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Jan. 1991

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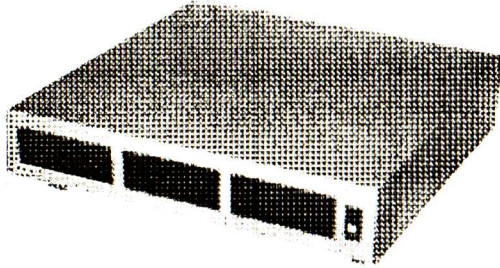
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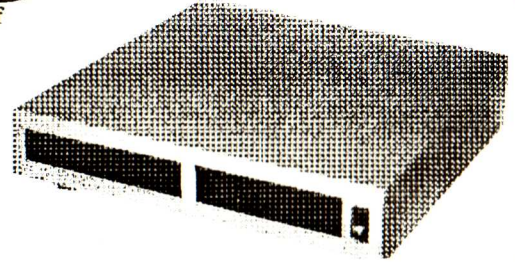
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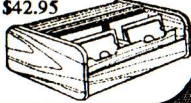
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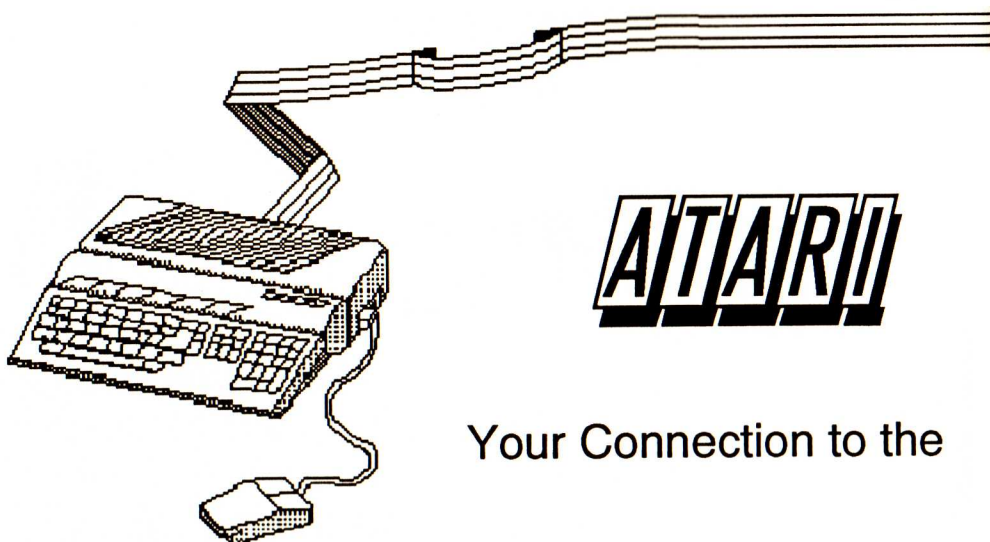
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ATARI

Your Connection to the

Volume 3

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

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INTERFACE



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Number 1

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On the Cover

The New "MegaSTe" as shown at Fall 1990 COMDEX. Courtesy Atari.

Managing Editor: Patricia Snyder-Rayl

Editor: Bill Rayl

Photographer: Gary Klugman, Pattle Rayl

Artwork: Migraph, Steve Volker

AIM is produced on a 4 Meg Atari STe, HP Laserjet II with PacificPage Postscript cartridge, PageStream and Calamus.

From The Reader's Viewpoint



Dear Bill & Pattie—

Hi to all of you! AIM is an outstanding magazine. It's a pleasure to enjoy the products of people who do a good job. My thanks to each of you.

Enclosed is a letter to Tim Craft of CACE. Please forward it to him.

Dear Tim, Enjoyed reading your article 8bit Q&A in the October issue of AIM. I have a problem. My Atari computers are 1200XL and 130XE.

Many printed (or listed) 8bit programs have a READ statement. The ensuing DATA statements contain a series of numbers, eg 243, 22, 199, etc. What are those numbers? Where does a programmer

get those numbers? How do I learn to use such numbers in my BASIC programs?

Some articles and manuals list PEEK locations followed by strange words such as VDSLST, VINTER, SIOV, etc. (See page 31, October issue of AIM.) What do those words mean?

Atari Friendly,
Joseph Hicswa (JACG)

AIM:

I don't know where else to turn. The Atari 800 still remains a breakthrough as far as I'm concerned. It is the *only* computer I know of that has *four* joystick ports useable by durable, inexpensive joysticks.

This is important because I and the neighborhood gang can't get enough of four-player games. Competitive or cooperative, arcade or strategy, we love them to death! We starve for more!

Please, tell me how/where I can get more four-player games. Any multi-player games will do also. These games are tough to find. Not to mention Atari 8bit software as a whole. Please include cost and ordering info also. Thanks!

Larry Nocella
Woodbury Heights, NJ

[Eds: Can anyone who reads this help Larry out with multi-player games, either PD or commercial?]

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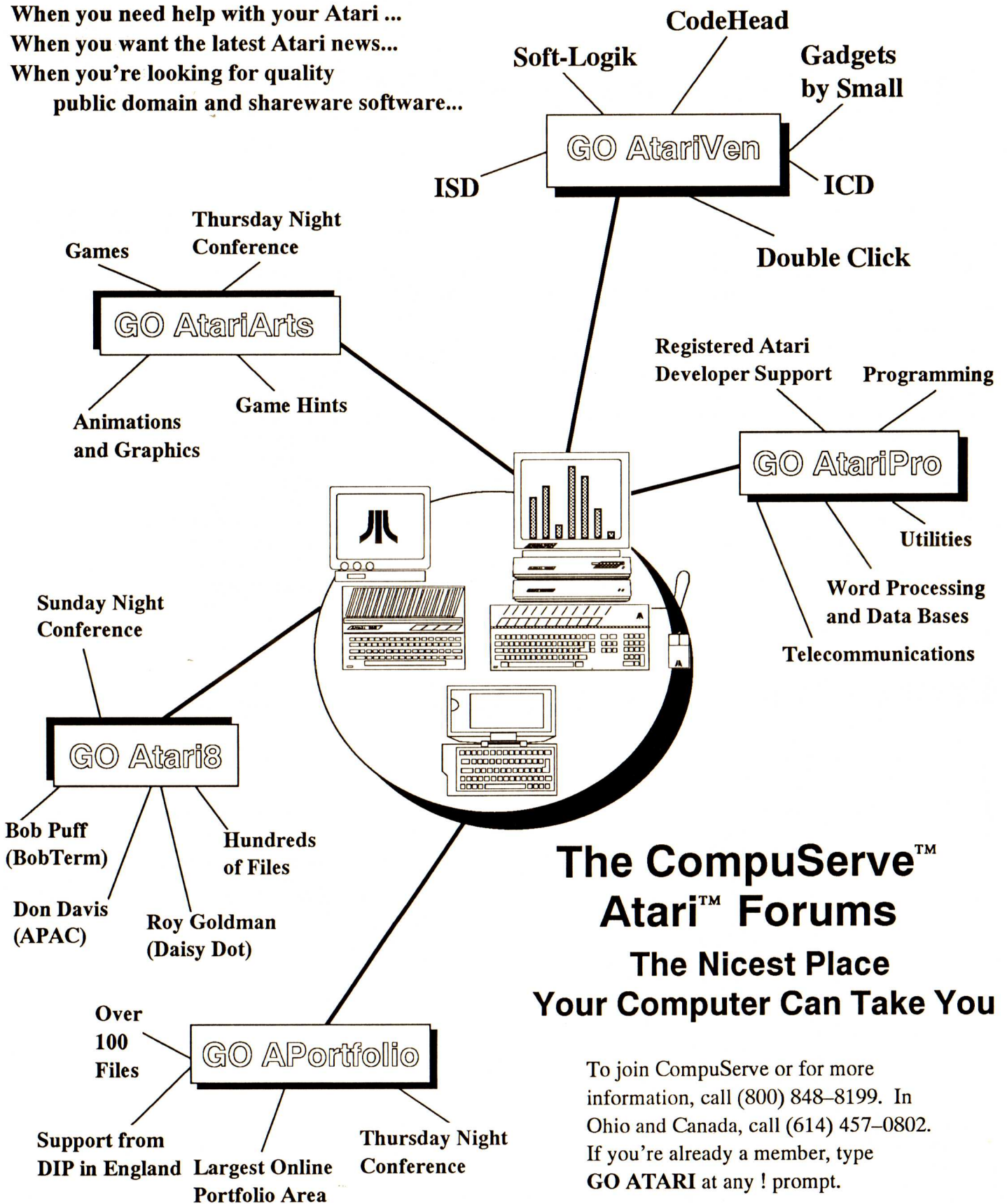
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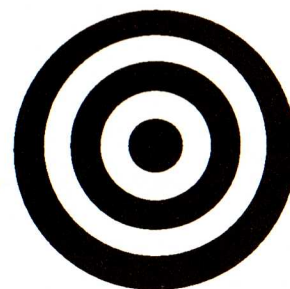
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Right On Target



David Plotkin

The first raindrops of autumn are just starting to fall on a *very* parched Northern California as I write this in mid-November, 1990.

It is certainly welcome—another dry year and we'd have had a new round of water rationing. The rain is going to make moving difficult, though. Yes, I sold my house and bought a bigger one with a mortgage to match.

The pressure from my spouse for more room finally wore me down. And though you may have heard that the real estate market in California had gone flat, such things are relative. True, real estate here is not escalating at the insane rate of past years—but this affects buyer as well as seller, and selling a house (like anything else) is just a matter of pricing it right. Mine sold to multiple offers in six days—I guess I priced it right.

Misfortunes of Moving

The job I am going to like least about moving is moving my Mega ST. The tangle of wires behind my nice, neat workdesk is beyond belief.

In fact, the new buyer, inspecting the house, questioned if I had not had to modify the house circuitry to handle such an incredible load. I had not, of course, since everything plugged into the outlet is a low power device.

With everything on at once, the lights don't even dim—which I can't say about the times my wife fires up her iron.

The wires aren't all electrical—as I have detailed before, my sys-

tem is chock full of switches for external drives, printers, monitors, even RS-232 switches. I have a modem, and a Video Key, and a Mouse Master...well, you get the picture.

Untangling the Tangles

I've been scratching my head for some time over two things. The first is how to even untangle the mass of wires. They seem to have multiplied over time, like some nest of incestuous snakes, and their number seems to increase every time I look back there.

It ain't pretty, folks. The second problem will be hooking everything back up correctly. I'm not sure I can remember how everything goes together any more. I puzzle over this every time I modify my system.

The answer, it occurs to me, is to label each cable and wire with the name/description of its termination point. As I pull each wire off, I'm going to put a piece of tape on the end and use indelible ink to write where it plugs in. This ought to work, and actually presents an opportunity to neaten things up behind my desk. I'll let you know how it works out.

The tangle of wiring is an unfortunate necessity with the Atari ST. My PC, which is equipped with nearly all the same equipment as the ST, has very few wires.

The reason is that most of the equipment on a PC (drives, controllers, switches, tape backup, modem, etc.) can be mounted internally in the case and wired directly into the bus. I happen to have a big case on my PC—a full-size tower that still has empty slots and drive bays.

It's really too bad the ST can't be packaged in a larger case that can carry many of the peripherals internally. I have heard rumblings of such things from Europe, but have yet to see anything appear here. So, I guess, for the meanwhile, we live with it.

AIMing High

I got my latest issue of AIM today, as well as Current Notes. Once again, I have been struck by just how fine these periodicals are.

The real thing that stands out is that they are definitely labors of love. This is not to say that they aren't professional—they are. And though both magazines are run as businesses, there is an underlying something that says "we like what we do." I find this extremely refreshing.

I read a lot of computer periodicals, from very dry publications like Computerworld and PC Magazine to some small local mags like Computer Currents and Microtimes. These last two are indigenous to Northern California, although I hear versions are springing up around the country.

Many of the periodicals are simply put out to turn a profit (unfortunately, I begin to feel STart is falling into this category). But the ones that are put out because the editors and contributors really *want* to put them out shine.

Bill and Pattie Rayl of AIM and Joe and Joyce Waters of Current Notes are not getting rich doing this—Joe/Joyce and Bill/Pattie don't even earn their "real" livings producing their respective publications. Nevertheless, the world would be poorer without them.

I look forward to receiving



these magazines every month, as they let me know what is going on in the world of Atari in a personable, yet professional, manner.

Making Mac ROMs

Have you ever wondered where all the Mac ROMs were coming from? I mean, the ones that you buy to pop into a Spectre cartridge. After all, Apple doesn't exactly produce lots of extra ROMs. And it isn't like a dealer needs to stock ROMs as spare parts—ROMs don't go bad and never have to be replaced.

In fact, the only source I know of for "spare" Mac ROMs is upgrade kits for Macs. That is, people who have older Macs that use the original 64K Mac ROMs can upgrade at an authorized service center.

Among other things, the 64K ROMs are replaced with the newer 128K ROMs. That, by the way, is why 64K ROMs have always been relatively plentiful—they are left over from Mac upgrades.

A little simple arithmetic, though, will show that something is amiss. I don't know how many Spectre and Spectre GCRs Gadgets by Small has sold, but it's a lot. I would guess the number is now nearing 10,000. Now, there aren't many un-upgraded Macs in the world any more, so Apple doesn't produce many upgrade kits. Those they *do* make, they keep pretty care-

ful track of. So where the heck do all the Mac ROMs come from?

As it turns out, a very inventive fellow in the Midwest has been making bogus Apple ROMs. That is, he was actually burning ROMs copied from Apple, and even silkscreening the Apple logo right onto the ROM, so it looks like the real thing. These were then sold to unsuspecting dealers (at least, I assume they were unaware they were involved with fraud), who sold them to eager Atarians.

As you can probably imagine, the guy made a fortune. His cost to manufacture the ROMs was probably on the order of a few dollars, and he was getting close to \$100 each for them.

When he was caught (yes, crime does not pay!) he was in possession of a half million in cash and a weapons arsenal (guess he was expecting trouble!). He is in jail now.

As Dave Small has commented many times, it doesn't pay to mess with Apple's lawyers (unless you're Microsoft or Hewlett Packard, who are successfully fending off Apple's latest legal maneuvering). But for the little guy, it's not a good idea. The question in my mind now, though, is where are we going to get Mac ROMs for future purchasers of Spectre?

See you next month!



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COMDEX FALL 1990

Michael Drysdale

As an Atari dealer and reseller, I probably look at COMDEX a bit differently than the press or a user. Here, only somewhat organized, are my views of this major computer show.

Off the Bat...!

The first stop in the Atari booth was Spectre 3.0x on a TT connected to a MEGA with an 030SST (Gadgets' much talked about 68030 upgrade for the ST) via AppleTalk as demoed by Doug Wheeler of Gadgets.

Bob Brodie cruised by and I latched onto him for a tour of the exhibit. Next stop was PageStream 1.8x on a TT. Fast? Yes. But even better was the display—TT hi-res 640x480 in 16 colors.

They were sending output in Postscript format to a QMS color printer. Full color DTP to slobber over. Next to that was Migraph, showing TouchUp's new ability to load/save grey scale TIFF and PCX files and thus print true grey scale from PageStream.

On a surprise visit to the Atari booth was Beach Boys' Bruce Johnson and James Grunke, keyboardist who uses C-Lab's Notator for everything but live performances. Story was they provided passes to Atari for their Las Vegas show.

I spent lots of time with Jeff Williams, GENIE SysOp. He showed me how to use Alladin on GENIE and gave me a copy of same. Listen up people, it is time to stop using CompuServe.

Augie Ligourie stopped me and asked how I liked the Portfolio

which I was using to make these notes. Well, that was his mistake!

I promptly pounced on him for a discussion of Stacy marketing and configuration. My only impression was of Teflon; he's heard all the dealer feedback before and it just doesn't stick.

Don Thomas of Atari talked about new application cards for the Portfolio. Look for Spellchecker, Thesaurus, Language Translator, City Guide Book, Expense Tracker and more.

What hardware did Atari have at their exhibit? Some products we can talk about, and some we can't.

The New Mega STe

First what we can't tell you about. The MEGAE (a Mega STe). Yes, Atari showed lots of them.

When can you *buy* one? Not any time soon (wait at least three to six months). When (*if*) it arrives, it will offer all the features of an STe plus: Math co-processor socket, VME bus (which is more standard than the MEGA bus, which it won't have) and a 16Mhz 68000.

Remember, the units at COMDEX *weren't* final products. Therefore, anything you read about them could be changed by the time they actually go on sale in mid '91.

Everywhere in the display (and on dealer price lists) was the TT. List price is \$2999 for 2mb RAM and 50mb hard drive. The PTC-1426 color monitor runs \$549. I'll not repeat here what you must have read months ago about it.

Not shown and not available (or in the foreseeable future) for US distribution was the CD-ROM drive. The few Stacys there appeared to be owned by developers. Atari said little about it.

Portfolio

There were lots of Portfolios. Shown was its ability to connect to Mac, ST and IBM machines. Nifty stuff was a portable 20MB hard drive and an A-D converter. This was clearly the product Atari is pushing. Watch for over \$1 million of advertising for it this holiday season.

What products were on display: Pagestream, Calamus, Dynacadd, Spectre, LDW Power, Word-Flair, Tracker, Hotwire, GENIE, AT-speed, and Talon Technologies' IBM emulators.

Noticeably missing were Word-Perfect, games, color drawing/animation programs and anything for video production. Unlike many other booths, there were no knock-your-eyes-out sight and sound demos.

"Will there be any advertising for the TT or STe?," I asked of a very high-ranking executive. "No," was the answer. He suggested it was up to dealers.

Little known fact: 30 percent of Atari's business is in educational markets. An Atari executive hinted there may be a promotion aimed in that direction.

Here are some tidbits for you hardware dwe...uh...specialists. Does the TT have a Genlock port or will the VME bus do? Do the TT and MEGAE have a clock? They act like they do, but no mention in the specs.

The MEGAE keyboard is neither an ST or MEGA keyboard; it's something else.

An offhand comment from an Atari employee (possibly a techie) revealed the TT has a 1.44MB drive but the drive controller chip only formats to 720K. However, the

chip is socketed. So get out your chip pullers and....

Does the MEGAe have an internal DMA or SCSI port? Or is that TT case misleading? Why doesn't Atari sell a version of the TT without the math coprocessor and hard drive and less RAM? A lower price might encourage more people to upgrade. Of course it might take sales from the MEGAe which won't be here till...

Did you know the TT will accept 26 meg of RAM! The MEGAe will(?) have TT TOS, so why not the STe? There's no Blitter in the TT. Hopefully someone will explain why a 68030 doesn't need it. Is the MEGAe so similar to the TT that one could fit it with a 68030 or is the case again misleading?

What you may read about what Atari said at the show about various products will vary depending upon: 1) who said it, 2) who they thought knew what or 3) what they thought they were authorized to say and to who. In other words, if you get conflicting information about COMDEX, don't be surprised.

Other Sights

I could not help but notice a kiosk prominently displaying all of Atari's products in front of the main entrance to the Las Vegas Convention Center.

Video Toaster—if you have not heard about this product on the Amiga (and soon MS-DOS), listen up.

Go and seek out info on it; go see it. It will change the way you think about computers and video.

The POQUET palmtop was available from distributor Ingram Micro-D. To be a dealer, you must order 25 units or \$40,000 minimum order. With dealer demands like that and a \$2000 price tag, Portfolio should continue to outsell it 14 to one.

Why do Intel, IBM, Apple, Compaq, HP (\$3 million to be a dealer), etc. bother to exhibit? They have all the dealers they want. Must be the prestige of having more money than you can spend.

There was a long line of people waiting for an autographed copy of a net-working book. How dweeby.

I watched a Mac II play back segments of Star Wars and Roger Rabbit better than regular video.

For those of you who think a trip to a convention in Vegas is exciting, I must make reality clearer. This is a working trip. As sole proprietor of a store, being in two places at once (East Detroit and Vegas) is difficult. If I'm in Vegas, the store must close. So, to minimize this inconvenience, I travel at night.

This is my second time to Las Vegas and COMDEX. Vegas is beginning to seem much like a plain, middle-aged hooker. The makeup and sequined dress looks glamorous and promises decadence; but underneath, things are wrinkled and sagging.

A Second Look at COMDEX

Irwin Brooks (LACE)

The Atari booth was the largest or near the largest on the Sands convention center floor. It was located adjacent to the entrance doors and was highly visible to all passers by.

Atari TT

The Atari TT030/8 runs TOS (and Unix?) at 16MHz [Ed: The TT CPU runs at 32MHz, while the rest of the system clocks in at 16MHz]. As of 11/14/90, the TT was in its 3rd week of FCC testing for Class B (home use) certification.

The TT was planned to be available and shipping by COMDEX time. However, initial first design tests of the TT showed that its electronic emissions were over the allowable FCC limit. This resulted in the case being redesigned to eliminate the RF shield and use brass-coated covers instead.

Mega STe

The new Mega is much more than just a repackaged Mega in a TT case. The Mega STe is now a 16MHz, Blitter-equipped Mega with all the other advantages of the STe. The Mega STe now sports stereo sound, 4096 colors and the TT's desktop. Plus, the

Mega STe can be equipped with an optional 68881/2 floating point math coprocessor for even more speed.

