonants (b, c, d...), blends (sl, sn, sm...) and digraphs (th, sh...). Educational software from Knowledge Vine. Low rez color.

LIBMASTR.APP—Shareware utility to organize, modify, convert and print your Print Master Libraries.

PNTVIEW.APP—Viewer for pics created with Lexicor Software's Prism Paint. Written by Robert M. Birmingham.

✓ **ROBIN.APP**—Control Mother Robin to catch flies and gather her children from various nests. Avoid hazards such as candle flames and spiders. Designed by Juergen Reichen-wallner from Germany. Color only.

SEQ2FLM.APP—TTP program that converts Cyber Paint SEQ files to Lexicor Software's FLM format. FLM is a new compressed animation format that results in smaller files, and faster playback speeds. Enter the name of the SEQ you want to convert and the name for the new FLM file, separated by a space. Example: OLD.SEQ NEW.FLM Written by David Ramsden.

✓ **TPN2_114.APP**—Taipan II version 1.14. GEM version of a classic trading game. See how long you can stay in business trading goods from New York to Rio in the 1800s. Best played in low rez.

UNSI.T.APP—Extracts files from Macintosh Stuffit (.SIT) archives. Runs under TOS—no emulator is needed! Even works with ARCSHELL.

✓ **WHATIS41.APP**—Recognizes 71 types of files: ARCs, LHArCs, PRGs, pics, ACCs, animations, etc...no more "what kind of file is this?" problems! Runs as a PRG or an ACC on any ST/TT in any rez. This version adds PKZIP, more Neo, Deluxe Paint ST and Prism-Paint files to the list.

YAHTZEE.APP—Yahtzee 2.0 is a slightly enhanced upgrade of Yahtzee 1.0 converted from Atari XL BASIC to GFA Basic by Y. Wolf in 1987. All prompts changed from keyboard to mouse. An excellent 1-6 player game that faithfully recreates the classic game Triple Yachtzee. GFA source included. Medium rez color.

✓ **ZX81.APP**—Timex/Sinclair ZX81 emulator for users who can't get enough of the ST's emulation capabilities. Includes many ZX81 programs including an assembler and an integer basic compiler.

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 February '91 disk when ordering.

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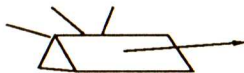
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Alamo Area Atari User Association (AAAUA), P.O. Box 79-1426, San Antonio, TX 78279-1426

The AAAUA is an Atari 8-bit user group serving the greater San Antonio area. General meetings are held on the first Tuesday of each month at the Balcones Heights Community Center, 107 Glenarm, San Antonio, Texas, from 6:30 to 9:30 PM. General meetings feature a presentation and small group problem solving. Each third meeting we have a swap meet and computer workshop.

Members receive a subscription to AIM as part of their benefits. Dues for regular family membership are \$24 per year or \$15 for six months. Dues for "Subscribing" membership has been increased to \$15 per year domestic and \$18 per year for most foreign countries due to increased costs. Subscribing members receive a subscription to AIM and (FR)ANTIC, and have access to our P.D. Library. For further information, call Al at (512) 492-6633.

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Treasurer	Joe Barth
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Newsletter Editor	Manuel Garcia

Presidential Ponderings by Alvan Sherrill

The big news this month is the AAAUA Christmas Party held Saturday December 15th at the Oaks of Marymont Apartments. We are grateful to the management for permitting us to use their absolutely beautiful facilities and to Peggy Blank of AAAUA for making the necessary arrangements.

Members started to arrive at 6:30 PM just as the last of four computers were set up and the decorations were completed. Party Chairperson Thelma Sunvison, assisted by Jannet Blocker, in charge of food, and her group of helpers had prepared an abundant feast to please a king.

At about eight PM the Super PacMan contest began. Out of eighteen participants, Adam Weissmuller took the first prize of a Super PacMan cartridge; Don Rogers and Chris Cassidy took the second and third prizes, respectively, each an Atari Joystick. Following this, the first four issues of ANTIC magazine donated by Floyd Blunk, owner of Atari-ville, our local Atari store, were auctioned off. These four priceless and historic bits of nostalgia all received the high bid from Dr. Malcolm Orr, a long time Atarian and loyal member of AAAUA. At the conclusion of the auction, Dr. Orr donated the magazines back to the user group for the hard copy library. Such generosity is rare, indeed! Thank you, Dr. Orr.

After the auction, Santa Floyd Blunk presented an Acey Deucey disk, by Softsmith, to each member present, followed by Santa John Hardie who gave each member a PD disk which our Librarian, Russell Gibson, had painstakingly assembled. John Hardie is past Vice-President of AAAUA and flew in from New York just for this occasion.

Next on the agenda was a raffle where everybody won! Nineteen of the lesser prizes of a miniature computer clock and an Atari bumper sticker, were awarded, followed by a repair kit, a circuit board clock, a 300 baud modem, a 1200 baud modem, an Atari 810 disk drive and an Atari 800. The Grand Prize, donated by John Hardie, was a real arcade GYRUSS game console. This was won, appropriately, by RUSSELL GIBSON. I don't think he could have been happier if he had won the Irish Sweepstakes!

In the awards ceremony, Thelma Sunvison, Jannet Blocker and Rose Marie Pettit all received the AAAUA One Dollar Award for outstanding and dedicated service. The Atarian of the Year award went to Gino Giammalvo, past newsletter editor. Gino did not receive the award just for his outstanding work as newsletter editor, but for his too numerous to mention contributions made to the user group over the past year.

Thank you, for all of us.



The Atari Boosters League East (ABLE) meets monthly with enthusiasts and provides user support for all Atari computers except the Portfolio and PC line. The purpose of ABLE is to advance the knowledge of the membership through mutual education and the interchange of ideas.

General meetings are held in the Palm Magnolia Room at the Orlando Public Library, 101 East Central Blvd., on the last Sunday of each month from 1:30 to 4:30 P.M. ST SIG special interest meetings take place in Room 134 at the Bush Science Center on the Rollins College campus on the second Wednesday of each month from 7 to 9:30 P.M. Ad hoc meetings are scheduled as needed to present speakers, conduct special workshops, provide tutorial seminars and for parties. We assist members in service and software problems, as well as arrange group purchases and discounts.

Information is disseminated to members through our newsletter, the ABLE Atari Information Digest (ABLE AID). A package of twelve selected previous issues of ABLE AID highlighting the "super eight" computers is available for \$10 (\$5 for members). In 1990, ABLE began participating in the Atari Interface Magazine.

ABLE accepts written correspondence at P.O. Box 1172, Winter Park, FL 32790, while membership inquiries are handled by Hadley Nelson, President, (407) 671-0317 or Milton Eager, Treasurer, (407) 834-0581. Annual dues are \$12.

We have also established an ABLE Program Library of User Software (ABLE PLUS), consisting of several thousand files for the super eight and sweet sixteen computers. This library contains public domain programs contributed by ABLE members, as well as other computer clubs and users, to allow the sharing of user-written software. A computer specific listing is available to non-members for \$3 and disks are available to non-members for \$6 each.

The Atari Clubs of Denver

<p>ATARI CLUB OF DENVER Emperor: Chet Cox 303-899-9382 Librarian: Paul Hirc 303-699-9647 Treasurer Guy McDaniel 303-238-2366 Exec Director (means nothing) Joe McWilliams 303-790-7119</p>		<p>STARFLEET President: C.J. Bender 303-465-1769 Vice: Chris Guenther 302-279-4432 Secretary: Thomas Doughton 466-4304 Treasurer Charles Robique 303-424-2857 Librarian (Don't ask!) Wesley Crusher (Don't ask!)</p>
<p>EDITORIAL MIKE Mike McCutcheon EDITORIAL SCOTT Scott Andersen JF</p>	<p>ST Interest Group (STIG) 1st Speaker - Ed Fason - 371-6614 Librarians - Lou Mendoza & Joe Ronda Scribe - Chet Cox PictureDrawer - Jeremy Fason</p>	

Atari Club of Denver minutes December 4, 1990

Guy started the meeting off by showing a telephone dialer program that he wrote. The program uses a modem to dial a number that is typed into the computer. Larry then showed us the highlights of the latest version of his disk labeler program. He recently made some minor changes that make the program easier to use.

Election of new officers was next on the agenda. Larry was nominated for president and accepted. With a unanimous vote, Larry will be the president for 1991. Joe said that he would continue as Executive Director and Guy said that he would continue as Treasurer unless some else wanted those positions. No one spoke up, so Joe and Guy will continue in their respective positions. Paul also was willing to continue as club librarian. We should all thank these people for their efforts to keep the club going.

After the elections, Guy showed how to use the Desktop interface on the ST. Since most of the members only have 8-bits, this gave them a chance to see something a little different for a change.



StarFleet Meeting Minutes by Thomas Oughton

December 14, 1990 -- The meeting started with a total of 7 members present. Anyone who wants to attend our meeting, we now meet at Pomona High school in Arvada, Colorado. Mike bought a 20 meg. hard drive for the the Atari Clubs of Denver's Bulletin board. This along with a backup power supply he created, should make the board reliable. The phone number for the board is (303) 343-2956.

