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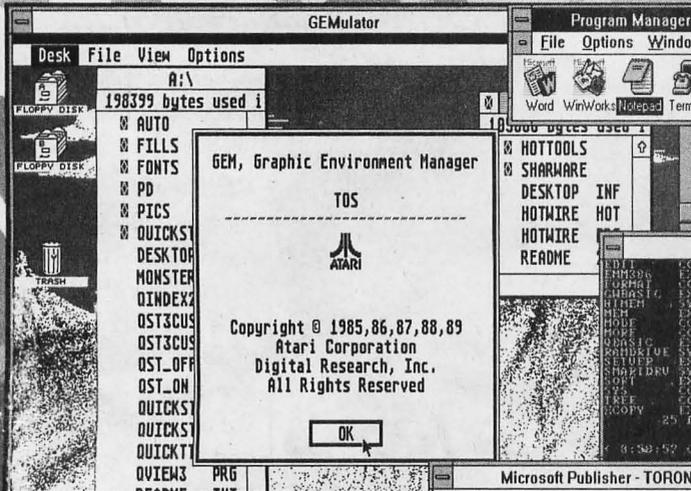
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A Holiday Feast of Atari Products!

A shrinking market? Recession? Some magazines have cut back on their production schedule, but here at *AtariUser*, it's hard to tell that things aren't rosy while looking at the continuing flood of products for the Atari line of computers. It's a veritable smorgasbord! We've had to push aside the regular columns and features this month just to catch up on the REVIEWS for a flood of new items of hardware, software, and books. And our RESOURCE section on current versions of popular software will help you be certain that you're up to date, too.

I'm sure you'll join us in welcoming the information Norm Weinress brings us on the GEMULATOR, the remarkable ST emulation system for use on PC's. His detailed analysis opens our issue-wide specialty lineup of reviews, just in time for Holiday gift considerations.

Speaking of those considerations, next month we've got a Christmas List Special that will make lots of suggestions in every price range, along with personal holiday suggestions and wishes from many Atari personalities. And a Lynx Resource section will fill you in on every game available, along with more background information on the hand-held game sensation.

Next month will also bring you news and photos from COMDEX, the annual super-computer show in Las Vegas. Atari's got the largest booth in all of the Sands Convention Center this year. You'll see why in the *December AtariUser*.

Some readers have noted differences in the Falcon internal pictures that we printed last month when compared with those that another magazine printed the same month. That's because their's was of an early prototype. The Falcon *AtariUser* pictured is a "Revision 3" Falcon, said to be nearly identical to "Revision 4," the production unit. Good eyes, folks!

Once again, I'd like to repeat the news that *AtariUser's* offices have moved. Please use our new address and phone numbers for correspondence and subscriptions:

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We're almost finished with a reorganization (whew!) that assures you faster response and better service, all from the Atari magazine with the largest circulation in the USA—*AtariUser!*

Happy Holidays!
John M. Nagy, Editor-in-Chief, *AtariUser Magazine*



Environmentally Sane!

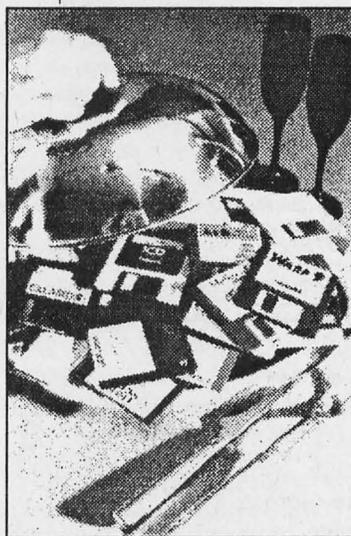
AtariUser is completely printed on recycled paper and uses only non-polluting Linseed inks! It costs more, but you're worth it.

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AU Readers Byte Back



Love That Resource

One of the most valuable sections of your periodical is the "Resource" section. I'm attaching information about the Atari dealers that are/were in my area, and a list of books I've found that weren't on your lists in the last few issues.
— **J.P. Soso, Brooklyn, New York**

■ *Thanks! We encourage all our readers to participate in AtariUser by forwarding us information as they hear it for incorporation into our Resource sections. We agree; they may be the most lastingly valuable pages of all in any Atari magazine available.* — JN

Give Me Fonts!

From the moment I bought my Atari, I wanted to be able to print multiple fonts with it. How is it done? I have heard of GDOS, "imbedded printer codes" and such, and I currently use a dot matrix printer and First Word. What do I need to get to upgrade with minimal resources?
— **Carole Kramer, Jackson Heights, New York**

■ *You've tapped a bottomless pit of questions on this one. Understand first that different fonts can come from a number of places, including disk files that define them or built-in multiple fonts in permanent memory in the printer. Selecting a new font can be done in hardware (push the right button on the printer itself) or in software. Your word processor, First Word, WILL allow you to change fonts from imbedded codes, IF your printer has a variety of fonts available built in. A "control sequence," usually involving pressing Escape then entering numbers, will be explained in your printer manual. They are like switches, turning on or off various print features. Most word processors will also address a few standard options like italic and underlining with a keyboard command that, in fact, places the imbedded command in the saved text. To use GDOS fonts, or any other file-type fonts, your software must know how to use them, and the methods of manipulation will be as different as the software. Document processors like That's Write and Calligrapher, sort of supercharged word processors, will have GDOS or other font support, allowing much variety in fonts. Page layout programs like Calamus and Pagestream go far further, adding full publishing power. Some fonts come with each package, and additional fonts are available for every format both on the online services and from vendors. You'll find that you get what you pay for, but you have to decide what you need. And the more you want to do, the more it pays to have more memory in your computer. Additionally, you'll soon find that the fanciest typeface looks weak when printed in dot matrix. A laser or jet-type printer is almost required for good looking output. Call one or more of the full service dealers that advertise here in AtariUser, and talk it over.* — JN

8-Bitters Unite

You've been publishing my NOAH 8-Bit ads in your free classified section for some months—thanks, I've had a good response. I'd like to do more, perhaps start an 8-bit Atari computer world-wide network. I'd encourage all 8-bit users to write to us about themselves, their computers, and their uses.
— **Brian K. Bogess, NOAH 8Atari User Group, 4801 Denison Avenue, Cleveland OH 44102.**

■ *I wish you luck and have printed your address for people to correspond with your group. But don't re-invent the wheel. There are a number of established 8-bit Atari support hubs already, any you might do better by attaching yourself to one of them. Try Ben Poehland's Atari Classics Magazine (179 Sproul Road/Route 352, Frazer, PA 19355) as a contact point. He's collected nearly 1,000 contacts as he's prepped his new all 8-bit publication.* — JN

Wish List

I really enjoyed Eric Bitton's article in the July issue on ST Gaming. For future issues, I wish you would have articles on hard drives, printers, modems, and databases for the ST. Also, how about some interviews with companies that no longer support Atari on why they follow this policy. Perhaps we could start a write in campaign to gain their support back.
— **Steven B. Hillyer, Athens, Ohio**

■ *Eric will be back for updates on his game reports next month. And we will continue our Tech Room series, covering selection and use of the hardware you mentioned, in 1993. As for why companies leave the Atari market, it doesn't take interviews; they aren't making enough money to justify their efforts. Their lack of sales makes their mind up, even though the software company might contribute to their own demise through failure to make their product known. We're amazed at the many Atari third party vendors who say they don't have enough sales to merit advertising. How can they ever have enough sales if they don't tell the world what they have? These are often the same people who will say Atari itself will never succeed if Atari doesn't advertise. I guess it's a "do as I say, not as I do" arrangement. Please, do write or call vendors who have products you want either to come to or stay with the Atari platform. While many such campaigns have little effect, it has worked on other occasions. It's been said that private letters draw more response than form letter campaigns, as the person taking his own time to compose a request is far more likely to follow through with a purchase later.* — JN

■ AtariUser welcomes letters, viewpoints, and questions from readers, although we cannot assure personal answers. Send yours to us at AtariUser Magazine, 249 North Brand Boulevard Suite 332, Glendale CA 91203.



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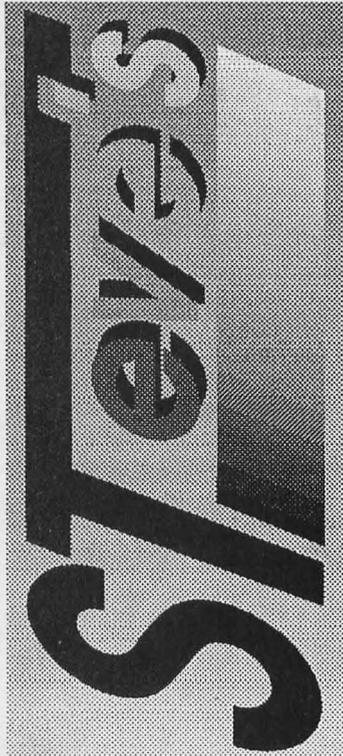
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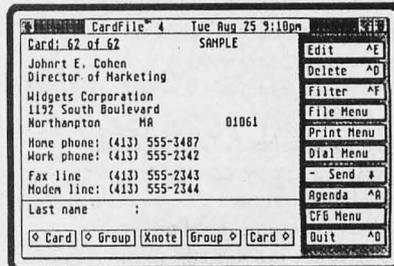
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AtariUser NewsEdge

■ Right-Sizing Still Shaking Atari

Atari Corp continues to re-shape itself in preparation for 1993's marketing of their new products. Trimming more people and places from the expense column this fall is the announced closing of Atari's Dallas, Texas research and development labs. Forty employees and programmers working there have been offered relocated jobs at the Sunnyvale, California headquarters of Atari. It's said that a few employees who are now job shopping have a resume entry that states that their latest completed project was the Atari 68040 design. Atari similarly dismantled the Lombard, Illinois LYNX development labs earlier in 1992.

Eric Smith, the original MiNT multitasking programmer whose project is the basis for the upcoming MultiTOS, started full-time work at Atari Corp in early November. Meanwhile, TOS team programmer Ken Badertscher has accepted a position with Taligent, the IBM/Apple project consortium.

At the management level, Atari's rising marketing/development star Bernie Stolar resigned in October. Bernie's accomplishments during his 9-month stay included many game development contracts for Atari computers, management of the consolidation of the Entertainment division, and hiring of the new Atari Explorer magazine staff.

Also leaving is long-time head of Atari Germany, Alwin Stumpf. Guesses as to why include observations that Alwin's hard-line high-market orientation conflicts with the current Atari direction of consumer-level penetration. Confusing Alwin's departure is a message signed with Stumpf's name that has been circulated online and in some publications that profess to explain why MultiTOS and FSMGDOS are being delayed (contract problems) and a statement that the Falcon030 will NOT be produced as shown. The message has been discredited as a fraud, as have followup messages in the same network purporting to be from Sam Tramiel and Jesus of Nazareth. The content of the "Stumpf" message has been denied vehemently by Atari and Stumpf co-workers, as well as disproved by other events (such as Eric Smith's hiring).

Remaining Atari officials have been scurrying and working late to prepare for the mid-November Las Vegas COMDEX appearance for Atari. Holding the largest booth and the best located real estate in the huge Sands Convention Center for the worlds largest computer trade show, Atari is still mum about what they'll display. Speculation runs from a two-piece Falcon to a 68040 or even a sneak look at the Jaguar game console. Whatever it may be, AtariUser will be there, and we'll show and tell next month. ■

■ WAACE: DC Area Fest Another Hit

The Sheraton Reston in Virginia had another full house at this year's WAACE Atari festival, October 10th and 11th. Officially attended by 1,200 to 1,400 people, down from last year's 2,000, 40 vendors still made their traditional record breaking sales this year. Inclement torrential rain leading up to the Columbus Day weekend didn't aid the turnout.