If that's not enough, how about Genlock for your multimedia video processing? This is quite the needed upgrade for the top-of-the-line ST computer series. Enough of an enhancement to get me thinking another ST could be put to some good uses.

Stacy

The Stacy laptop failed FCC Class B approval. So now, the word is the Stacy will no longer be offered for sale in the US. Atari is allowed to sell Stacy only to music distributors that sell to music retailers. And, who do you think would buy a music computer they can't sell to musicians, since Stacy can not be made available to any end users?

The Stacy product outlook is anybody's guess.

Portfolio

Yawn...the Portfolios at COMDEX seemed to draw some attention, but it was not a hit. Contrary to some beliefs, Atari does not have a corner on the palmtop market. In fact, there were palmtop computers at about every other booth, most with more features than

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the Portfolio. I wish Atari luck in this, since they could use the capital for more important things.

Software

Hot Wire—Charles Johnson and John Eidsvoog of CodeHead Software were there all three days answering questions and helping educate others on the benefits of this powerful desk utility.

NeoDesk 3—It's as good as the reviews have said, but unless you've seen it you can't imagine the difference. NeoDesk 3 is the desktop Atari should model all future revisions of TOS after!

HyperLink—The Atari Mega/ST's lookalike to Apple's HyperCard. HyperLink is a shell application standard program. It, in itself, can be developed into an indispensable desk tool but "stacks" must be written to work under HyperLink.

Graphics, database and spreadsheet data are easily handled by HyperLink. Look for this to be the shot in the arm the ST market needs to gain notoriety and respect.

WordFlair—Wordflair 2 is expected to be available at the end of November. Wordflair 2 is a new kind of software on the ST computer. It's not a word processor nor a desktop publishing program but a document processor.

A document processor was explained to me to be a word processor with selectable fonts, graphics import capabilities like a DTP but also it has a spelling checker and the speed of a word processor. [EDs: See the Sept. 1990 issue of AIM for a review of Wordflair.]

SoftLogik—PageStream 1.82 was on display running on an Mega STe. Softlogik has informed me the TT version is available free for TT users. (For version 1.83, registered PageStream 1.82 owner need to contact SoftLogik.) PageStream version 2 is in the process of being ported over to the Atari ST. It is already available for the Commodore Amiga. Expect PageStream 2 to be available in late first quarter of 1991.

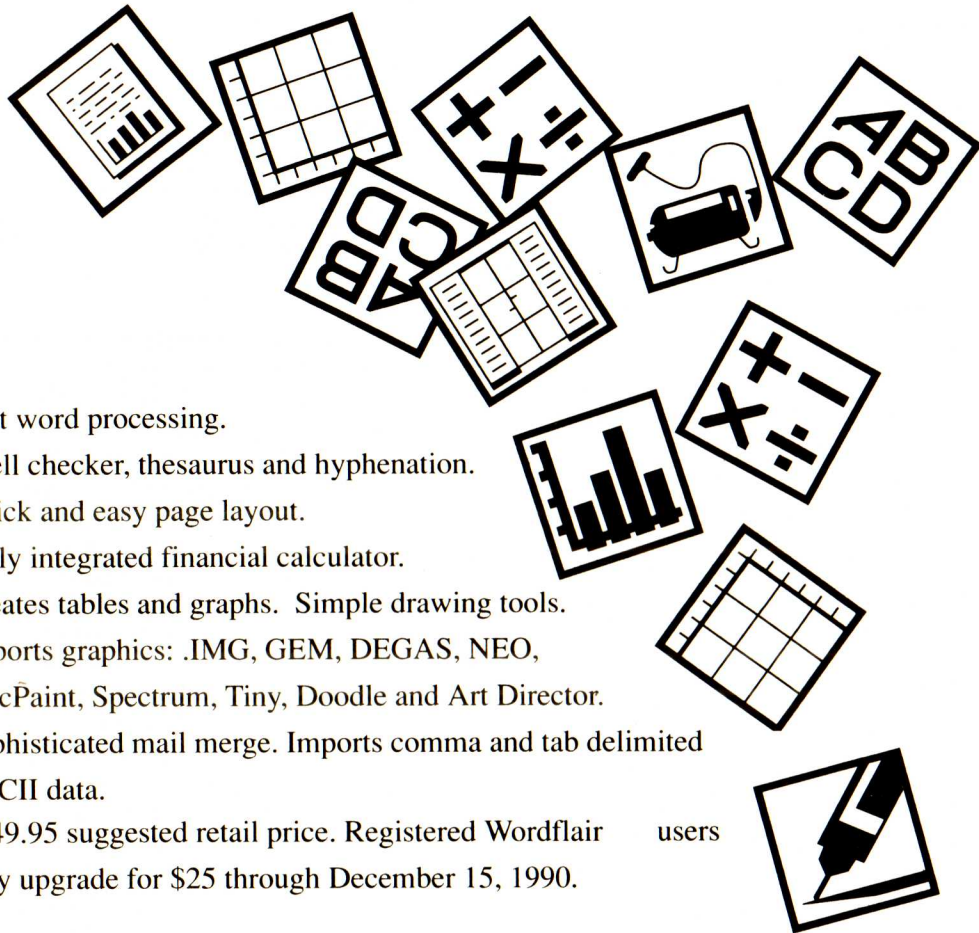
Hardware

Gadgets by Small, Inc.—Gadgets had the GCR running on the TT. The AppleTalk networking was being demoed between the TT and a Wallaby (portable Macintosh). The speed on the TT was impressive. The TT with the GCR compares to a Mac SE!

DreamPark Development—Our local guys (from Salt Lake City, UT) were there promoting the Power Drive (1.44bM floppy modification), a LapMate 720K floppy disk drive (allows the same drive to be used on the Atari STs and a PC laptop) and a yet un-named DMA to SCSI convertor to allow Macintosh peripherals to be directly plugged into your ST.

That is about all that comes to mind from the Las Vegas COMDEX held from November 12 to 17. I hope I didn't miss anything or anybody. If I did, I apologize. This was one of the most impressive displays of Atari unity and cooperation I have ever seen. Let's hope this is a sign of renewed life for Atari.

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The Right Brain

Living with a Multiple Personality Defect in Your Machine

Paul D. Stampfli (El Paso)

As I write this in mid-November, I see that is happening in the pages of AIM.

Billy Bob Ray stunned a few folks with his outspoken, albeit anonymous, editorial, and many of our contributors took offense. Some even took the time to think.

I am not going to comment much on this issue, except to say David Plotkin was, once again, "Right on Target," and Steven Leser made some excellent points with his comments on software pricing.

Software piracy is going to be around for a long time, and I think Billy Bob makes an excellent point with the advancement of demos of programs. I know I certainly hate to be stung by a very bad program. (Can you say Turbo Outrun boys and girls?) Shareware is the best way to go, in my opinion, and I want to throw my two cents in to remind everyone to register their shareware and support these hard-working programmers.

Of course, I don't want to appear to condone piracy. I don't condone auto-theft, either.

Ok, off the soapbox. I had an interesting conversation with a lady at work just the other day. I gave her a copy of a lesson plan of a professional class I had presented a couple of months previously.

She was very impressed with it, and commented that the Macintosh sure made "things look pretty, but it just isn't compatible with the standard Zenith's that the Army uses." Of course, being who I am, I just couldn't pass up the oppor-

tunity to talk about the STIBMAC. So I casually said something to the effect of, "Yes, I printed it on the Mac laser, but I typed it up on the Zenith and got some of the graphics from the Atari bulletin boards here in town."

She was *quite* interested, and we chatted for about 15 minutes about the STIBMAC, and all its capabilities and how "incompatible" its products can be.

She finally, of course, got around to asking what the basic platform was. When I told her it was an Atari, well, I had to go get my coat. The temperature dropped a good twenty degrees in the room. She stiffened up, and with something of a superior air, excused me from her presence saying she had "important work" to do. She did, however, keep the copy of my lesson plan to use as a reference.

NOTE: For those of you who don't know it, STIBMAC is the term used to identify the ST-IBM-Mac multiple personality computer. That is, an ST with two emulators running. This name was coined, to the best of my knowledge, by Jim Jenkins of Jenkins' Computer, and is about the best label I've heard of for this beastie.

A year ago, I would have been furious over this incident, but today I just shrugged it off and got back to business.

You see, I have found that the world is ready for a machine with multiple personalities, it's just not ready for that machine to have "Atari" on the label. Because Atari means game machine, Atari means 8-bit, 2MHz technology. And, even though you can prove otherwise, the mindset is "it's not compatible,

and don't try to confuse me with facts!"

So, I just smile a lot and continue to turn out whatever is needed, in whichever operating system (or personality) is most appropriate, and I wait for the world to catch up with me.

I know there are others doing the same thing that I am, and possibly some more thinking about giving their machines multiple personalities. I say to these people, "GO FOR IT!!!"

You won't regret it for a minute. Oh yes, you'll have to put out some bucks, and some brain sweat, and maybe spend a few late nights trying to fix some things. But, in the end, it will be well worth all your effort and cash.

Suggestions

Before you start this project, get as well acquainted with your products and support as possible without parting with the green stuff. You will need a hard drive; I recommend something in the 60 megabyte range as a minimum.

If you don't have an Atari dealer in the area that you *trust* to get inside the guts of your machine, is there a hardware hacker in your club or area that is very good with a soldering iron? Will your dealer take things back that don't work? Will he stand behind his products? Is mail order better (be careful!)? What is the least expensive route for you that will meet your needs?

Hard questions, the last being the hardest because you don't really know what your needs are until you actually start using the different OS (operation system) and find out what you *can* do with it.

Upgrade your RAM. I have a

Mega 2 and it's getting too small. While DOS isn't too much of a problem, the Mac is super RAM and disk intensive. That's another good reason to go with a hard drive (faster is better, down to about 21 msec. Faster than that is pretty much wasted), as Mac mode will give you tennis elbow swapping disks.

Get a monochrome monitor if you are going to use the Spectre. Although it will work in color, it's not very good, and the graphics and screen quality are stunning in mono. I recommend a monochrome anyway, if you do anything other than play games.

IBM Emulation

I have PC Ditto II for the IBM personality. I got Ditto I early on, and ordered the upgrade *months* before it was ever up and running. PC Speed isn't as flexible, and Supercharger, as far as I know, doesn't support sound, and is much more expensive. Of course you get the extra RAM with Supercharger, and it looks nice, and you don't have to solder it to the 68000 CPU. I haven't got a handle on the 286 they are supposed to be releasing, but if you're reading this (Talon Technologies), I would be very happy to beta test or review a unit for you! *Hint Hint.*

The large board size with PC ditto II means that you will most likely have to put Ditto II outside the case. Of course, you can remount your ST in an IBM style case. This is a pain, but not as much of a technical

problem as you may suspect, and gives you a great place to put your very own (personally designed) STIBM logo, as well as all the drives and cables you'll ever need. It also clears up your desktop, especially if you go with a tower case.

When running in IBM mode, use at least DOS 3.3, and make a backup of your system disk. Then, you can experiment all you want with autoexec.bat, config.sys and all those other fun things IBM forces on you. Then, even if you screw up in a big way, you can always start over again with your back-up.

Keep your IBM stuff in a separate partition of your hard disk and let it be. While it's much more convenient, and *usually* safe, to move IBM files with the mouse from the GEM desktop, MSDOS doesn't always like the results! The best thing is to leave that IBM partition alone except for data files you are moving to another OS. By the way, always save a backup copy of data files in the original OS, as they can easily get trashed in conversion.

Specifics

There are some things you just don't want to do, trust me! Let me warn you about the ones I know about. MSDOS is a command line nightmare, but it allows you to write, from that command line, your own batch files as well as configuring your system and telling the computer how to boot up. It even allows you

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to define your own prompt from the command line. MS-DOS can be very trying, but it can also give you a very deep feeling of satisfaction to master it.

Use the autoexec.bat file to tell the computer which programs to run at boot-up, and in what order. Also, specify if you do/do not want to reset you date/time on the computer.

If you'd like to see more, without an IBM emulator, you might consider .ACcess! from Rock Digital. This Command Line Interpreter works from GEM and gives access to many of the strengths of an IBM while still keeping your ST a one-personality deity.

Spectre

Which brings us to the Spectre and Dave Small. This guy is a pure, unadulterated genius and has my utmost respect. He started out with Data Pacific and the Magic Sac. Gee, what a hippie, Dave! A computer board in a brown paper bag that was stapled shut! Ah yes, the old days!

Anyway, you can choose the Spectre 128 or the Spectre GCR. I recommend the GCR because it will run Mac disks right out of the box. You will need to

buy the cartridge and the Apple ROMs. These can be had for less than \$400 total if you shop hard.

Don't overlook the Mac personality just because you have a mouse and a desktop. A Mac is *not* an Atari. I overlooked this OS for too long a time before I woke up and got on the ball. It's a great OS, with a lot of very fine applications written for it. And, while it's true that the Spectre emulation is a Mac Plus (a computer no longer supported by Apple), the Plus was the PC of the Apple world for a number of years, and most applications will run in the Plus environment.

Specifics

The Mac has some *super* software written for it. Support from Gadgets is the best in the business, on a par with WordPerfect. When you consider the size differential of the two companies, what higher praise is their? Most all Mac software will run on the Mac Plus emulation of Spectre. The emulator set-up software allows you to make the Mac partitions of the hard drive invisible to the other operating modes. This is a good thing, as otherwise wholesale HD destruction would occur.

Moving data files from ST to Mac is accomplished through the Transverter software provided, but you have to get your own System. System is the Mac software OS and can usually be procured cheaply, (or free) from the same place you got the ROMs for the cartridge. I strongly recommend that, if you have the space, make a small (one meg or so) Mac partition as MFS. Trust me. MFS is an "old style" Mac format, but is what is supported by Transverter, and doing this will save you a ton of time in transferring files.

What about word processing? Well, there's MS Word, Works, MacWrite, WordPerfect and on and on and on. And *all* of these allow the direct importation of graphics into the document, even in the most basic versions. And fonts, *wow!* There are more fonts than you can shake a stick at.

The only limitations are your memory and your imagination. Take it slow. I've had some *very* frustrating times in the world of emulation. Do not kill your machine, or throw it out the window. Just turn it off and come back to it later.

And something to dream on is this: When Atari delayed and delayed the TT, Small has started producing the 68030 board for the ST. While not a TT, it is reportedly very fast! When Atari says, "we'll have so and so by this and this date," and fails over and over again to deliver, Dave Small says "We can't do that, it's impossible, the stuff is all incompatible." And generally within the year, it is sitting on your desk.

I just got the Spectre newsletter, and I was heartened by reading Dave's comment in response to the question "Will we have a Mac II emulator on the TT?" Says Dave; "No. The 256K ROMs aren't available, NuBus would have to be completely changed, the monitor memory map is incompatible, and so on and so forth."

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Paul Gittins (PAC)

When I saw the new ad by DreamPark Development of Salt Lake City, Utah for their PowerDrive, my first thought was that what they were saying couldn't be done.

The Floppy Disk Controller (FDC) chip in the ST simply is not capable of doing formats of the density required for 1.44 megabytes of disk storage. You know how things always seem to be too good to be true.

Naturally my curiosity was peaked and so a few minutes later I was on the phone talking with Howard Abrams about their new product. He agreed with me that a normal ST FDC is not capable of high density and that is the heart of their new package.

What they have done is remove the original FDC chip and replace it with a newer style chip capable of the desired operation. I must hasten to add that you cannot simply unplug the old chip and replace it with a newer one.

First off, the FDC is soldered into place and has about forty pins to deal with. Second, there are some control lines dealing with the higher density and drive selection which need to be considered.

The PowerDrive takes care of these problems, as it comes on a small circuit board about two inches square with the new FDC chip and a couple of associated components. The board design is very neat and the quality is quite good.

To install the PowerDrive controller, the original FDC chip must

be removed and a socket is provided which is installed in its place. A small socket adapter board is provided which plugs into the chip socket and provides a couple of jumper selections as well as a cable plug-in assembly. A ribbon cable is plugged onto the adapter board and run to the PowerDrive board.

Installation

The installation of the PowerDrive circuit will take a competent technician from one to two hours depending on the condition of the computer and where the board is installed.

I was quite pleased with the overall installation. On the newer 520s and the 1040s, there is a very nice spot for the circuit board between the disk drive and the power supply, almost like it was left there for this purpose.

Did I forget to mention the high density disk drive? You will also need to obtain a high density drive. This can be obtained from DreamPark or you can "roll your own."

I recommend getting the entire package from DreamPark. The HD drive can either be installed internally as drive A or externally as drive B. Using the drive internally will require some artwork (carving) on the case of your ST as the eject button will probably not match the case of your computer.

When using an external HD drive, there needs to be a way to let the computer know which type of disk is being used, normal or high density. This is done by running a control line from the disk drive to the computer.

There is a small square hole in

the opposite corner from the write protect notch which is used to identify a high density type disk. The drive senses the high density disk and then provides a signal to the computer via the control line.

This line must be wired from the drive to the FDC where it is recognized by the PowerDrive circuitry. Unfortunately, this means a small hole will need to be made in the case or your computer to accommodate this wire.

Extras

The software provided with the PowerDrive is both attractive and functional. Not only does it format at 1.44 megabytes, but will actually extend the format up to 1.7 megs. It works and it works well.

The PowerDrive has the ability to switch between step rates, which means you can use also use 5-1/4" drives. Also, the data transfer rate is faster, which means programs load quicker and disk write functions are faster. The speed increase is on the order of 25 percent.

If you should decide to "roll your own," I strongly suggest using a TEAC drive. Not only is the quality very high, but this particular drive has functioned very well under all tests.

When I installed the PowerDrive, I used another type of drive and found I needed to do a little work on the drive to find the Density Select line. Had I used the TEAC, all the work would have been done for me.

The price at the time of this writing is \$259.95 for the PowerDrive board and External HD Drive, \$189.95 for the board and internal HD drive and \$119.95 for the board only.



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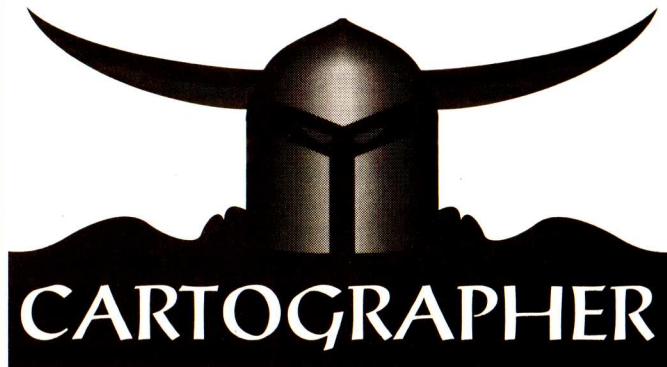
Board and External HD Drive...	\$259.95
Board and Internal HD Drive...	189.95
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Support

I had occasion to talk with the people of DreamPark and I must report their philosophy of doing business is very refreshing. They are totally committed to quality and top-notch customer service. They went to a lot of trouble to write a clear and usable manual, and as a result, my installation experience was very good.

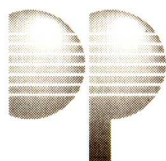
If you have the need for higher density or just the desire to reduce the size of your archives and backups, then this could be your solution. Once it is in place, it is transparent until you actually require its use, then it works. Using it is simple and trouble-free and I recommend it highly.

I must add one final caution. I have repaired a few ST computers in my time and very often I have seen hack jobs performed by incompetent would-be technicians. Do not attempt this installation unless you have anti-static soldering and desoldering equipment. You must also use good craftsmanship if you want this to work. It is not hard to do permanent damage to the ST, especially while removing chips. Many times, when STs need repair they are sent back to Atari for board exchange. If there is visual evidence of hacking, Atari may not accept the board and you are then the proud owner of an unrepairable ex-ST.



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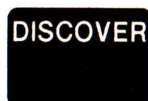
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Hewlett Packard DeskJet 500

The Inexpensive Laser Alternative

Micheal A. Calvin (SWAG)

Looking for a good quality graphics printer, we had narrowed the field to a Panasonic 1124 dot matrix or the Hewlett Packard DeskJet. We were impressed by both printer's output.

The Deskjet had only one drawback, the ink was not waterproof. Cost was another consideration, as the Deskjet was about three times the cost of the Panasonic.

On my way to work one day, I heard an ad on the radio for the "New DeskJet 500 with waterproof ink." So far, so good! Then they said the price was \$509! Whoopee!

Three days later, we went to Portland with Allan Coker to a Hewlett Packard dealer he knew of. The dealer said: "Yes, we have the new 500's, but don't have one unpacked for display." I asked if they had any literature on the 500 and was told they did. We looked over the literature and asked the price. "\$485 out the door" was the answer. "Sold" said we and paid for it.

We've had the 500 for four weeks now, and are very impressed. The 500 has three resident fonts—Courier, Letter Gothic and Times Roman. It also sports a 16K internal buffer and slots for additional memory, font and emulation cartridges. It feeds sheet paper or envelopes.