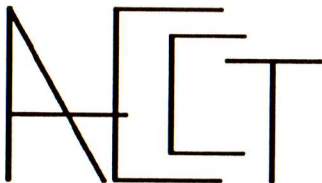
Other news discussed is that Diamond developer Alan Reeve is thinking of publishing a magazine. It will contain about 50% Diamond articles, and 50% other 8 bit articles. We discussed the idea of having less demonstrations, and spending more time answering questions. But, we need a larger turn out for that. Beginning users, COME TO THE MEETINGS, we would like to help.

The first demonstration was of a program written by our president Chris Guenther. This program he wrote for his mother allows a diabetic to record blood sugar levels, and insulin amounts. These values can be printed in either a bar graph form or a normal print out. This should help the doctor and patient control the illness. This program written in BASIC is available in the clubs library.

With Christmas upon us, the next demonstration was of the Christmas and New Year related programs in the club's library.

Mapware was the next program demonstrated. This oldie allows the 8 bit Atari to create detailed maps of portions of the world. It does not have all the country boundaries for all countries though. It will produce maps of four different projections; Cylindrical, Azimuthal Equidistant, Orthographic Equatorial, and Perspective. The Cylindrical is the fastest to generate, and the one people will use the most. Perspective is what the Earth looks like from an altitude entered. This program is written in BASIC and will run under Turbo BASIC which speed things up a lot. Using Turbo BASIC, it took about 12 minutes to create a perspective map. These maps can be saved to disk, and using a print program like Trent Dudley's Superb Screen Dump be printed on paper.

The Atari Club of Denver is going to catalog all the disks in their library. To speed up the job, one of their members wrote a program in Action! to catalog disks. This program is very easy to use. This product is very nice and after the demonstration we received, I hope it will soon be in the Starfleet library. The Meeting broke up at 10:05.



Atari Computer Club of Toledo club members receive, as part of their dues, Atari Interface magazine and access to the 8bit and ST public domain software libraries. Disks are \$2/8bit and \$4/ST. Non-members may purchase disks at a slightly higher cost.

ACCT meets on the second Monday of the month, from 7-9 pm at Bassett's Health Foods, 3301 W. Central Ave (Westgate Shopping Center), Toledo, OH. ST Sig held monthly at the home of David and Brenda Micka. Dates and times announced at meeting. ACCT may be contacted at 4487 289th, Toledo, OH 42611 or by calling Dave Micka at (419) 729-1891 or Michael Justice at (419) 242-7797.

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BBS support for ACCEPT: STEP El Paso: 915-755-STEP
STE-EP BBS El Paso: 915-821-9220

ACCEPT executive committee Steve Bruck, Tim Holt, L.R.'Pete' Rosh, Dave Davis

From the President, If you missed the December meeting of the club, you missed quite a bit. Here is a rundown:

The club now has a new name! members voted to change the club name from the ST Club to ACCEPT. ACCEPT stands for Atari Computer Club of El Paso Texas. This name is more encompassing than the name ST Club and should help to draw new members, those that may be familiar with the MS Dos and Mac formats that many of our club members are using. Some of us are using MAC and IBM almost exclusively on our Atari's. Because of that, we will be adding more MS- DOS and Mac stuff into our library.

Dave Davis has a tentative list of the library. 56 pages of arc'ed, lzh'ed, tos'ed, and apt'ed files. This represents a much larger library than we had previously, so if you see our former librarian, let him know how much we don't miss him. Dave is doing a GREAT job! Thanks again Dave!

The club will be getting some free copies of the magazine Atari ST Journal. You have to come to the meetings though, to get the magazine.

The auction was a great success! 21 items were auctioned off, for a grand total of \$254.35. Here are SOME of the deals that were made: A BEST mouse went for \$20. The excellent game Resolution 101, \$12. A hardly ever used version of Wordperfect \$75! We had \$40 an \$50 games going home with new happy owners for less than \$10! You can't get those kind of deals through the mail! (And there are STILL folks out there that won't join our club! Go figure.)

Club member Bill Marquis won the Atari Lynx that we raffled off for Christmas. Congrats to Bill, and thanks to all of you that helped sell and buy tickets. We made a few dollars on the raffle, and we certainly didn't lose any money, which was my only real concern.

The Kraft Tripletrack trackball for the ST was the demo by myself, and Steve Bruck demoed how to install Neodesk after most everyone else left.

I want to take this opportunity to wish all the club members and thier families a wonderful new year. You know, we have anifty little computer, and even though our numbers grow smaller and smaller each year, you folks have continued to help ACCEPT prosper and grow. We now have members in Canada, Mexico, and in 12 of the 50 states. That is due to your help, your confidence and support that what we are doing each month is a help to you. I would personally like to thank those members that have hung on for a long time with us: Paul, Dave, Pete, James, Suzy, Tom, Mark, Steve and any others I may have left off. To you new members, Wendell, and Joe, you are the hope for our club in the future. I thank you all!

Have a Happy New Year!



The Atari Computer Owners of Rochester, NY (ACORN) meets on the 2nd Wednesday of each month at Brighton High School, based in room 262S. Before each meeting, a STarter class for the ST meets at 6:45 pm and a Basically Speaking class for the 8-bit starts at 7:00 pm.

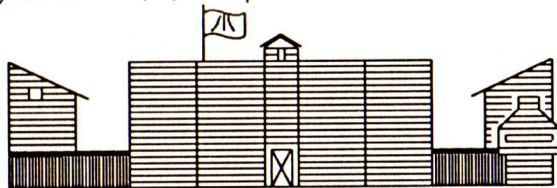
ACORN operates a BBS at (716)436-3078 with 52 megs of public domain downloads for the 8-bit and ST systems. Our mailing address is POB 23676, Rochester, NY 14692. Dues are \$18 per year which includes access to the club's PD libraries, enhanced access to our BBS, and subscriptions to our newsletter, the ACORN Kernel and to Atari Interface Magazine.

President	Don Allis	(716) 293-3415
Executive VP	Albert Yarusso	(716) 244-4487
8-BIT VP	Nick Cup	(716) 266-1648
ST co-VP	Dick Orme	(716) 334-4093
ST co-VP	Robert Costello	(716) 244-4487
Secretary	Chris Freemesser	(716) 328-1703
Treasurer	Vinnie Indovina	(716) 594-9731
Basic. Speak. Class	Jeff Summers	(716) 342-7632
STarter ST Class	Stu Woodard	(716) 352-4937
Kernel Editors	Candi & Bruce Nelson	(716) 334-5513
8-Bit Librarian	Nick Cup	(716) 266-1468
ST Librarian	Joe DePierro	(716) 223-7838
Ex. Newsletters	Helen Kiker	(716) 924-4809

December Hi-Lites At the December meeting, Kernel Editor Candi Nelson demonstrated PageStream and how the ACORN Kernel is put together. Bruce Nelson showed a videotape of his visit to San Jose Computer and talked about his visit to Atari HQ.

The January 9th meeting will be our annual "disk swap". ACORN members may purchase copies of any of our ST or 8-bit p/d library disks for only \$1.00.

The ACORN BBS is available to all Atari users. The number is (716) 436-3078 at 3/12/2400 bps.



**ATARI COMPUTER OWNERS RESOURCE NETWORK
FORT WAYNE, INDIANA**

ACORN, the Fort Wayne area Atari users group, meets at the Georgetown branch of the Allen County Public Library on the first Saturday of each month beginning on at 10 AM. Annual membership dues are \$18. Call our BBS at (219) 744-1396 for more information or write to us at ACORN c/o Ken Helms, 3627 Iowa Court, Fort Wayne, IN 46815.

CALENDAR: Tentative schedule for the demonstrations at the monthly meetings are: February, Computer Utilities; March, Business Software; April, Programming Languages; May, Music; June, Telecommunications; July, Three Rivers Festival

Meeting Notes: Kevin Van Zuilen, president of the local chapter of the IEEE, has expressed an interest in affiliating his organization with ACORN in order to gain a node on the national BBS network. The IEEE will pay the added cost of the long distance calls. The officers are working out the details of the affiliation. Scott Schaffer demonstrated Micro Illustrator on the XL/XE. Scott Sorg demonstrated Degas on the ST.

The February meeting will not be at the usual time and place. The library is conducting personnel training and the officers are investigating alternative times and places.



Regular meetings are held at the VAFB Federal Credit Union, Vandenberg Village, California on the first Monday of every month at 7:00 P.M. Dues are \$10 for individual or \$15 for family membership. The Atari Federation maintains a PD software library for both 8-bit and ST computers.

Atari Federation, P.O. Box 5367, Vandenberg AFB, CA 93437

Secretary's report: December's meeting was pretty quick. We elected new officers, or should I say our old officers were renewed for another year. So Phil Rominger is the President, Bob Ribortone is the V.P., Matt Matias is the Secretary, Herb Kanner is the Treasurer, and Chester Hadly is the 8-bit Librarian. Two new officers are: Al Hanson is now the Newsletter coordinator and Dan Liston is now the 16-bit Librarian.

Besides the elections, several gifts were given to members as door prizes. To top-off the evening, this was the club's Holiday Pot-Luck. If you missed this meeting, you missed some good eating. Seasons Greetings.