Atari was able to send Bill Rehbock and several Falcons to spice things up, and Bill also spoke at seminars and the Saturday night WAACE Banquet. The technical manager from Atari told of SUTRA, a Microsoft-Works type integrated program, developed in India, that Atari is prepping to either bundle with all Falcons or to sell cheaply as a competent do-it-all starter package. Demos of the Falcon and Speedo-FSMGDOS were met with happy but impatient crowds.

Most show-goers got a free copy of the just-released October AtariUser at the CodeHead and PMC booths while checking out Warp 9 and Gemulator, respectively. Other hot items were: Dave Small (with videotape annotated seminar) speaking of Spectre GCR version 3.7 to come and showing a Falcon opened up; Missionware's completed but still being updated Flash II and Cyber Paint (now working on STe and TT machines); Lexicor with JRI GenLock boards for the Falcon and showing Phoenix 512, like Spectrum 512 but for the true-color modes of the Falcon; Bob Luneski's Diamond Edge and Diamond Back II; Wintertree's Spelling Sentry; Computer Studio with deals on hardware and software (six TT's went out from Studio alone); and the DMC/Calamus/FastTech/GENie booth. Other retailers of note included Toad, Joppa, and CompuSeller West.

Seminars and special topic rooms are the special forte of the WAACE show, with a schedule that went on and on. While some were lightly attended, others were big hits. Dave Small and Bill Rehbock understandably made the biggest impact, drawing enough people to nearly empty the sales floor. Seminars on DynaCADD and Calamus, "Meet the Atari Press", telecommunication services (featuring early Atari personality Neil Harris, now of GENie), etc., did well too. A swap room, a MIDI demo room, and an education room each held bustling crowds and great exhibits.

WAACE organizers Ken Fassler, Russ Brown, and J.D. Barnes are all to be congratulated again this year for bringing a professional quality Atari show together. As always, plans have already been tossed around as to what to do next year, for another Atari date to remember. ■

AtariUser NewsEdge

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C-Lab Folds, EMAGIC Takes Over

Internal company unrest and division has brought C-Lab, developers and manufacturers of the most successful Atari MIDI sequencing programs, Creator and Notator, to an end. C-Lab products will be taken over by a new company formed by Ensoniq, the US distributors of C-Lab as well as a line of electronic hardware for the music industry. EMAGIC will maintain support and development of the Atari platform, and includes some of the same people who were C-Lab. Notator 3.1 was recently hailed in Keyboard magazine as the best MIDI sequencing program available for any computer.

Announcements from Ensoniq about Emagic include news of "Notator Logic" for the Macintosh, to be released before the end of 1992. Emagic joins Steinberg/Jones and Barefoot Software as the major remaining MIDI developers for Atari computers. Barefoot formed from the Hybrid Arts takeover this summer, and Dr. T's stopped developing for the Atari in 1992. Contact Emagic through Ensoniq Corp, attention David Netting, 155 Great Valley Parkway, Malvern, CT 19355, phone 213-647-3930 extension 297.

Montreal FAME

FAME 1992 was the Festival Atari de Montreal et Environs, held the weekend of September 19 and 20. It was the first Atari Fest held in Canada's Montreal area in four years, and was organized by the Atari ST/MEGA Users Montreal (ASTMUM) and the Montreal Atari Club de Montreal (MACAM). Although attendance was only about 200, organizers call FAME a success. Vendors included MACAM with intriguing "extended calculators" that work with word processors or spreadsheets, designed to handle data and variables used in chemical calculations and statistics. Microdel, ALP Micro Systems, Progeni Computers, and Italmelodie Music also were exhibiting at FAME. ASTMUM focuses on musical and artistic uses of Atari computers, and their members consist of MIDI musicians, composers, videographers, artists, technicians, and business people.

North California Show On Again

After a pair of cancellations for 1992 dates in the San Francisco area, The Sacramento Atari ST Users Group (SST) has elected to go it alone and announce the Sacramento Atari Computer Exposition (SAC Expo) for March 13th and 14th in Sacramento, California. The earlier events were planned as cooperative efforts with Bay area clubs. SST plans a full-size two day affair, held in the special events area of the Towe Ford Museum, home of the worlds most complete antique Ford automobile collection. Admission to the museum will be free for those who attend the SAC Expo.

The museum is located at the intersection of Interstates 5 and 80, just 15 minutes from the Sacramento Metropolitan Airport. Hotel reservations are available by contacting Mark or Dell at Sports Leisure Travel, 800-321-4758. Vendor packets have been mailed to the developers and vendors contacted by SST at the Glendale show in September. Contact the SAC Expo through Nick Langdon (Vendor Coordinator), C/O SST, P.O. Box 214892, Sacramento, Ca 95821-0892, or call 916-723-6425. GENie: M.WARNER8.

Atari Hong Kong on GENie

Jon Clarke of Z*Net's Global News Gateway offered a first on GENie in September when he hosted a worldwide real-time conference from the head office of the HongKong Bank. Although Jon normally does business for a New Zealand banking service, he reports in from various ports around the world as his business takes him abroad. How's the Atari market in Hong Kong? Cheap. Although there are actual Atari dealers, the prices are depressed due to both the trading rate of US currency and the presence of "backdoor" units on the market, not clones, but production from the local factories that "leak" out the back door. Jon reported that he bought a used Lynx for \$1 US, and that game carts

run about \$4 each. He told of the Golden Shopping Center in Sham Shu Poo, with over 1,000 computer stores (!). A 4 meg STe was about \$150 in US currency. All games and most programs are \$4 each, with open piracy by the shop owner. "Just point to the software and it is copied while you wait." The dealer only needs one copy for the duration of his dealership. Jon added that this was mainly in the Kowloon markets, not in the "high street" stores. GENie will soon be opening up consumer services in Hong Kong, where Jon reports there are now about 150 private BBS systems operating, including some for the Atari. The Atari Roundtables on GENie are official information services of Atari Corporation. To sign up for GENie service, call (with modem) 800-638-8369. Upon connection type HHH (RETURN after that). Wait for the U#= prompt. Type XJM11877,GENie and hit RETURN.

PowerDOS - Free!

DragonWare Software has released Chris Latham's PowerDOS as Freeware in an effort to generate interest and support from other programmers. PowerDOS is a fast and compatible multitasking replacement of Atari's GEMDOS level system software. It speeds and revises the high-level part of TOS that deals with disk input/output, parallel, serial and MIDI communications, program execution, and memory allocation. Benefits are not only speed, but "hooks" for multiple processes to run concurrently without getting in each other's way. PowerDOS is the kernel that makes Dragonware's Powernet operate in the background, and up to 256 such processes can be handled. Installed as an AUTO program, all "legal" TOS programs will get immediate speed increases in I/O, while only those written to take advantage of PowerDOS can access the features like multitasking, interprocess communication, and memory management. Multitasked processes can be as simple as a "save file" function that will return you to your application as soon as selected, while the actual save may take place in the background, saving seconds or even minutes. More advanced users can take advantage of setting up alias drives, adding pipes, naming serial ports, and using any of the number of PowerDOS utilities now available and those still under development. This is not a replacement for Atari's MultiTOS, a GEM multi-window multitasker, but rather a system-level enhancement. Programmers are especially encouraged to contact DragonWare Software, P.O. Box 1719, Havre, MT 59501-1719, 408-265-9609, GENie: DRAGONWARE

Do It with STyle

Zocra Technologies brings us STyle. A "big brother" for their file viewer STipple, STyle is a program for viewing, manipulating, translating and saving graphic images on Atari computers. STyle supports graphic image file for-

mats ranging from computer dependant formats such as NEO, Degas and MacPaint to hardware independent formats such as GIF, TIFF, EPSF and CP8, even if the original image has more colors or pixels than the ST can display, and maintains those colors and resolution regardless of the resolution used when you run the program. It also allows you to convert your Atari ST images into other formats such as GIF, PCX and TIFF for exchange with other systems. Rendering to different numbers of colors, greyscales, or color or monochrome dithers are also available, as are grey redistribution, sharpening, smoothing, transformations, and full scaling and editing options. STyle supports the STe/TT 4096 color palette and all TT resolutions. TT low support includes 256 color mode and 256 grayscale HyperMono. STyle 1.0, \$35.95 US, \$42.95 CDN, or the simpler STipple, \$29.95 US, \$34.95 CDN. Zocra Technologies, 4-319 MacKay St., Ottawa, Ont., K1M 2B7 CANADA.

Warp 9.3.71... Engage!

CodeHead Technologies strikes again with Extend-O-Save, the modular screensaver in the new version of their screen accelerator, Warp 9. When you aren't using your computer, it might as well be entertaining! The possibilities are almost limitless, and the upgraded Warp 9 now comes with 5 or more screensaver modules, with more being developed in the open architecture designed to let any programmer develop new idle-screen delights. Among other enhancements, PinHead is now built into Warp 9, so you can remove one more program from your AUTO folder. Upgrade for \$15 or buy it at \$44.95. Also new at CodeHead is an updated TEC (TOS upgrade board) for Mega ST's with a feed thru bus connector. Now all those folks with other cards in the Mega Bus connector can now enjoy the use of TOS 2.06 and Codehead's TEC. CodeHead Technologies, P.O. Box 74090, Los Angeles, CA 90004, 213-386-5735, FAX 213-386-5789, BBS 213-461-2095

JMG's HyperLINK Runs Free

JMG Software has released HyperLINK Runtime Package at no charge for distribution by users, dealers, and telecom services. While the full commercial version of HyperLINK is required to create and modify applications and reports layouts, the Runtime Package can run any standard HyperLINK database/text/graphics/report applications previously created. HyperLINK is a multi-purpose "Application Generator" to design custom forms, reports, graphical screens, and also combine text, graphics, and other types of media with common database files. HyperLINK contains a full dBASE III/IV compatible database handler that supports multiple index files and multiple field types (date/numeric/text/logical/etc), and also a multiple-window text editor, an IMG file displayer, and a basic

control/command set. All these features can be combined using "links" to create fully hypertext-based multimedia applications. The full HyperLINK package, with Application Builder, Report Generator, and additional modules, is \$149. JMG Software, 892 Upper James Street, Hamilton, ONT L9C 3A5 Canada, 416-575-3201, FAX 416-575-0283, BBS 416-389-9064, GEnie Address JMGSOFT.

DMC Takes INVISION ELITE

More than just another monochrome paint program, Invision Elite is so versatile that DMC (the Calamus folks) decided to take over marketing for designer Harlan Hugh Invision Elite creates black and white raster images with features like stretch, skew, bend, rotate, thin, thicken, copy, outline, and more. \$129.95 (\$149.95 Canadian) from DMC Publishing, Inc., 2800 John Street Unit #10, Markham, Ontario Canada L3R 0E2, 416-479-1880, FAX 416-479-1882, CIS: 76004.2246, GEnie: ISD.