The print resolution is 300x300 and compares favorably with laser output. Print speed with the resident fonts is 240 cps draft and 120 cps Letter Quality, or about three pages a minute in draft.

Most of our software supports

the 500 (sometimes as a LaserJet!). We have only had three programs that don't support it, and they are all GDOS programs.

Word Perfect installed with no problems using the Deskjet *plus* drivers for each of the fonts. MVG has a Deskjet setting. Pagestream 1.8 has a Deskjet driver.

The 500 will also operate as an ASCII printer, allowing you to print *Readme* files and *Doc* files from the desktop. If one really wanted to get total compatibility, there is an optional Epson FX emulation cartridge available (\$70-\$80).

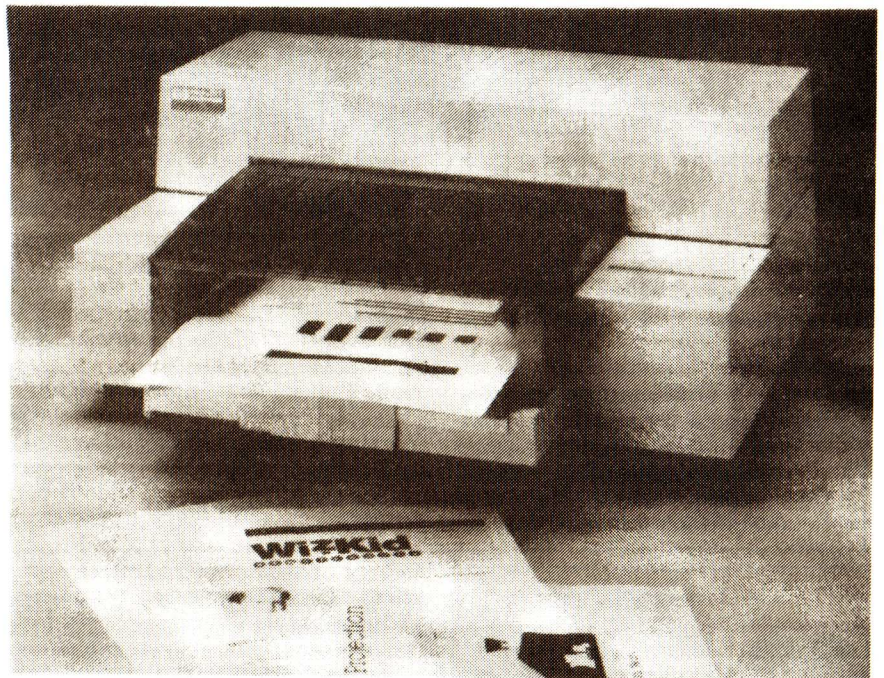
We are using the Deskjet 500 for almost all of our printing. It is faster and quieter than the Panasonic 1091. The only thing the Panasonic does now is print labels, as labels are quite speedy. The Deskjet will use all labels and paper that are made for the laser printer.

Ink cartridges will last for around 300-400 pages with mixed text and graphics. If used in draft, and printing text only, you should get about 600 pages from a single cartridge.

Replacement cartridges (and this replaces the head at the same time) have a suggested list price of \$19.95, although you can find discounters and mail-order firms selling them for much less. This calculates out to about 5 cents a page for good quality graphics, and about 2 cents for text of laser quality.

Summary

For less than half the cost of a laser printer, you can get the quality of a laser. There is a sacrifice in speed, but the cost more than offsets that. The ink is really as waterproof as any ribbon ink; it will weep a little if the page is soaked.



Keyskins—Protection for your ST

Patricia Snyder-Rayl

Looking for "safe typing" on your ST? Computer Supply House in Alaska has the perfect solution for you—Keyskins. These little plastic covers for the ST keyboard fit over your keyboard, including keypad and function keys.

Getting Started

Installation is a breeze, requiring only the plastic cover and your ST. The Keyskin comes with strips of clear, double-stick tape already

attached to the cover at strategic points. For us, the hardest part was thoroughly cleaning our STe before putting the Keyskin on!

Slight Modifications

Since there was a bit of a gap in placement of the double-stick tape, we put some extra tape on to try to minimize any "bubble" effect.

We also put a couple extra pieces of tape on the cover at the "home row" keys, so now it's easy to find the home row when typing.

I talked to Computer Supply House about the possibility of putting some sort of bump on the F

and J keys, so you would know without looking when you're on the home row keys. Richard Sitbon (owner of Computer Supply House) agreed this would be a good addition, if his manufacturer can offer it to him.

Key Responsiveness

The feel of typing on the keyboard was altered somewhat by the plastic cover, but the Keyskin is made of very flexible plastic, so I was able to get back up to speed once I adjusted to the different feel.

People have complained about the "mushiness" of the ST keyboard, and this will make it a bit "mushier" than before, but definitely useable. Protecting your ST or Mega system from spills and such more than makes up for loss of crispness in the key response.

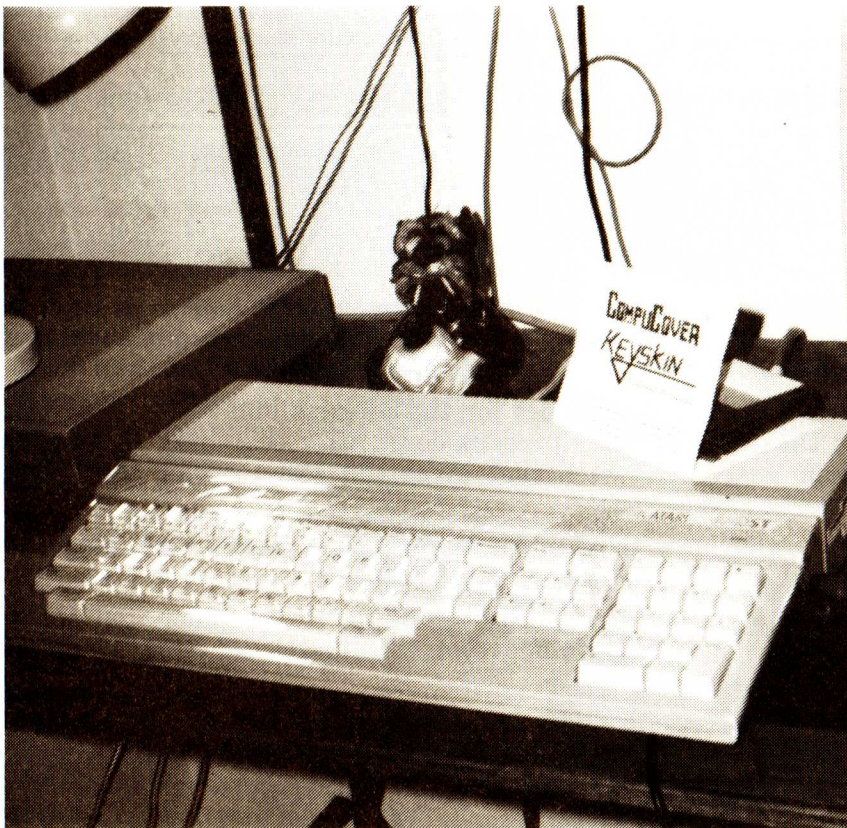
Inexpensive Insurance

At the recent November Chicago show in Gurnee, IL, the Keyskin on our STe received a lot of comments! Not the least of which was:

"My friend sure could have used that a few weeks ago. A can of pop fell off a shelf and landed upside down and emptied into his keyboard. The repairs cost him \$300."

The Keyskin retails for \$25, but Computer Supply House is offering it for a limited time at only \$19.95. This is definitely one of the best "insurance policies" you can get your computer!

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--Current Notes

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Mega Click™

For the Atari Mega 2 and Mega 4* Computers



BEST ELECTRONICS

New Product Announcement

Have you ever felt that something is missing from your Mega* computer? Those who have used other brand computers for work or school agree something is missing! When asked, any touch typist who owns a Mega computer will tell you right away! It's the Click in the keyboard key they miss!

Best Electronics is happy to announce their new product for the Mega 2 and Mega 4 keyboards called "Mega Click." By the name you can tell what this product does. After searching the world for half a year, we've found a replacement keyboard switch that gives the Mega owner that positive tactile "click" response like most real-world keyboards!

Our test sampling of Mega owners, who have tried our test Mega keyboards with Mega Click installed, all say the same thing, "I want the product now!"

The installation of Mega Click keyboard switches requires the ability to unsolder and solder-in components in your Mega keyboard. We strongly recommend that installation be done by an Atari computer service center!

Mega Click keyboard switches are packaged in a **30 Switch Starter Kit** and a **10 Switch Add-on Kit**. Suggested retail for the 30 Kit is **\$64.95**, and for the 10 Kit is **\$21.95**.

Mega Click Products became available December 26th. Place your order now!

BEST ELECTRONICS (408) 243-6950

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THE BEST TRACKBALL

Gary Klugman (SVACE)

I envision a computer interface will sometime come along that requires little, if any, physical movement—perhaps just a slight movement of the finger, or just eye movement.

Imagine a Star Trek interface like just speaking in the room and the computer answers. Better yet, how about controlling the computer with your thoughts? Some day, not that far away, I believe we will have these things.

Until then, I will just have to settle for the best hardware computer interface and the most user-friendly software.

Right now I use a mouse, GEM, various shell programs, powerful utility software and the best productivity software I can find for the ST. At least I did, until I recently started using an "upside down mouse."

Brad Koda from Best Electronics called me and asked if I would like to try a pre-production model of the Best Trackball.

A trackball is essentially an upside down mouse—instead of moving the mouse, you move the ball. The Best Trackball was to be introduced at this year's COMDEX. As of this writing, COMDEX just opened.

Brad said the model I received is exactly the same as the one that will be produced, except the cable will be a different color and the lettering will be different.

It plugs into the mouse port of your ST just like your mouse. The color is battleship gray and beige, so it matches your ST. It is 6-1/8"

by 4-1/8". I found it compatible with all utility, productivity and game software I tried.

There's no reason why it would not be compatible; it is essentially just another mouse.

It is ergonomically very well designed. I liked using Atari's Mouse Accelerator 3 with it, since I prefer to move the ball as little as possible. With the mouse accelerator there was no need to spin the ball.

You can move the cursor anywhere on the screen without having to lift your thumb off the ball. A ridge on the right button separates the left and right buttons. This makes it easy to find them without looking at the trackball.

Your hand rests on the flat area of the trackball and your wrist rests on your desk. There is no need to lift your wrist unless you need your right hand for the keyboard.

There is no need to look up at the trackball to find the proper hand position. You can feel it. The buttons are easy to use, with a definite click. Double clicking is easy.

As you might imagine, I really liked the Best Trackball. Moving

the cursor and clicking on icons without moving my elbow and wrist was almost like controlling the computer with my thoughts.

There might be some games where the user would prefer a mouse, but other games would feel better with the trackball.

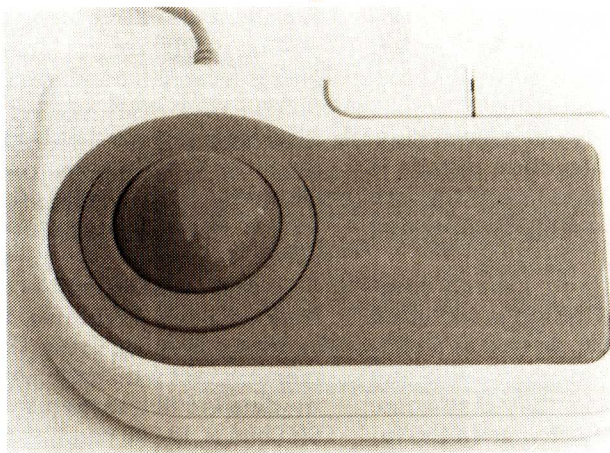
Of course, I had to take it apart.

That was easily done by removing four Phillips screws. The trackball is built like a tank. The internal parts are easily replaced and the ball is easily cleaned. Since Best Electronics specializes in replacement parts, you can be sure replacement parts, if needed, will be readily available from them.

In any review, I feel obligated to say something negative. After all, how many perfect things are there? What comes to mind is the Best Mouse costs a bit of money; the suggested retail is \$54.95.

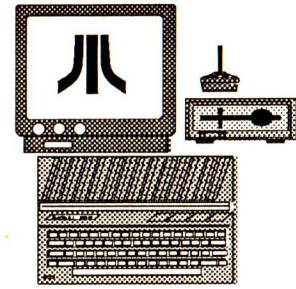
If you have a lack of space, you need this trackball. If you are a gadget person, you will want it. If you are perfectly happy with your mouse, find an opportunity to try out someone's Best Trackball.

It should be available by the time you read this from your favorite dealer or Best Electronics.



SIO2PC

PUTTING THAT IBM TO WORK FOR YOUR ATARI 8-bit



Bob Woolley (SLCC)

Regardless of any human qualities we may attribute to our machines, a computer is just a device taking data from a source, manipulating it, and sending it to a destination.

I prefer an Atari 8-bit because the real differences in computers are the sources and destinations available to the user and how easily they can be programmed. My Atari has lots and lots of nice input/output—sound, graphics, joysticks, paddles, etc. Where the Atari falls down is in its data storage hardware.

An IBM, on the other hand, is geared to large, fast data transfers. For those who have both systems, using the IBM as a disk subsystem could work wonders! Which is exactly why Nick Kennedy hacked together the SIO2PC hardware and software.

His hardware circuit connects the SIO bus from any 8-bit Atari to the RS-232 interface of any PC. His PC software then emulates an Atari disk drive or printer, allowing Atari files to be stored or printed on the IBM. In addition, Atari files can be converted to IBM format and vice versa!

The complete package of software and construction details is available as shareware (\$10), in a kit (\$30) or assembled and tested (\$50).

Complete (and I mean complete) documentation is included with the product, as well as a willingness to assist users with any stumbling blocks they may come across. This may change in the fu-

ture as his project gets wider distribution, but Nick has certainly done an outstanding job in the past. (So, let's not burn him out, OK? And, don't forget to send him something for his efforts if you roll your own.)

I got mine from him as soon as I heard about it—only called him once (twice?) during the week it took it to arrive (grin). Normally, the T1000 Toshiba I carry for work stuff pretty much keeps my spare tire company while I'm at home. Now, it has a new purpose in life!

As an indication of how well the SIO2PC is done, I opened the box, plugged it in and cranked it up immediately.

The system is menu driven and has very few functions that don't work exactly the way you would expect them to. The only awkward pieces are those dealing with the PC operations and even those are trivial. So, let's go through the SIO2PC features one at a time.

RAMdisks

The device is basically a RAMdisk that operates on the normal Atari SIO bus. What's a RAMdisk? That's memory (in the IBM) that acts like a disk drive to the Atari.

The hardware portion of SIO2PC is a cable that connects to the SIO on your Atari and the RS-232 interface on your IBM. Running the SIO2PC software on your IBM allows the IBM to "talk" on the SIO bus as if it were an Atari disk drive.

When the Atari reads a sector from an active RAMdisk, the data is really coming from the PC's memory, not a diskette. Although the data is still transferred over the SIO bus at 19,200 baud, there is no

disk rotational delay or track seeking time before it can be read.

This produces a continuous stream of data rather than the beep-beep-beep of a normal drive (reading a 707 sector disk from a 1050 takes 85 seconds, from a RAMdisk it takes 55 seconds).

There are four partitions available in the PC—D1: thru D4:—that can be used as RAMdisks on the Atari. These disks can either be created as blanks and formatted from the Atari or loaded from the PC's drives.

There are four sizes available—64K, 92K, 143K and 184K, in either 128- or 256-byte sectors. Once loaded, the RAMdisk displays its size, filename and whether it has been altered since the last save (a very handy feature for those of us who can't keep anything straight).

These RAMdisks are not entirely "safe" until you store them to a PC floppy disk, so keep that in mind while using them. My portable is battery operated, which makes it almost bulletproof. Your PC may not be so lucky!

Any partition that has a "diskette" loaded will become active on the SIO bus as a RAMdrive. Consequently, any physical drives on your Atari system that share an address with an active RAMdrive must be powered off. This is not so easy on the XF551 with its power switch in the back.

One SIO2PC function swaps RAMdrives with each other, allowing you to boot from RAMdrive D1:, swap it to RAMdrive D2: then power up a real drive to use as D1:.

To get yourself going, you will create RAMdrive diskettes, format them, write your favorite DOS and

copy Atari files to them. After that, everything will be stored on your IBM drives as PC files, one IBM file per Atari diskette.

My laptop does not have a hard drive, which would hold a *ton* of diskettes, but it does have 720K, 3.5" drives that can store six or seven single density Atari disks. If you're like me, you have multiple copies of some file you were creating scattered over a dozen or more diskettes. Wouldn't it be nice to have time/date stamps on them? With SIO2PC, all my Atari files are managed by the IBM, which has a time/date field on every file! Even Atari disks with no DOS on them will be logged!

I tried a number of utilities and unprotected programs on the RAMdisks and all worked as they should with a few minor exceptions. Protected commercial software will not boot from a RAMdisk, of course, but their data disks will work just fine.

MYDOS 4.5 does not seem to be able to properly calculate the number of sectors on the RAMdisk and formats everything as 1040 sectors. I was able to use VTOCFIX.COM to correct the count, but I got unpredictable results on some attempts. If you see a message about error 138 on sector 257, just try again or swap the address of the RAMdrive. It always works out eventually. Keeping a formatted, blank disk "on file" eliminates the necessity of formatting additional disks, anyway.

BobTerm, AtariWriter (in 2.0D, even!), anything I tried worked fine! The reason for this is there are no patches to any of the Atari hardware or Operating System. No memory is stolen, no drivers loaded, nada. The SIO2PC works right down to the command buffer level of SIO, no kidding.

Printing

The SIO2PC can also intercept the P: device on the SIO. Strange as it seemed, I could print to *both* my DeskJet printer and the PC at the same time (this is not a supported practice, but it doesn't hurt anything). The data sent to the PC can be output to the PC's printer, screen or an IBM-formatted file (printing to the screen does a nice job of previewing your AtariWriter files in 80 columns).

Along the way, you can convert the Atari EOL character to the ASCII CR/LF and/or strip off the high-order bit. This is one way to port an Atari text file to a PC or ST. You just specify the destination on your PC as a file and convert the EOL. Voila! I tried to send an object file this way, but the P: handler sticks a couple of extra spaces here and there which kinda wrecks the file. If a guy were to replace the P: handler with a smarter device handler, it would work great!

File Conversions

Along with printing an Atari file to a PC disk file, the SIO2PC package has an Atari utility (FILE2PC.OBJ) that converts an Atari file directly to an IBM file through the SIO2PC interface. There is a companion

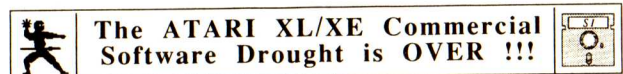
PC utility (MAKADISK.COM) that will create an Atari file on one of the RAMdisks from an IBM dataset on disk.

As a test, there just happened to be an Atari utility posted on CompuServe to display Degas picture files from an ST on an 8-bit. In order to use such a program, you normally need to download the ST Degas picture to your 8-bit using a modem or whatever. Since the ST and IBM are compatible disk-wise, I tried sending a picture over from the PC to the 8-bit thru SIO2PC. Worked just fine. Took 15 seconds. No special hardware, no waiting. Just for kicks, I sent it back to the IBM. The file was still intact! In fact, this article will get sent to AIM thru the SIO2PC. Where have you been all our lives, Nick?

Ramblings

Sound like a neat product? How about a remote capability so the Atari can send commands through the SIO to the PC that execute all these console commands? He did that, too! Whatta guy.

Anything not so nice? Well, a couple of little things. Like, the MAKADISK program will create an Atari filename with lowercase characters (if you aren't smart enough to type in caps). When you get it over in your Atari, you can't read it! The FILE2PC program does



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not handle a disk full error too gracefully. Nit-picking stuff. Atari should do half as good as this guy.

Who is this Nick Kennedy? He is a young Electrical Engineer from Arkansas who enjoys his Atari and wants to do good things with it. He started out two years ago by interconnecting two Ataris and worked his way up to an Atari and a PC. Much of his earlier experimentation is also included in the SIO2PC documentation if you are interested.

The Atari community is lucky to have such a generous citizen, and for what he is asking, the SIO2PC is a steal. Get that old IBM out of the closet, dust it off and send Nick a check! He can be reached at:

Nick Kennedy, 300 South Vancouver,
 Russelville, AR 72801

Power T1000 on. I raise the Toshiba's screen and hit the space bar to abort the powerup memory diagnostics. No Atari disk drives come to life...just the DeskJet, monitor, 1200XL and the PC are on the power strip. The AtariWriter File disk slides into the 3.5" drive on the laptop. I type "A:" - Enter. "SIO2PC 2" - Enter.

The status line announces "Disk Emulator now running." I press "L"oad, "1," "AW2D" - Enter. 184K of data is loaded into RAMdisk 1. Over to the 1200XL, the AtariWriter cartridge goes into its slot. I power up the 1200XL. Continuous SIO data transfer until the AtariWriter menu appears. "L"oad, "AIMJAN" - RETURN. More continuous SIO data. "E"dit. The Happy 1050 is silent, empty. The XF551, XF35 and US Doubler 1050 mimic the Happy. Bending to the task, I begin to type...."<cntl>-C", "SIO2PC"...