The Birmingham Atari Computer Enthusiasts of Birmingham, Alabama meets at the Vestavia Hills Library downstairs at 7:00 p.m. the second Monday of each month. Membership dues are \$20 for a regular membership, and \$35 for a professional level membership.

Mark Bodenhausen	President
James Gilreath	Vice President
Brenda Bodenhausen	Secretary
Steve Yates	Treasurer

For membership information, contact Steve Yates, 1005 Candy Mountain Road, Birmingham, Alabama 35216.

Our BBS is at (205) 833-5012. This is both a voice and data line. To access the BBS, press 1 after the first ring. For voice, press 2. After 6 rings, 2 is automatically selected.

BRAG ST



Buffalo Region Atari Group for ST's

BRAG ST was founded in 1987 to serve Atari ST owners in the Western New York area. General Membership Meetings are held on the third Thursday of the month at Erie Community College North Campus, Room S-105 in the Student Center. Setup begins at 7:00 PM; Meeting starts 7:30 PM. The Board of Directors meet on the first Tuesday of the month at the Your Host Restaurant, Harlem at Sheridan at 7:30 PM. All are welcome to attend. Piracy will not be tolerated at any BRAG ST function.

BRAG ST, PO Box 1035, Buffalo, New York, 14225

Chairman	Mark Pierro	(716) 691-7844
Vice Chairark	Ken Malark	(716) 683-1272
Finances	Gerry Genson	(716) 877-1328
Records	Joe Rogozinski	(716) 877-8378
Disk Librarian	Carl Barron	(716) 885-4325
Public Relations	Harvel Hontz	(716) 689-8074
Graphics	Dick Kersting	(716) 839-0494



November 15, 1990 BRAG ST General Meeting

Club Business: AIM- A vote was taken in regard to the "Editorial Ramblings" article on page 6 of the November AIM. The results of the vote were to "keep the price, size and quality the same, but move to second class mailing".

Board of Directors Elections - The following members were re-elected to the Board of Directors: Mark Pierro, Gerry Genson and Joe Rogozinski; also elected as a new Board member was Dane Stegman.

TV/Monitor - Mark Pierro reported the results of the Committee which went to Stereo Advantage and inquired about a 20 inch TV/Monitor for the club. The choices were between a Samsung (\$249) and JVC (\$350). The membership voted to purchase the Samsung.

Club BBS - The membership was reminded that the Club BBS, "BackScatter", phone number is 684-3978 and the access code is 'boast' (no quotes) for message area 69 and file areas 61, 62 and 63.

Demonstrations: Dick Kersting did a great job in demonstrating his MiGraph Hand Scanner. Several members brought pictures for Dick to "scan" in for future manipulation and/or storage.

At the break we raffled off Vegas Craps (won by Bert Royce) and LDW Basic (won by Bill Schmitt).

Bert Royce got the demonstrations going again with a MIDI demo. He showed various techniques that professional musicians use to help create and edit music. The last demonstration was on ST Aladdin by Carl Barron. Using this program helps you navigate GENie, simplify tasks, minimize time online and therefore saves you money! This program looks like it will become as popular with ST users as it is with the IBM users.

The meeting adjourned at 10 PM.



B.R.A.C.E. (Bluegrass Region Atari Computer Enthusiasts) meets the third Sunday of each month from 1 - 4 PM. Current membership dues are \$15 per year for an individual membership, \$20 per year for a family membership and \$10 per year for an associate membership. (An associate membership includes receiving the monthly newsletter, but excludes the use of the library.) Members of have extra privileges on The Abyss BBS (606) 223-2782.

President Hal Nason (606) 269-8989
 Vice President Greg Parsons
 Secretary Chris Dotson



The Capital District Atari Computer Enthusiasts was founded in 1981, is located in Albany, N.Y. and serves Albany, Schenectady, Rensselaer, Saratoga and surrounding counties in upstate New York. XL/XE meetings are currently held on the third Wednesday of the month and ST meetings on the last Wednesday of the month. CDACE meetings are held at the Computer Cellar, located in Westgate Plaza, Albany, New York.

The club has extensive public domain libraries for both computers which are available to members beginning at 6:30 PM on meeting nights. ST-based disks are priced at \$2 while the XE-based library continues to remain free to all members.

Dues are currently \$20 per year for each family. This includes a subscription to AIM magazine, full access to the club BBS, and our monthly newsletter. The club actively promotes the use of all Atari computers through demonstration and application and welcomes non-members and share ideas.

President Bob Thompson 518-439-5356



Cascades Atari Computer Enthusiasts is the Atari Club in and around Jackson, MI. The CACE BBS is run by the club and open to everyone. The number to call is (517) 764-4047. Current membership dues are \$14.80. Any written communication with CACE should be sent to PO Box 6161, Jackson, MI 49204. Our meetings are held on the second Saturday of the month from 1p.m. to approx. 4p.m. at the Boos Recreational Center. For more information, contact Brent Fisher at (517) 764-4599.



Cookeville Atari Computer Enthusiasts—c/o Robert Pecora—280 Capshaw Drive—Cookeville, TN 38501—Cookeville A.C.E. meets on the first Saturday of the month at 1:00 p.m. at the Putnam County Library in Cookeville, Tennessee.—Cookeville A.C.E. caters to Atari ST and 8-bit computers and is supported locally by The Generic BBS, Terry Rapp - Sysop.—C.A.C.E.

President Dan Hale (615) 526-8002
 Secretary Robert Pecora (615) 528-7116



President Norman Moore (503) 447-3598
 ST-VP Bob Kanski (503) 548-8201
 8-Bit VP Marc Hitson (503) 648-0513
 Treasurer/Editor Glenn Dulin (503) 382-3956
 Secretary Nancy Kanski (503) 548-8201

Central Oregon Atari Club, PO Box 6824, Bend, OR 97708
 Membership dues are \$1/month and \$1/year for each additional family member. We meet every second Saturday of the month at 5:00 PM at the Ann Rita Conference Center, which lies just in front of the St. Charles Hospital on Neff Road in Bend.



The Champaign-Urbana ST Users 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 in Urbana, IL. Membership dues include a subscription to AIM and GLITCH and use of the commercial lending library. New members are welcome. The group supports a local BBS, Blackhawk's Keep, operating 24 hours a day at 3/12/2400 baud (1/8/N): 217-892-5512.

Henry Murphy President
 Jimmie Myers Vice President
 Jim Linder Secretary/Treasurer
 Tim Brumleve Librarian

CRAG Calumet Region Atari Group

CRAG Calumet Region Atari Group PO Box 10995 Merrillville, IN 46411-0995 CRAG, is a club for users of the Atari ST, STE and MEGA ST computers. CRAG meetings are held on the second Wednesday of every month at Broadway Music, which is located in Greentree Plaza, at 1509 West 81st. Ave.(U.S. 30), Merrillville, Indiana. Meetings begin at 7pm.

Membership in CRAG is open to anyone. Dues are \$15.00 a year and entitle you to a subscription to Atari Interface Magazine, as well as discounted prices on CRAG's Public Domain/ShareWare Library disks. Library disks are double sided. Cost per disk is \$2.50 for members \$4 for non-members. For more information call:

Jeff Coe (219) 663-5117 Randy Noak (219) 663-6912

President's Ramblings by Jeff Coe

Well, this is my first column to be printed in AIM. Due to my own uncertainty concerning lead times, I won't be passing along any time critical information this month. As I write this we have a few days yet before the CRAG Christmas party. I hope we had fun!

For January, we'll be giving away the ST SOUND SAMPLER that was donated to us by Datel Electronics. Come on out and throw your name into the hat for the drawing. I don't have the program topic worked out yet for this month, so I guess you'll just have to take your chances and see what we can come with. I promise that we'll have something to keep your interest.

It's also a bit early to give much information about the monthly Library disk. It'll either be a disk full of those fantastic Knowledge Vine childrens programs or a new Utility disk. We've been collecting some very nice software lately, plus starting this month we should be getting some help by way of AIM's Disk of the Month club. Which brings up a topic we need to think about. Do you, the members of CRAG, want us to make these disks from AIM available to you exactly as they come in? Or, should we pick and choose the programs we want from each disk and try to incorporate them into theme disks the way we have been? It's a decision that I think needs to be voted on since we're all paying for the disks.

I need to pass along a bit more information here. If you write articles for inclusion into AIM (please do!!), you need to get them submitted to an officer of CRAG by the 12th of the month. That way we can get everything collected and submitted to AIM in time to meet their deadlines.

Finally, you may have noticed that we haven't got a nice logo at the top of our section like the other clubs have. How about a contest? Get out your graphics software and see what you can come up with. The only requirement is that your design must be in black and white, so it can be used as clip-art. The higher the resolution the better. The entry voted best will appear at the top of this column every month, and the artist will receive a free disk from the PD/ShareWare Library. (OK, so it's not the greatest prize in the world, but what do you want from me??) See you all at the meeting.



