Current Notes

Vol. 8 No. 6

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July-August 1988

SPECIAL REPORT:

- The Dark Side of the BBS World, Part 1
- Deus Ex Machina, Novels on the XL/XE
- Desktop Publisher, In the premier spot.

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The reviews are in . . .

"A Best Buy' I'm impressed" David H. Ahl, Atari Explorer, Nov-Dec 1987

"If you've got an Atari, you probably need this program." Jerry Pournell, Byte Magazine, October 1987

"pc-ditto is a winner."

Charlie Young, ST World, July 1987

"This is the product we have been looking for." Donna Wesolowski, ST Informer, August 1987

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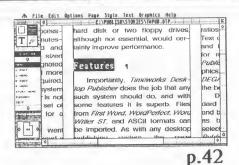
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- □ ST-related review or article.
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EDITORIAL • Joe Waters

Summer! Notice the footer on each page of this issue. It's summertime again and this is the July/August issue. That's right. No Current Notes until September. Summer is a slow season for the computer industry, as well as many other industries. School's out, the weather is nice, it's vacation time, and there are lots of pursuits to draw your interest away from computers. Since, as many of you know, Current Notes has no full-time employees—all the work to keeping this going is done in our "spare" time—the authors, editors, librarians, and certainly myself, all look forward to a bit of a break in the summer.

Author of the Year. Last year at this time, CN presented its first "annual" author awards. Well, a year has rolled by and it's time to present an award once more. This year we have a clear stand-out winner. A writer whose style is both entertaining and enlightening, with many appreciative fans (and also a few critics), who has given us all a deeper understanding of some of the ins and outs of the computer business. In the past year we have learned about emulators, Tesla--the greatest hacker of all time, the NF's, NT's, SP's, and ST's, the real force behind the Magic Sac and what Pournelle is really like. We also learned about the SUN Atarifest and the trials and tribulations of shipping the Magic Sac. Yes, as you've probably guessed by now, the CN "Author of the Year" award goes to Dave Small.

In this issue, Dave continues his contributions with two interesting and provocative articles. As a CN special this month, Dave starts Part 1 of a two-parter on "The Dark Side of the BBS World." Unfortunately, this fascinating and distressing narrative was just too long to all fit in this issue so we will continue it in September. As a companion piece, Dave's column deals with what will undoubtedly be a very controversial issue. Be sure to read about the "The Revenge of the Developers".

Public Domain or Tele Domain? I recently had a call from an author of one of the programs on one of the CN PD disks. This author wanted his program removed from the CN library. This author thinks it is perfectly OK for anyone to use his program. It may be freely distributed on the conditions that "no payment of any type (including 'copying' fees) is incurred upon the recipient of the program." However, since CN disks cost \$4.00, his program could not be distributed in our library. I removed the program.

I wonder, however, whose interests this author is trying to serve. It certainly is not that of the Atari public. The program is available on commercial Bulletin Boards such as Genie. You can "freely" download the

program from there. However, it really isn't free. In fact, as noted economist Milton Friedman once said, "there is no free lunch." You must pay a fee to use commercial bulletin boards. The cost of downloading one long program could exceed the \$4 cost of a CN disk, and a CN disk is filled with programs.

Some institutions charge up to \$12 or \$13 for a "PD" disk, a price which is, in my mind, a clear rip-off. However, at \$4 a disk, indeed, at \$3 a disk in quantity, CN prices are a far cry from "profiteering." CN pays for the CompuServe and Genie bills to download programs (many of which turn out to be not good enough to even put in the library), and for someone to test and put together disks that are added to our library. The cost of just generating a dozen new disks a month can range from \$250 to \$400. CN also, of course, pays for the blank disks, for someone to format and copy disks, design, print, and apply labels, and to fill library requests. CN pays for the padded envelopes and for the postage. We also routinely sell these disks to many Atari clubs who simply put them in their ST library. I assure you, these clubs could not develop these "PD" disks for a mere \$4 each even with all volunteer labor. The \$3 to \$4 disk price for CN library disks is a price set to benefit Atari users, not to make CN rich. In fact, if anything, the prices are too low, particularly the \$3/disk price. You will even find advertisements in CN for competitors who also sell Atari PD disks.

Authors who put their programs up on commercial bulletin boards and then prohibit the program from being distributed by anyone who "charges" a price for a disk are not benefiting the Atari community. I suggest they think a little bit more about why they released the disk in the public domain in the first place.

PD GEMS. One final note on PD disks. We have been introducing about a dozen different disks every month. However, we have not been able to also provide detailed descriptions or reviews of the programs in the PD library. Some NOVATARI members have done an admirable job of describing some of the better PD programs in the 8-bit library. I would like to do the same thing for the ST library. I would like to make "XL/XE PD GEMS" and "ST PD GEMS" regular monthly features of CN. To do that, however, I need some contributions. If you have a favorite ST PD program(s), how about writing up a short description and telling your fellow Atarians about your find. I know there really are some GEMS out there just waiting to be found. Let's help mine them.

Well, that's it for now. Enjoy this issue, enjoy the summer. We'll see you again in September.

Unusual Headlines

"THE ATARI MEGA ST4 IS EASY TO USE AND FUN FOR CHILDREN," ran one headline. A week later, "ATARI ST NEEDS BETTER SOFT-WARE TO HANDLE TOUCH BUSI-NESS PROJECTS", touted an otherwise sympathetic follow up. In between Computer Shopper front paged, "ATARI MEGA 4--LASER PRINTER--POWERFUL PUBLISHING DUO," heralding the fact that this superb desktop publishing combination was almost half the price of other systems, and at the same time berating Atari for not have trumpeted this combo far and wide. So Atari has been peeking its head out into the big time recently. Never one to be mentioned in the major press world, suddenly Atari was the center piece of two thoughtful and comprehensive columns by T. R. Reid in the Washington Post, after receiving heavy play in Byte Magazine a month earlier. It looked like Atari might be beginning to attract attention as a serious computer company.

As luck would have it this comes just at a time when there aren't enough machines to go around. Dealers have been without anything but a meager trickle of product for more than six months. True, in some areas there are Mega's to be had because the high price has generated some sales resistance. But the formula is simple. An increase in product for the U.S. requires an increase in the availability of chips. There is no glow on the horizon in this regard. Stories about Atari buying a major interest in a chip factory in Houston, or somewhere in New England are still stories. Atari is indeed looking at all possibilities, recognizing that without chips they may never emerge in the U.S. as a serious

computer company. As Lee Isgur, the market analyst, points out elsewhere in this issue, unless Atari buys a producing factory it will be two years before chip #1 drops off the end of the production line. Admittedly the chip problem, created by our own "free trade" administration, is not peculiar to Atari. Tandy and Apple have had to raise the price of their machines to meet the skyrocketing price of chips, the first time computer prices have gone up in a decade.

No PC's for the U.S.

On the less gloomy side, Atari has announced that their suit with MicroTronics is settled. Hopefully this will mean they will be getting some chips from that company this fall. But the number will be marginal relative to their needs. Thus the decision has been made, when reviewing whether to allocate the chips to the ST's or the PC's, to keep breathing life into the Atari machines in this country. The PC market will persist and can be infiltrated at a later date, Atari, reportedly, believes.

Late Night Lights

In May rumors abounded about Atari's new advertising and marketing initiatives, with office lights on late as they mapped out their ad campaign. Somehow a glow had started on the horizon and Atari U.S, the new division of Atari Computer, headed by James Babbitt, was going to "make it well again" in America.

While this was going on, Atari was arranging to have a seminar at Atari headquarters for the best and brightest of its dealers, read "big sellers." In mid–June 14 dealers were invited and 14 showed up to

spend the day with Atari executives, to learn where Atari was headed, and to have their questions answered. In the afternoon, Atari started the Q & A session by ticking off the concerns they were aware were uppermost in the dealers' minds. Topic A was advertising--for how do you sell a product without it. Atari management acknowledged this, but noted somberly that it was less than wise to advertise a product without a ready capacity to supply it. There was, however, a supply of game machines, and the dealers could count on adequate deliveries of these for Xmas as well as "a significant" ad campaign to stimulate the sale of those machines.

Supposedly, in addition to national ads, that would include offering dealers \$\$\$'s for local advertising "co-ops," i.e. splitting the cost of local advertising.

"Bundling"

Dealers were also told about a marketing venture directed at helping them move the Mega's. First, there would be a \$2995 desktop publishing package with a Mega ST2, monochrome monitor, Atari laser printer, Ms Word, double sided drive, VIP Professional, and a VT-100 cartridge. Next, a "business office" package with a Mega ST4, also a mono monitor, the same software, plus TimeWorks Publisher, and also a SLM 804 laser printer but including a MegaFile 20, Atari's new hard drive. All that for \$3995, which is about \$1600 less than current list for those items. A bright sign for dealers. Finally, they were told there will be a 520 ST "summer school" package with a mono screen, an Aracus educational program, Planetarium, and Missile Command, at \$699.