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MAC/65: ENHANCEMENTS AND BUG

John McGowan

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MAC/65 is a good assembler for the 8-bit Atari, but it does have one bug of which I am aware and a few more capabilities than are mentioned in the manual.

Bug!

Avoid forward referencing in macros if possible. As an example, try the following code in MAC/65:

```
.ORG $6000
.OPT OBJ
.MACRO IN
JMP @F
@F NOP
.ENDM
.MACRO OUT
JMP @F1
IN
IN
@F1 NOP
.ENDM
OUT
OUT
.END
```

Assemble the code with ASM,# and then type DDT and go to address \$6000. You will find:

```
$6000 JMP $600B (correct!)
      JMP $600A (should be
              $6006!)
$6006 NOP
      JMP $6006 (should be
              $600A!)
$600A NOP
$600B NOP
$600C JMP $6017 (correct!)
$600F JMP $6016 (should be
              $6012!)
$6012 NOP
$6013 JMP $6012 (should be
              $6016!)
$6016 NOP
$6017 NOP
```

What happened? We should have done a JMP to the next NOP address in the calls to the IN macro from within the OUT macros, and yet we didn't!

However, we did *not* jump to an address from one assembly of the OUT macro to the other but got the wrong address within the proper OUT macro!

The problem is the (incorrect) statement on page 54 of the manual, "another expansion...will reset the labels." Apparently this was true for the expansion of the OUT macros, but *not* for the expansion of the IN macros *within* the OUT macros. In fact, another expansion of an outermost level macro, *only*, will reset the labels!

To do the assembly properly if a macro call is seen, MAC/65 should do a third pass to resolve internal forward references. If another macro is seen within, it should do a fourth pass to resolve the inner macro's internal forward references...etc.

However, as the manual states on pg. 54, the assembler goes to the third pass but doesn't dig any deeper. So, with regard to resolving forward references, MAC/65 *assumes* there are no macros used within other macros!

In particular, in assembling the first OUT macro call, MAC/65 expanded it by calling IN and noting that @F took the value \$6006. Then it expanded IN for the second time inside this first call to OUT and reset @F to \$600A and *did not tell us* we had a redefined label!

Having gotten the label values, the assembler went back to put in the values. In the first expansion of IN, it used the current value (just derived) of \$600A (wrong!).

MAC/65 then went along further and noticed the redefinition of @F to \$6006 (before the second JMP), reset @F to \$6006 and used that value in assembling the code for the second JMP. MAC/65 then continued on and finally reset @F to \$600A again, but never used it!

NOTE: MAC/65 *did not* go to the second OUT call until it was finished with the first, since they are different outermost macros!

Now, you may feel this is so strange a bug that it has never come up in your programming, but it has if you use IOMAC.LIB from the manual!

Consider, to jump over a data set, would you use form1 or form2 below?

```
form1
      JMP @F1
@F .BYTE "My string",0
@F1

form2
      JMP **3+9+1
@F .BYTE "My string",0
```

In form2, the 3 is the length of the JMP absolute command, the 9 is the length of "My string" and the 1 is for the 0 byte.

No one in their right mind would assemble as in form2 (having to do hand assembly and count the number of bytes in the string) and yet...we do not have form1 in the @FL macro on page 88:

```
JMP @F1
@F .BYTE %$1,0
@F1
```

But the @FL macro *does* use form2:

```
JMP **4+%1
@F .BYTE %$1,0
```

And we have just seen the reason! If form1 was used in the

@FL macro, every expansion uses forward referencing. And so, if form1 were used, the @FL macro could not be used twice with literal strings within one outer macro. Supposing form1 were used, then

```
OPEN 1,4,0,"D:FRSTFILE"  
OPEN 2,8,0,"D:SCNDFILE"
```

would work (the OPEN macro on page 90 only uses the @FL once, and we have two outer macros to reset @F1). One may write a copy routine using such code and debug it.

Then take the code and insert a .MACRO COPY in front of the code and a .ENDM at the end to create a COPY macro, changing the code to OPEN 1,4,0,%1 and OPEN 2,8,0,%2 (and later I will talk about why this is *not* necessarily %\$1 and %\$2!).

You can debug this and note that it works! As long as at least one of the parameters in COPY is the address of a filespec. Then a year later, you use COPY "D:START","D:END" and it bombs! For now, *inside* the COPY macro we have two uses of the @F1 label, forward referenced (the label @F1 only shows up in the expansion of @FL if a literal string is used!). Now—a hypothetical year later after writing the COPY macro—try to debug it! This is why form2 is used in the @FL macro.

I had been writing a routine to do FP (floating point) addition using string versions of FP numbers. (Actually I was debugging a set of FP macros and routines downloaded from a BBS...I was working on the code and trying, somehow, to get it to work.) I had a macro to convert a string to FP and put it in FR0 which did a jump to the OS code and included:

```
BCC @FP  
JMP FPERROR  
@FP
```

This was done because the OS routines flag a bad conversion with the carry flag (like if someone tried to convert "this is not a number" into a FP number). I couldn't just use BCS FPERROR as the FPERROR code might have been far away...The macro worked fine.

The routine then moved FR0 to FR1 and loaded another number to FR0 and then did the addition. The routine worked fine.

Then, I put it in a macro called ADD...and it bombed! *Again* it was a use of the loading routine which used forward referencing twice in the ADD macro (NOTE: It is the fact that the LABEL @FP showed up twice, not that the load routine showed up twice...if you have two different macros used in one outer macro and they use the same label, and use forward referencing, you will bomb).

Another example...the BUMP macro on page 58 of the manual will conditionally assemble

```
BNE SKIPHI  
INC %1+1  
SKIPHI
```

if used with one parameter. Now, this is quite a useful

macro and you can have a routine which does a BUMP REG1, then later BUMP REG2 and the routine works fine. Then you put the routine in a macro and...bombs away!

Again, a forward reference used twice...works fine in debugged code *until* that code is inserted to be used in a MACRO!

What to Do?

We can take a hint from the @FL macro in the manual. Do not use forward referencing in *any* macro that may be used twice in another macro and give unique label names to labels used by distinct macros. For instance, don't use @F as a label in a PRINT macro and a LOAD macro if 1) it uses forward referencing and 2) these two macros may sometime show up within one outer macro!

The FP load routine above can be corrected by changing the BCC @FP to BCC *+5 (the 5 coming from the two bytes used by the branch, and the three bytes used by the JMP FPERROR).

You can try the same thing in the BUMP macro, replacing the BNE SKIPHI with BNE *+5 (two bytes for the branch and three for the absolute addressed INC). But, what if the INC is *not* absolute addressed, but zero page addressed? Then it should be BNE *+4!

The trick here is to change BNE SKIPHI in the BUMP macro on pg. 58, line 37 to BNE *+4[%1>254]! This will use absolute addressing when %1>254. That is, %1+1>255 (%1+1 is the address used in the skipped INC) or %1+1 is not a zero page address! Make this change in the BUMP macro and it will work, even if used with one parameter more than once in another macro.

What if you have code with a BCC @LABEL to a forward label and there is a lot of code between...some may be zero or absolute, some conditional assembly, etc.? Then, you cannot easily assemble by hand to find the correct offset used to correct the problem. Use forward referencing in this case, *but* put a comment in the macro code that the macro *must not* be used twice within another macro!

(A short note: AMAC, the AtariMacroAssembler has its own bugs and problems, not the least of which is that it is still in version one on a copy protected DOS2.0 disk and is incompatible with SpartaDOS). But AMAC does *not* use local labels in macros, but instead uses unique global labels. This takes up label space, but AMAC has *no problem* with forward referencing of labels used within macros used within macros).

This is a bug in MAC/65. And the code for the @FL macro indicates that some of the programmers at OSS were aware of it, but the BUMP macro code indicates that not all were aware of the problem. It is (as far as I am aware) undocumented until now.

And this bug can be severe, especially when debugged code works, then—when put in a macro—works sometimes and bombs sometimes (as in using a version of @FL in form1 above, where only one ref-

erence to a parameter is a string...then it works...but not if two are references to a literal string). MAC/65 will give *no* error message as to the duplicate use of the label! *Beware* of using forward referencing in macros in MAC/65!

%(LABEL)

Now that I have covered the bug, let me describe an enhancement. On page 57, the manual notes %(LABEL) is legal. This trick is used in the XIO macro on page 89:

```
@@IO = %0
@FL %$(@@IO)
```

We will see that %(@@IO) works as well in the next part of this article, but here is an undocumented item...%(expression) works as well. Try the following code:

```
.OPT OBJ
.ORG $6000
TEMP .EQU 4
.MACRO IN
.BYTE %$(%0+3-4)
.BYTE %$(1+1*1)
.BYTE %$(TEMP-4)
.ENDM
IN "testone ", "testtwo"
.END
```

Assemble (ASM,#-) and go to DDT at address \$6000...use the "W"indow command and note that memory contains "testone testtwo." In particular, on page 89, we can eliminate the need for the definition of @@IO by changing line 2240 of the code to @FL %\$(%0) [or even %(%0) as we will see later].

Parameter Passing

Try the following code:

```
.OPT OBJ
.ORG $6000
.MACRO IN
.IF %1<256
.BYTE %$1
.ELSE
.WORD %1
.ENDM
.MACRO OUT
IN %1
IN %$1
.ENDM
OUT $1234
OUT "test"
.END
```

Now assemble and investigate address \$6000 from DDT. There are two calls to IN inside the OUT macro. For the OUT \$1234 call, one would expect the IN %1 to work. But, the first four bytes at \$6000 are \$34,\$12,\$34,\$12...that is *both* versions of the call IN—including IN %\$1—give the *same* result!

This is used in the XIO macro on page 89, which uses @FL %\$(@@IO). This will work even if the last parameter in the XIO call is the address of a string!

But look at the next set of bytes. The call to IN %\$1 in the second call (OUT "test") is expected to work. But, we get "testtest" (use the "W"indow command in DDT to check the ASCII values), so the IN %1 call did just as well!

Thus, we can pass a parameter using %1 or %\$1 *ad libitem*. Though, when it is *used* rather than passed, it is necessary to use the correct form...in the sample above, we could not have used .BYTE %1 in IN and expect the proper result!

In particular, in the XIO macro, line 2240 could have been @FL %(@@IO) or @FL %\$(%0) or even @FL %(%0).

Thus, one can simplify the OPEN macro on page 90 by replacing the entire set of lines from 2470 to 2500 with either XIO COPN,%1,\$2,%3,%\$4 or even XIO COPN,%1,%2,%3,%4

Endnotes

In the IOMAC.LIB code in the MAC/65 manual, the programmers did indeed correct for the bug mentioned above. But, in the description of building macros (in particular the BUMP macro on page 58 and the PRINT macro on page 61) the manual is silent on the bug. Apparently it was known and corrected for in the IOMAC.LIB, but the documentation on writing one's own macros is strangely silent on the problem.

The IOMAC.LIB does use one of the enhancements (parameter passing) in the XIO macro on page 89, but, strangely, not in the OPEN macro on the following page! The form @FL %\$(@@IO) is used rather than %(@@IO), but the alternate form was known to the programmers at OSS since the equivalent macro (called SGET) on the toolkit disk uses SGET %3 rather than SGET %\$3 or the useless code used in the OPEN macro as presented in the manual.

It seems the manual presents enough material to use MAC/65 (though some code may be buggy), but does not take the time to fully explain the bugs corrected in the IOMAC.LIB or the use of the @FL %\$(@@IO) in the XIO macro. Nor does it explain the parameters printed in a listing (what does %1763 IN mean when assembling with a macro called IN?).

The description of the use of %\$ on page 60 is incomplete [as the possibility of using %(@@IO) rather than %\$(@@IO) in the XIO macro and the material on parameter passing, above, shows].

All in all, it is a manual enabling you to use MAC/65, but the deficiencies above are quite notable. I hope the material I've supplied here will enable other MAC/65 programmers to write bug-free code more easily.

Please consider this an addendum to the MAC/65 manual...material that should be known by every MAC/65 programmer.

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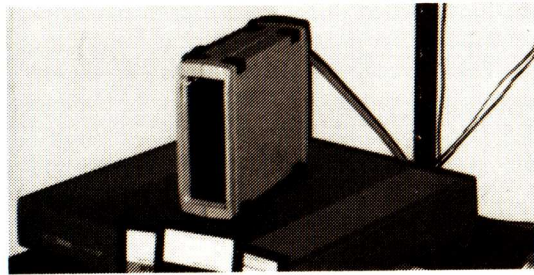
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SuperCharger

IBM Emulation Made Easy



Bill Rayl

Sometimes, it's tough being an ST owner in an IBM world. IBMers have access to thousands of very specialized software the likes of which we may never see on an ST. At least, not in "native" mode. That's the reason STers have been so intrigued by IBM emulation almost since the beginning.

The first attempt at IBM emulation, MS-EM from Paradox, was just that—an attempt. MS-EM almost, but never quite, worked right. Then came Avant Garde and pc ditto and STers had a solidly working, albeit slow, IBM emulator.

Now, the ST market is nearly flooded with hardware-oriented IBM emulators that give full-speed (or better) emulation and excellent compatibility. Nearly all of these involve some kind of modification to your machine. It might be as simple (relatively speaking) as soldering to the 68000 or as nerve-racking as cutting up your ST case!

SuperCharger, from Talon Technology (and RIO/Datel...more on this later), is currently the only available IBM emulator that does not force you to open your ST to install it. Just plug it into the DMA port on your ST (or on your hard drive) and away you go!

What You Get

SuperCharger is like a miniature IBM in a box that plugs into your ST. Inside the SuperCharger case is a well designed board containing an NEC V30, expansion sock-

eted) and a socket for an 8087 math coprocessor.

There are a couple options for powering the SuperCharger. First, the hardware originally came with a cable that plugs into the ST's joystick port and allows SuperCharger to draw power directly from the ST.

However, there was a notice in the package from Talon that they did not recommend this setup with modified STs or a one meg SuperCharger. Since all SuperChargers are now, to my knowledge, being shipped as one meg units, this power method may not be too useful. It is a nice option for Stacy owners, though!

I got SuperCharger with an external power supply. It means yet another thing to be plugged into the power strip, but it's the only practical choice with my 2.5 meg ST.

The manual that comes with the package is pretty sparse, to say the least. It tells you how to set up the system and gives a diagram of the board in the SuperCharger case. No software compatibility charts are presented and very little info on how to set up your CONFIG.SYS or AUTOEXEC.BAT files is given (the installation software on the supplied disks does this for you). The manual is almost more a set of reference notes than a user's guide.

SuperCharger comes with three disks, two of which are the System and Utilities disks containing MS-DOS 4.01. Not PC-DOS or any other substitutes, but real MS-DOS. You don't get any of the MS-DOS manuals with the package, unfortunately.

If you're unfamiliar with the

MS-DOS world, don't expect the SuperCharger package to teach you anything about using DOS.

On one of these disks is a nice program called DOSSHELL. This little IBM program lets you do file manipulation and lots more using cursor keys or even the mouse. It ain't GEM, but it's pretty nice.

Of course, you can always run DRI's GEM/3 under SuperCharger...or even MicroSoft Windows 3.0! Both are commercial packages you can buy from any IBM dealer.

The third disk you get has all the ST utilities for SuperCharger. These include ABIO.TOS and ABIO.ACC, which actually initiate the IBM emulation. These are currently at version 1.4, with version 1.5 recently announced as "coming soon." You can also set a program allowing you to use the SuperCharger's memory as a RAMdisk in the ST.

One of the nice features of emulation under SuperCharger is that you can switch from ST to IBM mode (and vice versa under ABIO 1.4) without resetting either the ST or SuperCharger. Consequently, you can be running programs *concurrently* on both platforms with no problems!

Compatibility

I'm happy to say SuperCharger has run every piece of IBM software I've thrown at it. That includes packages like CrossTalk, Procomm Plus, Norton's Utilities, Ventura Publisher, Lotus 1-2-3, Word Perfect 5.1, Right Writer and numerous PD and shareware programs. Some of these I brought home from work just for testing purposes.

Although SuperCharger does

seem to run most IBM software, there are some pitfalls. For instance, when I first tried running Procomm Plus under SuperCharger, it would lock up every time.

A call to Talon revealed I needed to run Procomm's setup program and redefine COM2 to have the same HEX value as COM1. After doing this, Procomm booted up with no problems. I had, in the past, used Procomm Plus under pc ditto without needing to do this. Proof that all is not equal under IBM emulation.

There have been a number of reports from users having some problems with the desk accessory version of ABIO. The system would randomly lock up from time to time. Switching to ABIO.TOS clears up the problem. The problem has been acknowledged by Beta Systems (the programmers over in Germany) and will reportedly be fixed in version 1.5.

Speed

Speed is such a relative thing, so I'll try to approach it in relative terms. First, ads for SuperCharger claim to have a Norton SI rating of 4.4. In relative terms, a standard IBM XT has a rating of 1.0 and my IBM AT at work has a 5.9 rating. That means, according to the Norton SI rating, SuperCharger runs nearly as fast as an AT. Pretty good.

On a program-by-program basis, though, there seems to be a bit of a difference in speed. Programs like Lotus 1-2-3 and Ventura seem to run as fast as they do on my AT. Some software—mainly graphic-oriented—seems to be a bit jerky. Procomm doesn't seem quite as snappy under SuperCharger as it does even on the XTs at work.

In comparison to the software-only pc ditto, SuperCharger is blindingly fast. It's like the tortoise and the hare, only the hare doesn't waste any time in crossing the finish line! Switching back to pc ditto, as I did when testing my problems with Procomm Plus, was almost a painful experience.

Sound and Graphics

The two weakest points concerning SuperCharger's emulation are in the area of sound and graphics. As for sound, there isn't any. The IBM has never been known for high quality sound effects, but not having system beeps or any sound whatsoever is a bit disconcerting, at least to me. The Beta Systems engineers have reportedly gotten sound to work, but it slowed the emulator down. There is current discussion of making a plug-in speaker card. However it's done, adding sound is on the list for future upgrades, but it's not available now.

As for graphics, SuperCharger supports standard CGA or Hercules monochrome graphics. In CGA mode, you only get four colors instead of the 16 you'd get on a real IBM. I've never been a big fan of CGA graphics to begin with, and I have Super VGA (1024x768x256 colors) on the IBM at work. With only four colors, many IBM games are going to be disappointing on this emulator.

The Hercules monochrome is quite usable and very similar to the ST's own monochrome mode. The Hercules resolution is 720x350, while the ST's is 640x400. In order to give you "true" Hercules monochrome, SuperCharger centers the monochrome IBM output on your monitor. You can then press a key to shift from side to side to see the pixels that don't fit on the screen.

Upcoming Products?

According to announcements from Talon Technology, work is being done on a VGA card that will plug into the expansion bus inside the SuperCharger. Hey, this really is just like a miniature IBM! No definite release date or price has been announced, though the VGA card has been discussed since April 1990.

Talon has also announced that an 80286 upgrade would be available in early 1991. The upgrade would come as a daughter board that replaces the NEC V30 on the SuperCharger motherboard. The upgrade would "probably" have a socket for an 80287 math coprocessor, since the 8087 coprocessor will not work on a 286 machine.

Already available is a software package called TC!Power. This program allows users to "build Expanded Memory from Extended Memory, hard disk space or both." The program will work with any IBM emulator on the ST. Under SuperCharger, you get the added option of using the ST's internal memory as Expanded Memory on the IBM. Some programs, like Ventura Publisher, can take advantage of this extra memory.

Talon or RIO/Datel?

When SuperCharger first hit the US market, Talon Technology was the only company selling and supporting it. Since then, RIO/Datel has begun SuperCharger support as well. RIO/Datel is a branch of a German company that sells SuperCharger in Europe. A number of magazines have also been running SuperCharger ads from *both* Talon and RIO/Datel lately. This has caused some confusion in the market as to what is really going on and who to buy from.

At this time, both RIO/Datel and Talon continue to sell SuperCharger. According to RIO/Datel employees, they are currently the only US distributor of SuperCharger and everyone (including Talon) now buys the emulator from them.

Recently, Talon has obtained exclusive rights to import PC-Speed and AT-Speed to the US and Canada. These products, which compete directly with SuperCharger, were originally marketed in the US and Canada by Michtron, which has been sold. Wherever you purchase SuperCharger, the planned upgrades (being done by Beta Systems in Germany) should occur.

If you're looking for sturdy IBM emulation with an emphasis on productivity, SuperCharger is the best available. If the VGA and sound card and 286 upgrade become available, this package will be hard to beat.

JoppaFAX

The Smart Person's FAX

Patricia Snyder-Rayl

It was a dark and stormy night. The detective moistened his nub of a pencil once again to take notes. "Just the FAX, ma'am. Just the FAX?"

"Yes, detective. This FAX is just too good to be for real."