The Eastside Atari User Group, (EAUG), meets on the first Monday of every month, 7PM, at the Alton Square Mall Community Room, in Alton Il. All meetings are open to the public. No club dues. PD library, club newsletter EAUG-Log, newsletter membership \$18 per year. Member group of the Midwest Atari Regional Council, MARC.

Club BBS's: Eastside BBS 618-254-6077 and Garage BBS 618-344-8466. EAUG's address is 2425 Crislisa Dr, Alton, Il. Call 618-465-0342 for EAUG information.

Hank Vize	President/Editor
Dave Pintar	Vice-President
Kelly Webb	Secretary
Larry Hutchison	Treasurer
Tom Guelker	ST Librarian
Kent Savage	8-bit Librarian
Dave Holden	Co-editor

F.A.C.C.S

First Atari Computer Club of Spokane

We currently own and maintain a 24-hour Bulletin Board System (BBS), open to everyone with a 300, 1200, or 2400 baud modem, called the Atari Zone 509-326-5741.

Since we currently have renewal dates scattered throughout the year, please check your card for your current expiration date. Remember, once your membership expires we are no longer able to send your AIM Newsletter or allow you to remain at the F.A.C.C.S. level on the Atari Zone. To prevent interruption in your F.A.C.C.S. services please renew by the expiration date on your card.



President's Message

President	Jeff Yoe	(913) 682-2883
Vice President	Jeff Barker	682-9253
Treasurer	Jim Muri	651-0600
BBS Sysop	Dave Hagan	682-2452
Librarian	J.D. Johnston	682-2883



The GTAUG has been 'around' since 1981 and supports both the 8-bit and 16-bit communities. Meetings are held the first Tuesday of each month at a location announced in the previous meeting.

At present our dues are \$24 per year (Our year begins in September.) and is pro-rated at \$2 per month for new members the first year. Since our nearest dealer is 90+ miles away, it is imperative that we support each other. It is for this very reason our group is a fairly close and diverse. We support all facets of Atari computing from 8-bit to Spectre/Mac to IBM and MIDI.



GRASS meets the first Wednesday of every month at the Wyoming Public Library, 3350 Michael S.W.. Doors open at 6:30, meeting starts at 7:00pm. Dues are \$22.00/yr. including AIM. Bring in one PD software disk and get 2 blank disks for your time.

Tim Feenstra	President	(616)249-9742
2239 Collingwood SW.,	Wyoming, MI 49509	
Greg Williams	Vice President	(616)698-7319
George Nosky	Treasurer	(616)942-1527
Len Brothers	Secretary	(616)532-0653
Chuck Baughman	Librarian	(616)795-7373
Gerry Borysiak	Membership	(616)896-9358
Charlene Bird	Co-Librarian	(616)795-3593





The Houston Atari Computer Enthusiasts meet on the fourth Wednesday of the month, 6:45pm at the Health Economics Corporation, 2400 West Loop South, in Houston, Texas. The club supports all Atari computers from the 400 to the Mega4.

Membership is \$22 per year, and gives full access to our BBS (713) 458-9923, access to our disk, magazine and newsletter libraries, a subscription to AIM, and our local news journal UPDATE ATARI. There are also other benefits, such as store discounts, door prizes, workshops, telephone help when you have problems, and much more! For more information, please contact one of our officers or drop us a line!

HACE, P.O.Box 460212, Houston, TX 77056

President:	Bill Kithas	713-855-0815
Vice President:	John Hauser	713-458-0595
Secretary:	Bob Leeper	713-665-3229
Treasurer:	Jim Salmon	713-879-8119
Newsletter Editor:	Tracy Webber	713-981-5343



Jersey Atari Computer Society, P.O. Box 710, Clementon, New Jersey 08021. JACS BBS: (609) 346-1224

The Jersey Atari Computer Society (JACS) provides a forum through which members may further their understanding and enjoyment of all Atari computers, through the exchange of ideas and information with other users.

JACS holds two meetings per month at the Camden County Library, across from the Echelon Mall in Voorhees, New Jersey. The executive meeting, where all the planning for the club takes place, is held in the 2nd floor meeting room from 7-9 PM (meeting dates vary from month to month). The regular JACS meeting is usually held on the third Tuesday of each month, in the 3rd floor meeting room from 7-9 PM.

President	Mike Hopkins	227-9058
ST Vice President	Maureen Kelly	428-9381
Treasurer	Forrest Blood	877-3579
Recording Sec'y	Gary Mickus	767-1933
Membership Chair	Al Guretse	596-7567

The regular monthly meeting includes topics of interest for users of all Atari 8-bit (400/800 & XL/XE) and 16(ST/Mega) computers.



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, 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 So. 2275 W., Roy, UT 84067-3515.

Irwin Brooks,	President/ST Librarian	(801)731-1516
Richard Clark,	Vice President	(801)825-5823
Ken Karchner,	Secretary/Treasurer	(801)776-8015
Lonnie Allen,	8-Bit Librarian	(801)392-4450
Kelly Knecht	ST Librarian	(801)773-5652

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.

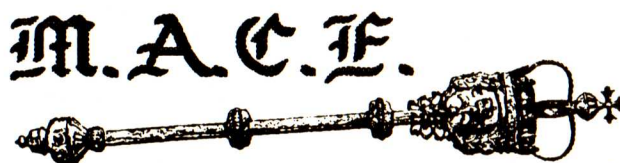
Mark your calendars for the next meeting: December 12, 1990.



The Long Beach Atari Computer Enthusiasts meet on the second Sunday of the month at 6:00 pm. Meetings are held at Mercury Savings and Loan on the corner of Long Beach Blvd. and Carson in Long Beach. Address is PO Box 92812, Long Beach, CA 90809.

President	Richard Hull	(213) 422-1055
Vice-president	John Saunders	863-2582
Treasurer	Pat Connelly	
LBACE BBS		498-8824

Club dues are \$20 annually. The club supports both the 8bit and ST. Members have access to the club's PD library and BBS and receive a year's subscription to Atari Interface Magazine.



The Michigan Atari Computer Enthusiasts

Members of MACE receive, as part of their dues, Atari Interface Magazine. Members are also entitled to purchase disks from the 8-Bit and ST public domain software libraries. 8-Bit disks are \$3 each, and ST disks are \$4 each. As an added bonus, if you purchase three (3) disks from either library you will receive a fourth disk of your choice at absolutely no cost. Non-Members may purchase disks at a slightly higher rate. Mail order is also available.

For a catalog of current disks in our libraries, send \$2 to: MACE, P.O. Box 2785, Southfield, MI 48037

MACE meetings are held on the Third Tuesday of each month at the Southfield Civic Center at 7:30pm. The Southfield Civic Center is located at 10 1/2 Mile and Evergreen Rd, one half mile south of the Evergreen exit on the new I-696.

Meetings are in the small pavilion, room 115. Parking is available in the parking garage below the pavilion or in one of the many parking lots on the Civic Center grounds.

If you have any problems with getting to the MACE meetings, please feel free to call on a MACE Officer to relieve you of your confusion. We are always glad to extend a helping hand!

Please come and join us! We are awaiting your visit!



The Mid-Ohio Atari User's Group (MAUG) is again without a place to meet. If you know of any appropriate place which is available, please contact Chuck Steinman as soon as possible.

MAUG membership dues are \$8.50 per year for residents of Ohio, and \$12.50 for non-residents. Included with membership is a subscription to the Atari Interface Magazine (AIM) at no extra charge. ST users may elect to also receive the AIM ST Disk of the Month, for a total fee of \$20 per year (\$30/year for non-Ohio residents).

Please make payments out to Chuck Steinman/Maug, and mail them to Post Office Box 134, Ontario, OH, 44862. Payment must be received by the 10th of the month preceding publication, to assure receipt of that month's magazine. Please notice your membership expiration date is printed on your address label, and renew at least 30 days in advance of that date to assure uninterrupted service.

**Middle
Georgia**



**Atari
Users
Group**

The Middle GA Atari Users Group is the sole Atari Club in the Middle Georgia area. We are composed of 60 members of which approx. half are ST users. Club president Pete Miller can be reached by phone at 912-328-8758. The MGAUG address is 115 Feagin Mill Rd., Warner Robins, GA 31088. MGAUG meets the second Sunday of each month at 1 PM at the Warner Robins Library. Annual dues are \$5 with the newsletter optional. Use of the club library is free to all paid members.

The December meeting was a little scarce again this year as it has been in years past. Most of the discussion in the meeting centered around the new Mega ST and its enhancements. The club has an offer from the makers of Word Flair for a discount on the purchase of their word processor. Just send them a disk from Word Writer ST, 1st Word Plus or Word Up and you can purchase the latest version of Word Flair for only \$75.

In related sales offers to the club. Practical Solutions which in the past has allowed the club to try some of their fine products has a BIG sale on their Tweety Board. For a mere \$14.95 plus shipping you can get stereo effects out of you ST.

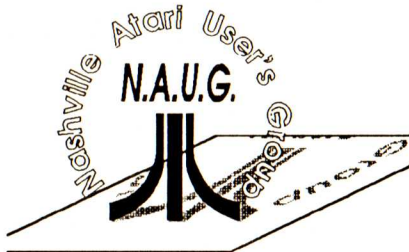
Lee Mavity has been nice enough to bring some of his latest issues of European magazines to the meeting for everyone to see. For the ST gamer this is the only way to see some of the great games that are available. Speaking of great games - for you WWII buffs WolfPack is coming out for the ST. WolfPack is a submarine simulation that looks great, Computer Gaming World readers gave it very high marks.