The Moon is Down

Just prior to the dealer meeting the glow had already vanished with the dawn. Chuck Babbitt, after less than 90 days, was gone from Atari Computer. The ad campaign was too ambitious and expensive? A personality conflict with the tough Tramiel team? The former. Babbitt had been brought aboard with one of his priorities being "the preparation of a hard hitting U.S. ad campaign." Apparently he lacked a feel for "Tramiel arithmetic" because he purportedly presented an ad program which Atari management claimed, if followed, would leave the U.S. company with a dazzling red bottom line. And with that, Babbit departed. Thus far, nobody has recorded his side of the story. But the old pattern of the marketing man getting mangled, has poked its ugly head skyward once again.

Hardware

Still on the Operating Table - The Atari "Mighty Mouse," the 68030 computer soon to be in our hands, was seen still under anesthetics in the Atari R&D operating room, with innards exposed. It had 18 chips slots with only 3 slots vacant. There was a 68881? chip installed (floating decimal coprocessor). In width it was almost the exact size of a 1040 keyboard measured from left to right. The 4 meg of memory was placed at the top right in 4 banks of chips. There was a new processor for special ports in evidence. It appeared to be "almost done."

Do It All? – Discovery, the company that produced the Happy Drives for the 8-bit machines, has developed a cartridge that will copy all software, Mac, ST, IBM and also have Apple ROM chips in it so that you can run the Magic version of Mac software. In the past, Discovery's lag time from development

to market place has not been insignificant.

Accelerate – The 16 Mhz speed-up board for the ST, per its designer, Kenneth George, will be shipped to dealers in mid-July. The Mega ST version would follow in two weeks. Using pc-ditto and IBM software George states it is as fast as an IBM. The board will cost \$250. Dealer installation at \$50-\$75 is strongly recommended. If the board meets specifications, it means that for \$300 you will, in effect, have an IBM computer crouched inside your ST, ready to run at top speed.

Software

Faithful Forever - WordPerfect Corp. has reorganized their Macintosh, Amega, and ST support units and program groups. The goal is to insure continued support for all the machines, for the foreseeable future. The basic ingredient of the reogranization is co-location of the groups around the Macintosh unit, the highest profit producer of the three. The resources of the Macintosh group can then be shared with the other units. The expected result will make it likely that ST users will be offered the full range of Word-Perfect products, now available for the IBM. These would include Planner. Data Manager, Library, and of course, the latest version of Word-Perfect. No dates are available, but it is known that WordPerfect will skip version 4.2 for the ST and go right to version 5.0 or if you prefer, version 6.0, since it will have enhancements not available to the IBM. For HP DeskJet owners Word Perfect Corp. is also preparing to ship a disk with seven HP DJ drivers on it for the various font cartridges that accompany the HP DJ.

Three For The Publisher – Timeworks will be releasing three accessory packs for their *Publisher ST*. With the documentation already at the printer they should be out in early August. *Publisher ST* owners

will note their contents on the back of the original program box. Symbols & Slogans will have 400 plus business application graphics for import into Publisher ST, and People, Places & Things and Education Graphics will contain about 200 each for use throughout the educational levels as well as for home and business.

Race To The Deadline - As we have noted. SoftLogic has been under considerable pressure to meet the deadline for release of Publishing Partner Professional. The last date missed was "early June." Beta test, version 15, is still having problems, such as crashing when it tries to load a font like Helvetica. But observers report "it will be something" when it's out. In the next race lane is Calamus, which is described as "potentially more powerful" than PPP. Our estimate is that both will be out in late September.

Not All is Quiet!

But be assured that there is some excitement out there. Atari has been working on one or two "goodies." If you keep in mind that personnel and budget limitations in a lean mean company like Atari generate constant re-evaluations of what to push and what to hold back, then it is easier to appreciate any effort to make the ST's smarter and more fun to work with.

TOS Re-Brained - Said one Atari fan when asked what he wanted most from Atari, "Fix the bugs in the brain dead operating system." For those of you who have been complaining that TOS has been guilty of this since its inception (an excessive criticism, we suggest) there is a new marvel a'coming. It is out in Beta ROM format and should be ready in September or October. In addition to speeding up certain graphic functions, e.g. AES and VDI, the new version will incorporate some of the functions of *Universal File Selector* (reviewed last month in CN). The question arises, will it be available to current machine owners, or initially only to new machine purchasers? In this regard, the new 1040 ST's contain the same ROM's that were issued in the Mega ST's, i.e. the program incompatibility the Mega's encountered, about 10% of the software out there, is now extended to new 1040's.

Outlined Fonts? – GDOS is said to be being rewritten for Atari by somebody in GERMANY. The new GDOS will not be bit mapped, but instead will have re-scalable fonts. That means you will not have to load in each size for each font, and watch your memory be sucked into some invisible death star.

Publishing Without GDOS -For those of you who have grown apoplectic installing GDOS to use with one of the publishing, drawing or word processing programs, life without it, we imagine, would have appeal. Our cousins across the border report that PostScript for the ST with its "any size" fonts and other joys is coming. Called Ultra Script, it will be a PS clone and will run off the Atari laser printer. Imagen, a sizeable software developer, is reportedly in advanced stages of producing it for Atari and you could see it by the end of the year or the beginning of 1989.

Not Excited? – If you're still not turned on, then consider an ST version of the Macintosh *EXEL* program, due out early next year. Along with it will come a HyperCard clone for the ST. The Atari version will load all Hyper Stack programs, not just those for 64 K ROM's.

Europe Awash In Games – Most of the games seem to be coming in from across the water. Two "massively addicting," from Mirrorsoft and released by FTL, are *Oids* and *Tetris*. The latter is unusual in description and play. Blocks tumble down from above

and you catch and arrange them in rows. The more rows, the higher the score. The first time you try it, despite its simplicity, you'll discover your score is rather low. Try it one more time? Do so. But be prepared at that point to try it again and again and again Oids is a combination of the old Lunar Lander, with its amazingly delicate air-jet control that allowed you to land your craft in the tightest of sites and Chopper, where you went out to rescue your downed pilots, in this instance, astronauts. All this is put together and represented in the most detailed miniature graphics you have ever observed on the ST. How it actually combines to rob you of more time than your current favorite, is still a mystery. That it does is not.

Caution – Two public domain programs to treat with caution or avoid are *Diskfree and Turtle. Some* users with hard drives have experienced the frustration of using them only to discover that the FAT tables of their hard drives have been fried.

Developer Ethics - Elsewhere in the issue you will read about David Small's insights into the darker alleys of the BBS world. Also in a replay we describe the nature and types of viruses and wonder about the "despicable" types that get their jollies out of creating and employing them. We wish only to question here the report that some developers out of frustration over having their hard work and creative efforts turn up as programs not on dealer shelves but "cracked" on pirate BBS's, have turned to seeding their programs with viruses that are activated when the protects are removed. Then, as with all viruses, they are triggered to go off on a certain date or after a certain series of events. Reportedly, when they "go off" they wipe out your hard drive. Allen Dulles, an early U.S. spymaster, was once briefed on a "black box" that would

detect missile launches from enemy territory. When asked how one prevented the enemy from taking control and simply deactivating the box, he was told with eagerness that that eventuality had already been thought of. The box would explode. He asked what then if children stumbled on it in the woods, and suggested with a commandingly soft voice, "Maybe we could fix it to just register 'tilt'." We wonder if there aren't also other avenues open to angered developers?

Hats Off Award

This months award goes to *CURRENT NOTES*' author of the year, David Small. While the clarity and creativity of his writing is not necessarily matched by his scientific/political accumen (grin), his articles in the past year have been outstanding. Hat's Off, David and P.S.: Pentagon is now interviewing for "innovative" programmers that can work as a team to devise a "virus" for the Soviet Star Wars computers, suspecting the Soviets have already seeded ours with same.

Time Table - Tec-Specialties in Houston, Texas "specializes" in turning out hard drive "boxes" of various sizes and capacities, one of which was reviewed in CN in May. It's president, Kay Vaumund, is a qualified engineer, apparently trying to turn out a superior product for less money. Calls received by CN suggest Vaumund and company are having trouble meeting shipping deadlines. This is not a problem unknown to Atari and other computer accessory manufacters. For those concerned about the lack of notification of receipt of check and at the same time experiencing delay in receipt of their box, we suggest you merely wait to forward your check until Tec-Specialities states they are "ready to ship".

ATARI SCUTTLEBITS + Bob Kelly

ATARI MARKET HAPPENINGS

I. Annual Report

In mid–May, as an Atari stock owner, I received the 1987 annual report. Some investors will tell you that a firm's annual report is largely a propaganda exercise. This simply is not correct. The reports are required to present general financial data in compliance with Federal statutes that are of value and interest. The table below, from the 1987 annual report, lists the major stockholders and salaries of those running the corporation.

There are some unfamiliar names presented in the table. Mr. Chin is a Vice President and served as General Manager of Atari's Taiwan manufacturing facility from 1985 to 1987. Mr. Schreiber is, in essence, Jack Tramiel's personal counsel while also a member of the Board of Directors. Mr. Pratt is the Vice-President for Finance/Chief Financial Officer for Atari. Mr.

Rosenberg is a member of the Board of Directors. Mr. Tokai is the Vice–President and General Mana– ger for Atari, Japan. Mr. Kawalick is Atari's Treasurer. Except for Mr. Kawalick and Mr. Rosenberg, all senior executive officers at Atari worked for Commodore Ltd., at one time or another.