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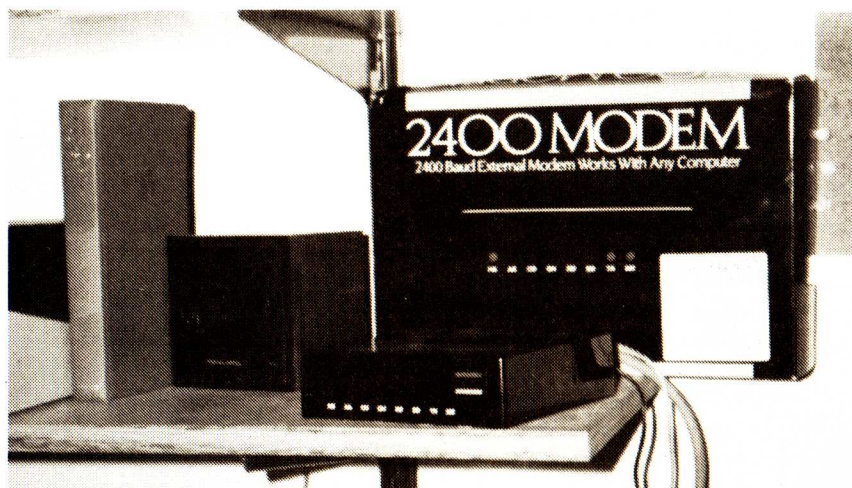
Shaking his head in wonder, the detective says, "It's one of those mysteries of the modern computing world."

Not Just a FAX

The Joppa FAX is a FAX machine and modem all in one. To use it as a FAX machine, you need Joppa's software and your ST computer.

The Joppa FAX will work right out of the box as a 2400 baud modem, and their software runs it as a 4800 baud FAX, with an optional upgrade available to take it to 9600 baud. This upgrade costs extra and requires replacing chips inside the modem itself. Joppa will do the upgrade at your request.

The Joppa FAX plugs right into the ST's serial port (the same as any other modem) and works fine with your favorite terminal package. I use Flash! with it all the time.



It does everything any other modem can do.

However, the Joppa FAX can't do everything any other FAX can—it cannot receive FAXes. But, it sends FAXes with ease. You can even create your FAX letters in PageStream, Calamus or just use ASCII text or even IMG or Degas pictures. This is where the Joppa FAX software really shines!

In the software for the FAX are some conversion options to convert pictures or text to "JFAX" format. This is what the software looks for when sending files through the FAX-modem. Included in the package from Joppa are two printer drivers—one for PageStream and one for Calamus. Since all documents I FAX are in PageStream format, I use that particular Joppa driver.

Installing the driver for PageStream is as simple as installing the drive and choosing the Print to Disk File option. Once the driver is installed and you're finished creating the document, just select Print Document and enter a filename. PageStream then goes on its merry way, printing your document to disk in JFAX file format.

Once this is done, just load Joppa's FAX software and you can

either view this new document or send it to an awaiting FAX machine.

Once the FAX is sent, don't be alarmed by the message from the software saying it can't print out a little slip acknowledging the receipt of your FAX. Since the Joppa FAX can't receive, and the other FAX is trying to send, it's perfectly natural and doesn't affect the FAX you sent in any way.

A Few Options

Your FAX can be modified in a few ways, according to your preferences. If you'd like your document to be centered, more to the left or right, or even at the top, middle or bottom of the page, you can set that under the preferences options.

You can also set the resolution between fine and normal and whether the scaling on your graphics is normal, double or automatically adjusted. You also get to choose between sending/not sending a cover page and putting a header and/or page number and/or time stamp on each page you FAX.

The Dialing Menu is very like the menu used in Flash!, so those comfortable with that terminal

program should be right at home using the Joppa FAX software. You can choose multiple numbers to FAX simultaneously (called Broadcast FAX) and you can send multiple documents as well.

You can also choose the time you wish the FAX to be sent. This comes in handy if the document doesn't have to be rushed. Using this option, you can send the FAX when phone rates are lower...and you don't even have to be around to send it! Just leave the modem on and the Joppa software booted.

For those who like to hit keys instead of mousing around the screen, Joppa has added "softkeys" to their software. This means all the major commands, such as sending a FAX or converting the pictures or text, are accessible via function keys or control-something keys.

Finally, Joppa FAX keeps a transfer log of all your transmissions for record-keeping purposes. If you're using the software and have a question about a feature, detailed on-line help is accessible by just clicking the small question mark in most menu boxes.

A Few Cautions

If you're using PageStream, like I do, you should

remember to set the Density option in PageStream to 1 if you wish to send a "normal resolution" FAX. If you want to send a fine resolution FAX, the Density option in PageStream should be set to 7. You should then set the corresponding resolution in the Joppa FAX software. Problems can be caused when setting the Density high in PageStream and the resolution low (or vice versa)...your output may not be what you expect!

According to the Joppa FAX manual, choosing fine resolution produces a 200x200 DPI image (similar in quality to a Xerox), while normal resolution produces a 100x200 DPI image. Setting fine resolution increases the actual size of the file and increases the transmission time.

Summing Up

For close to what you might pay for a 2400 baud modem, you can get a Joppa FAX modem that gives you a modem and a FAX as well! If you have a need to send FAXes but don't wish to spend several hundreds of dollars for a device that will just sit around most of its life, get the Joppa FAX!

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PRINT ALL THE LANGUAGES OF 1ST WORD AND 1ST WORD PLUS

Don Schmidt (SWAG)

The original HEX file that comes with 1ST Word Plus is missing many of the characters available within the program and the ST keyboard. I chose to rewrite many of the codes and to add the missing characters.

PAN1080I.HEX is the result, and now is able to provide all characters shown in the Font Tables of 1ST Word or 1ST Word

Plus. This HEX file is provided on this month's AIM disk.

Many of the characters are custom designs and appear to print in letter quality (actually, they are double struck) even in draft mode. Another flaw is they can't be printed in bold, underlined, italic, light, superscript or subscript.

You need to run the install program for 1ST Word or 1ST Word Plus and use the resulting 1ST_PRNT.DOT or PAN1080I.CFG. If you decide you like and want to use PAN1080I.CFG with

1ST Word Plus, just rename the file to PRINTER.CFG. (Remember to rename or relocate the PRINTER.CFG you are presently using.)

I hope this will be of some help to those who correspond with relatives and friends in the "Old Country."

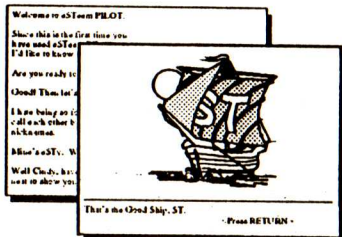
P.S. Some of you more adventurous types might try using the CFG file with other wordprocessors (it has been successfully tested with Word Writer ST) and have the ability to print out 1ST Word DOCs as well as your own DOCs.

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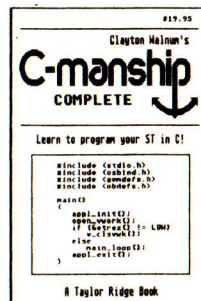
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Atari Lynx— No Pussycat!

Terry Thorn (BACE)

I assume most Atarians have, by now, at least heard of Atari's Lynx... the world's most advanced hand-held portable game machine. If you were like me, you heard of it *long* before you actually laid eyes on one. I really hadn't been too excited after what I read about it. Indeed, after reading a "review" of it in *Current Notes*, I was *much* less than enthusiastic about it.

Then I made the big mistake...I ignored the "review" and decided to look at it for myself when it became available in the area. After seeing the Lynx in action, I immediately bought one even though that was *not* my intent.

It was truly a portable color entertainment system with 16 color graphics (out of a possible 4,096 colors), four channel sound, 16 MHz CPU, high quality display and superb games cards that can hold up to, I believe, one megabyte!

The Lynx package comes with a California Games game card. I must admit California Games was quite good, contrary to the "review." What's more, California Games contains the COMLynx option which allows Lynx units to connect for *multi-player* gaming!

Being the inquisitive type, I decided to dismantle the unit. Basically, the design is quite simple. There's just one circuit board with a Citizen LCD screen on top of it. Below the circuit board is a small fluorescent light for backlighting the screen. The functions are controlled by some conductive rubber buttons.



There's an joystick that's *very* responsive. Additionally, there's "A" and "B" action buttons and two option buttons whose functions are defined by the game being played. By pressing an option and pause button, the screen display will rotate 180 degrees to facilitate left-handed play!

The Lynx also has jacks for the COMLynx cables and, of course, headphones. The built-in speaker is quite adequate and can get *loud*, as my daughter frequently tests out the volume control.

As I stated earlier, the California Games card comes packed with the Lynx. It's a blend of four games commonly associated with California. There's Surfing, BMX, Half-Pipe, and Footbag.

When I bought the Lynx, I also bought Gates of Zendocon. This is a space shoot 'em up with 52 different levels that's as good as anything on the full-size game machines. Every time I play it, there seem to be aliens appearing that I've never seen before.

My latest acquisition is Blue Lightning which is an Afterburner clone which has gotten high marks in gaming magazines. The detail in Blue Lightning is quite astounding.

Other games available are Electro-Cop, Chip's Challenge, Gauntlet III and Slime World has recently begun shipping! More games titles have been announced such as...

Klax	Rampage
Red Baron	Vindicators
Check'd Flag	3-D Barrage
Super Soccer	Cyberball
720 Degrees	PaperBoy
A.P.B.	Rygar
Stealin' Home	Football

Grid Runner	Turbo Sub
Junkyard Dog	Masters Golf
Time Lords	Super Hockey
Pinball Shuffle	BlockOut
Ninja Gai Den	Ms. Pacman

Graphics on the Lynx are colorful, detailed and very smooth. To best describe the appearance, I'd have to say they're better than the 8-bit's graphics and almost as good as the ST's. The resolution is lower than the 8-bit, but the Lynx's scaling feature and 3.5" screen make it appear to be higher. There is a built-in sprite generator, so lots of objects can be on the screen and you won't notice any slow down.

The screen is easily viewed indoors, but suffers somewhat when viewed in bright light. Outdoors, the colors are washed out. In direct sunlight, you can't really see anything.

I'm very happy with my Lynx and I highly recommend it. I was a little apprehensive about buying it because of Atari's past track record of promoting their products. So far, they have been actively recruiting developers and produced both print and TV ads for the Lynx.

So, thinking about it, there may not be as many games available for the Lynx as for the GameBoy, but I've always preferred quality over quantity. After seeing the GameBoy in action, there's no contest.

The only drawbacks I can pass on about the Lynx are its inability to be used in bright light and its low battery life. But, unlike the GameBoy, the Lynx works very well in the dark and Lynx games are far better.

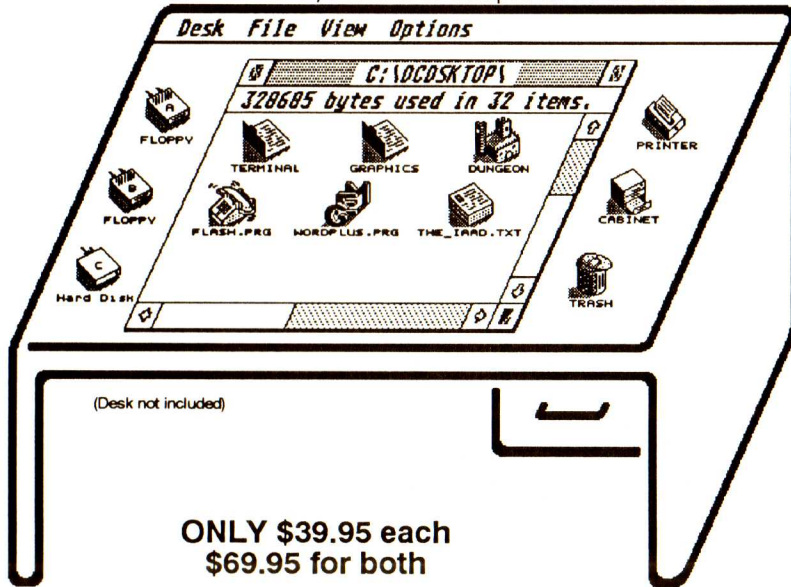
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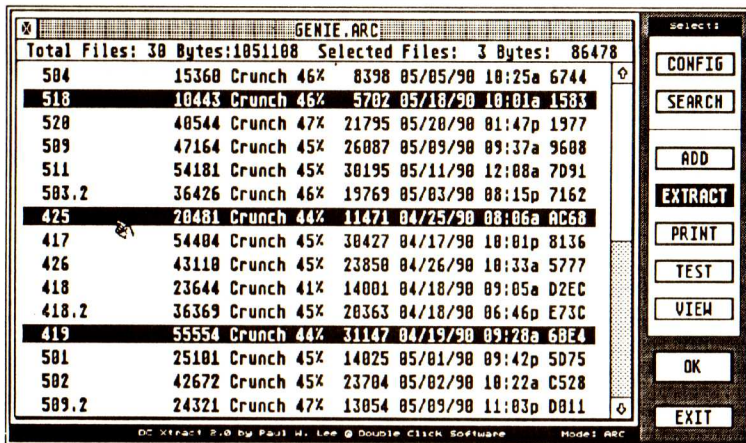


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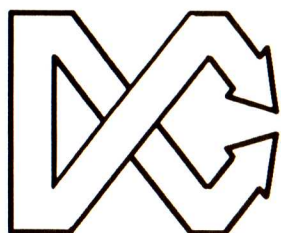
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ANSWERS, TIPS AND RELEVANT INFORMATION

Paul V. Alhart (AFED)

As I promised, this month I have a BASIC "type-in" program for you called DefaultWriter+ Companion #3. This program will allow you to Enable or Disable the RS-232 handler loader routine in AtariWriter+. It will also let you change the screen colors. This program will work on either the 48K or 130XE versions of AtariWriter+. Since these changes are written to your AtariWriter+ disk, some precautions are necessary.

Carefully type in DefaultWriter+ Companion #3. Double check your typing and save it to disk.

Make yourself two copies of the file AP.OBJ from the AtariWriter+ disk. One is for back-up (just in case) and the other is the "working copy" to be modified.

The working copy should be put on a blank, freshly formatted (single density) disk to insure that all the sectors are written contiguously to the disk.

Run DefaultWriter+ Companion #3. Place your working copy of AP.OBJ in drive 1 at the prompt and press RETURN. After reading the current settings, these settings and a menu will be displayed. The settings for an un-modified copy of AP.OBJ should be:

RS-232 handler routine
Enabled
Character luminance = 15
Background color = 144

If yours are different, Press "Q" to Quit and recheck your typing.

Once you have made your changes and are happy with them,

press RETURN to save them to the working copy of AP.OBJ. Copy the working copy of AP.OBJ back to your AtariWriter+ disk, boot it up and give it a try. In the event you have problems, copy your back-up AP.OBJ file to the AtariWriter+ disk and you will be back to where you started.

To make it easier for you to type

in, DefaultWriter+ Companion #3 contains no "special characters" and was written to be short and easy to follow. Error checking is minimal for this reason as well. Feel free to "Glitz up" this program as you desire and give copies to your friends.

Merry Christmas and Happy New Year.

```
1 REM DefaultWriter+ Companion #3
2 REM by: Paul V. Alhart
3 REM AIM December 1990
10 ? CHR$(125):? "Place COPY of AP.OBJ in DRIVE 1":? ? "HIT
ANY KEY TO CONTINUE"
20 TRAP 310:OPEN #1,4,0,"K":GET #1,A:CLOSE #1
30 OPEN #1,12,0,"D:AP.OBJ":NOTE #1,Q,W
40 TRAP 320:Q130=Q+208:Q=Q+20:W130=103:W=96
50 POINT #1,Q,W:GET #1,A:GET #1,B:GET #1,C:GET #1,D
60 IF Q<>Q130 AND B+C+D<>221 THEN Q=Q130:W=W130:GOTO 50
70 IF Q=Q130 AND B+C+D<>221 THEN GOTO 320
80 R=Q+95:T=108:T1=T+5:IF Q=Q130 THEN R=Q-77:T=88:T1=T+5
90 POINT #1,R,T:GET #1,E:POINT #1,R,T1:GET #1,F
100 POKE 764,255:GOSUB 200
110 G=PEEK(764):H=PEEK(53279):IF G=255 AND H=7 THEN 110
120 IF G=28 THEN A=169:E=15:F=144:GOTO 100
130 IF G=47 THEN 330
140 IF G=12 THEN POINT #1,Q,W:PUT #1,A:POINT #1,R,T:PUT
#1,E:POINT #1,R,T1:PUT #1,F:CLOSE #1:GOTO 30
150 IF H=5 THEN E=E+1:IF E=16 THEN E=0
160 IF H=3 THEN F=F+2:IF F>255 THEN F=0
170 IF H=6 AND A=169 THEN A=96:GOTO 100
180 IF H=6 AND A=96 THEN A=169
190 GOTO 100
200 ? CHR$(125):? "ATARIWRITER+ 48K VERSION":IF Q=Q130 THEN ?
CHR$(125):? "ATARIWRITER+ 130XE VERSION"
210 POKE 709,E:POKE 710,F:?:IF A=96 THEN ? "RS-232 HANDLER
LOADER IS DISABLED":GOTO 230
220 ? "RS-232 HANDLER LOADER IS ENABLED"
230 ? "CHARACTER LUMINANCE IS ";E
240 ? "BACKGROUND COLOR IS ";F
250 ? :? ? "START TO ENABLE/DISABLE RS-232"
260 ? "SELECT TO CHANGE CHARACTER LUMINANCE"
270 ? "OPTION TO CHANGE BACKGROUND COLOR"
280 ? "ESCAPE TO RESTORE ORIGINAL DEFAULTS"
290 ? "RETURN TO WRITE THESE VALUES TO DISK"
300 ? "'Q' TO QUIT PROGRAM":RETURN
310 ? CHR$(125):? "File D1:AP.OBJ IS LOCKED OR NOT
FOUND.":GOTO 330
320 ? CHR$(125):? "UNABLE TO MODIFY THIS COPY":? ? "PLEASE
COPY AP.OBJ TO A BLANK DISK":? "AND TRY AGAIN."
330 CLOSE #1:POKE 709,202:POKE 710,148:POKE 764,255
```

BASICALLY SPEAKING

Jeff Summers (ACORN)

The project this month is to write a program that takes ASCII text and converts it to be easily read on your Atari or printed on your printer.

The problem is this: many bulletin board services will, from time to time, carry news releases. These may be new product announcements from Atari, reports from Consumer Electronics Shows (held twice yearly, lots of products are unveiled at these industry shows) or other announcements.

These bulletins are usually in ASCII format, as most computers adhere to this standard. Our Atari 8-bits use ATASCII—short for Atari ASCII—which is not entirely compatible with ASCII. The result is that graphics characters are scattered within the text, there are no returns at the end of lines, and when printed to a printer, characters are chopped off and other problems occur. The greatest reason for this is that ASCII and ATASCII do not agree on what character should be used to mark the end of a line.

Simply stated, the problem here will be to write a program that converts the ASCII end of line sequence to ATASCII RETURN characters. To begin, let's break down the steps involved:

- 1) Find out the source filename (the ASCII file).
- 2) Open that file for input.
- 3) Find out the destination filename (the file that will be ATASCII).
- 4) Open that file for output.

- 5) Read characters from the source file. If they are an end-of-line, translate.
- 6) Write the characters to the destination file.
- 7) Continue until all characters have been processed.

Now, let's tackle these steps one at a time. First, we need to set up a string array for our filenames.

So, for step one, we have:

```
10 DIM FNAME$(20)
20 PRINT "Input filename"
30 INPUT FNAME$
```

Now we have the filename stored in FNAME\$. We now need to open the file for input (step 2):

```
40 OPEN #1,4,0,FNAME$
```

Here the 1 refers to which channel we are opening (you have the option of 1-5 for most purposes), the 4 means we are opening the file for reading, and the 0 is meaningless. Next, we will get the output filename and open it for output (steps 3 and 4):

```
50 PRINT "Output filename"
60 INPUT FNAME$
70 OPEN #2,8,0,FNAME$
```

Here the 8 in the open statement means we are opening the file for writing. If the file previously existed, the prior contents will be erased. Also note that we are using the same string. The string contents are changed by our new input statement, and therefore we can save a little memory by using the one string name for two different purposes.

Now we need to read characters from the input file and translate them if they are end-of-line characters. ASCII uses character number 13 to signify a carriage return and character number 10 to advance a line (the ATASCII character 155 combines these functions). So, we need to change all

character 13s to 155s and ignore all 10s (step 5):

```
80 GET #1,X
90 IF X=10 THEN GOTO 80
100 IF X=13 THEN X=155
```

Line 80 GETs a character from the input file and places it in variable X. This will be the ASCII value. If it is 10, we ignore it and get another value (line 90). If it's 13, it gets changed to a 155 (line 100). We next dump the character to the output file (step 6):

```
110 PUT #2,X
```

PUT prints the single character with the value specified (in this case X) to the channel specified (in this case 2). Finally for step 7 we need to loop until the whole file has been transferred. But how do we know when the whole file has been transferred? If we simply add

```
120 GOTO 80
```

the program will loop until all characters have been transferred and an error is generated. However, at that point an ERROR - message appears on the screen and you would have to manually use the CLOSE statement to close the files to complete the transfer. Very tacky. Instead, we have the TRAP statement that will catch the error when it occurs and transfer us to another program section. Adding the lines:

```
75 TRAP 130
130 CLOSE #1:CLOSE
#2:END
```

Now, when the error occurs at the end of the file (the error occurs because you try to read from the file when there are no more characters to send), the program jumps to line 130. At this point the files are closed and the program ends.