The AIM disk was not available yet this month but I am looking forward to seeing it soon. Be sure to bring your blank disk to the next meeting. Pattie at Unicorn Publishing has assured me that our issues will be coming a little more on time in the future.

If you are using our local IBM bulletin boards ST area then be sure to note that it may go down if you don't act. If you enjoy using the board then be sure to send the SYSOP at least \$10 to cover his phone bills for the next year. If he does not get enough money then he will shut down.

There is also still a lot of software for sale at our bargain table. Some titles include: Final Assault, Battleship, Police Quest II, World Games, StarGoose, Jinxter, The Pawn, The Guild of Thieves, Dive Bomber, Harrier Strike Mission and others. Most are selling for a mere \$6 and are in their original boxes.

Well, that is about it for this year. I hope to see you in February and be sure to bring all the Christmas ST goodies that you get from Santa.



Nashville Atari Users' Group P.O. Box 121752 Nashville, TN 37212. NAUG meets on the third Thursday of each month from 7PM to 10PM at the Cumberland Museum and Science Center. Membership dues are \$24 per family for the entire year. With your membership you will receive our local newsletter, Atari News, a subscription to Atari Interface Magazine, access to the club's 8-bit & ST Public Domain/Shareware libraries, any group discounts on products, and entrance to all club related functions. We have an Associate Membership for \$12 per year. With this membership, you will receive Atari News, AIM and access to our 8-bit & ST PD/Shareware libraries. People joining during or after the month of July pay 1/2 the yearly rate. Visitors are welcome to all meetings.

President & Editor	Walt Sullivan	(615) 228-7353
Treasurer	Michael Gardner	(615) 868-0843
8Bit Chair & Librarian	Jerome Seward	(615) 385-9366
ST Chair & Librarian	Lee Griggs	(615) 356-9071



O-ACEs is a non-profit group interested in getting more out of Atari computers. We are NOT affiliated with Atari Corp. or any other commercial organization -- we are there for YOU! We cover BOTH 8-bit (including the 400/800, XL, XE, and XEGS series) AND 16-bit (ST series) Atari computers. We meet twice each month (except November and December) on the 2nd and LAST Wednesday each month. Doors open by 7:30 pm at La Vista Recreation Center, 8116 Parkview Blvd. (just off 84th Street, south of Food-4-Less and east of 84th at the light)

FIRST MEETING: (2nd Wednesday) Covers news, views, and decisions that ALL members might be interested in. FOCUS MEETING: (LAST Wednesday) Concentrated information on a single topic (such as word-processing, spreadsheets, music composition, desktop publishing, etc.)

Call 592-5427, for more info on O-ACEs!

Meeting News November: For November's meeting, we held our annual election/re-election of officers for the coming year. Only three offices were filled. For President, George Ortiz was voted unanimously in, Bill Zimmerman stayed on as the 8-bit Librarian and the new ST Disk Librarian is the former Vice-president, Pete Killian. No Vice President was voted in, but we are looking. Pete is filling as VP until we get a new one. The end of the month FOCUS meeting was not held because of Thanksgiving.

December: December's meeting has come and gone. We did vote Marc Lombardo for the office of Secretary/FOCUS Coordinator. Marc said he is looking forward to the new year for our club. From our mailbox we received several newsletters from other clubs, especially LACC. We also received our holiday greeting from AIM, thanks.

Also last, but not least, we received an offering from the author of the program GramSlam, the word processor accessory. During our meeting several ideas were floated around about increasing our membership. The main idea discussed was to take out a classified ad in our local newspaper. We are still looking for more ideas, if you have any other ideas, call me (George Ortiz) at 292-1904 or Pete Killian at 592-5427.

Upcoming Focus Meeting Subjects

We will be back to our normal schedule in January, when Pete is going to show/discuss in-depth the Aladdin program for Genie. I am going to show/discuss Combat/Simulation programs for February 1991.

New Membership Benefits!

Pete discussed new benefits we just instituted for new members. Among those new benefits is a one-time only chit for new members. The new member must redeem this chit within one month after it was issued for a disk of his choice from the club library.

Our disk library has been relatively stagnant recently, what with our previous librarian being called out of the country unexpectedly. We have been adding AIM disks regularly, but there has been little else coming in. We "aim" to do more for you our members! Even better, we think a lot of you can help to make things better by contributing PD/shareware you have that is not yet in our library. To make things sweeter, every one of you have a limited time (until the end of January 1991) to bring in as full a disk as you can and trade it for any other disk in our library. Now that you each have your own library disks (I still have some members that have not claimed theirs), use them and bring back some goodies, even if they are also oldies!

Local Show Coming Next Year

We have already been contacted about an annual event in our area, a Computer Expo held at a local junior high school. Our group has had a prominent place at the show for several years now, though primarily as a fairly ad hoc show and tell of some members favorite programs/hardware. This year maybe we can do a theme presentation (any suggestions welcome) and do even more to get the word out about our favorite machines. The show will be coming up in March 1991, more about that later.

Well that is all for now, Merry Christmas and Happy New year. George





Annual Dues \$25.00

Newsletter ONLY (year) \$10.00

The Portland Atari Club with the Original Eugene Atari Computer Enthusiasts

Portland Atari Club and the original Eugene ACE

We of the Portland Atari Club are very excited at becoming members of AIM. PAC is one of the oldest Atari clubs and still has active sections of both 8-bit users and ST members. We currently are available through the ACE of America BBS at 503-285-4417 operating on 300/1200/2400 baud. Club meetings take place the first Monday of the month at the Northwest Service Center on NW 18th and Everett. All are welcome. Meeting time is 7 till 9:30 pm.

The Portland Atari Club wishes to announce the results of the elections for positions on the Board of Directors.

President: David Hunt 286-6276

Vice-Pres.: Ben Smith 256-9974

Sec-Tres.: Mel Anderson 232-7231

Sergeant at Arms: Dutch Leonard 257-0481

8-bit Librarian: John Johnson 655-2092

ST Librarian: Teri Williams 771-7337

Membership Sec.: Randall Leong 246-6354

8-bit Program Dir.: Bob Beck 206-693-0347

ST Program Dir.: Paul Karczag 256-4199

Sig Coordinator: Mel Anderson 232-7231

BBS Director: Chris Healy 775-5295

I would like to congratulate the lucky winners, and commend those who ran unopposed for their willingness to serve.

In addition to having our annual elections, we also held our November swap meet and there were some very good bargains to be had. There were a couple of items I didn't even know existed! My only regret is that I was so busy running the meeting and elections I didn't have the time to spend any of my own money. It's not like I don't have enough stuff already but there is always something new to see and enjoy. We also passed a revision to our club charter which essentially removes the extra year of free membership for board members. This was passed unanimously.

By the time you read this letter we will have also had a hopefully successful Christmas party and will be looking forward to that new little Atari bonus under the tree. Maybe a monitor or printer, or how about a 9600 baud modem?

There is a BBS you may call which contains information on and about the club. ACE of America at 285-4417, 2400 baud and under. The monthly AIM disk is also available from the librarian at a reduced price. You must come to our monthly meeting where you can get this fine disk for \$2.00 plus a blank disk in exchange.

PORTS ATARI P.A.C.E. COMPUTER ENTHUSIASTS

Table with 3 columns: Position, Name, Phone Number. Includes President Tracy Hendershot, Vice President Larry Nadeau, etc.

Membership to PACE is \$30.00 per year or \$9.00 per quarter. General meetings are held at 6:30pm on the third Sunday of every month. In the event of a holiday, a new date will be chosen and will be posted within the pages of this newsletter and on local Bulletin Boards. Membership includes a monthly newsletter, monthly meeting, FREE Disk-of-the-Month, access to our BBS, FREE printer ribbon re-inking, and FREE copying priveleges to our VAST collection of 8/16 bit Public Domain programs. Ports A.C.E. is an alliance of families with a mutual interest in the Atari Computer and is an independent, non-profit organization. PACE hardware assets: 130XE, 1050 Drive, MacInkr and a Supra 300 baud modem. Any written correspondence should be addressed directly to Ports A.C.E., Tracy Hendershot, 4835 Crosley Avenue, Duluth, MN 55804.

I hope this Holiday Season has been special to all! The New Year is off to a great start. Our club has finally purchased its own 520ST-FM (The "F" stands for internal floppy; "M" means with built-in RF modulator.) No longer will the ST people have to bother with disconnecting their systems at home and lug them to the meetings. This will be an excellent system to start with and the ST Librarian said he saw no trouble transporting it to each meeting. Come early this month and work or play with your clubs' 520ST!

Larry Nadeau has undertaken quite a few 8bit projects this winter. Already, he has completed hard-wiring an IBM keyboard into his 130XE, lights and all. Mr Nadeau also says he has an awesome project in the planning stages and may even surprise us by Spring! Way to go Larry!