A few of the more interesting facts/claims presented in the 1987 annual report are:

• Federated stores' operating losses are expected to continue for the first three quarters of 1988. By year end, Federated is projected to achieve break-even by Atari. Comment: The fourth quarter holiday sales period is the critical variable in this projection. In essence, Atari's overall growth in the price of its stock by the end of 1988 will largely depend upon the speed of Federated's recovery.

Common Stock Ownership* and the Five Highest Paid Executive Officers

	Amount	Percent	Dollar
	(millions	of	Compen
Name of Owner	of shares)	Stock	sation (1)
I. Tramiel	25.3	43.9%	400 Sec 500
Warner Comm, Inc.	14.2	24.6%	N.A.
Sam Tramiel	1.1	1.9%	211,798
Leonard Schreiber	.220		
Samuel Chin	.193		158,207
Gregory Pratt	.177		157,632
Michael Rosenberg	.050		
Taro Tokai	?		198,720
Steven Kawalick	?		109,618
* As of April 11, 198	8		
(1) Compensation ir	cludes salaries,	bonuses and e	mployer

contribution to life insurance policies.

- Research & Development outlays, as a percent of sales, declined from 6% in 1986 to 5% in 1987.
- In West Germany, Atari computers represent 10% of the total market for computers selling over 1000 Deutsch Marks (roughly equivalent to U.S. \$600).
- In Switzerland, the Atari ST's share is about 30% of the educational market.
- In the United Kingdom, Atari sales accounted for some 40% of the 16 bit computer market.
- In the U.S., over 1000 schools use ST's for math, reading, and language skills.

In 1987, Atari's revenue (net sales) from the electronic products division (computers) was \$362 million and for retail operations (Federated Stores) \$131 million yielding a total of \$493 million. The operating income was \$72 million for the electronic products division while Federated stores experienced an operating loss of \$6.4 million. Interestingly enough, of the total \$493 million in revenues, \$267 was generated in North America with Europe's share amounting to roughly \$204 million. Europe's revenues were all computer related while Federated sales of \$131 million must be deducted from the U.S. and Canada net sale figure to be somewhat comparable. Thus, as best can be determined, European computer sales were roughly \$50 to \$65 million more than those of North America.

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Finally, earnings per share for the electronic products division alone rose from 53 cents in 1986 to 80 cents/share in 1987, an increase of 51%. Considering this performance, one would expect Atari's current stock price to be on the rise. However, it remains below the average of \$10 7/8 for the week prior to the Oct. 19, 1987 crash (as of early June the price per/share ranged between \$7 & \$7 1/2). [For further information on Atari's financial situation see the Paine Webber report on Atari on page 18. –JW].

II. Glasnost and Atari

A U.S. firm will be the first to publish a personal computer magazine in the U.S.S.R. The magazine to be printed in the Russian language will be under the editorial control of the publisher of PC World – IDG.

The first issue of the magazine is scheduled for publication this month and will cost the equivalent of U.S. \$3.20 per copy. Currently, the number of PC users in Russia is small and little information about computer developments is transmitted to the general population. About a third of the magazine's content will focus upon developments in Russia with the remainder covering the U.S. and European computer markets. The first issue is expected to be a run of 50,000 copies. The Soviet staff of the magazine will consist of seven writers and editors.

What does this have to do with Atari? Atari will advertise in the magazine. The other companies planning to advertise are: Ashton-Tate, MicroSoft, and Siemens. The first issue will be about 150 pages with 20% of the available space devoted to the advertisers. Ad space is not cheap. This looks like a major long-range marketing effort by Atari.

The ultimate goal of this initiative, according to an unidentified Atari spokesperson, is for every computer classroom and factory in the U.S.S.R. to have an ST on the desk and a picture of Jack on the walls next to Lenin and Gorbachev. Za Zaslugi, Nagradit' Tramiela Dzhaka (Ordenom Lenina).

III. Europe, Midi, and Atari

The Financial Times of London recently reported that the European recording industry is experiencing financial difficulties. Recording studios in Hamburg, Paris, and London are being forced out of business. The problem stems from the introduction to the music world of the personal computer and the midi interface.

During the 1970's and up to the mid-1980's, recording artists did most of their rehearsing in record company studios. The ratio of rehearsal time to actual recording time was on the order of 6:1 (usually measured in months). However, in the past few years, an increasing number of recording artists are conducting their rehearsals at home with the aid of a personal computer, midi interface, and music design software. Some studios faced with the loss of the rental income from rehearsals have attempted to lure artists back by purchasing the latest, most sophisticated computerized recording technology. This has stretched the finances of many companies. Lately, the major European studios have been reducing their prices in an attempt to draw back former customers. The smaller companies, unable to purchase advanced recording equipment owing to capital constraints and the inability to significantly reduce prices have but one option available--close their doors.

By the way, the home computer which dominates the European recording market is ... the Atari 1040. Now, you know the rest of the story and why Atari assigns such a high priority to attending the Midi Expos in Anaheim and New York in September and December 1988.

IV. Video Games

A quote from a recent article in Advertising Age:

"The demand is greater than supply, and the demand has stayed much stronger than expected ... Last year, the majority of U.S. sales came from video games."

The speaker was Michael Katz, President of the Atari entertainment electronics division. What he is really saying is the U.S. public's perception that Atari is a video game company is CORRECT.

Total video game sales in the U.S. in 1987 amounted to roughly \$1.1 billion and Atari has about 16% of the market based on dollar sales (market share is 35% for the number of game units sold). Nintendo has about 70% of the market based on dollar sales and between 55 and 60% when calculated on unit sales. The best "guestimate" is that XE game related sales accounted for roughly \$140 to 170 million of Atari's total revenue in 1987.

Atari has hired a new advertising firm to help market its video games. The XE game advertising account is valued at roughly \$10 million. Note, the Atari computer division is without an advertising agency in the United States. I leave you with this fact to ponder and its implications for the priority assigned by Atari to Mega and ST sales in the U.S. for the remainder of 1988. Enjoy the rest of your summer and minimize the time on that computer untill fall.

That's all for now folks......

MAGIC SAC UPDATE + Jeff Greenblatt

TIPS AND TRICKS

This month this column will be devoted to TIPS and TRICKS that I have found that work with the Magic Sac. There are many TIPS and TRICKS that have been written up for the Mac and I have been testing them out over the past few months. These are some of the more handy ones that I thought would be useful.



If you want to cancel a command, such as copying a file or running an application, hold down the Control key and press the Period (.) key. This aborts the operation and will bring you back to the Finder desktop. You may have to repeat this several times for it to work.

If you want to trash an application file from the desktop without confirmation through the dialog box, hold down the Alternate key while you drag the icon to the trash can.

You can close all opened windows on the desktop with a single keystroke. Simply hold down the Alternate key and then click on the close button of any opened window. All opened windows will close simultaneously.

Let's suppose you want to open an application which is 3 levels deep in folders. Normally, when you return to the desktop upon quiting the application, all previously opened folders will remain opened cluttering up the desktop. To avoid this, hold down the Alternate key as you open each folder. When you guit the application, the windows you opened using this procedure will be closed when you return to the desktop. If you do want a specific folder to remain opened when you return to the desktop, then don't use the Alternate key as you open that specific folder.

Let's suppose that you forgot to use the procedure above to close all opened windows. Another option to implement this feature is to hold down the Alternate key when you select Quit from an application. This will close all opened windows when you return to the desktop.

If you are using a single drive system, you can speed up the copying process. Put all the files you want to copy into a folder and drag the folder to the icon of the new disk. Disk swapping is minimized using this procedure because all available memory will be used before you are asked to swap disks.

Using Finder's Clean Up option, icons are normally moved to the closest grid location. If you have trashed an icon, the gaps left are not filled in. If you hold down the Alternate key when you select Clean Up, icon will be moved up to the top of the window beginning at the top left-hand corner.

To trash a locked file without using the Get Info option from the File menu, hold down the Alternate key while you drag its icon to the Trash Can.

If you are not sure whether a file is locked, move the arrow cursor to the file name. If the file is locked, the arrow won't change to an I-beam.

You can undo accidental renaming of a file or a disk by pressing the Backspace key until only the I-beam is present. Then press Return or click the mouse button and the original file or disk name will appear.

Here is something that can only be done from the Finder. If you want to print more than one document at once, select each document file using Shift-Click (mouse) or use the selection rectangle by dragging the mouse. Then use the Print option from the File menu. The document's application will be opened automatically and printed in the order in which they were chosen. This only works if the documents are in the same folder and were created by the same application.

Do not drag a file to the Trash Can and then drag it back out of the Trash to a different folder or disk. If you do, you will destroy the file, the folders and most likely the disk. First drag it back where it came from before moving it to another folder or disk.

You don't have to make a background window active to move it. You can move it around by holding the Control key down while dragging it around by its Title Bar.



To get the highest quality printing with a dot-matrix printer, the system file must have a Font that's twice the size your using. Most applications, except paint type applications which are bit mapped, use this method by looking for the double size Font and halving it to produce Fonts with twice as many pixels in it.