Every VP's Friend: Spelling Sentry

New from Wintertree Software is Spelling Sentry, a desk accessory that adds a spell-checking capability to virtually any other GEM program in real-time while you operate your standard favorite applications or terminal programs—even while online. If you type a word containing a spelling error, Spelling Sentry sounds a tone and flashes the screen. Then, with a single mouse-click, you can select the correct spelling from one of the alternatives which Spelling Sentry suggests. Spelling Sentry will automatically replace the misspelled word with the correct one. It can also check ASCII files and saved word-processor documents. Besides being a spelling checker, Spelling Sentry can also expand abbreviations while you type. For example, when you type your initials, it can replace them with your full name. For fun, an anagram solver and a word-guessing game are integrated in Spelling Sentry. \$59.95 from Wintertree Software Inc. (formerly Phil Comeau), 43 Rueter St., Nepean, Ontario Canada K2J 3Z9, 613-825-6271

Easy MacSEE

The many Spectre and GCR Mac Emulator (from Gadgets by Small) users have reason to rejoice with the release of MacSEE, a file copy/mover utility that can read standard Macintosh HFS and MFS disks from Atari modes. It can see and copy files on Spectre format disks and use 1.44 meg drives and hard drive partitions, even removable media drives. MacSEE is completely GEM-drive, so all you do is "click" through the choices, select the file you want moved from a standard item selector window, and it's about as fast as copying a standard ST file. The program was written by Alan Reeve of Reevesoft, and a very preliminary and limited version was released into the public domain as "MACREAD" after another developer attempted to market

■ Some of AtariUser's News and Press information is provided by the Z*Net International Atari News Service, copyright Ron Kovacs., P.O. Box 59, Middlesex, NJ 08846, (908) 968-2024 voice, (908) 968-8148 BBS, GEnie: Z-NET, CompuServe: 71777.2140.

AtariUser NewsEdge

Zubair to Offer First Falcon Upgrade ■ Zubair Interfaces has developed Z-RAM/Falcon, a 4 or 16 Megabyte upgrade board for the as yet unavailable Atari Falcon030. The compact four layer circuit board is completely compatible with Atari's own board. The Z-RAM board features low profile machined sockets, allowing the user to purchase the board and plug in as much RAM as desired. The board has two connectors and simply plugs into the motherboard. Owners of a Falcon030 with 1 Meg of RAM can simply pull out their 1 Meg board and plug in the Z-RAM/Falcon board. Populated with 32 1 Megabit RAM chips (1 Megabit x 1 configuration), the board becomes a 4 Megabyte upgrade. Or use 32 4 Megabit (4 Megabit x 1) RAM chips, and the board becomes a 16 Megabyte board (14 Megabytes is addressed by the system, two megabytes overlap the Falcon TOS address space and is not usable). The suggested retail price of the bare board (without RAM) is \$249.95 and volume shipments will start in mid-November. Zubair Interfaces, Inc., 5243-B Paramount Boulevard, Lakewood, CA 90712, phone 310-408-6715.

New 8-Bit/ST Catalog From B&C ■ The Winter catalog from B&C Computervisions is now available. The 32 page booklet is full of accessories, parts, software, and hardware for Atari systems, including lots of 8-Bit products, but plenty of Lynx and ST/STe/TT support as well. Get yours by sending for \$1 to cover shipping to B&C Computervisions, 2730 Scott Boulevard, Santa Clara, CA 95050, phone 408-986-9960.

the test version without full permission. The new product is radically improved and more versatile, and a version for Windows is next on Reeves' agenda. MacSEE retails at \$59.99, and should be available through your local dealers. Or call the distributor, Compu-Seller West, 220 1/2 West Main Street St., Charles, IL 60174, 708-513-5220.

Sales Software Upgrade

Hi-Tech Advisors announced new versions of their respected Sales-Pro point-of-sale software. Now at version 6.20, the cash drawer-to-inventory modular system has added improved back-order facilities, more versatile customer histories, and assorted speed and cosmetic enhancements. All new is another version of the software that is customized for decimal portion tracking and billing, handier for businesses that charge by weights or time. The SalePoint and Sales-Pro series begin at \$99 and run up to \$599 for complete systems with mail-merge, floor planning, service and repair, purchase orders, etc.. Contact Hi-Tech Advisors for demo disks and information at Box 128, Ravena NY 12143-0128, phone 800-882-4310.

Font Fusion

MegaType Software is now offering two new font programs for the Atari ST and TT line of computers. BitMaker can create PageStream screen fonts from Adobe Type 1 or .DMF printer fonts to dramatically speed up screen redraws. It also can render screen and printer fonts for use with GDOS applications from PageStream .DMF printer fonts. All bitmap font creation is done automatically with a few simple mouse clicks. Select a printer font, select a point size to create, and sit back and watch the font being created. GDOS fonts can also be created by using other MegaType products. BitMaker lists for \$49.95. MegaKern and MegaKern lite provide automatic kerning for PageStream .DMF and Adobe Type 1 fonts. In less than 5 minutes, you can have a precisely kerned font of more than 1200 pairs ready to use with PageStream. MegaKern (\$79.95) works with both Adobe Type 1 fonts (Mac and PC/ST), and PageStream .DMF fonts. MegaKern lite (\$49.95) kerns only PageStream .DMF fonts, for UltraScript users who can't print Type 1 fonts from PageStream. MegaType, PO Box 645 South Bend, IN 46624, 219-288-7468, EMail DFTURNOCK on GENie.

I DON'T LIKE YOUR TONE

It can happen to you: replace your toner in your Atari SLM laser printer (or others!) and suddenly you get light print with streaks. You can keep increasing the toner darkness dial inside the SLM until it's all the way on, to the point of spooning toner onto the drum, and your printouts are still light and streaky. Woe is you, you need an expensive new drum. NOT. Although it is a little known fact, all toner is

not created equal—even name brands. Differences between production runs, age, storage, etc. can each affect the quality of the toner, and your new toner may be the culprit. Before you shell out for a drum, replace the toner again with a fresh box, bought somewhere or sometime other than the first box. You are likely to find, once the new toner circulates, that your printer is happy again. And you can't lose if the drum is to blame after all, just use the replaced toner later. But store it carefully—its a mess. If you DO need a drum, an alternative to buying new is rebuilding. E. Arthur Brown (1-800-322-4405) will clean and rebuild the SLM 804 drum unit and toner hopper for you for \$39.95, and will re-do it within 90 days if you're not satisfied. Call for details and ask for their Atari catalog.

High-Dollar RAM

Computer memory prices have skyrocketed since the US Department of Commerce's preliminary determination that Korean microchip makers were dumping (selling below cost) chips on the US market, attempting to gain a long-term market advantage by forcing competition out of business. Tariffs may be placed on some of the companies involved after the first of the year, but the market has reacted with panic for fear of shortages or later, still higher prices. Bonds against future tariffs could go as high as 90% of the sales price of SIMMS memory chips, recently available for as low as \$28 per MEG. Now, suppliers are not guaranteeing prices for more than a day or two at a time, with prices jumping 100% in a week's time. Regardless of the fact that imported SIMMS boards are the only ones currently targeted by the probe and tariff proposals, all configurations of memory chips have gone up in price. Buyers are advised to put off buying until the panic eases, as Japanese and other maker chip prices should have not been affected, and should soon return to near normal prices.

Piracy: A Felony?

The Software Publishers Association or SPA has come out in favor of a US Senate bill which would make intentional software piracy a felony from the current status of a misdemeanor. Senate bill S-893 would only target big-time pirates, including illegal bulletin board operations, dealers who "sweeten" hardware purchases by loading up computers with illegal copies of desirable software, and those who specifically make copies to resell them at deep discounts on a regular basis. The Piracy Felony bill would cover illegal copying for "purposes of commercial advantage or private financial gain" making it a crime punishable with a fine of up to a quarter million dollars and up to five years for those making more than 50 copies in a single 180 day period. The same \$250,000 upper fine limit and a maximum prison term of two years could be imposed for those "willfully" making and selling between 10 and 50 copies.



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The AtariUser Holiday Feast of Products!

The flow of new hardware and software for Atari products continues unabated by adverse economy or market conditions. So much has come out in the last months that we've accumulated a backlog of reviews—there's been too much to say and not enough room to say it. So this month, AtariUser's catching up, presenting reviews of 20 new products including hardware, software, games, applications, even books. Get ready and don't look back, because here we go... a full issue of new and updated products!

Gemulator

*ST on a PC
Emulation Hardware/Software; PC*

Calamus on an IBM? Yes. One of the most interesting new developments for the Atari user is Gemulator, introduced at the recent Southern California Atari Faire by its inventor, Darek Mihocka. This system, a combination of software and hardware, allows you to run your Atari programs on IBM PC's and clones!

Darek is well known for having developed software in 1987 that let an ST emulate an 8-bit Atari computer. Since then, he's been talking about doing an ST emulation on a PC, and now he's made good on his boast. This thing actually works, although with some limitations and substantial machine requirements.

Why would you want to do this, run Atari software on a PC? The most common buyers (other than the super-user who is really a hardware collector) are going to be Atari fans who are stuck using a PC at work, and who want to use some of their familiar programs at the office. For those who have both types of machine at home, they can now have a backup ST for emergencies. And those loyal Atari fans who have been bragging about the programs we can use, can now talk their PC using friends into enjoying our luck. Yes, Gemulator might actually increase the number of people buying Atari software, as well as extending the Atari life of users who have switched computers for whatever their reason.

The requirements to use this system are severe. A minimum of a '386 PC with at least six megabytes of RAM are needed to run the Atari emulation. In fact, anything less than a '486 system running at 33 MHz will give results too slow to be satisfying. However, such systems are becoming common, especially in office and business situations.

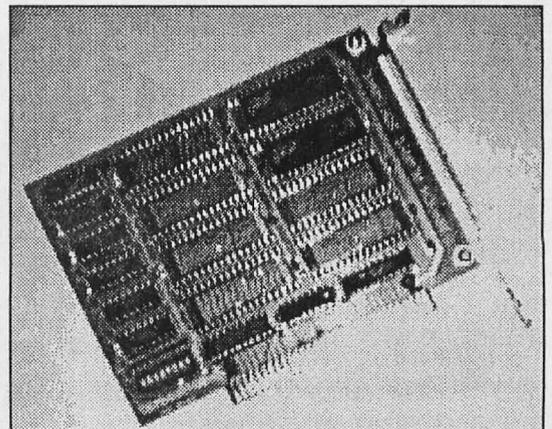
This conversion is accomplished by a combination of

software and hardware. The software does a full emulation of the 68000 instruction set, rather than trying to insert a Motorola microprocessor into the PC. The hardware is an accessory board which is placed in an empty slot on the PC motherboard and contains one or more sets of Atari TOS ROMs.

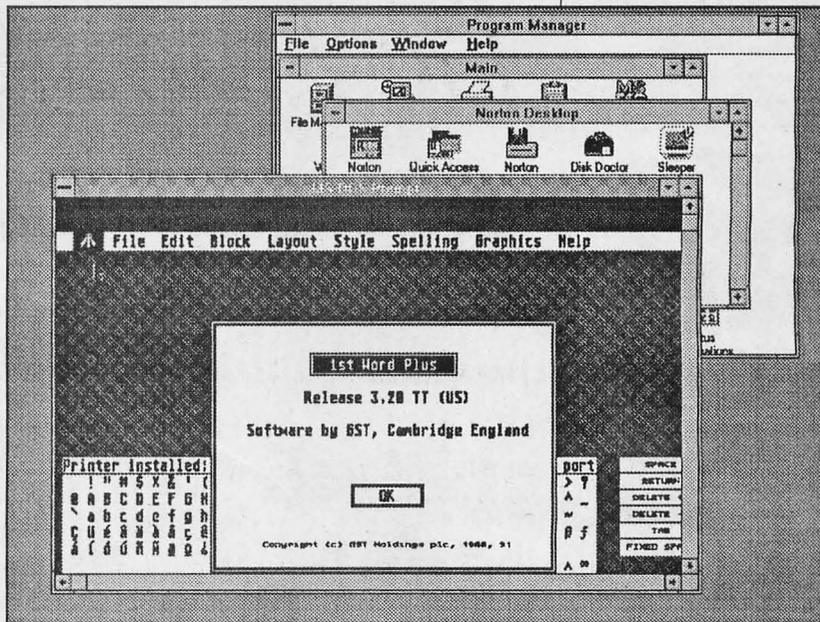
Although it sounds a little unusual, the two pieces are sold separately, by two different companies. The plug-in board is being sold, with a ROM set installed, by Purple Mountain Computers. The software is provided as shareware, by the author's company, Branch Always Software. Version 1.00 is being distributed by all the usual means for public domain programs, and the author requests that the user pay a \$59.95 shareware fee. Registered users will receive printed documentation, a newsletter and an upgraded version (presently version 2.0) that's up to 30% faster, uses less memory, and has more features.