Many rumors and flying about lately. Since they are only rumors, I won't bother you with the boring details and just waste space in AIM, I'll bore you at the meeting! Also election of officers this month, so try to attend our next meeting on Feb 17th.



P3Atari Computer Enthusiasts (P3ACE)

Serving the Colorado Springs, Colorado ATARI community since 1982. PO Box 17779, Colorado Springs, CO 80935

Table with 3 columns: Position, Name, Phone Number. Includes President Rick Reaser, VP ST Terry Quinn, etc.

The masthead should show our "new and improved" club officer compliment which was elected at our annual Christmas meeting. Some new and some old faces are included. We are still looking for an 8-bit VP. In the meantime, Dave Koster and I will be taking up the slack.

For those of you who missed it, the annual Christmas meeting/party was a real success. We managed to give away a good amount of 8-bit and ST software. We even sold a few things for \$2 bucks apiece. We consumed mass quantities of goodies. Steve Leser even brought a cake. About 30 people made it in all. The club treasury and membership count are in good shape as reported at the meeting by Jerry Sundee. We discussed the AIM options and most felt it would be nicer to get the magazine faster. We will also start sending out reminders to people to renew their memberships this year. If you have any other suggestions to make the club better, please let one of the officers know. The club is going to join the Atari User Association (AUA) and try to get on the official Atari user club list for the billionth time. (Maybe they don't like us. We keep sending in our name, but they never respond.) Who knows, maybe Bob Brodie will even visit Colorado Springs. We are also going o try and get more outside speakers to come to the club, like from Denver. Hopefully, more or our 65 members can make it next year to our gala Christmas gathering.

The November ST SIG was a great success. Over 40 people showed up. What a shocker!!! Three new members were added to the club roles. The topic was utilities and Steve Leser had a nice program for us all.

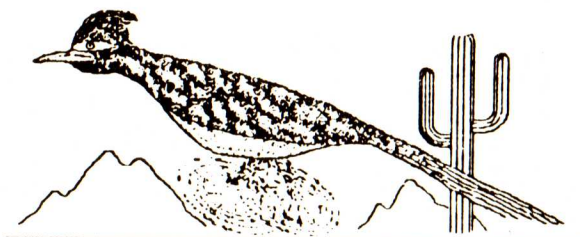
As is always the case, we need more of you to write up articles for AIM to keep it the high quality magazine that it is. Several of us have written articles already, and we hope to see more.

LASERNET BBS (591-4620) now has several FidoNet echos up and running. Be sure to check in for the latest in Club News and happenings. If you don't have a modem, call me about borrowing the club's 300 baud Hayes "loaner modem."

For those of you who are on GENIE, be sure to check out GENIE Lamp. Our own John Peters is the editor. Terry Quinn is a frequent submitter, along with a few other members.

Please examine your address label to see how your membership is faring. See you at the next SIG Meeting.





PHAST - Phoenix Area ST

The PHAST monthly meetings are held on the second Saturday of each month at 8640 N. 19th Ave., Phoenix, Arizona from 9am to 12pm.

President	Robert Dytmire	(602)861-1903
Vice President	Lance Summers	(602)584-1183
Treasurer	John Steiner	(602)849-8949
Membership/Sgt. Arms	Mike Zachary	(602)273-1185
Recording Sec/ Editor	Jim Keho	(602)934-9181
Publications Librarian	Donald Thompson	(602)486-1593



The Rushmore Atari Computer Enthusiasts is a nonprofit organization of Atari computer owners not affiliated with Atari Corp. Meetings are held on the third Saturday of each month, 2pm, at the Westminster Presbyterian Church. Annual dues are \$12 for basic membership and \$15 for membership and newsletter. RACE offers the Black Hills Atari owner hardware and software support and the largest library of public domain Atari software in the state of South Dakota.

NO PIRACY WILL BE TOLERATED AT ANY RACE FUNCTION!

President	Rick Burton	(605)-642-5353
V. President	Duane Charter	



WE'RE NOT JUST PLAYING GAMES ANYMORE!

Rockford Atari Computer Club is comprised of avid, dedicated users of all Atari computers. We support and promote the use of 8-BIT, and ST/MEGA machines with extensive PD libraries, monthly meetings, and semi-regular SIGS.

We have had a change of meeting place this year, as our previous site is being used for adult education on Saturdays. We may be able to secure a regular space there, if we can agree to meet at some other time/day (possibly evenings?). Any suggestions, or other alternatives should be mentioned at the meeting. Our regular business meeting is held from 9 to noon, the third Saturday of the month.

We have accepted the gracious hospitality, of the Springbrook Congregational Churches as an alternative meeting place. It is located, off Alpine, just as you make the turn onto Springbrook road, from Spring Creek road. Our mailing address is 3902 15th Avenue 1 - Rockford, IL 61108. Our phone number is [815] 397-5316.



South East Valley Atari Connection meets the third Saturday of each month at 10 AM at 3234 S. Fair Ln. (Eaton Business Park, just off of 48th Street and Southern), Tempe, Arizona. Yearly membership is \$12.00. Membership includes reduced prices on PD ST and 8-bit libraries and monthly newsletter.

R.A.C.E.

President	Eric Schofield	851-5134
Vice president	Brian Casper	851-8092
Secretary	Tony Manino	851-8092
Treasurer	Jim Harrop	851-5134

Hey gang! Things are looking up in the Atari world! The Mega STe was announced by Atari Corporation at the November Comdex and it was supposed to have started shipping in December in Canada. Perhaps by the time you read this, it will be available in the good ol' U.S. of A!

Many months ago, I asked the club members exactly how many of you would be interested in a monthly club disk. At that point in time, we had at least a half dozen hands raised. As of right now (December 16) we have had only 3 subscriptions to this monthly disk. Why? The officers and I are working really hard to support the Atari community, it would be nice if the Atari community would help support the club. We need active members (let's not let our monthly attendance get low!), we need those subscriptions for the monthly disk (it's a good disk and we're working hard to keep it going, it takes many hours every month on behalf of me and Tony Manino), we need all of the members who haven't paid or haven't been active to make a decision ---> support the club or just be a loner.

Perhaps I sound a little bit upset. Sorry gang, I am. I am a full time student in school taking 18 credit hours, I have 2 jobs (I've pretty much quit one of them), I have family which I like to visit once or twice a month, and I am also the president of our users group. People complain about not having enough time to do things, well, I don't have enough time to do a lot of things neither. I'm only asking you to show up to the monthly meetings or to at least get involved with the club in some way or form. I think there are a few of you out there that don't appreciate the amount it takes to keep this club going.

Starting immediately, if you know someone who is interested in joining the club, tell them to get their subscriptions in as soon as possible. For the past 9 months, the officers have been catering to these people who continue to say "I'll pay the club dues next month." We are not going to waste anymore time calling these people. If they want to join the club, they'll join. If not, then so be it. I won't lose any sleep over it.

Let's get things in gear and make the club as good as it should be. By the time you read this, we should have an Atari dealer in the Raleigh area, I hope that you will support them and that your mail ordering volume will be reduced to nothing.

Next month's meeting will feature the Juggler! This is a program that will allow you to have several programs loaded into memory at the same time. Much like the MultiFinder for the Mac (except without the memory crashes). It should be really interesting and I hope that you will show up. Call me or any of the officers if you have any interests or questions.

Meeting: February 19 (Tuesday) at 7p.m. Richard B. Harrison Library "Juggler" memory partitioning demonstration



President	Claudette Tishcler	226-5644
Vice-Pres	Gary	521-2855
Treasurer	Kathi Koenig	892-0881
Newsletter Ed	Joseph Adato	449-6881
Disk Librarian	Barbara Carlstrom	371-2732

The ST Atari North Coast Enthusiasts (STANCE) is an independent, not for profit Atari computer user group and is not affiliated with Atari Corporation, or any of its affiliates, in any way.

\$12 per Year with a one time sign up fee of \$13.00.

STANCE club meetings are held every third Monday of each and every month at B & G Electronics, (located at 15729 Madison Ave., Lakewood, Ohio 44107) starting at 7:15PM





General Meetings are the 3rd Monday of each month at North Park Recreation Center Social Room, 4044 Idaho Street at 7pm. ST/8-bit workshop meetings are held on the 1st Thursday of each month at North Park Adult center, 219 Howard Ave at 7pm. All meetings are open to the public. Annual membership dues are \$18 which includes increased BBS access time, AIM subscription and reduced rates on the Disk of the Month. SDACE's address is PO Box 900076, San Diego, Ca 92190.

President	Richard Betson	(619)630-5869
Vice President	Mike Bergman	(619)558-7866
Treasurer	Nancy Rivers	
Disk Librarian	Marc Lawson	
Chief Wizop	Michael P. Odegard	
Editor/Co-Sysop	Steven Kiepe	(619)549-3207
BBS - 24hrs,	300-2400 baud,68MB	(619)689-8157



The Saginaw/Tri-City Atari User Group meets the last Saturday before the 18th of the month, at 9am, at the Rudy Zauel Memorial Library, on the corner of Center and Shattuck in Saginaw Township.