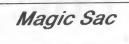
You can attach your favorite Desk Accessories or Fonts to an application instead of the System file. When you open a disk window to install a Font or a DA, hold down the Alternate key while doing this and all files on the disk will be visible. Select the application you want to install a Font or DA into and install them in the usual manner. This one is handy for installing DA's that are only useful with specific applications like a Word Count DA for MacWrite.

When Font/DA Mover is run, it normally defaults to Font mode. If you want to use the DA mode, hold the Alternate key down while opening Font/DA Mover. If you forget to

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do this, then as soon as the DA button appears, click on it while it's searching for fonts to override it.





There is a reset button built in to the Magic Sac compliments of Dave Small. If the system hangs up for some reason or other try pressing Shift–Undo to reboot back to the Mac Desktop without powering the ST down and starting all over.

If you are curious as to what your disk drives are doing during a load or save process, press Shift-Up Arrow to display the built-in disk drive monitor. This one is especially handy for Translator owners and long file saves and loads with Mac formatted disks. To override the disk drive monitor display press Shift-Down Arrow.

Data Pacific Update

Last month I hinted that there was a breakup in the works at Data Pacific. It has apparently gone far beyond my wildest dreams. Not only is Dave Small no longer associated with Data Pacific, but Dan Moore has also left. Dan wrote a large number of the Magic Sac utilities like McFormat, Mover and MagicHD, and also a good portion of the Hard Disk code for the Magic Sac. Dan got an offer he couldn't refuse with AT&T working with a Unix/PC group. Dan will be missed!!! I wish him the best!!

Now, what exactly happened between Dave Small and Joel Rosenblum is really none of our business. Some rumors have it that Dave Small was under contract to Data Pacific and the reason he is no longer there is that he completed his contract to bring the Magic Sac up to it present state. Don't believe that bull!! Like I said before, what really happened is none of our business. But it is our business to know whether the Magic Sac will have a future or will this great hack simply die in it's present state.

The following is a portion of a message left up on GEnie concerning this very subject:

You might also want to look at this thing from my point of view; the Magic Sac was about the last three years of my life, and now I'm out of it. That's sort of a shock.

I have tried pretty hard to keep the people here on Genie up to date on what's going on, as well as my efforts to take over marketing and enhancing the Magic Sac.

I have little to no influence right now on the future of the Magic Sac. Joel sees "no need for enhancement to the Sac" as of our last conversation, so that pretty well shoots down version 6.0; I'm not even sure I can legally do it and distribute it PD, just for fun. It's a shame, I had some neat ideas for it. (I think I might have mentioned them). At present, while I own the Magic Sac code, dP has a license to market it to the ST world, and I'm not sure I can do anything that might be interpreted as undercutting that.

I also don't want to come across as being upset with Joel. dP is his company; he took the risk of funding the Magic Sac project, and it's right he should make something off it. Neither he nor I have gotten rich doing this; I could have made far more working at (say) Apple in the last two years than I have. But I've also had a lot of fun and gotten to know some good people.

Right now, the question of whether Joel or I should continue to support the Magic Sac is still up in the air. It's been flip-flopped a couple of times.

As you can see from the above

message, the future of the Magic Sac was quite dim. On the other hand, there is still some hope that Joel will decide to continue it's development. I do know that Data Pacific hired a replacement for Dan Moore to take over the Tech Support. This is

a good sign, in that there is some interest in keeping it alive. Economics, in the form of cash flow will have a role in this.

New Library Disks

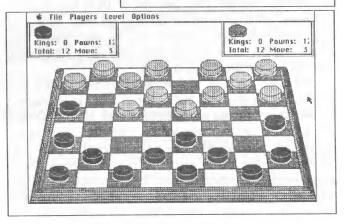
This month, 2 new disks have been added to the Current Notes Magic Sac library. Here is what is on each disk:

Disk M52, Clip Art #2, has 27 clip art files as follows: Al & Jimmy, Americana, Arrows, Bigger Guys, Billboards, Borders, Cars, Cartoons, Cats, Celebrities, Egret, Famous People, Farm Animals, Good Guys, Gorilla, Hopefuls, Little Guys, MacLectic Clip Art, More Little Guys, Presidents, Rain/Chef, Skier/ Football, Skylines, Space/Race, Statues, Tennis/Running, and Wine & Beer.

Disk M53, Games #12, contains 5 new fun games as follows: 3D Checkers 2.0, Bills Casino, BMX-The Racing Game, HeloMath, and Mouse Craps.

HOT NEWS

Right after turning this article in to Current Notes, the situation changed. As of June 9th, Dave and Joel had just completed negotiations to do version 6.0 of the Magic Sac software. Version 6.0 will most likely have sound in it as well as increased hard and floppy disk I/O by as much as a factor of 10. There also may be a 128K carttridge in the future. More about this in the next issue of CN. [J.G.]



From M53 – 3D Checkers

XE/XL UPDATE + Len Poggiali

XE GAME SYSTEM & GOE TO THE RESCUE

On the surface the **Atari XE Game System** and Merrill Ward's **Graphics Operating Environment** (*GOE*) would appear to have little in common. The former, a venerable 8-bit computer, disguised as an all-too-cute game machine, was released a number of months ago in an attempt by Atari to capture a share of the sophisticated game machine market from the then current leader, Nintendo.

The latter, a true 8-bit desktop program, fondly referred to as "ST, Junior," was created and soon will be released by a group of persons who, while realizing that the Atari 8-bit market is at best sluggish, felt that they had a product that deserved to see the light of day.

How then are these two items-one a hardware product and the other a piece of cartridge softwaresimilar? In the first case an aged but quality computer is being given a new life as a result of a cosmetic overhaul and an appeal to a more whimsical brand of computer user. With the *GOE*, Merrill Ward is attempting to inject new life into the old 8-bit warhorse by giving its owners what they have been craving since the advent of the ST--a mouse-operated, icon-based operating system.

The similarity lies not in the products themselves, but in the expectations they have aroused, or will arouse, in the Atari 8-bit community. If the XE Game System sells well, then the 8-bit user base will expand, prompting more third-party software companies to release heretofore unreleased titles (albeit on cartridge) for the Atari market. The success of *GOE* should have a number of 8-bit owners dusting off their 800s and XLs, and new game system buyers purchasing disk drives in order to be able to save their word processing and paint program files and such.

Although *GOE* is the more innovative of the two products, I must admit that when a new game system arrived at our house recently (courtesy of Atari Corp.), the reaction among my family members was overwhelmingly positive. Not since our purchase of an Atari 2600 some five years ago has a computer or computer-related product caused such excitement in our household. Here, after all, was a computer that looked like a game machine that looked like a computer. For my wife and older son, a sleek, detachable keyboard,

64K of RAM, and total compatibility with our Atari 800XL made this a winner. My younger children loved the console containing a cartridge slot and five brightly-colored buttons (Power, Start, Select, Option, and Reset); the joystick and light gun; and the built-in version of *Missile Command*, and the *Bug Hunt* cartridge (for the light gun).

I liked almost everything about the system. For one thing there is much about it that is very familiar. Unpacking the box and setting the system up took no more than fifteen minutes because nearly all of the connections are the same as with older 8-bit products. The grayish color of the console, keyboard, and joystick matches that of the other products from the XE line. All of my peripherals plugged in easily and worked as always. The two controller ports are still on the right, and Atari Basic remains built in.

Secondly, there are some unfamiliar elements which I found quite attractive. Because the keyboard is detachable, I no longer have to lean forward to reach the keys, but can sit back in my chair, keyboard on lap, and type away for hours without fear of nagging backaches. The placements of the Help and Power keys atop the keyboard and console respectively are much more convenient, as is the absence of the flap on the cartridge slot. That may allow for more dust to get in, but it sure makes popping in a cartridge a lot easier for my children and for their dad.

Finally, although the three programs that come with the system are of uneven quality, they each represent a facet of this multi-purpose machine. *Missile Command*, one of the aged parents of computer gaming, still can provoke a good deal of fun and frustration via one's joystick. *Bug Hunt*, as a light pistol product, is not state-of-the-art, but it is nicely drawn and reasonably successful (for a freebie). The true prize of the three is *Flight Simulator II*, which takes its input from the keyboard. This brilliantly conceived and beautifully executed classic sells on disk for about 1/3 the price of the entire game system. To include it as part of the basic *XEGS* is proof of how classy Atari can be when they put their minds to it.

I have only three complaints to register. The joystick ports are recessed in such a way as to make it difficult for one to find the pins and even more difficult

CURRENT NOTES

to secure the plug. Some of the other keys might have been better placed on the keyboard rather than on the console. This is particularly true of Option and Select, which are used a good deal in many word processing programs. My last and most serious problem with *XEGS* is that I don't care for the keyboard. I know that most people feel that the old 800 keyboard was the all-time best Atari keyboard, and they're probably right. The one I've used the most has been the 800XL's, and these XE keyboards by comparison are spongy and slow.

Nevertheless, my family and I have grown fond of our *XEGS*, and I doubt (spongy keyboard and all) whether we ever would willingly part with it. If other new owners feel this way, then Atari has a winner on its hands.