In operation, the ST software is loaded into PC RAM, and is read by the Gemulator program. If the instruction to be executed is located in TOS, the ROM set is read from

■ Gemulator is an 8-bit (small) card that fits an standard PC slot. It can take up to 10 ROM chips and select between installed TOS versions.



■Yes, that's an ST screen, in color, in Microsoft's Windows 3.1. And yes, it's just as shocking to look at as you'd imagine, as you use your favorite ST programs on an IBM using Gemulator.



the card in the PC. In any case, the 68000 operation code is used to call an appropriate routine to emulate it in Intel (PC) code. Naturally, this takes a great deal of time, so the emulation will seem very slow except on the fastest of PC's.

The size of the program to do the emulation is about three and a half megabytes. This is because the 68000 instruction set can have some 50,000 possible instructions, counting all addressing modes. Each one of these has a corresponding routine in the emulator.

One of the failings of PC computers is segmented address space. This was a limitation of earlier Intel microprocessors and is the source of the often cursed "640K" limit that PC'ers are faced with. Newer Intel processors are not limited in this respect (our Motorola processors never were), but PC's are still configured in the old manner to permit using old software.

Because the Gemulator program is so large, and because Atari programs expect a linear address space, this system must be run on one of the newer machines, using an Intel 80386 or 80486. The computer should have at least five and a half megabytes of available RAM. That is three and a half for the program and two megabytes of memory for the Atari programs, emulating an ST with 2 meg of RAM.

If you don't have enough memory, the Gemulator can use virtual memory. That is, it will keep part of itself in a temporary file on your hard disk, and swap sections between RAM and hard disk as needed. Of course, this will slow operations even further, so it is best to run the emulator from RAM only.

The registered version of Gemulator (now at V.2.0), the one sent to people who pay the shareware fee, permits using one to eight megabytes of memory as Atari RAM, in one megabyte increments, and it has been made a bit smaller (now about three megabytes). Also, the execution time has been improved.

Pluses and Minuses

Gemulator has some flaws which may be overcome in time. It also has some advantages. The first thing that should be mentioned is that there is no emulation of the cartridge port, MIDI, sound, or of the Blitter chip. This means it is not suitable for many Atari games. There will also be problems running programs that use copy protection, particularly those that use a hardware device for protection, mostly expensive music programs. The shareware version (V.1.0) does not support the serial (modem) port, although printers plugged into the PC parallel port should work normally.

Another major point is the use of hard disks. Atari and

the Dos world used identical hard drive formats—until they were faced with the need to use partitions larger than 32 megabytes. There, they diverged, using non-compatible designs. The result is that for partitions smaller than 32 megabytes, the Gemulator is happy. But it can and will write beyond 32 meg and damage the data there by using the wrong method of addressing the drive.

In the first released version of the program, writing to the hard drive is disabled. The registered version of the program allows writing to the hard disk, but with strong warnings about using partitions larger than 32 megabytes. The author of Gemulator plans to write a new hard disk driver that will eliminate this difficulty.

Before you think everything is bad news, there are some things the Gemulator can do that the ST does not do. One of these is the use of 1.44 Megabyte floppy disks. Most PC's these days use high density floppy drives. The emulator board comes supplied with TOS V.2.06, so it will read and write high density floppies. Floppy disk formatting is not enabled, but you can easily format them under DOS.

It should be mentioned that the ROM reader board has sockets for eight ROM chips. It comes with TOS in a two chip set, installed. The user may insert other versions of TOS into the remaining six sockets; one 6 chip set, or up to three more 2 chip sets. When starting the emulation, you select the TOS you want at the moment. All versions below 3.0 are supported, although reports of some problems when using the rare TOS 2.05 version, and with a two chip set (as opposed to the more common 6-chip set) of TOS 1-point anything, you'll have to add a simple pair of jumper wires to an empty spot in the Gemulator board. Darek is updating his docs to cover this.

Another feature which is available in the registered version is the ability to use the PC's VGA screen to emulate the Atari TT's medium resolution, 640 x 480 with 16 colors on screen. It looks like an extended graphics card mode to any ST software. Calamus SL and other applications can use this mode and operate in color! A simple AUTO program called VGA.PRГ enables it.

RE: Views

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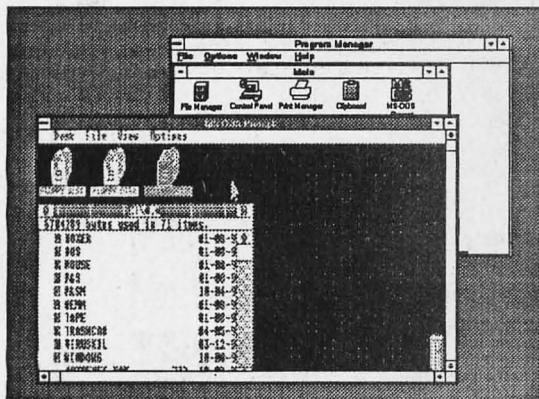
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How To Use Gemulator

With the Gemulator board and software installed in the PC, the program can be executed from the DOS prompt. In order to use the PC's memory in a linearly addressed manner, it must be run in Intel's protected mode. A utility that will reconfigure the PC is provided, and is run automatically when Gemulator is invoked. The program takes some time to load (it is very, big!), and will then display a prompt for the user to type in his commands, including choice of color or monochrome operation, and choice of which PC floppy drives to use.

After you tell it to install your chosen TOS, the next thing you see is the usual Atari startup display. In the case of TOS 2.06, you see the Fuji logo. Even though you are expecting this, it will knock your socks off, the first time you see it on a PC. If you have placed a floppy disk in drive A, it will read your desktop information, AUTO folder programs and accessories to be installed. You are, in fact, now operating an ST.

This procedure can be done under Microsoft Windows. A batch program, GEMULWIN.BAT, is provided to assist in this. From Windows, call the DOS prompt, and then run the batch program. The procedure is then the same. You can suspend the emulation, like any other PC program, and return to Windows, run other programs and then return to the emulation. The pictures shown with this article were made in exactly that way.

If you have enough memory, you can even install two copies of Gemulator, in different windows, and be running two Atari applications simultaneously. In other words, multitask!

In color operation, when the Emulator's window is made inactive, the palette changes. This is a function of Windows, and cannot be adjusted. However, the colors will be correct when the emulation is made active again. Monochrome doesn't show any difference.

How Fast is Slow?

It's ironic that the most used measure of Atari computer speed, Quick Index, is another product of Darek Mihoeka. Most measures of the speed of Darek's Gemulator are done using Darek's own yardstick, and while some users and

■ Gemulator will run in ST Low and Medium Resolutions (color) as well as in ST High Monochrome mode. The registered version will also run in 16 color TT Medium mode, in Windows or from DOS.

developers have complained that Quick Index is too simplistic, it remains popular. Tests on a '386 33MHz PC indicate the reasons you need more: CPU Memory is only 53% of that of a stock ST, even while shifts and divides are more than double that of an ST. Screen output is almost normal for text, two-thirds normal dialog boxes, and scrolling is less than half the speed of a "normal" ST, let alone an STe.

Move up (waaaaay up!) to a '486/DX/50 plus a fast video card, and things improve a lot. Fully tweaked for performance (and using a software screen speeder), CPU goes to 192%, bringing 16 MHz accelerated MegaSte performance to the PC. Disk operations go from half speed on the '386 to well over full speed. Text output hits nearly five times ST speed, while scroll and dialogs are near 200% each.

In operation, even the fast PC's give the user a sense that things are moving a bit behind time. The operations are mostly fast enough, but they happen perceptibly after they are asked for. Mouse clicks are the most obvious of these, as you double click, and as your brain decides it must not have "taken", the function executes. It takes only a little use to adjust to it, and in fact, the slow uptake gives Gemulator an overall "responsiveness" nearly exactly like what is considered "normal" in Windows.

What Works

The system has been shown to work with many popular Atari programs. These include the DTP programs Calamus SL, Pagestream and Publishing Partner; word processors such as WordWriter and 1st Word Plus; painting programs Prism Paint and Degas Elite; business programs LDW Power and Pha\$ar; and many others, like Hotwire, MultiDesk, MaxiFile and, very importantly, the screen accelerator, Warp 9. Using Warp 9 will speed up the screen redraws on the PC/ST just like on a real ST, and is really needed to help the emulation.

Other applications and such that have been reported to work fine under Gemulator include NeoDesk (all versions), Laser C, ARCSHELL, the Control Panel, Universal Item Selector. Atari's MACCEL3 crashes for now, but SilkMouse and the Warp 9 mouse accelerators work.

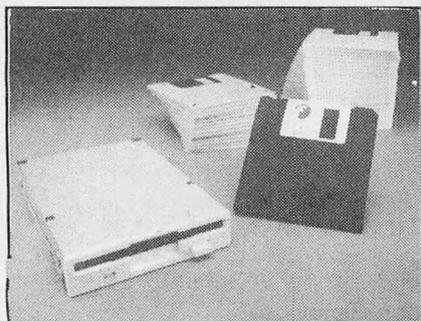
Conclusions and Speculation

Gemulator, like any new product, will be found to have some faults that require correction, but it is clear that these can be overcome. The important fact is that it works with a large number of programs and proves that TOS can be run on a foreign system. It is slow, unless a very powerful PC

REG: VIEWS



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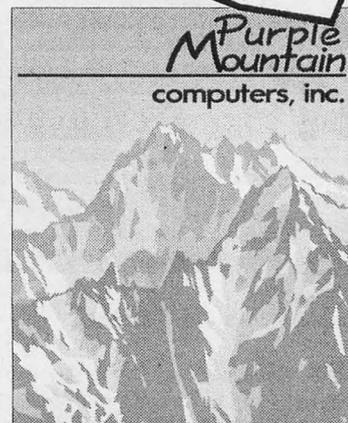
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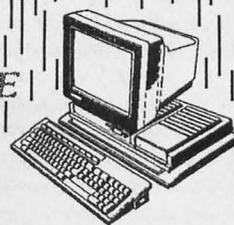
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is used. However, PC speeds are increasing, and prices are falling, so it's possible to run at a usable rate now and at better speeds in the future.

Sure, there are problems left. Communication to the storage media needs more work, as discussed above. Realistically, the shareware version without hard drive access will be more annoyance than it is worth, as you can't so much as write a config file to your drive. There are some minimal mouse problems—the image lags due to fewer redraws, causing the user to overshoot. It will be a while before the serial and joystick ports work. If the Gemulator crashes, it takes a complete reboot of the PC to reclaim the memory if running in Windows.