President	Bryant LaFrenier	(517) 835-2234
ST Librarian	LeRoy Valley	(517) 686-6796
Tres./Sec.	Marty Schmidt	(517) 792-6029
8bit Librarian	Ted Beauchamp	(517) 686-8872

Club dues are only \$20, which provides support for both the 8bit and ST, and fill access to the club's Public Domain library, along with a year's subscription to Atari Interface Magazine.

December Meeting: The December 15th meeting featured our annual swap meet. Only a few people showed up even though historically we usually have a good crowd. A few bargains were available but not much happen.

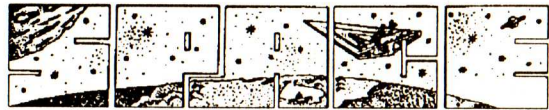
We tried to plan for the Fashion Square Mall Community Fair in Saginaw on the 4th-6th in January 1991. This show gives us one of the few opportunities to present the world of Atari computing to our fellow neighbors in the Tri-City area. With possible presentations of MAC and IBM emulators along with the computing power of an Atari computer, our group will impress the visitors at the mall.

For the JANUARY 12th MEETING: In the January meeting, we will look at Desktop utilities like NeoDesk 3.0, DC desktop with DC Utilities, and QuickTools. Hopefully, we will attract a few new members to the group once the STAG group present ourselves at the Fashion Square Mall in Saginaw, MI in January. Show Off Your Atari St!!

Equipment Volunteers For January 12th are Bryant LaFreniere with his monitor and 1040ST.



The ST Users Network -- supporting users of the Atari ST, Mega, and newer technology computers. P.O. Box 27285 Salt Lake City, Ut. 84118. STUN operates a 24 hour BBS -- (801)272-4243. Open meetings are held on the 3rd Wednesday of each month at 7 P.M. in the Murray High School.



The Southcentral Pennsylvania Atari Computer Enthusiasts support both 8bit and ST computers. Dues are \$15 per year and include a subscription to AIM and SPACE PROBES. Information can be obtained by writing to us at PO Box 11446, Harrisburg, PA 17108.

ST ☆ R ST ATLANTA ROUNDTABLE

STAR (ST Atlanta Roundtable) meets at Shoney's at 6551 Peachtree Industrial Boulevard at 7p.m on the Third Monday of each month. Membership dues are \$15 per year. Each member will receive a copy of AIM and a new PD Disk is available each month. For membership info contact Ed Cadow, Claude Brewer Rd, Loganville, GA 30249 or (404) 466-0014.

President	Bruce Hein	(404) 926-0095
Vice Pres.	Les Green	(404) 921-6462
Treasurer	Sidney Ayscue	(404) 320-6560
Librarian	Tommy Messenger	(404) 938-2718
Newsletter Ed.	Jim Menegos	(404) 473-9885

ST.A.R.R.

THE #1 ATARI USER GROUP IN THE NEW HAVEN (CT) AREA

ST Atari RoadRunners is probably now the oldest continually running Atari user group in the state of Connecticut. The club was organized in March 1986 by one of the New Haven area Atari dealers and at that time we were strictly an ST club. As time went on, other Atari groups started to disband and we found ourselves in and among the 8-bit users.

We hold our meetings at Greater New Haven State Technical College, in North Haven, CT. Our meetings have traditionally been held on the first and third Thursday of each month. However, starting in January 1991, we will hold only one meeting per month and that will be on the third Thursday. The first meeting of the new year will be January 17th at 7PM. Hopefully, we will be in Room 307.

If you would like more information about ST.A.R.R., feel free to contact one of our officers listed below. And, do call the ST.A.R.R. BBS -- our sysop gets lonely sometimes.

Matthew Masserman	President	(203) 621-7007
Lou Demetriou	Exec VPresident	(203) 271-0452
Merrill Ross	VPfor 8-Bit Affairs	(203) 239-9403
ST.A.R.R. BBS	(300 - 9600 baud)	(203) 421-486



The Southwest Washington Atari Group was formally created in April, 1985; prior to that, local Atari enthusiasts met on an irregular basis. The group has been holding its meetings at 6:30 p.m. on the last Sunday of the month (save July) at Clark County Fire District #5, Station 3 on 213 NE 120th, Vancouver, WA. SWAG started out with a large following of 8bit owners and as more and more members upgraded to the Atari ST, the membership has become mainly ST owners, but 8bit is still supported. Annual dues are \$12 and SWAG can be contacted at PO Box 1515, Vancouver, WA 98668.

Allan Coker	President
Steve Traxler	Vice President
Gary Lentz	Sec/Tres/Librarian
Michael Calvin	Newsletter Editor
The Bear Cavern BBS	(206) 574-1146

Salinas Valley
Atari
Computer Enthusiasts

SVACE is the only Atari user group in the Monterey Peninsula area. It supports both the 8-bit and ST computers. There is a free disk of the month for all attendants, bring your own disk. Dues are \$12.00 per year and includes Atari Interface Magazine. Meetings are at 7:30 P.M. on the first Tuesday of the month at the Salinas Community Center. Demonstrations and raffles are a regular part of our meetings. SVACE can be contacted at 672 E. Romie Lane, Salinas, CA 93901. Anybody interested in Atari computers is welcome.

We have had interesting meetings lately. By combining hardware from different users, we were able to scan things and print them on a deskjet. We had another meeting and again by combining equipment we connected two ST's together with a null modem. We then had demos of games that can be played by modem and a telecommunications demonstration.

The next meeting (which may have happened already) will be on MIDI. We expect to have two keyboards a number of MIDI programs and a demonstration of Sierra-on-Line's use of MIDI sounds in their games.

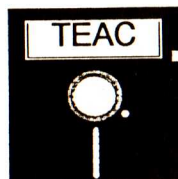


Tinker ACE of Oklahoma meets the first Saturday of each month at 1 PM (12:30 set-up time) in the Moore Public Library, 225 S. Howard, just off of SW 4th and I-35 in Moore. TACE can be contacted at 104 E. Northrup, Midwest City, OK 73110 or at the TACE BBS (405) 755-9561, 24 hrs., 3/12/2400 baud, running Oasis 4.3 software with over 60megs online storage. ST & 8bit support. Dues: Full - \$20, Correspondence - \$15. Dues are prorated at \$1.25/month for correspondence membership and \$1.66/month for full membership.

President/VP	Greg Ray	(405) 964-3765
Librarian	Chris Hamilton	
BBS Sysop	Rick Spencer	
Technical Advisor	Ron Hamilton	(405) 387-5649

WANTED
EPYX JUMPMAN JR.
Cartridge for Atari 400

If you have one for sale, please call me.
Ernest Weckesser
5370 Wolf Road
Erie, PA 16505
(814) 838-8865 days
(814) 833-5603 eves/wknds.



TEAC
The Educator's Atari Club

Yearly membership fee of \$25 includes 6 issues of the TEAC newsletter, the TEAC Educational 8-bit Disk Library catalog and a one year subscription to Atari Interface Magazine. For more information, contact TEAC at PO Box 1024, Laytonville, CA 95454.

UNYACE
Upper NY Atari
Computer Enthusiasts

The Upstate New York Atari Computer Enthusiasts (U.N.Y.A.C.E.) meet monthly at the New York State Electric and Gas building, on Old Vestal Road in Vestal, New York. Meetings are from 7 to 9 PM in the Auditorium. The next meeting date is March 12th.

U.N.Y.A.C.E. had optional dues of \$8 per year. Monthly meetings are informal and open to all who are interested in Atari computers.

Contact C. Todd Krissel, President, at (607) 729-4303 or call the Cygnus BBS at (607) 729-5506 (9600 baud, 24 hrs/day) for more information.



Ventura-RAM, a charter member of ACE-NET, meets the third Wednesday of the month at the Mercury Savings Bank at 1656 Arneil Rd, Camarillo at 7:30p.m. in the Mercury Room. Membership dues are \$24 for a full year, pro-rated monthly. Renewals are only \$20 a year. Newsletter membership only is \$15 a year, pro-rated. For more information on Ventura-RAM, contact PO Box 1513, Camarillo, CA 93011.

President/Newsletter Ed.	Tim McCoy
Secretary	Toni Peters
Treasurer	Mike Portanova
Sargeant at Arms	Barry Miller
ST Librarian	Dick Chacklin
8bit Librarian	John Lindquist



WNYAUG meets at 7:30 pm on the first Thursday of each month in room 116E, Bacon Hall at the State University College of Buffalo Campus, 1300 Elmwood Ave.

Dues are \$15 for new members and \$12 for renewing members. Send checks and correspondence to WNYAUG, PO Box 59, Buffalo, NY 14216.

President	Mike Husband	(716) 825-8486
Vice President	Kevin Packard	773-9325
Treasurer	David Shane	875-5350
Secretary	John Kasupski	
SysOp	Don Koepf	681-0564
8bit Librarian	Norm & Betty Knab	937-6974
The Wizard's Attic BBS		681-1654



W.A.U.G.

Windsor Atari Users' Group

The Windsor Atari Users' Group (W.A.U.G.), founded in 1982, is among the oldest computer clubs in North America to serve the Atari community. We are an international family of Atari owners with members from across Southwestern Ontario and the state of Michigan.