Merrill Ward also deserves a marketplace victory for having the daring, the ingenuity, and the perserverance to create and to begin marketing *GOE*. Although the finished product has yet to be released, the demo program sent to me by Merrill Ward president, Shelly Merrill, has given me a pretty fair idea of just how comprehensive and excellent a desktop package *GOE* will be.

In the opening screen I was welcomed by an ST-like arrow and the command to plug in an ST mouse. After a couple of clicks, I arrived at a screen containing four titles in the top column (Desk, File, View, Config), two disk icons labeled "Disk Drive A" and "B" respectively, and a garbage can icon. Clicking each of the titles brought up a different menu. For example, "Config's" menu listed "Drive Name" and "Change Colors." Many of the menu choices through-out the demo were disabled; however, "Change Colors" seemed to be working, so I clicked a bit and my attractive green screen (with menus of black print on a white background) changed at my command.

After trying all menu choices under each title, I moved my arrow over to the first disk icon and click-clicked to a menu of the major programs on the disk. These include a full-featured word processor, a fairly sophisticated paint program, an icon editor, and a program of sample fonts.

Most of the saliant features of these also were disabled; nevertheless, the menu screens could be called up, and so I got an idea of what each has to offer. The paint program, for instance, included the following features: Draw, Text, Block Move, Fill Area, Grid Mode, Square, K-Line Draw, Spray Paint, Line Draw, Circle, Select Brush, Move Window, Undo, Load/ Save Picture, and Exit to Disk.

No doubt other features will be added to the final product, which should be released some time this summer. Anyone wishing to obtain a demo disk may do so by sending \$5.00 to Merrill Ward, 255 N. Cielo

Road, Suite 222, Palm Springs, CA 92262. The demo may be used as a \$5.00 credit toward the purchase of *GOE* when it becomes available. Incidentally, while a mouse is required on the demo, *GOE* will allow for a mouse, a joystick, or keyboard input.

For those forecasters who have been predicting the fall of the Atari 8-bits for years now, the appearance of XEGS and *GOE* must be quite disappointing. For those of us who have been fighting to keep the 8-bits alive and kicking, these two highquality products could not have come at a better time.

More About ST, Jr.

In a recent phone conversation, Shelly Merrill told me that he hopes to have an "ST, Jr." version of Atari's ST manual as documentation for *GOE*. With the exception of some changes due to the differences between "ST, Jrs." and STs (e.g., 40– versus 80– columns), the manuals will be identical. In that way both 8–bit and ST users will share a common vocabul– ary and a knowledge of each other's operating sys– tems. This will make it easier for both groups to switch between 8– and 16–bit Atari computers.

Another revelation made by Mr. Merrill was that within a week after *GOE* was first written about in *Current Notes*, he received 125 requests from our readers for copies of the demo disk. Hopefully, now that some of the more commercial Atari magazines are getting around to mentioning this revolutionary 8-bit product in their publications, orders will have reached in the tens of thousands.

In order to convince retailers that "ST, Jr." should be on their shelves in local stores, Mr. Merrill needs to go to them armed with our letters requesting *GOE* demos. That is why it is important for each and every interested 8-bit user to order his own demo rather than borrow (or worse yet, copy) his friend's disk.

Merrill's aim goes beyond fostering his own product, however. He would like to see 8-bit hardware and software once again on the shelves of the mass retailers such as a Sears or a K-Mart, as well as in stock in the smaller, more specialized stores. As he says, "80% of the population hasn't touched a computer yet. It's the future that we want."

Bridge 5.0 Released

Bridge 5.0, an enhanced version of Artworx's popular *Bridge 4.0*, features improved bidding based on the Standard American–Five Card Major approach. Additional features include Stayman convention, the ability to request an opening hand, auto–bid and

(Continued on Page 17)

MIDI UPDATE + Grant Slawson

What's New in the MIDI Marketplace

The innovations in midi software have been coming fast and furiously, but mostly on the professional level. There have not been too many positive things emerging in the last six months for the midi enthusiast who isn't interested in spending \$200 to \$300 on software. However, a few goodies have hit the marketplace which deserve some attention.

Easy Score Plus. Most of the *new* software has been in the field of music notation. Hybrid Arts finally arrived on the scene with *Easy Score Plus*, a program for writing music and converting sequenced material from *Easy Track* and *SMPTE Track*.

Hybrid Arts did well in their first attempt at this style of software, and the product is good. It is a fully GEM driven product, much like Music Studio in its method of placing notes on the staff. First you go to an extensive list of notes and time values, then choose the note you want by clicking on it. The note is then attached to the cursor, and is placed on the staff in the appropriate spot. The value of this note stays with the cursor until the user goes back to the menu to select a new value. Text is supplied for lyrics and notation on the score, as well as numbered measures.

Information can be input through a MID! keyboard as well, but not in "real time". Since all notes are given equal value, you must switch the value of the notes to change from eighth notes to quarter, etc. This is not the most intuitive way to play something.

The best feature of the program is the ability to import and then score out the sequences done in *Easy Track* and *SMPTE Track ST*.

Using this feature allows you to play the parts into the sequencer, then import them and do your editing in the *Easy Score Plus*, then put them back in the sequencer (shades of the *Copyist ST* reviewed last November). The program sells for about \$100 and is very reasonably priced for the power you get.

Copyist ST. Three new versions of the *Copyist ST* by Dr. T's Music Software have been released in the past few months. The new *Copyist* comes in Level 1, Level 2, and Level 3.

Level 1 has all the features of the Copvist 1.4 which I reviewed last year, except that exporting a score from the Copyist to KCS or MIDI Recording Studio is not possible. The program also supports only dot matrix printers. The best news is that you can buy the Copyist Level 1 for about \$90.00!! This also works with MIDI Recording Studio which has also been enhanced, and sells for about \$50.00, giving you a recording and scoring system for \$140.00 that exceeds anything in its class. (One point before I go on; at the time of this writing, Level 1 is not planned to run in the Multi Program Environment).

Level 2 has a tremendous amount of improvements over 1.4, the best of which is the ability to "rubber-band" the area you want to edit, like so many of the drawing programs we know and love. Dr. T has added 5 fonts to the program (italics, bold, compressed, elongated and bold-italic). The compressed font really helps with placing a lot of lyrics in one measure. The printer drivers also support HP Laserjet and the Atari SLM 804, as well as dot matrix.



Level 3 has all the features of Level 2 with the added capability to use a Postscript printer, and export files in encapsulated Postscript. Level 3 costs about \$390, and provides professional output in a short time.

Levels 2 and 3 can now also score out full Orchestral drum parts, and import them from a sequencer. The addition of some GEM commands and the ability to run the Copyist in the Multi Program Environment simultaneously with KCS makes it the most powerful sequencing and notation system out for the ST.

Super Score. Michtron brought out Super Score to go along with Super Conductor, which we reviewed August of '87. It falls far short of the other two programs, but if you already have Super Conductor it is a method of getting those seq*uences* on hard copy. While it sells for about half the price of *Easy Score Plus* and *Copyist Level 1*, it combines with *Super Conductor* to cost about \$130.00, and can't stay in the race with either of the other two scoring programs.

The Multi Program Environment (MPE) by Dr. T is probably the most exciting thing to happen this year for MIDI on the ST. This shell is part and parcel of KCS 1.6 and Level II, and allows you to run five programs simultaneously! You first run KCS and then you run four more of Dr. T's programs from within KCS. What makes this even better is that the sequences you have recorded can be stopped and started from the other programs. This allows you to audition different sounds in your synthesizers from a library you have stored on disk. This is a tremendous time saver as you no longer need to quit your recording software to find that one perfect sound you have buried in your synths disk library. With their *SMPTE* software and *Fingers and Tunesmith* on the way, Dr. T has just set himselve up as the leader in the field of MIDI software for the ST.

Powerful Synthesizers. There has also been a tremendous influx of powerful, moderately priced synthesizers in the last 6 months. Roland introduced their MT-32 last fall, and was the first reasonably priced, multi-timbral module to use PCM (Pulse Code Modulation) samples. It was finally possible to get authentic acoustic instrument sounds for about \$550.00. Since samplers are still in the \$1700 and up range, this was quite an accomplishment. What made this even more interesting for ST owners was that their computer was the only one that had a patch editor available for it, and since

the MT-32 had a volatile RAM, (any changes made to the sounds and configuration by the user were lost when the unit powered down), the ST became the only means of storing this patch information for the module! Dr. T was the company that brought out the editor, and it runs in the MPE as well.

The last few months have seen **Kawai** and **Korg** both introducing PCM synths, and the modules are in the \$600 range and sound GREAT! One more small detail; Both the Kawai K–1 and the MT–32 have a DRUM MACHINE built into the synth which is assigned to a separate MIDI channel and doesn't take up voice allocation numbers in the modules! Pretty slick, non?

Articles are cropping up in all the magazines about the nationally known artists presently using the ST. B.B. King was in the MIDI issue of START, and stars such as Peter Gabriel and Stevie Wonder have switched to the ST for the majority of their sequencing needs. There is no doubt that the ST is the leader in the field of sequencing and MIDI.