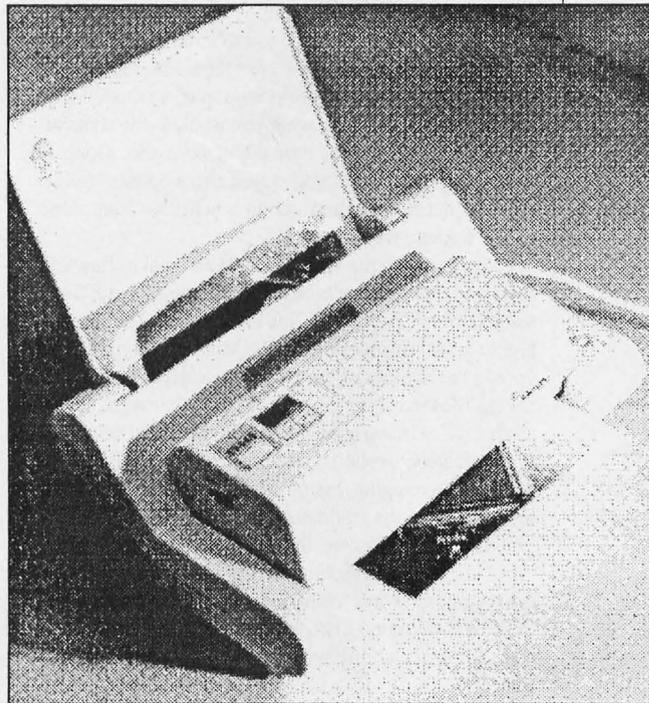
But it should be emphasized that the emulator is software. Difficulties, as they are discovered, can be fixed without buying new hardware. As an example, a last-minute fix to version 1 allows GFA BASIC to operate properly. Some things, like sound control and MIDI ports, will require additional hardware in the PC to interface to it.

The author, Darek Mihocka, is a longtime Atari developer who now works for Microsoft Corp. He's in a unique position, being thoroughly familiar with programming the ST and in a position to understand the internal operation of Microsoft Windows and other PC software. This has allowed him to marry the two computers, and he's already shown his intention and willingness to support and continue to improve the Gemulator.

Longer term, Darek has said that he'll be considering using the same ROM board for other emulators he's planning for the PC, including the Atari 8-bit computer. This one should be easy now, as Darek showed a nearly finished (and full speed) version of the PC-XFORMER over a year ago at the Glendale show. And even MAC emulation on the PC is in Darek's plan, with MAC ROMs used on the same board, while Darek's own future MAC emulation software would reside in the PC.

Gemulator cannot replace the Atari computer. Falcon or TT 68030 emulation is at best a glimmer in Darek's eye today. Gemulator cannot be made to work with all Atari software, especially those with hardware copy protection devices. But it can make a very satisfactory second machine, for most uses. And it might expand the market for ST software, which will benefit everyone who uses Atari computers.

The Gemulator ROM Reader Board with TOS 2.06 sells for \$299.95 from Purple Mountain Computers, 15600 N.E. 8th Street Suite A3-412, Bellevue, WA 98008. The Gemulator software, version 1.00 is in the public domain. To register and get updated versions, send \$59.95 US to Branch Always Software, 14150 N.E. 20th Street Suite 302, Bellevue, WA 98007. — *Reviewed by Norm Weinress, who assisted Darek as a Beta tester during development of the Gemulator.*



■ Migraph's PS400 Wand in a self-portrait.

Migraph Wand

Full Page Scanner

Hardware; ST, STe, TT, Falcon

Migraph brought the ST the first quality hand scanner some years back. With the advent of their new and competent Optical Character Recognition software as well as other company's FAX software, there's a need for affordable full-page scanning. Migraph has answered with THE WAND.

A full 8.5" wide scanning area in what could be seen as a "two-hand-scanner" can scan a page in seconds. With the optional sheet feeder, it can do it better, faster, and far straighter than by hand. And the sheet feeder will hold 10 sheets in que for scanning. The full unit becomes a wringer-washer setup, with a tray above and behind to feed sheets out the front.

The Wand (manufactured by OMRON) does resolutions up to 400 DPI in 10-DPI increments via an electronic selector pad on the unit when using the revised Touch-Up software (V.1.84), included. I found the setting process to be annoying, as you must set the software resolution first, then dismount the scanner from the sheet feeder, click it to the chosen resolution, then hold the SCAN button and move the scanner to make the setting "take", and finally return the Wand to the feeder, ready to begin. I wish the software could program the scanner, like the units that cost





far more than the Migraph unit.

Anyway, once you have a resolution set, you can scan all day using the software to start the scans. You might scan graphics, particularly photographs, a number of times before you have exactly what you want, as the contrast knob is quite touchy—a little adjustment goes a long way. And unlike the “light/dark” adjustments on most (all?) other scanners, the Wand’s control actually changes the CONTRAST. Wow!

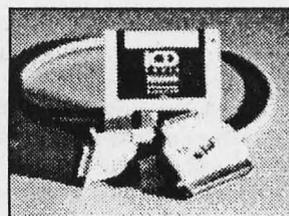
And how are the scans? The Wand makes flawless IMG and other monochrome format images, with four adjustable dither patterns or line art settings. The Wand has a higher actual resolution than the Migraph Hand Scanner, upping the number of grayscale equivalents to 256 when saving files in a TIFF format. Grayscale images have the advantage of being able to be resized without degradation. Unfortunately, a mono conversion to grey TIFF must use pixel area averaging, losing detail in the final grayscale image. Photographs scanned on the Wand and saved as grayscale TIFF files are, in my opinion, unacceptably “soft” for use in publishing except at small sizes. Migraph is looking into ways to sharpen them. Saved as dithered PCX or IMG mono files, the detail is impeccable, but at the cost of non-scalability without unsightly patterning in the image.

For creating page images for FAXes, the Wand is perfect. For OCR, doing a full page at a time will cut your work in half or more over hand scanning. Migraph has upgraded their OCR software to take advantage of the Wand as well, although automated multi-page operation is still not available (but coming, says Kevin Mitchell of Migraph). The new (and otherwise fast and wonderful) Touch-Up is updated for full page scans, but lacks a low-res prescan and area selection for re-scan, a feature of most high-buck flatbed software. As it is, you need a lot of memory available even if you want to save only part of a full page. You’ll have to have room for the full page at full resolution, then clip what you want.

You won’t find a better full-page scanner at the price of the Wand. If you need more than the Wand can do, buckle down and save for a three-pass color scanner—of course, there’s no domestic color scanner software for the Atari yet, either, so take your time. The Wand’s suggested dealer retail price is \$899, and includes the \$299 OCR and \$199 Touch-Up software. Owners of the Hand Scanner from Migraph can buy the upgrade to the Wand (re-use your interface/power supply) for \$349. Either way, you’ll probably want to add the sheet feeder (another \$249). Other combinations and configurations are available through Migraph directly, 32799 Pacific Highway S., Federal Way, WA 98003, phone 206-838-4677. — *John Nagy*

The LINK

Host-in-a-Dongle
Hardware; ST, STe, TT



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There’s not too much to say; the Link is self contained and powered off the system you are using. It has a large-standard SCSI socket on one end and an Atari ACSI socket on the other. Attach it directly to a SCSI external device (hard drive, CD-ROM, Floptical, even printer) and your Atari ST series will talk Atari, the drive will talk SCSI, and everyone’s happy. Fortunately, it’s nearly that simple. The only glitches in this easy solution come from occasional unexpected interactions between other ACSI and SCSI devices. Some configurations of mixed equipment may balk with a Link in line, but it’s generally resolvable with a swap of positions in the data chain or with termination changes.

The Link comes in a pegboard-baggie with a DMA cable and the latest driver software from ICD. Shipped with the unit I received was V.6.0.2, which supports removable media including CD ROMS (!) and Floptical disks. The software will fine operate without the Link, but the installation, advanced caching, and formatting features won’t work until it is returned to the chain.

No, you can’t use a Link backwards to convert the Falcon or TT SCSI port to DMA for use with older internal-host devices like the SLM804 laser printer. That’ll take another, currently missing Link.

If you need a Link, you need it. There’s no other practical answer. Thanks, ICD, for making it a good answer. The Link, \$99.96, from ICD Inc, 1220 Rock Street, Rockford, IL 61101, phone 815-968-2228. — *John Nagy*

PMC Freedom Floptical Drive

Big Bytes at Fast-food Prices
Hardware; ST, STe, TT, Falcon

Purple Mountain Computers broke the \$400 price barrier with their introductory offering of the Freedom Floptical Disk Drive. This is an unassuming looking external 3.5”

floppy drive unit that can take single sided, double sided, 1.44 meg, and 21 megabyte disks. It attaches at the SCSI port of a TT or via an ICD Link (included at the price!) to the ACSI/DMA port of an ST/STe/STacy/TT.

What's a Floptical disk? It looks like a standard 3.5" floppy until you slide open the metal door. You can see through the disk itself, and in the right light you can see the rainbow of CD tracks printed onto the upper surface of the disk. An infrared beam tracks on these guides like a CD player, allowing ultra precise head placement and very dense data packing. Hence, 21 megabytes on a single disk.

Performance: A Floptical mechanism can read and write "normal" disks at twice the rate your old drive "A" can. And the special 21 meg disks read and write at 4 times the speed of a standard floppy, and about 1/4 the speed of a standard hard drive. That's not shabby, and near the rate of the first Atari hard drives that were dazzling in their day. Disks are presently about \$25 each, but prices should drop steadily, perhaps as low as \$5 in the coming year according to some industry officials.

These little marvels are the way of the future. Like all Flopticals, PMC's drive uses the InSite drive mechanism, so PMC's unit will perform exactly like any other Floptical. Buy on features, appearance, and price. I found the Freedom to operate flawlessly with the highly considered ICD software, included. However, you won't be able to fully use the drive with older computers, as TOS 1 and 1.2 can't handle the 4-sector-per-cluster arrangement that the Floptical automatically uses. With 1.4 and newer, you're golden.

Features: almost none are available, but one I'd like is a SCSI ID reassignment switch available externally. PMC hasn't got one—you need to open the unit and move jumpers on the drive itself to select a compatible ID if you need it to be other than #2, as it arrives. Appearance: the PMC Freedom is as plain as allowed by law. In a word, beige. A ribbon cable exits the back of the unit, terminating in a clamp-on SCSI connector. A pair of unlabeled (and disconnected inside) connectors languish on the back panel, left over from some earlier intention for this particular case. The metal rear plate of the case gets quite (but not alarmingly) hot, as the power supply heat sink is attached to it. I noted some minimal RF interference on my mono monitor when accessing the PMC Floptical. Price: PMC has the best price yet, by a considerable margin, at the \$399 introductory level. Even when/if PMC's price goes up, they'll be below the present competition.

I'm hooked. I have a SyQuest 44 meg removable drive, but the versatility of the Floptical convinces me that it's the way to go today except for high-speed applications like direct-to-disk audio. Access speeds aren't critical if you have a hard drive already, and even if you are using the Floptical instead of a hard drive, it's not going to keep you

waiting. In fact, I'd recommend new owners to consider a Floptical even BEFORE a hard drive, to get the best of versatile storage and portability up front.

Someday all computers will have a Floptical drive instead of the suddenly meager 1.44 standard of today. Until then, do it yourself. The econobox of drives, the PMC Freedom is today's best buy. The \$399 introductory price is still in effect, and includes one 21 meg disk, drive, case, power supply, ICD Link, DMA cable, and ICD driver software. More disks are \$19.95 each in 4-packs. Purple Mountain Computers Inc., 15600 NE 8th Street Suite A3-412, Bellevue, WA 98008, phone 206-747-1519. - *John Nagy*



■ Purple Mountain's new economy Floptical Disk Drive comes with ICD's Link and software.

Shadow of the Beast

More than a Shoot-fest Game; Lynx

As the name implies, Shadow of the Beast is a conversion of the Psygnosis computer game. You play a demon, stripped of humanity by the Beast Lord. Driven by revenge, you run, jump, and fight through a number of scrolling stages to destroy the fiend. Along the way, you will unravel puzzles and hunt for tools and weapons, but an army of minions and many traps stand in your way.

As is the original version, the Lynx translation of Beast is incredibly difficult, requiring precision jumping and movement. You have only one life, and your health is whittled away by relentless attacks and sheer drops. The game has three continues, but there is no way to save a game or skip stages. Levels are immensely large, with dozens of places to explore. You'll need lots of free time for this title.