Our club meets every third Thursday from September through June with the exception of December when we meet on the second Thursday so as not to conflict with Christmas scheduling. We meet at 7:30 p.m. at the Roseville Gardens Community Centre, 6500 Roseville Garden Drive, Windsor, Ontario, CANADA.

Our club dues are \$25(Canadian) per family membership. Each membership entitles you and your family to attend our regular meetings, as well as receive the AIM magazine as well as our own monthly publication, 'exSTracts'. In addition, each membership gives you access to our ever growing public domain library, packed with programming from around the world. Each club disk sells for \$4.00 (Canadian) with the occasional monthly special as offered by our club librarians.

President	Brian Cassidy	(519) 966 0305
Vice President	Len Brown	(519) 252 4572
Finance	Gary Choptiany	(519) 966 5489
Membership	Kazmir Choptiany	(519) 254 4557
Communications	Todd Latam	(519) 839 5096
Software Coord.	Larry Latam	(519) 839 5096
Library Coordinator	Kevin McMahon	(519) 944 8935
Editor	Thom Woodrich	(519) 948 5448
Associate Editor	Shawn Cassidy	(519) 966 0305
Past President	Ray Caille	(519) 734 8183

Our September meeting saw the introduction of the new AIM disks of the month added to our expanding library. We were also graced with a visit from a former (but honorary lifetime) member, Allen Barga now living in Kitchener, Ontario. We also had a few new games shown by Larry and Kevin. They treated us to SIM City and Police Quest II.

October, being election month, saw the addition of five new members on this year's executive. Following the elections, we had a change from our usual swap meet with that of an auction instead. With the talents of our auctioneer, Wally, we were able to raise approximately \$200 for our club coffers. It was agreed that this was a more entertaining event than a straight swap meet.

In November the membership approved the motion to apply for a Wintario grant to acquire a new STe, hard drive and modem to establish a BBS in the near future. As well, Brian and Shawn showed off Battle Chess and Wayne Gretzky Hockey. Brian assured everyone that the new TT will be on display for the December meeting, in time for early Christmas ordering.

Things to watch for in future W.A.U.G. meets, the Stacy 4 with 40 Meg Hard drive and MIDI, Supercharger, Spectre GCR, the DVT VCR harddrive backup system, the Migraph Hand Scanner with Touch-Up, a new paint program in development (locally) and maybe even a visit from an Atari (Canada) representative. See you next month.



Westmoreland Atari Computer Organization meets the second Tuesday of each month in the North Huntingdon Township Town House, Center Highway and Brownstown Road (just off Route 30 near the Hamilton car dealerships, Irwin, PA) at 7:30 P.M.

Founded in December, 1983, WACO boasts huge ST and 8bit PD libraries. Double-sided disks are only \$3 for members, \$4 for non-members. Disk catalogs on disk are only \$2. The \$20 annual membership (\$24 for family) now includes a subscription to AIM.



The Washtenaw Atari Users Group meetings are held every second Tuesday of the month at 7:30 pm in the Michigan Union building on the campus of the University of Michigan on State St. at the corner of S. University in Ann Arbor.

Club dues are \$15 per year and provide access to the PD library and subscription to AIM. Meetings feature demos of both 8bit and ST software and hardware. Nonmembers and questions are welcome. Officers can be contacted by calling Craig Harvey at (313) 994-5619 or by BBS at Molin's Den at (313) 451-0524.

The December meeting of WAUG was held on 12/11. Craig called the meeting to order at 7:20pm, stating that he was making up for all the times the meeting had been called to order LATER than 7:30. This had no noticeable effect, however, so he called the meeting to order again at 7:40 (which seemed just about right!) Craig announced the meeting topic would be Christmas Party/Games, but this came as no surprise to anyone who was watching Pattie set up the cookies/soda pop table...

"Nobody gets any cookies or pop until AFTER I talk!" Craig warned, and then set about discussing continuing progress of plans for the Atarifest. Pattie helped describe events of the past week, noting that Atari Canada will probably do most of the leg work for the show while it would seem that Bob Brodie will be there and that is just fine with everyone involved!

Bill Rayl spent a few minutes discussing the contents of the ST Disk of the Month, followed by a request from Mike Olin for volunteers to help stuff envelopes containing User Group info about Atarifest. Many thanks to Soft-House Computer Center of Garden City for their contributions! The rest of the evening was spent in conversation and merriment.

Happy Holidays to all from the officers of WAUG!

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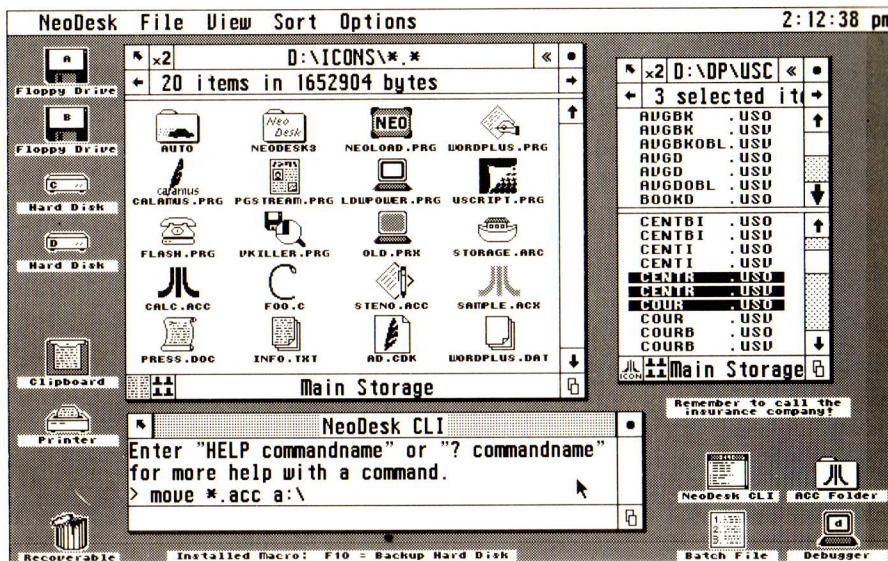
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“WATCH THIS SPACE FOR MORE NEWS ABOUT “PHASE-4”™

NeoDesk™ 3

The Ultimate Desktop



NeoDesk™ 3 is a complete replacement of the boring, built-in desktop that comes with the Atari ST. Its advanced, yet intuitive, graphical interface will make your computer both easier to use and much more powerful.

It is the easiest and most affordable way to realize your Atari's true potential. Many have called it "the ultimate upgrade for the Atari ST".

NeoDesk introduced the idea of placing your commonly used programs directly on the desktop while pioneering the concept of assigning different custom icons for individual files and folders.

Now NeoDesk 3 takes you a step further, introducing several new and original concepts which will make you want to scream "I want my NeoDesk 3!".

In addition to keeping commonly used files and programs on the desktop, you can now also keep folders on the desktop. And not to limit your creativity, with NeoDesk 3 you can even write *Desktop Notes™* right on the desktop itself.

Only NeoDesk 3 allows you to look at two different parts of the same window, thanks to its amazing *Split Window* feature. Of course, each window can be set to display text or icons, independently of any other window. Each window can even have its own sorting and text options.

NeoDesk is also smart, using all of its available memory for file copying so that as many files and folders that will fit into memory are read in at once. No more useless disk swaps, even hard drives benefit from its speed and efficiency.

Add some of the other NeoDesk 3 features, such as a brand new Icon Editor, keyboard equivalents, desktop picture, file templates, *Active Icons*, and *Hot Keys* (execute your favorite program with a single key), then you have more than enough reasons to buy NeoDesk. But for those of you who need a little more, read on.

NeoDesk 3 now offers a unique *File Clipboard™* which lets you temporarily hold files and folders in memory while you are busy doing other things. In a way, you can think of it as an automatically expanding and shrinking ramdisk.

You now also have the power of *Macros*, with which you can automate any series of desktop operations like opening windows, copying files, running programs, etc. These can also have *Hot Keys* assigned to them.

NeoDesk 3 even has special support for 5 1/4" floppy drives and formats all disks with the correct information so they work on most MS-DOS computers.

From low resolution to ultra high resolution, NeoDesk 3 supports up to 10 different resolutions in each system.

Of course, these features would not be useful unless they were easy to use. Rest assured, NeoDesk 3 has been designed to be "upwardly compatible". Use NeoDesk just like you used the original desktop, no need to forget all that you have learned.

It doesn't stop there. The included *Recoverable Trashcan* lets you recover files deleted with it at any time in the future. It was created using the *NeoDesk Developer's Kit*, which opens a whole new world of possibilities. There's also the *NeoDesk CLI* (both available separately), a complete window based command line interpreter which allows you to create pop-up menus, automate file operations, and much more.

No matter who you are, NeoDesk 3 has something for you. From helpful search capabilities to a powerful file reorder function. Thanks to its ability to remove itself from memory, it only needs about 35K of memory. Of course, there's lots more, which you can discover by ordering today!

NeoDesk 3 and the NeoDesk CLI are available from your local dealer, or order toll free by calling (800) 284-GRIB and get FREE 2nd Day Air (US only). Call or write for upgrade and other information.

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