Over the next few months I am going to be evaluating programs that can help you turn short musical passages of a measure or two into complete pieces. By playing these ideas and then changing the flow of the music in real time with the mouse, you will be able to change pitches, tempo, velocities, and turn tracks on and off as the piece records into another sequencer or plays your synths into a tape recorder.

Try to check out some of the innovative music hardware and software that has emerged in the last six months. Now more than ever, we can see Atari giving more power than anything else in its price range, and in many instances, more power than anything else in the home MIDI market.

XE/XL UPDATE (Continued from page 15)

auto-play options as well as the ability to replay interesting hands at a later date. As before, the program provides the player with virtually an infinite number of hands to be played.

The Atari *Bridge 5.0* lists for \$29.95 and will run on all Atari 8–bit computers having at least 48K of RAM. *(Artworx Software Company, Inc., 1844 Penfield Road, Penfield, NY 14526, (716) 385–6120, (800) 828–6573.)*

Syncsoft Screen Generator

SYNCSOFT has announced the Screen Generator, a product "..that may revolutionize the way BASIC programs are written." It allows screens to be built by simply typing on the screen what the user wants them to look like, including all of the Atari graphic characters.

Fields may be defined as display only, alphanumeric enterable, or numeric-only enterable. The generator creates basic code for each screen to be included in one's program. All fields are assigned a unique name according to the relative location on the screen of which they are part. A run time screen handler interfaces the screens to one's program, passing all fields to and from the program a full screen at a time, much like mainframe systems do.

The *Screen Generator* lists at \$11.95 (a quantity discount of 20% is available for orders of five or more) and runs with TURBO BASIC which is included at no additional charge.

For more information or to order write to Syncsoft, P.O. Box 5862, Aloha, OR 97006.

AL/65 Development System

Omega Soft announces *AL/65*, a linker–based assembler, which compiles the code into relocatable code, or code which can be used in other programs.

The *AL/65* editor offers full–screen editing, user definable macros, custom character sets, plus many other features. For ease of use the program is menu driven.

With it, users will have the capability to trace through their programs, change memory, find a string, even run the program and toggle the screen to see what it does. There also is a command processor DOS (AL/65 also will run under just about any other 8-bit DOS available), as well as a number of other helpful utilities.

[Omega Soft, P.O. Box 139, Harrels, NC 28444, 1(919)532–2359. \$44.95 p!us \$3.00 S&H.]

PaineWebber Says Buy ATC

[Lee Isgur, First Vice President at PaineWebber Inc, recently completed a very bullish report on Atari. Lee very generously forwarded that report to CN. Rather than selectively pick and choose parts from the report, I thought it would be more helpful to our readers if I reprinted the whole analysis. Except for about four and a half pages of financial tables, the full report is provided below. –JW]

Atari's first quarter results confirm for us that the company should earn well over \$1.00 per share fully taxed this year (a range of \$1.10-1.40 probably has a 90% chance of being correct with a single point estimate of \$1.20) and \$1.60-1.80 or better in 1989. This justifies our buy (1) rating. We find it hard to conceive that the sheer momentum of revenues and operating profit will go unnoticed for very long. We recommend buying ATC now and think existing holders could double up. Although the quarter showed an EPS decline to \$0.10 from the year-earlier \$0.16 (the year-ago guarter also included a \$0.10 extraordinary tax credit, bringing the total to \$0.26) and our quesstimate of \$0.17, the details of the quarter were exceptionally positive and indicate the likelihood that in the current environment most ATC-side numbers and the consolidated profit numbers going forward should rise sharply for at least the next four quarters.

Highlights of the first quarter

- 1. On a 63% net income increase, the Atari computer division earned \$0.26 per share versus \$0.16 a year before.
- 2. The Atari computer division reported a 61 per cent revenue surge.
- 3. A shift to surface transportation in the first quarter from air late in the Christmas quarter caused a buildup in intransit inventory and probably left \$20-25 million or more in sales on the table.
- Primarily because of DRAM cost increases, Atari computer gross margins showed a five point drop. DRAM price increases added about \$4.5 million to first quarter costs.
- 5. Component shortage problems also curtailed sales.
- 6. The Federated retail division, which was not owned a year ago, lost \$0.16 per share. We estimate that two-thirds of the Federated loss, or \$0.11, was from the final write-down of the old inventory.
- 7. Federated's \$71.5 million of revenues were the

\$/1/4 ASE		ek range \$47/8-16 1/	8
1987	1988E	1989E	
\$0.16	\$0.10A	na	
0.13	0.20	na	
0.14	0.26	na	
0.32	0.64	na	
0.76	1.20	\$1.60-1.80	
	6.0	4.0-4.5	
\$0.00	\$0.00	\$0.00	
arowth Rat	te	na	
	1987 \$0.16 0.13 0.14 0.32 0.76 \$0.00 	1987 1988E \$0.16 \$0.10A 0.13 0.20 0.14 0.26 0.32 0.64 0.76 1.20 6.0	1987 1988E 1989E \$0.16 \$0.10A na 0.13 0.20 na 0.14 0.26 na 0.32 0.64 na 0.76 1.20 \$1.60-1.80 6.0 4.0-4.5 \$0.00 \$0.00 \$0.00

result of an 8–10% same store sales decrease and five store closings.

 Finally, exchange losses of \$1.6 million were included in other income in this year's first quarter versus gains of \$2.1million in the year-earlier quarter (a swing of about \$0.05 a share).

The strength of ATC's computer and game business can begin to be appreciated when it is realized how well operating profits did despite the negative factors mentioned above.

Outlook

- We estimate demand for Atari products (primarily computers) currently exceed supply by at least 50%.
- Despite the above discussed problems, steadily ramping up production assures computer and game revenues this year in the \$550–700 million area, up 50–100% from last year.
- If DRAM shortages ease in the second half of the year, as we are now forecasting, comparative gross margin declines will ease.
- The cost/inventory relationship should begin improving this quarter with the \$68.5 million cash on hand at the end of the first quarter rising and inventory dropping. (First quarter 1988 inventory rose to \$201.2 million from \$196.9 million at December 31, 1987. In this period Federated inventories actually dropped to \$68.9 million from \$73.1 million.)
- While Federated sales should be in the \$300–350 million range this year, the results in 1988's remaining quarters should be at about break even. (Modest losses--\$0.03-0.08 per share--in our

opinion are possible in the next two quarters and a profit is likely in the fourth quarter. However, management is on record as stating that with further cost reduction there is even a possibility of a "small profit" in the second and third quarters).

- If ATC achieves its goals for Federated this year it will have revenues of about \$300 million and a loss of about \$0.16 a share of less, with a rebound in 1989 to \$450 million of revenues and profits of about \$0.18 per share. (Atari continues to take decisive action at Federated including further large overhead reductions. If such actions do not backfire and make the Federated operation unmanageable over the next few months, the turnaround will probably get under way.)
- Video game sales this year should at least double last years \$80 million, with the higher-end 7800 and XE systems rising to where they account for more than half the sales in this category.

Other items of interest:

- Over the last two quarters ATC has reduced Federated's headcount from 3,000 to 1,900, has closed 6 stores and has downsized a number of others. We expect employment to stabilize near current levels for the next 6 to 12 months. The brunt (management's estimate, 80%) of the costs associated with these reductions was felt in the March 1988 quarter.
- With all the opportunities currently available and with so many new developments, were ATC able to sell Federated now for what it paid for it, it would. But if the Federated business plan develops as ATC is now thinking, by year-end ATC would be unwilling to sell Federated at such a low price.

Computer division

- 1. We estimate that currently over 80% of ATC's computer sales, around \$400-500 million this year, are outside the U.S.
- 2. It is likely that ATC will open a factory in the United States to manufacture computers for both domestic and international consumption within the next 12 months. (At the annual meeting management forecast production from such a facility before year-end.)
- 3. ATC is studying the potential of opening a semiconductor manufacturing plant in Germany. Such a plant would initially make 1-megabyte chips and 4-megabyte chips later. This facility would be financed by grants, low-cost financing and tax incentives. From the time ATC begins to open this plant it will be about two years before the first chips are manufactured. (The decision where

to open this plant is expected to be made well before year-end.)

- 4. Atari will introduce a 68030-based computer in the fall.
- We will also see from Atari this year a laptop ST with a built-in hard drive.
- 6. Management's goal is for 50% of ATC's computer sales to come from the U.S. in 1990. We regard this as an overly ambitious goal but think it is a good possibility by 1991. Given the current track of ATC's growth we calculate that this would represent \$1 billion of domestic sales in 1991 and mean that ATC would be a \$2.5–3 billion or more company by that time, compared with our estimate of less that \$1 billion this year. On the other hand, if we factor in potential problems such as economic cycles, shortages and disruptions, 1991 sales would probably be only one–half to three–quarters of our projections in 1991. However, that would still be an impressive feat.
- 7. Point #6 illustrates the reasons for our enthusiasm for ATC. If such unencumbered goals can be achieved, then EPS of \$4.00–5.00 by 1991 are also a good possibility. However, even in the less optimistic scenario that is perhaps more likely, EPS more than double this year's projections appear quite easily achievable and would certainly be impressive.
- 8. Atari will introduce what will probably be the first 68000-based game machine in January. The retail list price will be about \$199.
- 9. ATC spent \$10 million advertising its video games last year. This amount will double this year.
- 10. Nolan Bushnell, one of the key creators of the original Atari game machine, is now working with ATC to develop game software for the new game machines.
- 11. ATC top management continues to be cautious about video games, anticipating that sometime in the next year or two the industry will have another sharp downward correction. As a result it plans to continually undersell the market. Furthermore, because it perceives software as less risky than hardware, Atari will continue to increase its emphasis on software.