What elevates Shadow of the Beast from being another run-and-jump game is its adventuring aspects. The only way to make progress is to thoroughly explore each area for key weapons and items. And you always know what mistakes led to your demise.

The graphics are some of the best ever seen on a Lynx. Fantastic use of color and detail makes for realistic images, topped with smooth multilayered scrolling. Your character runs, turns, and jumps with fluid



animation, and most of your antagonists are equally well done. Game sounds are above average, and the music steals the show, with a variety of stunningly atmospheric background tunes. You can turn them off, but you won't want to.

Shadow of the Beast hits the Lynx without losing any of the original's challenge. It's an audio-video feast, but the high difficulty level may turn off some players. As a serious, take-no-prisoners video game, this title is just the ticket. Atari Corp., \$39.95. — *Robert Jung*

Baseball Heroes

Swing for the fences!
Game; Lynx

It was a long wait, but now Baseball Heroes for the Lynx has arrived. One or two coaches pick from four teams of 20 players each. Select a team, assemble a nine-man squad, arrange a batting order, then take to the field for nine innings. A single game is possible, as well as a seven-game "Final League" challenge. There's also practice in batting and fielding available with a Home Run Derby and a Three Flies Out game.

Baseball Heroes ambitiously tries some new ideas, and partially succeeds. The ability to select players and the lineup is welcome, although there's no way to change during a game. A variety of views are used, such as behind the batter and pitcher, overhead, and from the outfield. Common baseball rules are supported, and the gameplay is respectable. Infielders cover each other, players dive and jump for balls, and batters and pitchers have a variety of options. The computer opponent is challenging but leaves opportunities for players to exploit.

Baseball Heroes has a few problems, the worst of which is the fielding, which starts with an overhead view, then switches to a "behind the outfielder" angle. Judging the ball's location becomes difficult and requires practice. Also, some of the controls are a little quirky, such as using the same button to throw and jump, and the batters' slow swings.

The graphics are simply delightful. There's great use of animation, including details like the umpire hunching down for each pitch. The batter and pitcher views use gigantic characters that fill the screen, while fielding is done with small but manageable players. Even the player selection entertains with team logos and "trading cards" for each member. The only music is the title theme and a few simple tunes, and the remaining sounds consist largely of



digitized effects, such as the crack of the bat and the umpire's calls. Though the crowd falls silent too quickly, the sound effects are fine overall.

Baseball Heroes is a very good translation of the sport. It has a few rough spots that detract from it somewhat, but for the most part, this is a quality title and a showcase game for the Lynx. \$39.95 from Atari Corp. — *Robert Jung*

NFL Football

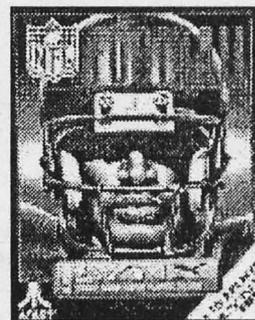
Ten Yards, Down and Out
Game; Lynx

First the good news: NFL Football for the Lynx is a portable form of the American sport, where two teams of eleven men try to carry a ball into the opposing team's end zone. All of the teams and logos of the NFL are available, letting players fulfill fantasies of managing hometown favorites. For more realism, offensive plays are designed by a real NFL coordinator, and strategies can be altered in real time. Two dozen offense plays are available, and each play can be improvised, such as passing on a running play. A game has four 15-minute quarters, and two Lynxes can be connected for two-player competition.

Everything else goes downhill. Passes are thrown by holding down a button, moving a crosshair to a receiver, then releasing — while the opposition rushes in. Running plays yield little yardage and are almost useless. Any touch from an opponent brings you down with no chances to break free. There's only six defensive plays, and no easy way to change the player you control. The Lynx opponent has no head for strategy, but makes up for it by having its players run faster than yours. There's no difference between teams other than logos and colors. There's no penalties, no punt blocks, no... fun.

Graphics are clean and identifiable, but fail to excite. The Lynx's hardware scaling is wasted; the screen zooms in after a play and zooms out for kickoffs, but most of the game is viewed halfway up, and you can control players that are off-screen. The game is quiet much of the time, save for a whistle and the sound of running feet. The referee's digitized voice is muddled, and the cheering crowd is a crude white noise effect.

It doesn't matter that football games on other portable systems are no more sophisticated than this. The Lynx concept held real promise of something more. But in the end, I found NFL Football to be an exercise in boredom. \$39.95 from Atari Corp. — *Robert Jung*





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Pinball Jam

"Oooh, let's party!"
Game; Lynx

Atari has released Pinball Jam for the Lynx game system, a card that contains two real Williams/Bally titles, "Elvira and the Party Monsters" and "Police Force". The campy, buxom vampire Elvira has you shooting ramps for pizzas and punch, while in Police Force, you fight the Loan Shark and other villains.

Pinball Jam has a high level of realism, though it's no substitute for the tables. Game physics are mostly accurate, but the marble is a little too elastic. Pressing Option 1 shakes the board,

and tilts are possible, but slap saves and other more complex moves are not. The action is viewed from overhead, with the screen scrolling up and down to track the ball, so aiming off-screen is harder; during multiball, the lower ball is tracked while an arrow points to the other one. Free games become extra balls, and each pinball can be played in easy or hard mode. The rules and scoring of the original games are intact. Of the two, Elvira is a tougher challenge, and players unfamiliar with the real machines are at a disadvantage—new players have to discover where specific targets are before they can play effectively. Only one person can play at a time, but the top three scores are tracked.

Pinball Jam also duplicates the look of the arcade, with the screen containing real playfield art, arrows, and ramps. Most sounds come from computerized chimes for bumpers and flippers, though each pin has a selection of slightly scratchy voices from the arcade. The best sounds, though, are the tunes that set the pace and keep things lively.

For those who can accept minor compromises for realistic pinball action, Pinball Jam is a perfect way to spend many hours. \$39.95 from Atari Corp. — *Robert Jung*

Switchblade II

Run, Jump, and Yawn
Game; Lynx

The evil ruler Havok, once defeated by Hiro the hero, has returned once again to ravage the land. Now Hiro must run, jump, and slash his way through Havok's robot forces

and restore peace. This threadbare plot comes from Switchblade II, the Lynx adaptation of the Gremlin computer game. You control Hiro's three lives, fighting enemies and finding weapons, money, and health through six levels. There's the obligatory boss at the last substage of each level.

There are literally hundreds of these scroll/jump/kill titles; Switchblade II leans towards the mediocre end of the spectrum, with game play that feels flavorless and hollow. Superficially, there is nothing at fault, as it follows the clichés: responsive controls, a tried and true plot, lots of enemies and power-ups. What this game lacks is a sense of adventure and excitement. There's little challenge, since enemies either patrol mindlessly or attack in ones and twos. Young players may find it tricky, but most will stomp over Havok's forces. Other games offer the same thing, only better, faster, and harder.

The graphics and sound do not do anything to enhance the appeal of Switchblade II. Aside from a title theme, the game is mostly quiet. What few sound effects exist are uninspired.

Switchblade II is yet another scrolling, "destroy everything" game that will quickly get lost in the crowd. Action gamers can easily find other titles that are more enticing. \$39.95, from Atari Corp. — *Robert Jung*



Cyberdrome

Virtual Reality Simulator
Game; ST, STe, TT

This new game is a little strange. If you're looking for a quick 3-D shootemup, Cyberdrome isn't it, despite having 3-D vector graphics and shootemup elements. It's a little more on the cerebral and simulation side, designed with multiple remote players in mind.

Cyberdrome's storyline is reminiscent of the movie Tron. A big nasty program named CJER (cee-ger) has taken over part of a crystal mainframe computer and wants to eventually rule the whole virtual-thing. CJER has created an army of mutant combat programs to aid in its conquest. That's where you come in. At the helm of your virtual-reality hoverjet program, you must curb CJER's delusions of grandeur by deleting his minions into data oblivion.

The game operates on a charge/attack cycle. In the



RE:Views

charge cycle, you look for a memory mine, which is an "underground" (sub-grid) maze of tunnels containing many defense systems and the all-important transmitter. Key-cubes must be collected to unlock security gates, allowing you to reach the transmitter. Deleting it provides you with the access code to the next memory mine, but also sets the current mine to overload and self-deletion. You only have a few seconds to exit the mine before it goes.

During the attack cycle, a Predator program (looking spider/mantis-like in the virtual reality of the Cyberdrome) is released and heads for your comm-port, your link into the computer. You can destroy the Predator program (not easy) but another one will be launched in its place. This will go on for the duration of the attack cycle. Once the Predator reaches your comm-port, it unleashes a Mole Tunneling Program which starts eating its way through your comm-port, looking for your transmitter. If it get it, you're toast (er, disconnected)!

The hoverjet moves in strange ways. It makes right angle turns, can go forward and back, can slide left and right, and also goes up and down. Everything is done with the keyboard. The mouse and joystick are not supported at all, and considering how the hoverjet moves, it makes sense. The numeric keypad is used for all movement-related functions as well as shield activation and weapon firing, while the leftmost keys of the main keyboard are used for all other functions.

Cyberdrome's graphics are nothing spectacular, but there are some neat touches, like the way your partner's hoverjet fades to invisibility when he/she turns on the negative shields. The sounds consist mainly of functional beeps, pings, and the whoosh of your hoverjet.

You can play this game by yourself, but Cyberdrome was really designed to be played by a two-player team with two machines hooked up together via modem or null-modem cable. This is definitely a game where the gameplay transcends the graphics. It's not for everybody, but is a welcome addition to the limited realm of multiplayer/multiCPU interactive games.

Rhea-FX is planning on releasing some mission disks in the future. Cyberdrome comes on one double-sided disk with manual-word-lookup copy protection, 1 meg required, runs in color only, modem and data link support, \$39.95 from Fair Dinkum. — *Eric Bitton*



Ork

Alien Adventure Game; ST, STe, TT

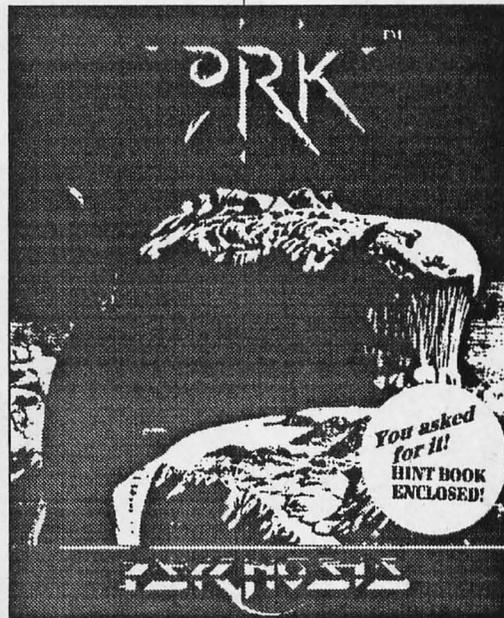
"The Killing Game Show meets Shadow Of The Beast with slightly insane puzzles." That's a fairly accurate description of ORK. It's a sideview omniscrolling platform shootemup with some seriously weird aliens and landscapes. Some of the puzzles (especially in the later levels) are in the old Infocom text adventure style of obscurity. I mean, how many of you would have guessed that you needed a rocket to dislodge a key from a platform you can't reach? Never mind that you had to get the rocket from a jar that you had to place on an arrow and break by shooting a rock and letting the pieces fall on it... I guess that's why Psygnosis threw in a booklet with a complete walk-through (in four languages) free of charge.