I hope this entices you to try working on a few projects of your own.

Using GFA Basic AND THE RESOURCE CONSTRUCTION SET

Brent Edstrom (ACORN)

I bought my first computer, an Atari 1040 ST, about 15 months ago. Since that time, I have developed an interest in programming. If you are interested in learning how to program, I would strongly recommend getting GFA Basic 3.0 with the compiler.

It has been an absolute joy to use. The editor couldn't be better. GFA Basic 3.0 is also a structured language. This means there are no clumsy line numbers to work with. It also means many of the techniques used are applicable to other structured languages as well.

I wrote the Folder Maker code to show two programming techniques: writing a program for an accessory application and using dialog boxes created from a Resource Construction Set. I would point out you don't need to have a million lines of code to create useful applications.

The Folder Maker listing is fairly short, but I have found it to be a helpful little accessory. I decided to write this program because of an inconvenience I was experiencing when using Word Writer-ST.

Word Writer lets you specify a path name that data can be saved to, but if you forget to set up a folder while at the desktop, you must, as far as I know, save your work to a pre-existing folder or the root directory. Folder Maker lets you create a new folder from within a program such as Word Writer. When selecting this accessory, you can also check the available memory on a disk drive or hard drive.

A word of warning: This pro-

gram doesn't do any error checking for connected drives. If you try to create a folder on a non-existent drive, your computer will most likely crash! Also, since this program was meant to be run from within another program, Folder Maker, will not update the drive windows. This means you can create a folder from the desktop, but you will not see the folder until the next time you access the drive.

Creating a Dialog Box

To use this listing, you must have GFA Basic 3.0 as well as the GFA Compiler. The first step is to load the Resource Construction Set (RCS2.PRG) from your GFA Basic disk. You will need to create two dialog boxes with the following items and names: Accept the default name of 'tree1' for the first dialog box. Open the dialog and drag two buttons into the box. Name them 'Cancel' and 'OK'.

I find it is most helpful if I use the same variable name as the button text, so type in 'cancel' and 'ok' for the respective item descriptors. The RCS program will automatically assign an '&' for these items.

Drag one more button into the dialog box and label it 'space'. Next, select 'exit' and 'selectable' for each of these buttons. You must have at least one 'exit' button in the dialog box, otherwise the computer will lock up. You may also want to make one of these buttons a 'default' button.

In addition to the buttons, drag two editable text boxes into the dialog. Label the first one 'drive' and the second one 'folder'. For the 'drive' object, leave only one space for text (this will show the current drive). I chose to use 12

text spaces for the 'folder' object, as I wanted to have the ability to make a folder with eight letters, a period, and a three letter extension. You may want to use the following syntax for this item:

```
PTMPLT>
ENTER FOLDER NAME:-----
PVALID>
-----PPPPPPPPPPPP
PTEXT>
-----
```

Note: the 'P's are used to limit any text entry to valid TOS filename characters.

Create another dialog box ('tree2') and enter the following items: An 'exit/default' button with 'return' as the variable name, a text box with 1 text space titled 'chkdrive' and an editable text box (eight text spaces) with 'memory' as the item name.

At this point, the dialog boxes are complete. For some reason, the RCS2.PRG doesn't automatically create a list file, so you may want to select 'list' as an output option. This will create code that may be directly merged into your program. In the Folder Maker listing, anything with a 'Let' in front of it was merged from the RCS. Select 'Save As' in the file menu and save the resource as FOLDER.RSC.

All that remains is to type in the listing, compile the program and rename the compiled program with an .ACC extension. I hope this source code will be helpful in clarifying some of the techniques involved with using the Resource Construction Set. Perhaps this will inspire you to add some new functions. A disk formatter might be nice, or how about a searching utility?

(Listing on next page)

```

Folder Maker
$m15000
ap_id&=APPL_INIT()
IF ap_id&=0
  ALERT 1,"PROGRAM ONLY RUNS | AS AN ACCESS-
  SORY.",1,"Return",dum&
  END
ENDIF
IF RSRC_LOAD(DIR$(0)+"folder.rsc")=0
  DO
    -EVNT_TIMER(-1)
  LOOP
ENDIF
LET tree1&=0 !RSC_TREE
-RSRC_GADDR(0,0,tReel&)
LET drive&=4 !Obj in #0
LET folder&=1 !Obj in #0
LET ok&=2 !Obj in #0
LET cancel&=3 !Obj in #0
LET space&=6 !Obj in #0
LET tree2&=1 !RSC_TREE
-RSRC_GADDR(0,1,tReel&)
LET chkdrive&=1 !Obj in #1
LET memory&=4 !Obj in #1
LET return&=5 !Obj in #1
me_id&=MENU_REGISTER(ap_id&," Folder Maker")
DO
  -EVNT_MESAG(0)
  IF MENU(1)=40
    CHAR{{OB_SPEC(tree1&,folder&)}}=""
    CHAR{{OB_SPEC(tree1&,drive&)}}="A"! Default
to drive A
    -FORM_CENTER(tree1&,x&,y&,b&,h&)
    -WIND_UPDATE(1)
    -OBJC_DRAW(tree1&,0,3,x&,y&,b&,h&)
    REPEAT
      ex&=FORM_DO(tree1&,0)
folder_name$=CHAR{{OB_SPEC(tree1&,folder&)}}
drive$=CHAR{{OB_SPEC(tree1&,drive&)}}
UNTIL ex&=ok& OR ex&=cancel& OR ex&=space&
-OBJC_CHANGE(tree1&,ex&,0,x&,y&,b&,h&,0,0)
IF ex&=space& AND drive$=""
  ALERT 1,"YOU MUST ENTER A DRIVE NAME
|BEFORE SELECTING THE DISK- |SPACE OP-
TION",1,"RETURN",bla&
  ELSE IF ex&=space& AND drive$<>""
    CHDRIVE drive$
    memory$=STR$(DFREE(0))
    @update_window
    CHAR{{OB_SPEC(tree2&,chkdrive&)}}=drive$!
Selected drive
    CHAR{{OB_SPEC(tree2&,memory&)}}=memory$
    -FORM_CENTER(tree2&,x&,y&,b&,h&)
    -WIND_UPDATE(1)
    -OBJC_DRAW(tree2&,0,3,x&,y&,b&,h&)! 2nd
dialog box
    REPEAT
      ox&=FORM_DO(tree2&,0)
      UNTIL ox&=return&
-OBJC_CHANGE(tree2&,ox&,0,x&,y&,b&,h&,0,0)
ENDIF
IF ex&=ok& AND folder_name$="" OR drive$=""
  ALERT 1,"YOU MUST ENTER A FOLDER AND
|DRIVE BEFORE SELECTING OK.",1,"Ok",dumm&
  ELSE IF ex&=ok& AND folder_name$<>"" AND
drive$<>"" AND drive$<"Q"
    CHDRIVE drive$
    folder_search$=folder_name$+CHR$(0)
    r&=GEMDOS(78,L:V:folder_search$,&X10000)
    IF r&>0
      MKDIR drive$+":\"+folder_name$
    ELSE
      ALERT 1,"THERE'S ALREADY A |FOLDER WITH
THAT NAME!",1,"RETURN",gunk&
    ENDIF
  ENDIF
  @update_window
ENDIF
LOOP
PROCEDURE update_window
  -FORM_DIAL(3,0,0,0,0,x&,y&,b&,h&)
  -WIND_UPDATE(0)
RETURN

```

THE CASE STRUCTURE IN GFA BASIC (OR IN CASE OF FIRE, GOSUB EXTINGUISHER) Micheal Calvin (SWAG)

Before we start on CASE, a correction for a previous article: TRIM\$ does work! My ANTIC manual had the syntax printed incorrectly. The correct syntax for TRIM\$ is: a\$=TRIM\$(b\$). Thanks to Mike Sieben of the Atari Federation for letting me know. Mike also pointed out a second error. The "%" variable declaration is a 32-bit integer, and the "&" variable declaration is a 16-bit integer.

Before release of the 3.x series of GFA Basic, the CASE structure was only available to the 'C' and PASCAL programmer. CASE takes the place of a series of IF/ELSE statements and is very useful for menu and shell applications. If there are three or more choices, CASE is better used. CASE uses less code and compiles and runs faster than IF/ELSE.

The syntax for CASE is as follows:

```

SELECT x - x may be a string or numeric variable
CASE y[TO z] or CASE y[,z,...] - y and z may be constants
CASE TO y - from 0 to y are accepted
CASE Y TO - y becomes the lowest value
DEFAULT - if none of the defined conditions are met, use
this option.
ENDSELECT - end of structure
CONT - Insures that the DEFAULT or CASE conditions are
jumped past if a condition is met.

```

The following program gives an example use of CASE, and how IF/ELSE would be used in the same situation.

```

' In CASE of fire GOSUB extinguisher'
DO ! Think structured
  PRINT "[Y]es, [N]o, or [Q]uit?"
  REPEAT
    l$=INKEY$ ! Wait for user keypress
    UNTIL l$<>""
  ' Using IF, here's the way we'd have to do it....'
  IF l$="N" OR l$="n"! is it N or n?
    PRINT "No"
  ENDIF
  '
  IF l$="Y" OR l$="y" ! is it Y or y?
    PRINT "Yes"
  ENDIF
  '
  IF l$="Q" OR l$="q" ! is it Q or q?
    PRINT "Quit"
  ENDIF
  '
  IF l$>"a" AND l$<"d"
    PRINT "Why did you press ";l$;" ?"
  ENDIF
  '
  IF l$<<"N" AND l$<<"Y" AND l$<<"Q" AND l$<<"n" AND
l$<<"y" AND l$<<"q"
    PRINT "Key not allowed"
  ENDIF
  ' Okay, using the same input, here's the CASE way'
  SELECT l$
  CASE "N","n" ! More than one condition, separated with
a comma
    PRINT "No"
  CASE "Y","y","J","j" ! Multiple conditions (Ja is yes
in German)
    PRINT "Yes" ! I didn't even try to find j in the IF
group!
  CASE "Q","q"
    PRINT "Quit"
  END
  CASE "a" TO "d" ! a range of conditions, defining upper
and lower
    PRINT "Why did you press ";l$;" ?"
  DEFAULT ! OTHERWISE is an alternate keyword and more
mnemonic
    PRINT "Key not allowed" ! None of the selected con-
ditions'
  ENDSELECT
  ' Doesn't the CASE method seem more elegant and
easier to decipher? Think of how easy it would be to pick
from a whole bunch of user inputs.....'
  LOOP

```



?? What is ??

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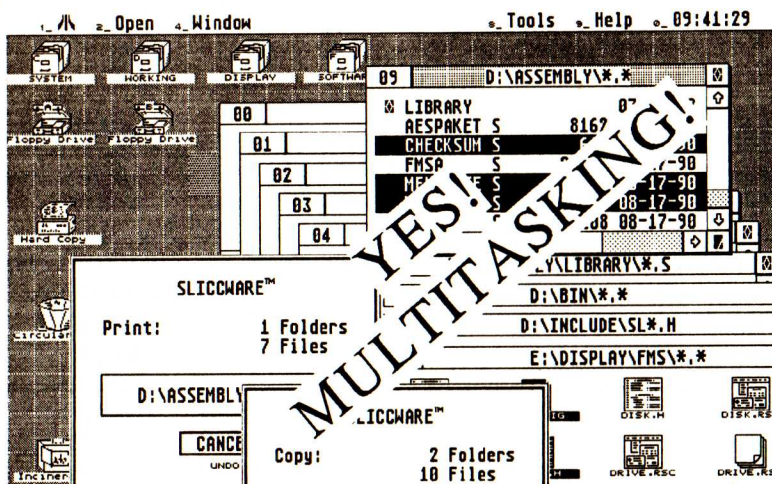
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The Ultimate Article

Robert C. Arp, Jr.

When this article has been written and published, no other need be written nor published. After you have read this article, you need read no other. Thenceforth, we should expect every magazine to cease publication and every magazine writer to seek some other activity in which to while away the hours.

An absurd idea? Well, such conceit is characteristic of those who proclaim their products to be the "ultimate." Actually, the only thing "ultimate" about those individuals and organizations is their egocentricity.

Is there, perhaps, a particular function that fails within the brain of these egotists—a failure which permits them to imagine that their (usually mediocre) efforts cannot possibly be surpassed by anyone?

I am now looking at the cover of a GFA Basic 3.0 manual which declares, "The ultimate programming language just got better!!" What drive! Obviously, this programming language was not the ultimate when originally proclaimed thus. Since the new proclamation of "...just got better!!" eradicates the original, the new proclamation is false by definition.

I singled out GFA Basic's claim as an example of a ridiculous advertising trend which seems to be gaining momentum in the ST market because I know the product is competent enough to withstand the criticism. Others I could finger are as worthy of a critique.

I am not trying to generate much ado about trivial matters

here—my time is too valuable for that; but I am calling attention to lapses in decorum towards ST consumers. After all, this type of advertising gimmickry reflects the advertiser's assessment of our collective intellectual ability.

Furthermore, I do not rest on my condemnation of the descriptive "ultimate." I also question the proliferation of more modest proclamations such as "fastest," "best" and "most." These, at least, permit consumers to assume that advertisers are claiming such distinction only until the next "fastest," "best" or "most" appears.

However, there can be only one "ultimate" of a thing within the life of the universe—I certainly hope none of the available ST products have reached that plateau. I am amused by the frequency of updates generated for these "ultimates."

The impact of advertisements which depend on nonspecific superlatives is not as effective as those advertisements which emphasize particular product features. Contrast the "ultimate" genre with the ads for Calamus and DC Desktop.

I now turn your attention to ads which have no impact at all because of poor layout and design. The most immediate example I have is for the products of Innovative Concepts. In this case, my criticism is I that can't read the ad—the typeface causes too much eyestrain.

Another type of unreadable ad uses too much color; another type obscures text with an incompatible background. When these techniques are used within a magazine article, the article is not read.

When used within an advertisement, the advertisement is not read.

Typeface too small—see the Good Backup Utility ad. Specificity of features lost via layout—see the Diamond Back ad. Typeface and layout utilized for maximum advantageous impact—see the ABCO Computer Electronics Inc. ad. [*Eds: Thanks Robert, since that's the only ad you mention that we had a hand in designing!*]

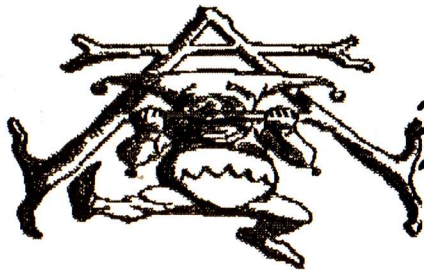
I've gone this far, so I might as well point out an ad that is too busy—Artisan Software; an ad that is not—Codehead Software; and an ad in the middle—Branch Always Software.

In conclusion, I suggest to competent developers that the use of nonspecific descriptives automatically attaches to your products the stigma usually reserved for the incompetent. How about exercising a little modesty—lest your hand be called.

Robert C. Arp, Jr.
278-1 San Tomas Aquino Rd.
Campbell, CA 95008
(408) 370-9039



Happy New Year



Fool's Errand

Bill Magro (CUSTUG)

If you're tired of games which rely on luck more than skill or you've played one too many shoot-em-ups, *The Fool's Errand* (TFE) from Miles Computing may be for you. TFE is an adventure game, of sorts, but it is unlike any adventure game you may have seen before.

Gone are the traditional annoyances of adventure games: there are no difficult-to-manuever characters, you cannot 'die', and you aren't racing a clock to finish. Consequently, you won't find yourself constantly starting over. All progress is permanent, and since you won't finish in one sitting, games can be saved.

As the game player, you unravel the story of a fool wandering through a strange land in search of wisdom. Viewing the Prelude, you learn from the Sun that your goal is to recover the 14 Lost Treasures of the land. The Sun gives you a map of the land, but it is unreadable because many parts are missing and those that are readable are scrambled.

You, as the Fool, visit 80 places, each accompanied by a puzzle. Upon successfully solving each puzzle, you recover a piece of the Sun's map and another passage in *The Story*, which chronicles the Fool's journey.

The puzzles vary widely in nature but share one common feature. The solution to each is via skill and logic. Some are trivial; some will baffle you for a time. TFE has mazes, words and pictures to unscramble, cryptograms,

word searches, a card game (the rules of which you must discover) and many others which are not easily classified.

Each puzzle comes with its own instructions, though the instructions sometimes tell you no more than to "solve the puzzle."

At the start, about 20 puzzles can be accessed. Solving a puzzle often gives you access to another place to visit. In this way, each of the 80 places (and puzzles) can be reached.

Even when all the puzzles are solved, your task is far from complete. The Sun's Map is, itself, a puzzle which must be unscrambled. Once put in order, the Sun's Map contains further puzzles. Using clues, which are embedded in *The Story* (and clearly set apart by blue or red letters), these final puzzles can be solved, revealing the names of the 14 Lost Treasures. Entering the names of the Treasures entitles you to view the Finale, which concludes *The Story* and the game.

Technically, the program is excellent. It is provided on four non copy-protected disks, which can be copied to a hard drive. Copy protection is afforded by means of a "code wheel," which sports three concentric disks that rotate to generate 1331 possible positions and result in 121 different codes. Looking up the access code is almost fun.

The program is very responsive, and seems to be bug free. Interaction with the puzzles is intuitive, with most screens accepting both mouse and keyboard input. Most of the puzzles contain striking screen art which is relevant to *The Story* and occasionally essen-

tial to the puzzle's solution. Tremendous effort was expended on the art and in the programming of this game, and the results are worthy of that effort.

Though a fine program, TFE is not without its shortcomings. The puzzles may disappoint you late in the game. They do not get much more difficult than the initial puzzles. Solving a few classes of puzzles becomes rather routine after a short while.

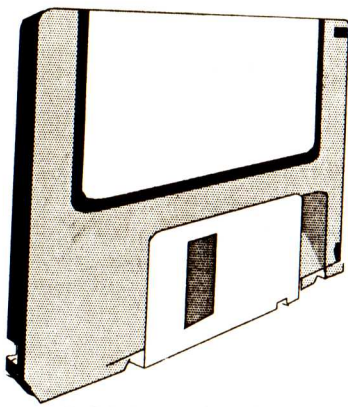
My partner, Lisa (a word puzzle wizard), and I finished the game in approximately ten hours.

The Story, too, is a trifle disappointing. Devoid of plot or message, it seems to exist solely as a medium for the provision of the final clues. It is chock full of nonsense words which are integrated quite roughly into the *Story*.

The game itself possesses a plot. *The Story*, however, does not contribute significantly. Unlike LucasFilm's *Loom*, you won't want to replay this game solely for its enchanting story.

The puzzles are the heart of this game, and solving them is where you will enjoy yourself. There are many different kinds of puzzles, and many are creative and clever in their solution. Hopefully, the next game in this series will incorporate more of these challenging and interesting puzzles.

The Fool's Errand is a game to be played with someone. You will collaborate when boggled and celebrate when you triumph. Though sometimes disappointing in its simplicity and unrewarding in its completion, it is, most importantly, always a lot of fun.



AIM Disk of the Month January 1991

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

Here's a short description of the files on the January '91 disk. For more complete documentation, see the text files contained in most of these archives.

BACKUPST.APP—Hard drive backup by Fred Appleman of the University of Utrecht in the Netherlands. Uses a proprietary data-stream format to create fast image backups but can backup/restore (interactively) individual files and folders. Full English docs included.

BIGBUX.APP—Answer your money questions! Does depreciation, mortgage, commercial paper, investments and much more. Shareware.

DC_SLICK.APP—DC Slick Shift, freeware from Double Click. Uses Control, Alternate or Shift keys to emulate mouse buttons.

DTerm1.APP—Dterm 1.0 terminal program, now with auto dialer, capture buffer/viewer and auto Zmodem. Scan dialing and unlimited redials, Macros and strings for each number. Shareware from the authors of Cheetah.

EASYTEXT.APP—PD Desktop Publishing package from England! Can use GDOS fonts, but works without them as well. Import Degas pics and much more.

GOGOST21.APP—GoGo->ST is a file executor that replaces the GEM desktop, speeding up your access to programs and documents. Version 2.1 allows lists to be loaded from a "button" on the main GoGo desktop. Shareware.

GSLAM231.APP—GramSlam Grammar Checker improves the quality of your writing. Looks for incorrect, awkward or wordy phrases, describes the problem in easy-to-understand terms and offers suggestions for improvement. Runs as PRG or ACC. DEMO (10 sec delay after each action).

KV_GEO2.APP—Explore the Sun/Earth/Moon relationship with animations and information. Includes an animation of the full Apollo mission, with descriptions of each stage. Low rez COLOR. Shareware from Knowledge Vine.