Balance sheet

Along with rapidly rising revenues and operating profits from computers and games ATC is also steadily enhancing its balance sheet. Much of this is due to management's philosophy of concentrating on cash flow rather than "window dressing" EPS numbers. The acquisition of Federated resulted in establishment of a \$13.5 million goodwill balance sheet item on October 4, 1987. This was being amortized over ten years on a straight line basis and thus this account declined to \$13.1 million on December 31, 1987. But this item was adjusted downward for the reasons mentioned earlier (i.e. by the inventory write-down) by over \$4 million in the first quarter and thus it now stands at only \$8.8 million. Moreover, other asset reductions enhanced the first quarter cash flow by an additional \$3.3 million.

As a result of rapidly rising operating income and even more rapidly rising cash flow, working capital at March 31, 1988 stood at \$189.2 million, a \$76.6 million increase over the last 12 months. After netting out the \$64.1 million cost of Federated from the \$75 million in proceeds from last year's debenture offering, this indicates internal operations increased working capital by \$65.7 million over the past 12 months.

Note in addition to the \$68.6 million of cash on hand on March 31, ATC had unused bank lines of \$32 million.

Other comments from annual meeting

- Because of the tight supply of DRAMs, ATC is currently only making a minimal amount (a few thousand) of PC clones each month. (Whether or not ATC makes MS-DOS machines, this family of PCs will survive. But were ATC to curtail ST production this could prove fatal to this emerging operating system and certainly hurt Atari's credibility.)
- 2. Later this year ATC will begin making the PC-5 (its 286 machine).
- Currently 50 transputers are in the hands of developers. Another 200 will be shipped to developers in June. ATC plans to start shipping these machines to the public before year-end.
- 4. ATC now has design centers in Sunnyvale, California, Carrolton, Texas and Tokyo. Affiliated centers are operating in Cambridge, England and Boston, Massachusetts.
- 5. The eventual goal is for the ATC brand to account for 10% of Federated's sales.

Risks

No matter how rhapsodic an analyst gets, any stock has risks. Yet the normal market risk we have practically brushed aside by saying ATC's current low price, strong financials and surging results should allow it to rise from current prices over the next 12 to 18 months even in a poor market.

What then are the risks associated with Atari? We

see three, two of which we regard as less probable than similar problems that one must address when dealing with most other companies.

First is the economic risk. Given ATC's geographic business mix and current relatively small worldwide market shares in both personal computers and video games, we think the company can move forward in virtually any economic scenario other than a worldwide depression. This view is predicated not only on ATC's current market position but also on our view of the innovativeness and opportunistic nature of ATC's management style.

This leads to the second risk, that of management. Under Jack Tramiel, Atari's chairman, the company has a small dynamic management team. Although Atari is definitely the vision of its chairman, the skill of the team's other members is often overshadowed in his limelight when the company is under public scrutiny. Thus there is a public view that "JT" is critical to ATC's success. We acknowledge that success would be that much harder to achieve without Jack Tramiel's guidance; but we have come to respect the other members of the team and believe that like so many other successful companies Atari now has a management and leadership depth based on more than just one or two people.

Finally, there is Murphy's law: "That which can go wrong will go wrong." Certainly, some now unanticipated event or group of events could tarnish ATC's outlook. However, from our current perspective ATC's prospects are definitely bright. That is,barring such catastrophes as a worldwide depression or the disappearance of the top four or five members of ATC's management team, the company should prosper over the next 12 to 18 months in revenues, and the stock price should appreciate accordingly. Moreover, we think it is highly probable that impressive growth trends—in revenues, earnings and stock price—will continue over the next three to five years.

Conclusion

Atari continues to do excellently. We believe the Tramiel team is comprised of superb operators as well as visionaries and we think they are building a company that will be a world force in the consumer electronics area. As much as anything else, the small domestic representation and the need to turn around Federated have resulted in the stock being depressed and having little sponsorship. Nevertheless, the ability to grow its basic business by over 60%, despite the temporary adverse factors enumerated above, leads us to conclude that unless some unforeseen event occurs it is only a matter of time before the stock begins to move ahead smartly.

NOVATARI XL/XE PUBLIC DOMAIN LIBRARY

The price for mail orders is \$3 per disk plus \$1 for postage and handling for every 3 disks. Send checks, payable to NOVATARI, to Alan Friedman, 5951 Heritage Square Drive, Burke, VA 22015.

Any user group librarians who are willing to trade library disks write or call Roy Brooks, 4020 Travis Parkway, Annadale, VA. 22003, phone 703 750 0146. We trade with groups all over the world.

Demos

1: Miscellaneous 2: Movie Maker Clips 3: Heavy Metal Art 4: Miscellaneous 5: Desktop DOS + Demos 6: VizPics 7: Mandelbrot factal graphics 8: Hitchhiker's Guide to Galaxy 9: WIZARD of OZ 10: Adventurers Companion

Education

- 1: Mathematics
- 2: Primary Language
- 3: Teachers' Toolbox 4: Word Builder 1.0
- 5: Animated stories
- 6: Geography
- 7: Bio+Chem with touch typing
- 8: Basic Math
- 9: Higher Math and Language
- 10: The Cell
- 11: Spelling Bee
- 12: Math Game
- 13: Word Games

Games

- 1: Text Adventures I
- 2: Gambling
- 3: Simulations
- 4: Mazes
- 5: Parlour Games
- 6: Graphics
- 7: Action! Games
- 8: Arcade Look-A-Likes

9: Text Adventures II 10: Text Adventures III 11: Surf's Up 12: Ski King 13: 20 BASIC Games 14: Super Quiz A & B 15: Two Graphic Adventure Games 16: Space Lords 17: Pinball Games 18: Machine Language Games 19: Dandy Dungeon

Language

1: Fig-FORTH 2: ACTION! source codes (cf. GAMES 7) 3: ACTION! Graphic Demos 4: ACTION! Graphic Demos 5: ACTION! Modules #1 6: ACTION! Modules #1 6: ACTION! Modules #2 7: BASIC XL-REF Base 8: ACTION! Modules #3 9: KERMIT telecom 10: TURBO BASIC 11: Pascal Sampler 12: Searcher XL Turbo 13: Turbo Basic for 400/800 14: C Language

Music

1: TV/MOVIE Themes 2: ROCK 3: JAZZ 4: BASIC with animation 5: Ams Player: 12 Rock Songs 6: Ams Player: 14 Movie/Video Themes 7: Ams Player: 16 Oldies 8: Ams Player: 18 Classics 9: Ram130 AMS Beetles' Songs 10: MUSIC COMPOSER Songs 11:Pokey Player 12: M usic Major

Utiliity

1: MISCELLANEOUS introduction 2: Printers 3: DOS 2.5 4: Directory & Label Printer 5: Graphics Trilogy 6: Copymate XE 7: SCOPY sector copier 8: Translator Disk 9:256K Upgrade 10: Daisy-Dot NLQ 11: Dos 2.6 12: MACHDOS 2.1 13: Print Shop Editor 14: Easy Find 15: Print Shop Icons 16: TEXTPRO 1.1 17: Print Shop Icons 18: Touch Edit 19: DOS 4.0 20: Graphics 21: 130XE upgrades + Utilities 22: HI-RES 130 (graphics) 23: Rainbow DOS 24: Font Master 25: 3-D CAD 26: Adelaide Symbolic Disassembler 27: DB's & Spreadsheet 28: Graphic Utilities & Pics 29: String Magic 30: Print Shop Icons 31: Hacker's Toolkit 32: Weekly Scheduler 33: Textpro 2.5r (telecom) 34: Print Shop Utility 35: Monitor/Debugger 36: Diet & Nutrition 37: General Ledger 38: Super Copiers 39: Atari Writer Drivers

Telecommunications

1: 850 Interface 2: 835/1030 Modem 3: MPP Modem 4A: AMODEM 7.2 5A&B Chameleon Terminal Emulator 6: 1030&850 Express (3.0 & 2.1) 7: Data Comm 8: AMIS XM10 BBS program 9: AMODEM 7.4 + Rverter 10: Forem XE

The Revenge of the Developers: A Controversial Practice

(c) 1988 by Dave Small

Some developers are philosophical about pirate BBS's. They feel there's basically nothing that can be done, so they don't worry about it.

Some developers attempt to shut down BBS's; they contact the FBI, and/or file a civil lawsuit. (Pirate BBS operators who feel they are secure against this because the developer only has their phone number are kidding themselves; any private detective worth his pay can get the address of any phone number with little effort. Any phone phreak can do it with a "CNA", too.)

Some developers are pirates themselves, and belong to the clique. I kid you not; some of the most amazingly complete pirate libraries I have seen have been at various developers.