OK, in Ork, you're are an aspiring alien space captain, a member of a race of really-really-really tough customers. You're about to face your final exam, and if you make it through alive, you'll be rewarded with a star cruiser. If you don't make it through alive, you're quite obviously dead. There are only 6 levels, but they're plenty tough.

You can save one game position to a disk, but only from one of the many neat little data terminals scattered throughout a level. Those terminals also provide you with object information, a map of the surrounding area (if you picked up the scanner module), the status of your character, and an indicator showing how much of the game you have completed so far.

This particular Psygnosis title doesn't have the expected animated intro sequence that usually takes up all of disk 1, and it's not really missed. Ork's game graphics are very colorful. Your on-screen character is a little on the strange side, but then again, he IS an alien! He looks like an organic walker machine with cement mixers strapped to his back (they're jet engines for flying, of course). The digitized sound is nicely implemented, with a constant background thrumming, explosions and alien animal noises.

If you like platform games and hard puzzles, check out Ork. It comes on 2 disks, from Psygnosis US/UK. — *Eric Bitton*



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Mah-Jong Solitaire 3.0

Now Much More than Drachen
Game; ST, STe, TT, Falcon

Times change. It was nearly two years ago that I saw Cali-Co's Mah-Jong. Then, I was unimpressed, not by Cali-Co's execution of the classic Shanghai/Ma-Jong tile match game, but by how little it distinguished itself above the free public domain title DRACHEN.

The new 3.0 release of Mah-Jong is a different animal (a cat, specifically). With modest expectations of the \$39 retail game, I booted and installed Mah-Jong on my hard drive. I was more than pleasantly surprised by colorful screens, dozens of choices of play area "tablecloths", a variety of tile designs, and a choice of many starting patterns. From out of the blackness above the menu bar, a pair of green cat eyes follow your every move. This is "Shadow Bouncer", and you can turn her off if she makes you nervous.

All this color and design does more to the gameplay than you might imagine. The game itself has been a sure winner in every incarnation to date. The tile recognition and matching/removal rules are standard in Cali-Co's version, but the challenge varies radically depending on the combination of tiles and backgrounds. A traditional game is available, or for a maddening but compelling game, try dominos for tiles on the black neon background. Or use the Navy Flag tiles on the blue wave tablecloth. Or the animal tiles, or the little people, the Morse code or alphabet or Rune blocks... you get the idea. Not only are the games



given a whole new effect, they are educational, capable of aiding recognition of letters, codes, or, um, cats. There's lots of cats here.

Mah-Jong V.3.0 requires a color monitor in low resolution (fine on a TV), and any ST ever built will run it. Really nice touches throughout include switches for every conceivable option, including keyboard equivalents, show removed pieces, help, undo, random or selected game setups, and a game pause with a colorful scribbling screensaver. There's no music or sounds other than a

wisking effect as tiles are removed.

Cali-Co puts Mah-Jong 3.0 in an unassuming bag-pack, using minimal and environmentally sane recycled paper. At \$39, it's challenge is to be worth at least \$39 more than the very good free versions that populate the BBS libraries. It succeeds, and will be a lasting joy for kids and adults. Cali-Co Superior Software, P.O. Box 9873, Madison, WI 53715, 608-255-6523. — Dr. Paul Keith

Tracker/ST

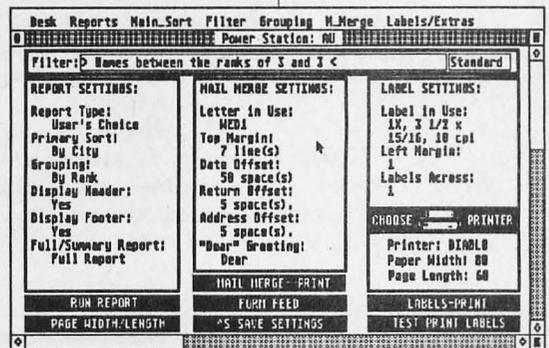
Mailing List and More
Application; ST, STe, TT,
Falcon

Tracker/ST, from Step Ahead Software, has grown steadily from its beginnings as a mailing address database. Now, it's a unique productivity tool.

I work for myself, which means that I work all the time. I have a need to keep track of the people I come in contact with, and to keep notes on these elusive entities that I call my contacts. When I call them after a few weeks or months, it's nice to remember what I've said to them. I want to segregate the people in my list so that I give myself an idea what they're about. I might even want to call them with a single flick of my finger, then type up the facts our conversations and know that my note will stay with the person's file. In the end, I'd probably like to send them a quick letter, or include some of them in a mass mailing with a personal touch, possibly a form letter customized with a their name and address and a few personalized comments.

Tracker/ST is artfully crafted to do all this and more with one program on my computer, and avoid the paper, files, and confusion of office life. Tracker is divided into three sections, the ENTRY screen where you enter your information, the POWER section that lets you sort your information in a variety of different ways, and the QUICK LETTER section that formats and prints your letters.

From the ENTRY screen, a one-key command lets you search for one of your records. And it happens real fast, especially handy when you're on the phone with someone on your list and you want to know their history. You'll have their whole address listing, plus an area for short notes, and entry fields that allow you to place words and symbols that can be sorted in a variety of ways when in the POWER section of the program. Tracker/ST lets you pull up a record, put on your telephone headset and dial a number of clients in quick succession. A LONG NOTES fea-

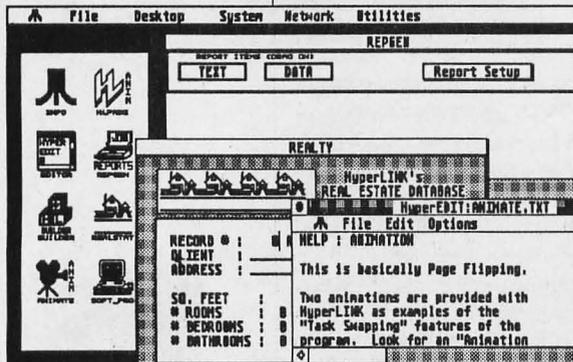


New Stuff!

ture lets you get really detailed in your attached information. Once you've made your calls and entered any changes, you can run a report selected groups of people in your list to help you decide who you need to call next time, and what kind of action is needed in your follow up. This makes the work you do in the future easier and a lot more complete and accurate. Tracker doesn't make decisions for you, but it sorts your information in an effort to help you make those decisions.

I rely on Tracker/ST as a very solid program. It's actively supported on the Genie information service by the author, Nevin Shalit, and is also designed to integrate with an advanced envelope/label program called GEMvelope, sold separately.

Tracker/ST increases the effectiveness of your efforts. It provides me with the tools that I use a that a normal database just doesn't have. Tracker/ST V.3.04, \$99.95, from Step Ahead Software, 496-A Hudson Street #F39, New York, NY 10014, 212-627-5830. — *Steve Blackburn*



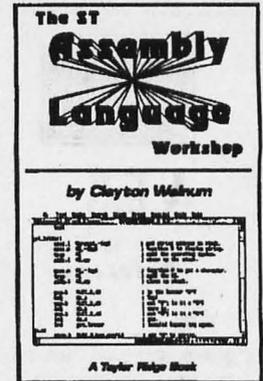
HyperLINK

Relational Interactive Database Application; ST, STe, TT

HyperLINK can't really be compared with any other program on the Atari platform. Like HyperCard on the Mac, it's a database program that can show related graphic images, anima-

tion, sounds, and text, all at the same time in up to seven different windows on your color or monochrome monitor. It requires at least one meg of ram, a double sided disk drive, a hard drive is highly recommended. The disparate output formats can be linked together with buttons that you create through the use of what is called the Application Builder, a tool to create your own personalized applications. Multiple applications can run at the same time and reports can be generated for output to your printer.

HyperLINK can link a number of different database functions and multiple media into one process, application, or display. The possibilities are limited only by your imagination and ambition. But HyperLINK is just a tool, you have to create the functions you want to use, something that can be fairly difficult to master, and lots of work to fulfill. Fortunately, developers at JMG have gone out of their way to make their system accept and direct data files prepared with other commercial databases like DBase, and its own data can even be edited and manipulated via DBase tools.



Applications can be built to track products in your inventory, collections of coins, records, people or anything you may need to keep track of in a database. Or, consider the educational possibilities of interactive displays. Business people can train their employees on the varied aspects of their jobs, and schools can generate applications to help understand difficult subjects.

HyperLINK Version 2.0 has just been released which adds features, finally offers a usable manual, and fixes problems with the report generator. JMG continues to demonstrate that they and their program are here to stay.

Simple database needs don't require the power and the freedom of HyperLINK. But if you want to do something that will provide you with an expanded view of your database with links to multimedia sub-processes, check it out. A free "run time only" version of HyperLINK (available on GENie and local bulletin boards) will let you see for yourself what it can do. Sample HAP files (applications) are also available that will give you ideas, like a map of Canada that lets you click on areas to get close-up views and data about the Provinces. HyperLINK, \$149, from JMG Software, 892 Upper James Street, Hamilton, Ontario L9C 3A5, 416-575-3201. — *Steve Blackburn*

The ST Assembly Language Workshop Volume 1

Book; ST, STe

Clayton Walnut, author of the highly acclaimed "C-Manship Complete" now breaks the assembly language coding conundrum. Designed to be a tutorial, this first volume of a three volume series teaches the basics of 68000 assembly language programming on the Atari ST to those already familiar with computer programming in high level languages like C or even BASIC. The advantages in learning assembler is that a high level language programmer can integrate assembly routines inside of existing programs for maximum efficiency.

The \$24.95 price includes a 260 page book and a disk. The step by step tutorial covers in eleven chapters an overview of assembly language, an explanation of the binary and hexadecimal numbering system, the ST's stacks, registers and 13 addressing modes, branching and sub-routines, and a 68000 Instruction reference by Bryan Schappel. By the end of the tutorial the reader will be able to comfortably convert numbers, call the numerous O.S. functions in GEM, and handle disk files in assembler. The accompanying disk contains the ASCII listings of the example programs, the executable versions of these programs and the public domain program "The Take Note Calculator," which can be installed as a desk accessory. The tutorial does not include an assembler, so the user must



provide his own to assemble finished code. The programs in the tutorial were designed using Devpac 2, and are also supported by The Mad Mac Assembler.

With the ST Assembly Language Workshop, learning 68000 Assembly is easy and straightforward for the beginner. This manual is a well organized work and a fun way to learn a potentially confusing and frustrating language. Volume 2 will expand on what is learned in Volume 1 by applying those assembly skills to GEM programming by covering file sectors, alert boxes, menus and windows. Volume 3 will cover advanced GEM programming. I look forward in continuing the workshop in volumes 2 and 3.

The ST Assembly Language Workshop Volume 1, by Clayton Walnum, \$24.95 with disk from Taylor Ridge Books. — *Kevin Festner*

The A.E.S. Quick Reference

Book; ST, STe, TT

The A.E.S. is the Application Environment Services that provides the Atari ST/TT high level functions. It creates and maintains the desktop environment with its drop down menus, dialog boxes, icons and windows. The A.E.S. Quick Reference is the first volume in a planned three volume reference series providing the experienced Atari programmer or developer a complete guide to the A.E.S. Library of Functions. It is not a tutorial, but rather a catalog of pre-existing assembly language function calls that can be integrated into existing programs.

The \$11.95 price includes a 92 page book and an accompanying diskette and is well worth the price for those already experienced in GEM programming. For the novice, this quick reference will only serve to confuse and frustrate. Each of the 68 AES functions is alphabetically ordered by function name and thoroughly explained. The assembly source code is included as well as examples of each function call in C. Assembly language or C programmers can make use of the included complete program shells as templates for their own programs. The AES libraries range from GEM interface functions, keyboard, mouse, screen and window display functions to memory and file applications, as well as AES message words.