MONOMON.APP—English version of MonoMon 2.2. from Germany, a disk editor utility that also formats, copies and checks for viruses. MONO only.

MORTGAGE.APP—Mortgage/Loan calculation program with options for early payments and more. Submitted to AIM by the author.

NAMETUNE.APP—Name This Tune, for 2 players. Identify songs before your opponent. Use synthesizer or ST speaker. Includes a program for making music files. Medium rez COLOR. Shareware.

PAN1080I.APP—Printer driver for 1ST Word/Plus that accesses all foreign and special characters, from Don Schmidt (SWAG).

PINGAME.APP—Classic Pin Game as an ACC, written by Ed Smith of SPACE. GFA source listing included.

STATS.APP—The STATISTICIAN is a PRG/ACC that reports the status of your system and drives. Displays TOS version and date, GEMDOS version, Blitter, System time/date, floppy write verify/seek rate, Capslock, memory map with graphical display and info on all disk drives. Some options settable by the program. Shareware from Structured Technology.

ST_TYPE.APP—ST Typewriter lets you use your printer as a typewriter. Set Pica or Elite, DPI and more.

TUNES.APP—Disk (111 songs) of MIDI files set up for use with Name This Tune. Extract to a blank disk.

XYZ2.APP—XYZ transfer utility 2.0. Upload and download with XModem, YModem and ZModem. New options include estimated transfer time, support for running unattended, enhanced disk error recovery.

Readers can purchase this disk from their local AIM Participating user group or by sending \$6 (\$5+\$1 S/H) to Unicorn Publications, 3487 Braeburn Circle, Ann Arbor, MI 48108. Please specify the January '91 disk when ordering.



DMC

OUTLINE[®] ART

Outline Art is a vector-oriented, graphic generation tool. Multiply your creativity through the many functions which you will find in this program.

Outline Art supplements the Calamus desktop publishing system with a great number of new functions and effects. An extract from the extensive list of functions include:

- A user interface, quite similar to that of CALAMUS.
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- Creation of rayed objects, ie; from a font to a central point.
- Nearly unlimited possibilities for the manipulation of text, characters and text attributes such as:
 - rastered, transparent, outlined, rotated, stretched, compressed and cursive styles...
 - circular text and text along a freely-defined vector path...
 - projection of raster areas and text on vector outlines...
 - conversion of text into vector objects...
 - kerning functions...
 - Functions can be freely combined and applied to all Calamus fonts.

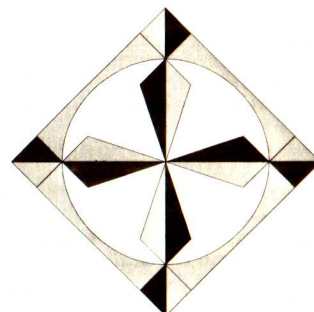
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Convert 2X, our new program to convert CVG (Calamus Vector Graphic) to EPS (Encapsulated PostScript[®]) or PS (PostScript[®]) file format is included with Outline Art.

Note : **DynaCADD**, our complete 2D and true 3D Computer Aided Design and Drafting Package, allows the importation of Calamus Vector Graphic format, (CVG), which can then be output through all devices supported by DynaCADD, ie: CAMM-1, Plotters etc,... An excellent solution for the Sign Making Industry.

AYERS ROCK



Outline Art with Convert 2X retails for US \$289.95.

To place your order, contact your local Atari Dealer or ISD directly at:

ISD Marketing, Inc.
 2651 John Street, Unit #3,
 Markham, Ontario,
 Canada, L3R 2W5,
 Tel: (416) 479-1880
 Fax: (416) 479-1882
 GENIE at ISD
 Compuserve at 76004,2246

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

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

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

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|--------------------------|----------------|
| President | Alvan Sherrill |
| Vice-President | Billy Washburn |
| Secretary | Sheila Kepner |
| Treasurer | Joe Barth |
| Public Relations Officer | Bruce Davisson |
| Librarian | Russell Gibson |
| Newletter Editor | Manuel Garcia |

Presidential Ponderings—November was election month for AAAUA. The new board consists of the names shown above. Thelma Sunvison and Ed Sekula were re-appointed as "Special Assistant to the President" and "Hard Copy Librarian" respectively.

My thanks to the membership for your vote of confidence in supporting me for another term. I could not have done my job without your support and without the support and hard work of your board of officers and appointees.

My thanks especially to Jose Borrero for serving as vice president for the six months remaining when John Hardie moved to New York. The cooperative and dedicated efforts of all of you have made AAAUA what it is today. My thanks to each and all! I also want to welcome newly elected Vice-President Billy Washburn and Newsletter Editor Manuel Garcia to the board. I know you will do all in your power to continue making AAAUA the best user group possible.

The AAAUA/SALSA AtariFest held on Saturday, November 3rd, was a moderate success with a total of about sixty persons, including about twenty non-members attending. SALSA stands for the ST Atari League of San Antonio which was formed by a group of AAAUA members who acquired their STs around 1984. This was the first joint meeting of the two user groups.

Food was in abundance, thanks to Kyle Miller (SALSA) and Rose Marie Pettit (AAAUA). \$200 worth of prizes were awarded to winners of the ST Midi-Maze and 8-bit BallBlazer contests. Everyone had fun playing a number of different games, playing midi-music and just generally enjoying good conversation. We have hopes of having a similar joint meeting next year.

Now, an urgent message to everyone, AAAUA members and non-members alike, regardless of where you live. If you want the Atari, especially the 8-bit Atari, to remain a viable computer option, then we, the Atari users, must band together and support it. How? By joining and participating in a user group, by supporting publications such as AIM, and by urging others to do the same.

Let's face it! Commercial support is sadly lacking. Many commercial outlets and publications have abandoned Atari in pursuit of what they perceive as "big bucks" in MS-DOSland. By default, the responsibility has fallen upon us, the users. So, JOIN the user group where you live. If there is no user group where you live, I invite you to become a subscribing member of AAAUA. Then, PARTICIPATE!

Write an article on any relevant subject, technical or non-technical, for publication in your user group newsletter and/or for submission to AIM. Let's spread our knowledge and expertise about computing and the Atari to all who would benefit by becoming part of the Atari community. This is the only way we can ensure the survival of our cherished Atari computer. Will you join with me in pursuit of this goal?



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

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

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

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

the Atari Clubs of Denver

ATARI CLUB OF DENVER Emperor Chet Cox 303-399-9352 Librarian Paul Mirca 303-699-8647 Treasurer Guy McDaniels 303-238-2316 Exec Director (means nothing) Joe McWilliams 303-790-7119	STARFLEET President C.J.J. Bender 303-451-1753 Vice Chris Guenther 303-278-4432 Secretary Thomas Doughton 466-6344 Treasurer Charles Robique 303-424-2887 Librarian Steve Pleet Mesley Crusher (Don't ask!)
ACCT STIG EDITORIAL MIKE Mike McCutcheon EDITORIAL SCOTT Scott Andersen JF	ST Interest Group (STIG) Ed Ft Springs - 371-6514 Librarians - Lou Mendoza & Joe Ronda Scribe - Chet Cox PictureDrawer - Jeremy Fason



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

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

- | | | |
|---------------------|-----------------|----------------|
| President | David Micka | (419) 729-1891 |
| VP | Michael Justice | (419) 242-7797 |
| Secretary | Sharon Hill | |
| Treasurer | Rose Taylor | |
| ST Librarian | Brenda Micka | |
| Disk Drive-Thru BBS | | (419) 885-3441 |





The Atari Computer Owners of Rochester, NY (ACORN) meets on the 2nd Wednesday of each month at Brighton High School, room 314N. Before each meeting, a STarter class for the ST meets at 6:45 PM in room 242S and a Basically Speaking class for the 8-bit starts at 7:00 PM in room 314N.

ACORN operates a BBS at (716) 436-3078 with 40 megs of public domain downloads for the 8-bit and ST systems. Our mailing address is POB 23676, Rochester, NY 14692.

Dues are \$18.00 per year which includes access to the club's PD libraries, enhanced access to our BBS, and subscriptions to our newsletter, the ACORN Kernel and to Atari Interface Magazine.

President Don Allis (716) 293-3415
Exec VP Albert Yarusso (716) 244-4487

December Hi-Lites—We held our annual auction at the November meeting. Many 8-bit left satisfied with the "new" programs they bought for their machines and the ST'ers we please with the bargains they got on hardware and software for their machines.

At the December meeting, Kernel Editor Candi Nelson will demonstrate PageStream and how the Kernel is put together.

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

ATARI COMPUTER OWNER'S RESOURCE NETWORK

ACORN, the Fort Wayne area Atari users group, meets at the Georgetown branch of the Allen County Public Library on the first Saturday of each month beginning at 10 AM. Annual membership dues are \$18 which includes access to our library of 8-bit and ST software, magazines, books, and hardware; member's privileges on the BBS; the monthly newsletter; and a membership card good for discounts at some of the local stores.

Eric Converse	President
Scott D. Schaffer	8-Bit Vice President
Scott Sorg	16-Bit Vice President
Kim Stahn	Treasurer
Karl Fadus	Librarian
Ken Helms	Secretary/Newsletter Editor
Our BBS	(219) 744-1396



Bluegrass Region Atari Computer Enthusiasts

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

President Hal Nason (606) 269-8989



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

President	Phil Rominger
Vice President	Bob Ribortone
Secretary	Matt Matias
Treasurer	Herb Kanner
Newsletter Editor	Jerry Sullivan
8-Bit Librarian	Chester Hadley
16-Bit Librarian	Charlene Rominger

Secretary's report: November's meeting was pretty light, mostly just a friendly bull session. However, Phil did manage to review some of the Atari world's news (nothing great this month). One of our members demo'd 'Assistant Chef'. The demo was good, the program could use some refinements. For a little extra entertainment, Phil demo'd a few of the programs on the disk of the month. To finish off the formal part of the meeting, we voted on AIM's future options. The vast majority would prefer AIM to maintain the same price and mailing and improve size and quality.

Birmingham Atari Computer Enthusiasts

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

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

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

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

BRAG ST



Buffalo Region Atari Group for ST's

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

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

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



BRAG ST—The October 18, 1990 meeting was called to order by Mark Pierro at 7:30pm; there were 20 members present.

We started out by explaining that the MIDI demonstration by Don Missel has been permanently canceled due to Don's inability to schedule a date with us. Club member Burt Royce then agreed to put on a demonstration at the November meeting. Thanks, Burt!

Nominations were opened for the four(4) Board of Directors positions whose terms were about to expire. Re-nominated were: Mark Pierro, Gerry Genson, and Joe Rogozinski. Also nominated was Dane Stegman. Voting will take place at the November meeting.

Mark discussed with the members the MiGraph Hand Scanner and Touchup software user group offer. Then the list programs available on the AIM Disk of the Month for November was passed around.

Mark then discussed with the club about buying a 20" TV/Monitor for presentations at club meetings. A motion was made and passed to spend up to \$275 for a TV/Monitor. Mark said he would investigate into what brand would be the best to buy. Our first demo was "Space Ace", demonstrated by Mike Stringer. We all sat in awe as Mike breezed through the game - the graphics were fantastic, like watching a cartoon! Then Mike showed us Speed Ball, in another excellent presentation. Next, shareware games from The Knowledge Vine, KVHouse, KVMatch and KVGeo were demonstrated by Mark. These are excellent learning games for children ages from 3 years and up. These programs are all available on AIM's Disks of the month. At the break, disk sales were brisk and our software raffle winners were: "Lucky" Joe Rogozinski, KillDozer; Burt Royce, Gauntlet.

An informal open forum continued to the end of the meeting, while members enjoyed cider and donuts in keeping with the spirit of the season. The meeting closed at 9:40pm.



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



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

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



The Champaign-Urbana ST Users Group (CUSTUG) meets at 7pm on the second Wednesday of each month in the Auditorium of the Urbana Free Library at the corner of Elm and Race in Urbana, IL. Membership dues include a subscription to AIM and GLITCH and use of the commercial lending library. New members are welcome. The group supports a local BBS, Blackhawk's Keep, operating 24 hours a day at 3/12/2400 baud (1/8/N): 217-892-5512.



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

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

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

President	Bob Thompson	518-439-5356
ST VPresident	Jim Bage	518-583-2106
XE VPresident	Ian Herrick	518-465-8121
Secretary	Bill Crowley	518-371-0416
Treasurer	Joe Bogaard	518-785-4071
BBS Sysop	Ed Lafortune	518-235-7044
ST Librarian	Bill Crowley	518-371-0416
XE Librarian	Ian Herrick	518-465-8121
Newsletter Editor	Bill Silverman	518-439-6465
CDACE BBS (300-2400)		518-237-1232



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

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



First Atari Computer Club of Spokane

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

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

President	Tim Osborne	509-624-1917
Classic VP	Ron Hoffman	509-487-3520
ST VP	Keith Busch	509-926-9369
Treasurer	Norm Iverson	509-253-4733
Secretary	Nancy Prevost	509-456-0506
Sysop	Greg Morse	509-328-1013
Classic Librarian	Ed Hicks	509-992-1244
ST Librarian	Roy Steele	208-773-4876
Newsletter Editor	Merry Iverson	509-253-4733





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

Well, another month has come and gone and still we are waiting on any new word for any enhancements to the ST or the new TT.

Hope something happens soon. The general membership attendance at the meetings is still low. Any of you members out there that need help or just want to talk about your Atari come out and join the fun the 3rd Thursday of each month at 7 PM. Bring a friend. The meeting in December is our annual graphic's contest for all members. Last year was a lot of fun and we saw some really good graphics drawn by some young artists. Make sure you attend and bring any graphics you or your kids have drawn. Remember, they must be composed on any Atari drawing program and must be of original design.

I look forward to seeing everyone at the meeting. If you have any new information you would like to see included in our new newsletter, let me know by the 1st of the month so we can get it included in the President's Letter.



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

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

President's Monthly: 17 November, 1990—Merry Christmas everyone. It seems a little strange to be saying this before Turkey Day, but that's the way it goes when you write stuff more than a month ahead. I wish you all a happy and safe holiday, and hope you get at least some of the new toys you have on your lists.

I would like to report success repairing my broken XF551 drive, by installing some jumpers to the port connections on the bottom of the board. It was not hard at all, but sure seems like Atari could have made these more secure so that the problem did not occur in the first place.

A little closer to home here, I have been told Childrens Palace has a few 8-bit titles for sale. Games, but then anything is better than nothing. Even mail order is getting tight, with only a couple places left with much of a selection. At least companys like ICD still have some great stuff for us.

January is vote time for GRASS, so make sure you come to the meeting to get your vote counted, you even have time to get into the running for your favorite office yet. This is your chance to get the group heading in the direction YOU WANT. Your opinion is important, the group is here for you, but you also have the obligation to make your views and desires known. Enough said.

See you all at the meeting, and once again, best wishes to everyone this holiday season.



Congratulations to all the officers and thanks to last years group. May we all have a fine year in the GTAUG! The GTAUG has been 'around' since 1981 and supports both the 8-bit and 16-bit communities. Meetings are held the first Tuesday of each month at a location announced in the previous meeting.

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

President	Carl Neblett	(409)755-6535
Vice President	Bob Lisle	(409)832-5659
Treasurer	Charles (Butch) Foster	
Secretary	Joe Bryant	(409)839-8645



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

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

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

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



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

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

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

JACS

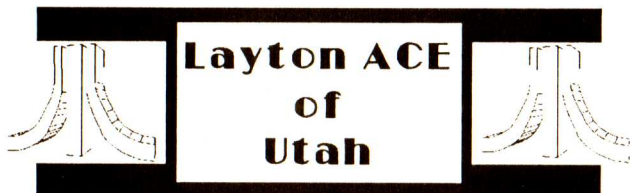
Jersey Atari Computer Society, P.O. Box 710, Clementon, New Jersey 08021. JACS BBS: (609) 346-1224

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

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

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

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



The Layton Atari Computer Enthusiasts (L.A.C.E.) membership cost \$20 per year. Privileges include the AIM Monthly Magazine, access to the 8-Bit and ST club libraries, monthly meetings, help and friendship. If you are presently not a LACE Club member and wish to join contact the one of following persons or write to LACE, c/o Irwin Brooks, 3897 So. 2275 W., Roy, UT 84067-3515.

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

The L.A.C.E. Club Meets in the basement of the Clearfield Library every second Wednesday of the month at 7:00 p.m.

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



Mid-Ohio Atari User Group Post Office Box 134, Ontario, OH 44862

The Mid-Ohio Atari User Group supports all models of Atari computers. We meet at A&B Computers, located in the West Park Shopping Center on Park Avenue West in Mansfield. Meetings are held the third Saturday of each month from 7:00pm to 9:00pm. Demonstrations are welcomed and pirating is expressly forbidden.

MAUG is a participating club in the Atari Interface Magazine. As such, members receive an issue of A.I.M. each month for no extra charge. Club dues are \$7.50 per year for residents of Ohio, and \$10.00 per year for others. A monthly disk subscription is an additional \$3.00 per year if you pick your disk up at the meeting. Disk subscriptions which must be mailed are an additional \$24.00 per year.

The club maintains a disk library for both the 8-bit and ST computers. The library disks are made available at each meeting. There is also a message base on the DataQue Support BBS members to use. Anyone wishing to become a M.A.U.G member can contact Chuck Steinman at the club address or call the DataQue Support BBS at (419) 529-5197 and leave email to the SysOp.

M.A.C.E.



The Michigan Atari Computer Enthusiasts

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

For a catalog of current disks in our libraries, send \$2 to:

MACE, P.O. Box 2785, Southfield, MI 48037

MACE meetings are held on the Third Tuesday of each month at the Southfield Civic Center at 7:30pm. The Southfield Civic Center is located at 10 1/2 Mile and Evergreen Rd, one half mile south of the Evergreen exit on the new I-696. Meetings are in the small pavilion, room 115. Parking is available in the parking garage below the pavilion or in one of the many parking lots on the Civic Center grounds.

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

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

Middle
Georgia



Atari
Users
Group

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

November Meeting

The November meeting saw another great turnout with 18 members able to stir themselves. Lee Benjamin was nice enough to once again bring his computer to the meeting. It seems that only a few people are willing to put the extra effort forward to make the meeting enjoyable. I believe that everyone gets much more from the meeting when there are at least 2 computers present.

We voted at the meeting to purchase the AIM disk for the club instead of the club president, me (grin), working on the disk each month. I will still offer programs myself but I will not be compiling a Disk of the Month. The great people at Unicorn Publications (Bill & Pattie) asked members to vote on which direction that they would like to see the magazine to go in the Future. The members unanimously voted they would like to see the magazine expanded, even though it means it will still arrive a little late each month.

At the meeting we talked about which way that Atari is moving and I was hoping to hear of some new members this Christmas but I haven't heard of anyone mentioning buying a new computer. The Atari market in the U.S. (to me) seems to be on the down-hill, it seems like deja-vu of the old 8-bit days. On the up note though Atari seems to be still going strong over seas and we have all enjoyed some of the benefits of its popularity over there. According to Computer Gaming World 80% of all entertainment software is bought for IBM and 10% for Amiga. Atari was not mentioned. At the local discount wholesalers I have noticed a lot of interest in the Packard Bell VGA systems, the graphics are great.

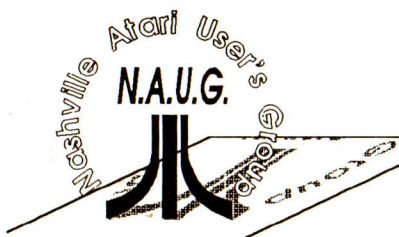
Christmas is coming and there are a lot of sales going on especially at the club. We have about 20 programs (games) that we have for sale for \$6 each. Most of them are old Epyx and Rainbird games.

What's New: Jimmy Wallace brought his new Sim City game to the meeting to demonstrate. Is it a game or a simulation? I'm not sure but it looks like it could be quite addicting, much like Empire.

At the next meeting I will have M1 Tank Platoon from Micropose. I just now got it so I haven't had much time to play it. I hope that by the meeting I will be a full fledged tanker.

Well that's about it for this month. I hope to see you at the next meeting and don't forget your blank disk so that you can get the AIM disk of the month. See you there!





Nashville Atari Users' Group P.O. Box 121752 Nashville, TN 37212

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

President & Editor Walt Sullivan (615) 228-7353
Treasurer Michael Gardner (615) 868-0843



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

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

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



Annual Dues \$25.00

Newsletter ONLY (year) \$10.00

The
Portland
Atari Club
with the
Original
Eugene Atari
Computer
Enthusiasts

Portland Atari Club and the original Eugene ACE	
President David Hunt	503-286-6276
Vice-President Ben Smith	256-9974
Sec. Treasurer Mel Anderson	503-232-7231
Membership Sec. Randall Leong	246-6354
ST Disk Librarian Teri Williams	771-7337
8-Bit Librarian Jon Johnson	655-2092
Sargeant at Arms Dutch Leonard	257-0481
ACE of America	503-285-4417

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

The Portland Atari Club wishes to announce the results of the elections for positions on the Board of Directors. 8-bit Program Dir.: Bob Beck; ST Program Dir.: Paul Karczag; Sig Coordinator: Mel Anderson; BBS Director: Chris Healy. I would like to congratulate the lucky winners, and commend those who ran unopposed for their willingness to serve. Their dedication to the Atari Community is outstanding and they have done a fine job in the past.