Volume two of the Quick Reference series will cover the VDI, the Virtual Device Interface, and volume three will cover the lower level OS functions found in the BIOS, XBIOS, and GEMDOS. Programmers will welcome the books, but if this all is alphabet soup to you instead of exciting news, skip this series.

The A.E.S. Quick Reference is by Clayton Walnum, \$11.95 including disk and bibliography, from Taylor Ridge Books. — *Kevin Festner*

Cubeat

MIDI Power, Low Price
MIDI; ST, STe

Cubeat is one of the baby brothers to Steinberg's Cubase, a program that provides a modular package for sequencing, scoring, and control over both keyboards and recording equipment.

The contention is that Cubeat

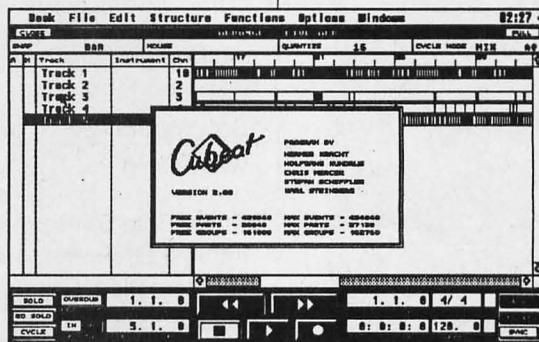
lacks only Cubase's notation features, and is otherwise more or less the same. But it's not quite true. On the practical side, the program will not run on the TT—Cubase was updated, cartridge key and all, to work on the TT. Examination of the sequencer side of Cubase also indicates that Cubeat doesn't completely share its big brother's features.

On the positive side, Cubeat is a lot of bang for the buck. The sequencer relies on extensive graphics in its interface, from displaying parts within tracks by event (this can be turned off) to the way editing is depicted. For example, you can make small adjustments in event placement by using a boot-shaped mouse icon to kick the chosen event into the next slot.

The extensive use of graphics, even when they appear insufferably cute, makes Cubeat exceptionally easy to use even on a surface level. You can operate on the parts that make up a track represented as pieces of tape, edit them with a scissors icon and assemble them at will by using a glue tube icon. Once you start diving below the surface, the power of the program becomes very evident—you can manipulate MIDI data in a variety of ways, right down to the choice of file types, and you can sync the computer to outside devices via a number of options. Cubeat works very handily with the Fostex R8/MTC-1 multitrack tape recorder and MIDI synchronizer combination, which relies on a combination of MIDI Time Code and MIDI Machine Control.

It's this power that makes Cubeat worthwhile despite the difficulties (a tendency to lock up periodically, an occasional failure to notice the copy-protection key, and disagreements with most all standard accessories and auto programs). Steinberg provides extensive support for the program via numerous accessories, available on GENie, as well as by mail from Steinberg-Jones.

If you don't need direct program access to notation, Cubeat is well worth a serious look as a powerful and easy to use MIDI sequencer and system control. Cubeat, \$329, from Steinberg/Jones, 17700 Raymer Street #1001, Northridge, CA 91325, 818-993-4091. — *Steve McDonald*

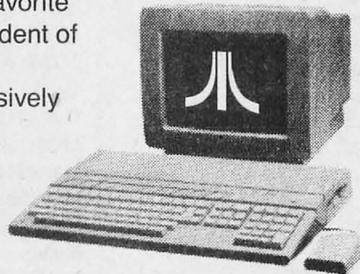


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MegaPaint Professional
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Avant Vector
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and the list goes on and on...

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Latest Software Versions!

Use this list to see that you are using the newest release of these popular software packages for the ST/TT. Please help us (and you!) by forwarding corrections, additions, and updates to AtariUser, for NEXT time!

* Indicates that this is expected to be the final version to be supported.

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1st Card	Logilex	1.2	lottODDS	Missionware	1.1.0
1st Word	ABC Solutions	3.2	Mah-Jong Solitaire	Cali-Co	3.0
Arabesque Pro	Gribnif	2.15	Mail-Pro	High-Tech Advisers	4.11
Avant Vector	CodeHead	1.2	Master Drummer	Zobozian	2.1
Calamus	DMC	1.09N*	MaxiFile III	CodeHead	3.0
Calamus SL	DMC	8/92	MegaPaint Pro	CodeHead	4.0*
Calligrapher	CodeHead	2.88/44	MIDIMax	CodeHead	1.3
CardFile 4	Gribnif	4.02	Migraph OCR	Migraph	1.1
Chronos	Lexicor	1.3	MTC Shell/VSH	Beckemeyer Devel.	2.0
CodeHead Utilities	CodeHead	4.0	MultiDesk Deluxe	CodeHead	3.4a
CodeKeys	CodeHead	1.3	Multiplay	D.A. Brumleve	3.4B
Convector Pro	Gribnif	1.00J	NeoChrome	Atari	1.0
Crossword Crtr. II	Fair Dinkum	1.07	NeoDesk 3	Gribnif	3.02
Cryptographer	Fair Dinkum	1.01	Notator	C-Lab/EMAGIC	3.01
Cubase	Steinberg/Jones	3.015	Omni-Banker	Paradigm	1.6c
Cubead	Steinberg/Jones	2.0	PageStream	SoftLogic	2.2
CyberDrome	Fair Dinkum	1.01	Pha\$ar	Pacific Software	4.06*
DB Man	Versasoft	5.2	Pheonix 512	Lexicor	1.0
DC Shower	Double Click	1.0E	PopIt	CodeHead	1.1
DC Utilities	Double Click	2.0G	PowerDOS	DragonWare	1.03
DC Data Diet	Double Click	1.0A	PowerNet LAN	DragonWare	1.07
DC Desktop	Double Click	1.2H	Prism Paint	Lexicor	1.5b
Degas Elite	Batteries Included	1.1*	ProCopy	Proco	1.8*
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Diamond Edge	Oregon Research	1.02	QuickTools	Branch Always	1.0*
Diamond Back II	Oregon Research	2.5	Rosetta	Lexicor	1.0
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G_MAN	DragonWare	4.0	Spectre/GCR	Gadgets by Small	3.0
Gemulator	Branch Always	2.0	Spelling Sentry	Wintertree Software	1.0
Gemvelope	Synergy Resources	2.9	ST TOS	Atari	2.06
Genedit	Barefoot (Hybrid Arts)	2.0	Stalk the Market	Quidnunc Software	2.0
Genus Font Editor	CodeHead	1.85	STalker 3	Gribnif	3.02
GFA BASIC	GFA	3.6	STe TOS	Atari	2.05
Glendale Show	HACKS	6.0	STeno	Gribnif	2.00
Hard Disk Toolkit	Beckemeyer Devel.	3.20.1	Straight Fax	Joppa	1.6
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INVision Elite	DMC	1.13	Ult. Virus Killer	Oregon Research	5.5g
Kidpainter	D.A. Brumleve	2.3A	Warp 9	CodeHead	3.73
Kidpublisher Pro	D.A. Brumleve	6.4EB	WERKS	Oregon Research	1.25
Knife ST	Oregon Research	1.10	Word Search Ctr.	Fair Dinkum	1.05
Lattice C	Oregon Research	5.52	WordPerfect	WordPerfect	4/91*
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RACC Rockford Atari Computer Club 3693 Renfro Road, Cherry Valley, IL 61016, 815-332-5303 PROG. H. Jake Olbrich Educational Programs for Learning Impaired Students. [8/92]

In Search of: Peachtree Accounting Software for Atari 800, New/Used w/ docs — Cash or 8-Bit equip/trade — Isaac Honor 718-282-0217. [8/92]

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AtariLand Calendar

November 16th - 20th: Fall COMDEX, the biggest computer trade show in the USA with 2 million square feet of show floor. Atari will again have a major presence at the Las Vegas, Nevada show, and has been soliciting for up to 50 third-party developers to participate in the huge Atari area at the Sands Convention Center, and Atari will have the largest booth in the entire Sands complex (Booth #2824). The Falcon line of computer is expected to dominate the Atari booth, with outstanding demonstrations for the dealer and distributor attendees to consider. COMDEX is where dealers and distributors make their marketing decisions of what to carry in their stores for the coming year. It's said that a glimpse of future Atari machines may be seen as well. Contact Bob Brodie at Atari Corp for information on attendance or exhibiting at COMDEX, 408-745-2052. AtariUser will be there!

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January 13th - 16th, 1993: The Winter Consumer Electronics Show comes to Las Vegas, Nevada. CES is an electronic playground, with ev-

erything in the way of high tech toys for kids and adults. Game consoles and hand-held entertainment items like the Atari Lynx are big here, and Atari will attend with a hotel suite showroom. Will the Jaguar make its first appearance? Contact Atari Corp for more information on seeing their display at 408-745-2000.

January 15th - 18th, 1993: NAMM is the largest conclave of musicians each year. Held in Los Angeles at the Anaheim Convention Center, the variety of sights at the National Association of Music Merchandisers is wilder than at Disneyland, just next door. Atari was the first computer manufacturer to ever display at NAMM in 1987, and has become a standard at the shows. A trade show for music stores, distributors, and professionals of every strata, entertainers are seen everywhere at NAMM. AtariUser will be there! Contact James Grunke at Atari Corp for more information at 408-745-2000.

March 13th - 14th, 1993: The Sacramento Atari Computer Exposition is to be sponsored by the Sacramento Atari ST Users Group (SST) at the Towe Ford Museum in Sacramento, California. This show replaces the earlier scheduled, then cancelled Northern California Atari Fest for the Bay Area, to have been held in December 1992. A major two-day effort, the SAC show is being held in the special events area of the Towe Ford Museum, home of the worlds most complete antique Ford automobile collection. As an added bonus, admission to the museum is free when you attend the Expo. The museum is located at the intersection of Interstates 5 and 80, just 15 minutes from the Sacramento Metropolitan Airport. Contact Nick Langdon (Vendor Coordinator) C/O SST, P.O. Box 214892, Sacramento, CA 95821-0892, phone 916-723-6425, GENie: M.WARNERB.

March 1993: CeBIT, the world's largest computer show with 5,000 exhibitors in 20 halls, is held annually in Hannover, Germany. Atari traditionally struts its newest wares there, usually before it's seen in the USA or anywhere else. In '93, the Atari 040 machines should be premiering, and this is the likely venue. Third party developers also use this show to introduce new hardware and software, so expect a wave of news from CeBIT every year. Atari Corp and the IAAD coordinate cross-oceanic contacts to promote worldwide marketing of Atari products, and this show is an annual touchstone of that effort. Contact Bill Rehbock at Atari at 408-745-2000.

September 18th - 19th, 1993: The Glendale Show returns with the Southern California Atari Computer Faire, V.7.0, in suburban Los Angeles, California. Contact John King-Tarpinian at 818-246-7286 for information.

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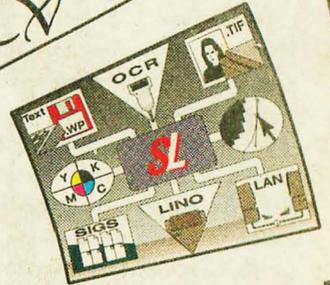
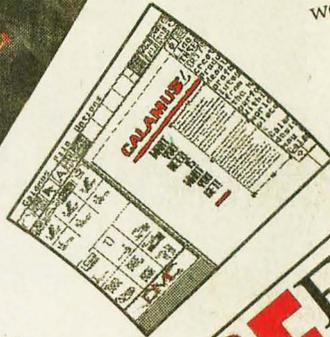
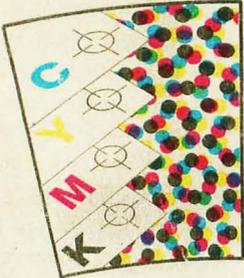
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