In addition to having our annual elections, we also held our November swap meet and there were some very good bargains to be had. There were a couple of items I didn't even know existed! We also passed a revision to our club charter which essentially removes the extra year of free membership for board members. This passed unanimously.

By the time you read this letter we will have also had a hopefully successful Christmas party and will be looking forward to that new little Atari bonus under the tree. Maybe a monitor or printer, or how about a 9600 baud modem? Like they say the real definition of a computer is a hole in the desk you throw money into...Lots of money!!

There is a BBS you may call which contains information on and about the club. ACE of America at 285-4417, 2400 baud and under. The monthly AIM disk is also available from the librarian at a reduced price. To obtain the current AIM disk at the best price you must come to our monthly meeting where you can get this fine disk for \$2 plus a blank disk in exchange.

Paul Gittins, Lame Duck President, Portland Atari Club



President	Tracy Hendershot	525-1058
Vice President	Larry Nadeau	525-7430
Sec/Treasurer	John Zupansic	394-9326
ST Librarian	Don Henricksen	729-6309
8bit Librarian	Gary Armbrust	729-6906
ST Coordinator	Geoffrey Bennett	722-3354
8bit Coordinator	Aaron Potopinski	525-1058

Membership to PACE is \$30.00 per year or \$9.00 per quarter.

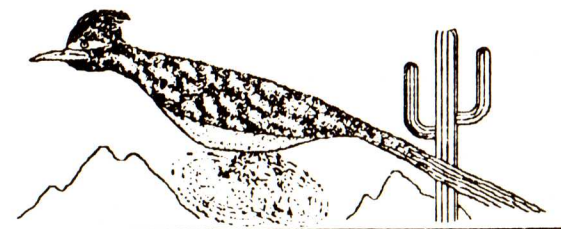
General meetings are held at 6:30pm on the third Sunday of every month. In the event of a holiday, a new date will be chosen and will be posted within the pages of this newsletter and on local Bulletin Boards. Membership includes a monthly newsletter, monthly meeting, FREE Disk-of-the-Month, access to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

Happy New Year! I know everybody had a jolly Christmas because your Atari computer keeps the whole family busy during the hectic holidays. The club wants to thank all who were considerate enough to purchase software for their Ataris too. We certainly need to be active in that department and every little bit helps. Besides, it t'was Christmas! I was quite pleased to upgrade Master Tracks Pro to version 3.62. Read all of the Atari journals you can get your hands on for more interesting software that is being developed. I'm certain that the coming year will bring us many demos of all these new software packages.

We renewed our subscription for another twelve installments of AIM Disks-of-the-Month. They were everything we had hoped for. Now, those who can't afford the commercial services for the latest in Public Domain, can enjoy new software each and every month on these disks. The European software is most interesting and proves that quality PD does not necessarily originate from the United States.

There has been some discussion that an 8-bit DOM may be available from our friends at AIM. Write to Bill & Pattie, and let them know you want a monthly disk for your machine. Their mailing address is at the beginning of your AIM magazine.

Next meeting will be on Sunday Jan 20th, at the Androy Hotel, Superior WI, in the mezzanine at 6:30. See you there!



PHAST - Phoenix Area ST

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

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



P3Atari Computer Enthusiasts (P3ACE)

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

President:	Rick Reaser,	380-8082
VP ST:	Steve Leser	591-6062
VPXE:	John Sandgren,	599-5933
Treasurer:	Jerry Sundee,	574-0005
STLibrarian:	Rick Mount,	596-8631
XELibrarian:	Dave Koster,	550-1410
Editor:	Ed Fletcher,	596-1130

The Prez Sez by Rick Reaser

You all should have received a complimentary copy of Current Notes a number of months ago (if you were on the mailing list when I sent it to them in August.) For those of you who haven't been to a meeting lately, let me explain. We are a registered club with Current Notes and as such, our members can receive Current Notes for \$23.00/yr. I sent them a membership roster so they can verify members and they sent out a complimentary copy. Several members get Current Notes individually and the Club has a subscription which you can view/checkout at meetings. We also have a subscription to Puget Sound Atari News (PSAN). The Boston Computer Society Atari SIG also started to send us their magazine for some reason.

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

Be sure to check out LASERNET BBS (591-4620). User friendly is the buzzword on this board. The latest in Club News and happening are posted on it. There are also some great on-line games on it. I'm currently hooked on Movie Madness. If you don't have a modem, call me about borrowing the club's 300 baud Hayes "loaner modem" for the telecommunications deficient Atari owner.

The Club has been getting a lot of things in the mail lately. We pass around and discuss all the offers, sales, magazines, and other newsy items at the SIG meetings. This is a good reason to come just by itself. The Canadians have been sending us a lot of things of late. Hope to see you at a SIG meeting soon.

By the time you read this, we will have had the Club elections and the Christmas party. However, since I am writing this in mid-November, I don't know what happened, so I can report on it. Tune in next month for the complete results.

We had a good turnout at the November 8-bit SIG. John Sandgren is back, bigger than ever, with tons of tidbits for all. John demoted several fine and a few not so fine public domain financial programs. He even managed to educate a few of us (including me) in the process. We also looked at SPY VS. SPY and Kennedy Approach. Both are excellent games. We even had a "mid-air" during the meeting.

The October ST SIG was heavily attended. I am always amazed that no matter what the question is, someone in the peanut gallery will know the answer. Rick Mount, our ST Disk librarian, was back in town, buying supplies for Desert Shield from the True Value Hardware Store across from where we hold the meetings.

Have a great new year!!!



WE'RE NOT JUST PLAYING GAMES ANYMORE!

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

We have had a change of meeting place this year, as our previous site is being used for adult education on Saturdays. We may be able to secure a regular space there, if we can agree to meet at some other time/day (possibly evenings?). Any suggestions, or other alternatives should be mentioned at the meeting. Our regular business meeting is held from 9am-12:00 noon, the third Saturday of the month.

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

Camille Changes Her Name! Now "The Knights of Camelot"

I have had a lot of trouble with my BBS since I took over Camille 2000. First I had a lot of trouble with my networking; it would dial and lock up. Sometimes it just keeps dialing and dialing. Other times it would just call and get nothing. My main problem has been some scrambled corrupt messages (VIRUS'?) coming through the network, and locking up the system, or worse trashing the hard drive!

I have been spending a lot of time trying to clean up my hard drive. It did not have anything of worth on it; only some IBM and Commodore files and the message bases. Nothing that bothered me. All I had to do was reformat the HD. About a month later another scramble occurred in the main drive, messing about 20% of the files. So I spent 14 hours arcing everything and moved it to another drive.

Then I moved it all back and unarced it. Well it lasted all of about a week and another scramble was back affecting everything again. So this time I removed very minimal stuff. Then reformatted it and put what I had backed up on floppies. Well it has been running about a week and a half now without any problems. I just hope it stays up. Give us a call The Knights of Camelot *RACC BBS* (815) 226-2388. My handle on there is SysOp *Burt* or better know as King Arthur.

There is one thing I would like to say. I have been reading in AIM about people wanting them to start an 8-bit disk. I think the excuse that Bill & Pattie don't have the hardware (8-BIT) is a lame one. There are a lot of people wanting to get rid of their hardware. You could get it for a very small price. The computer clubs could donate a disk or two from their PD libraries to build a library for you. Try it, you may find it will bring some more interest to your magazine. I have some 8-bit users not wanting to get your magazine because it does not have enough 8-bit stuff in it. Well that is what I think.

Burt Luhman is 16-years-old and a Junior at East High in Rockford, IL. He is currently the Sysop of RACC BBS called "The Knights of Camelot." He is considering studying Computer Science, Repair or Programming once he graduates. The BBS is up 24 hours a day and can be reached at (815) 226-2388. 3/12/2400 Baud.

Prez Notes ver.2

I think Burt may have missed something in your comments about distributing an 8-bit disk Pattie. I know you have your hands full with publication of AIM and do not produce the ST Disks all by your little hands. [Eds. Andy, in this you're incorrect. We produce about 70 disks now each month, and each of them is copied by Pattie, by hand.] Your point being, nobody has come forward to package and distribute the 8-bit DOM, and besides all you own is ST gear anyway! (I read between the lines, "Who has time to do it on my staff, me, myself or I?!?!") Although I don't think he wants the job, why not let all the clubs contact Burt and encourage him to take up the banner!!!

I think everyone knows that, in a volunteer club like we have, once you complain about a job someone else is doing, you automatically volunteer to do that job. So, what do you say, BURT??





**Rushmore Atari Computer Enthusiasts
(RACE)**

3512 Lawrence Dr., Rapid City,
SD 57701 (605) 348-6331

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

NO PIRACY WILL BE TOLERATED AT ANY RACE FUNCTION!

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

President's Particulars **The Persian Gulf Crisis Hits Race!** Effects of the gulf crisis have reached even our club. Many of our members come from the Air Force Base and some have been, shall we say, relocated. Best wishes and prayers be with them. This has left fewer members at least for the present, but...the remaining Hard core Atari Hackers (HAH) will carry on with renewed vigor!

We had field commissions, oops, I mean held elections at the October meetings. Limited attendance caused us to move to have nominations and then vote on the whole block of nominated officers. The vote was unanimous! Yes, yours truly is still the President. Duane Charter took over the Vice Presidency. Ken Kayl is the new Treasurer and Joe Weigel is the new Secretary. Congrats!

There was a lively spur-of-the-moment SIG-style rap session about IBM emulation toward the end of the meeting.

Other miscellaneous items: A raffle was decided on (8 and 16 bit) for the near future. I was contacted by a serious Atari user from Nebraska who is planning on attending some meetings. He lives three hours away but saw us in AIM and called us!

Last but not least, **Our New Meeting Location Will Be Announced.** See all you RACEdrivers at the next meeting.

R.A.C.E.

Pres/Treasurer Eric Schofield 851-5134
Vice President Brian Caserp 851-8092
Sec/Librarian Tony Manino 851-8092

Hey gang! How was Christmas? I hope Santa brought everyone wonderful Atari presents to fill your holidays with cheer! Perhaps you're wondering how we're able to get our newsletter up to date in AIM? The reason is because I'm actually writing this in early November! The advantages are simple. You get the magazine and you can also find out when our next meeting is in that very issue! No more waiting around for a telephone call! The obvious disadvantages are simple, it takes a LOT more planning on the officers behalf and the information that you get is obviously dated material. Oh well, nothing in life runs completely perfect I suppose.

The presentation we held in October was an overwhelming success! We presented the Spectre GCR and we had 52 people attending! We've done the Atari community well! Don Nelson showed off the Spectre GCR while I (Eric Schofield) basically showed off Atari and the STe!

We need someone to take the role of Secretary for the club. Barry Clayton graciously accepted the original librarian position but due to lack of time, he has asked me to find someone else to take the role. If anyone is interested in helping us overworked club officers out, PLEASE give us a call. The next club meeting will be held on January 22 at 7p.m. at the Richard B. Harrison library. We will be showing off the Blitz Cable that many of you may have heard of and we will also have one other presentation yet to be announced.

If you have any questions or problems, please feel free to give any of the above officers a call! We're here for YOU! See ya at the next meeting gang!



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

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

SEVAC

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

President Tim Barr (602)821-1200
Vice President Marc Dyer (602)897-0314
Treasurer Lee Whiteside (602)962-9415
Secretary Blaine Nelson (602)964-1949



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

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

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

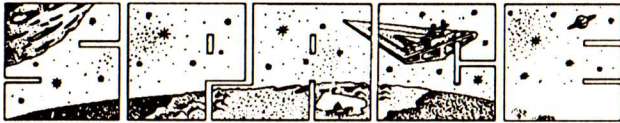


President Claudette Tishcler 226-5644
Vice-Pres Gary 521-2855
Treasurer Kathi Koenig 892-0881
Newsletter Ed Joseph Adato 449-6881
Disk Librarian Barbara Carlstrom 371-2732

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

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

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



All meetings will be held at the Camp Hill Shopping Mall Community Room until further notice. Currently all dates are set for the 3rd Monday of the month.

ST CLUB EL PASO

The Atari ST Club of El Paso is the only official Atari ST user group in the El Paso southwest. Meetings of the ST Club are held once a month at the Richard Burges Library, 9300 Diana in the NorthPark Mall Parking lot. Each meeting is at 12:30pm on the second Saturday of each month.

Meetings feature demos of the latest ST products, as well as help for those that might have a computer problem. Voting membership in the ST Club is \$20 per year, and includes a years subscription to this magazine. Newsletter only memberships are \$18 per year. Members also receive special access to the STE-EP BBS at 915-821-9220. To become a member of the ST Club of El Paso, just drop us a line to: 10953 Yogi Berra El Paso, Texas 79934

ST Club executive committee 1990-91: Steven Bruck L.R. (Pete) Rosh Tim Holt

November 1990 Minutes-This was probably the boringest meetings ever held, BUT also the most productive meeting. We actually got the library into some order, and set a new record for most computer hardware plugged into one wall outlet: 4 STs, monitors, a hard drive, an external drive, Dave's two external drives, and a Lynx. I must say this about the library: for all the problems we have had there, they have a hell of an electrical system! Not even a flicker!

Well, we copied about 75% of all the ST library, that translates into about 83 disks full of pd stuff! No single sided stuff, Bubba, this is all Double sided, DD, and crammed to the gills with pd stuff from our former librarian's library. We still have a hell of a lot of cataloging to do, so anyone interested in helping Dave, give him a buzz.

Here is the scoop: When the library is in order, YOU will be able to access all the disks, or just one disk, simply by leaving a number and a file name on STE-EP. (Of course, you must be a club member for this benefit to occur.) Also, the entire library will be at every meeting, for you to copy your little brains out.

December will see the Lynx Giveaway, a vote on a club name: ACCEPT, the auction, and maybe, we will have the library ready. Keep your fingers crossed. Welcome back Mark and Dave Davis for another year. Also, thanks to all who have sold tickets. I know of several of you have bought whole packets: C. Klassen, G. Schleuter, T. Hodgeson, T. Holt, D. Davis, M. Davis, and S. Bruck.

We need the following demos in the future, so if anyone out there would like to volunteer, please let me know: Multisynch monitors, Non-Atari Laser printing, constructing a hard drive, computer electrical safety, databases, spreadsheets, the Portfolio and the ST: Is it a match? If anyone could do ANY of these, please drop me a line, so that I may schedule you for a month. Until next month!



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

STUN's last meeting was all about disk storage. Randy explained some of the special data on track zero of each disk that tells the operating system how the disk is formatted. For special applications a disk can be prepared with more than the standard free space through custom formats.

The November meeting will feature demonstrations of NeoDesk 3.0 and a new hardware item that allows direct use of Macintosh peripherals on the ST. DreamPark Development is the manufacturer (the ones who make the PowerDrive high density drives).



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

President	Bruce Hein	(404) 926-0095
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THE #1 ATARI USER GROUP IN THE NEW HAVEN (CT) AREA

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

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

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

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

We would like to take this opportunity to wish all of our fellow Atarians a very Happy Holiday Season and of course the best of New Years.



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



Minutes for October 1990, S.W.A.G.

The meeting was opened by president, Allan Coker, at 6:30 p.m.

The meeting was held at our normal meeting place, Fire District #5's meeting hall. Eighteen members were in attendance. Our membership is increasing. Michael Bigham of Gresham, Oregon joined the ranks, bringing our total paid memberships to 31.

Member J. Gerber (president of SStep) reported that Steve Braun (Braun's Computers) is seriously considering selling his computer business in Beaverton, Oregon.

Micheal Calvin donated a package of Micro/5 ComPak "Color Coder" 3 1/2" disk storage boxes to be raffled off. Member Tom Antolic held the winning ticket.

Gary Lentz demonstrated two programs: "LOOKIT & POPIT" from CodeHead Software and "MUG SHOT" for Wiz Works.

Salinas Valley Atari Computer Enthusiasts

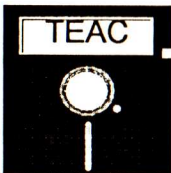
SVACE is the only Atari user group in the Monterey Peninsula area. It supports both the 8-bit and ST computers. There is a free disk of the month for all attendants, bring your own disk. Dues are \$12.00 per year and includes Atari Interface Magazine. Meetings are at 7:30 P.M. on the first Tuesday of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

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

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



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



TEAC The Educator's Atari Club

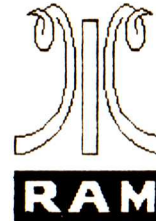
Yearly membership fee of \$25 includes 6 issues of the TEAC newsletter, the TEAC Educational 8-bit Disk Library catalog and a one year subscription to Atari Interface Magazine. For more information, contact TEAC at PO Box 1024, Laytonville, CA 95454.

UNYACE Upper NY Atari Computer Enthusiasts

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

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

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



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



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

Club dues are \$15 per year and provide access to the PD library and subscription to AIM. Meetings feature demos of both 8bit and ST software and hardware.



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

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



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

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

President Mike Husband (716) 825-8486
Vice President Kevin Packard 773-9325

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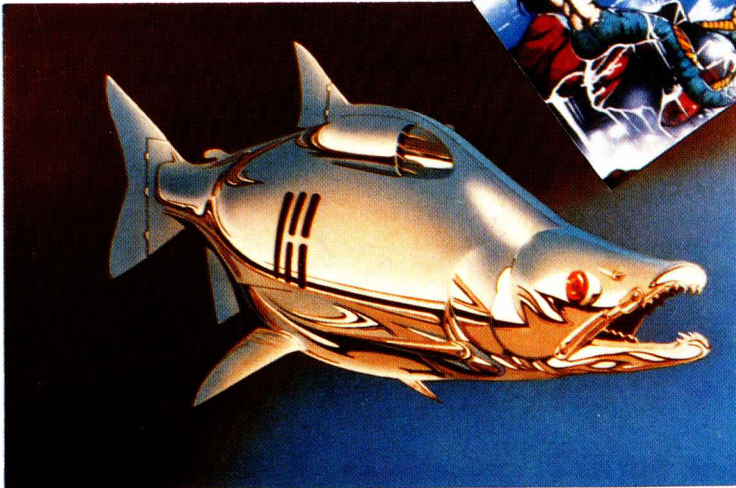
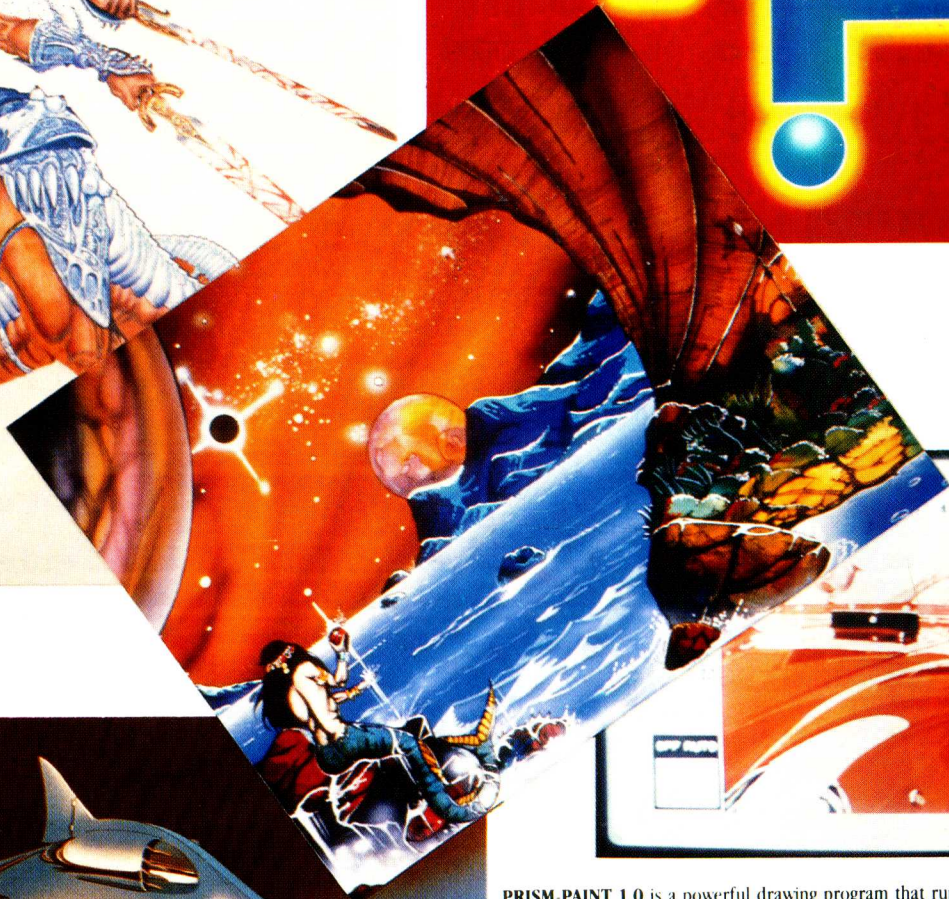
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