And then there's a few other developers, who don't have the cash to sue, who bear a rather personal grudge against the pirate board operators who have been ripping them off.

They've started a covert action which I'll tell you about, and frankly admit is going to step on some toes. They are not going to talk about doing it, or admit doing it, for legal reasons. But it's happening.

Some people feel this is a good idea. Some people feel it is terrible. Everyone agrees it's controversial.

The typical "warez" on a pirate board are "cracked" programs (see article) from a developer. Typically, the pirate who cracked through the copy protection is pleased to label the program as "cracked by xxxx", as a way of showing off.

I had an interesting experience with a pirate, whose moniker is

"Dr.Typo" and "Captain Wizard". (He uses two.) As a side note, I've been told by several sources who he is; he runs an 8-bit Atari hardware and software company out on the East Coast.

(It's amazing how little loyalty there is among thieves; an offer of a Magic Sac is amazingly good at producing a name and phone number for Dr. Typo.)

This is, of course, difficult to prove. But it doesn't matter; as you'll see, Dr. Typo has already gotten what he deserved.

Dr. Typo "cracked" version 4.52 of the Magic Sac, and put the Apple ROMs on disk. Thus you didn't need a Magic Sac cartridge to run Mac software. This is strongly illegal. (Offending Apple's copyrights is suicidal; they have endless attorneys and money for things like this. It's a genuinely stupid move. For instance, InfoWorld covered the story of a Cincinnati BBS being closed, equipment confiscated, and the operator sued for tens of thousands of dollars for having a copy of the Apple ROMS online. But, anyway...)

Dr. Typo proudly uploaded the cracked 4.52, the first Magic Sac that would run using the hard disk, and sat back and waited for the applause from the pirate community.

Dr. Typo did the crack slightly wrong; his patches to the code were a byte off. What happened was, when an interrupt occurred, and the "D0" 68000 register was less than 7 (which is random during an interrupt, you never know what the registers are at the point an

interrupt happens), sector 0 of the hard disk would be written to, usually with 0's. It was an accident, I'm pretty sure; his patch was wrong.

Sector 0 is absolutely crucial to the operation of the hard disk. It contains the partition table: the table that tells the ST where the various partitions are on the hard disk. Without Sector 0, the hard disk is completely unusable; if you lose Sector 0, all data on your hard disk is lost, unless you can find a wizard to rebuild that sector. You can't start up your hard disk, can't do anything except reformat it.

So what the good Doctor's "clever" hack did was blow away the entire hard disk, at random intervals. You never know just when it's going to do damage.

It happened to me within five minutes of testing his software. (I've mentioned I keep up with what the pirates are up to, so I tested the cracked 4.52 version). My whole hard disk was gone! Fortunately, this was early in the morning, and I'd backed up the hard disk to another at the day's start; I also had enough technical knowledge to find out what had happened, and rebuild the partition sector. Most people do not have this knowledge, nor the proper tools.

In short order, Dr. Typo's 4.52 Magic Sac started killing pirate bulletin boards it was on. Most of the operators had to reformat their hard disks and start over, which is a real quick way of find out how up to date your backups are. Most hadn't kept complete backups. A number lost many of the favorite "warez".

Dan Moore and I went to Compuserve, Genie, and other national networks, and posted a warning about Dr. Typo's 4.52. While we felt it was poetic justice, in a sense, we didn't want innocent users losing their entire hard disk if a friend brought over a pirated copy of 4.52 to "demonstrate" or something. Losing 20 megabytes of data can be a tragedy; what if it was a medical computer system or some such? And no one backs up perfectly, let's face it. (There isn't even a streaming tape system for the ST!)

This warning was picked up by the pirates, who are also on CIS and GEnie, and posted on their boards—the ones that were still running, anyway. I found it on COASTLINE (see "Dark Side" article in this issue), an East Coast pirate board, for instance. They'd had Dr. Typo's version of 4.52 as a down– load, until they saw the warning. They were one of the few lucky ones.

Dr. Typo's name continues to be absolute mud in the pirate community. Rather than applause, he started getting some of the harassment tactics that pirates pull on one another ... "pranking" the phone, for instance (having your modem call at all hours of the night). I'm not sure what else was done to him.

Given the time I'spent developing the Magic Sac, I can't feel even a little sorry for him.

While I'm fairly certain it was an accident (it looks like he made, well, a typo in his patch table, and the code then falls into the hard disk handler, which is initialized to point at sector 0 because of the bootup process that looks for Magic Sac sectors .. etc, etc..), that doesn't change his reputation on pirate boards. Lots of them lost their hard disk's data when they tested Dr. Typo's patched program.

His reputation was so tarnished that "Dr. Typo" had to abandon his

moniker; he's now "Captain Wizard", and is still hacking away at the Magic Sac. Last I saw, he'd cracked version 5.9, and wasn't even daring to hint that he was once "Dr. Typo", lest he be lynched. In fact, he denies it...

(Of course, I hope a few of the right people read this article, because it's the truth. Captain Wizard is the same idiot, that's right.)

What if software developers DELIBERATELY released versions of the software, that said they were "cracked by xxxx" ... that damaged the ST they were running on?

But, anyway, I got to thinking. What if Dr. Typo had pointed the way for software developers? What if software developers DELI-BERATELY released versions of the software, that said they were "cracked by xxxx" (pick any favorite pirate's handle), that damaged the ST they were running on?

Hmmmmm.

I talked about it with a few people, and to my surprise, off the record, between-you-and-me-Dave:

They were doing it already.

I am not going to list any names of anyone who's admitted they're doing it; you're just going to have to take my word. There are some mighty militant software developers out there.

The current technique seems to be a time-bomb, then FAT corruption.

It works like this:

The developer makes up a special version of their program, that is CLEARLY labelled as a pirate version. If someone runs it, there can be no mistake that they're run-

ning a pirated version whatsoever; this is to avoid accidents. At that point, no holds are barred; the program goes to work.

The program checks the date. The program needs to be distributed throughout the pirate BBS network, you see, and if it starts killing the boards off too early, it'll be detected and deleted. So it waits, and is spread around by eagerbeaver uploaders, anxious for more "upload points" to download "warez". (See article).

If the time has come (two weeks to a month seems to be the timing of choice, although one is a six month delay, set for Sept. 1988) then the hard disk that the board has been running on develops a very subtle problem with its FAT, or File Allocation Table. The problem spreads itself; the internal links that tell the operating system what sectors comprise a file get relinked elsewhere.

The effect is that the database of pirated files gets slowly corrupted. Someone who then attempts to download from that database, say, a terminal program, will get a piece of the terminal program, a piece of something else, an empty sector--however the FAT was corrupted. They will definitely not get a working terminal program.

Naturally, the damage is done slowly, so it's hard to detect just which of the (often) hundreds of programs out there is doing it. And CHKDSK programs do not detect the damage, because the linking is done in a legit–appearing manner.

The pirate users, of course, will complain loudly that the downloaded "warez" won't work, about which time the pirate BBS operator discovers that his whole database is shot. He might as well reformat and start over. Depending on when he's backed up, his backups are also damaged, since the problem happens subtly. Note that this is NOT a virus that will spread to an innocent user's system. If the system runs the pirated software, it's got a problem; otherwise, no.

I talked this over with a (reformed) pirate during an online conference late one night. It's happening, all right. He said that pirate boards now often use "write protect" programs to safeguard their hard disks while testing programs.

What he didn't know is that a write-protect program (say, PRO-TECT.ACC from START, which I helped write), can be bypassed by someone who directly accesses the hard disk through the hardware, not through the operating system. In fact, in the face of a determined program, *there is no way to safe-guard a hard disk*.

With the advent of computer viruses, and the first ones appearing on the ST, this problem is going to take on major proportions. I'm thinking of modifying my hard disk to have a physical write protect switch that cannot be overridden by software. Deliberate malicious viruses are being released into the ST community, (often piggybacked onto pirated software, as it turns out); I have to protect myself from that.

So there you have it.

You see, the problem with pirate boards is that they've had it too easy.

Before, you could download a program and its documentation in a few easy minutes, and run it. It would work. Easy.

But now things are changing. Now that program, so proudly displaying its "Cracked By Skull and Bones", may just wait a few days, then go zap your hard disk. It'll do that despite all the protection you can think of, and it may be so subtle that you'll not know for weeks of the damage. So much for your rotating backups. (Other solutions, which the software developers rejected as too radical, included deliberately burning up a color monitor by forcing the ST into monochrome mode --which can be done in software. Too radical. I also happen to know that one developer does NOT think it is too radical. Hint, hint.)

Now I want to emphasize that I can see both sides of this issue, and I also want to emphasize this is something I have not personally done. Dr. Typo happened to me, and I still think it was by accident. It wasn't my problem that he was so eager to upload, and show off, that he didn't test his version enough.

But it seems a reasonable solution in some ways. If someone runs a program that says it's a pirated version, he's just stolen someone's intellectual property. That point must be clear; the program MUST say it is pirated, so that the user knows.

At that point, I feel that the software developer is somewhat justified in wreaking havoc. It's certainly a grey area. I have seen my friends go bankrupt, and move out of the ST world, because of piracy. It's that bad. And the boards are the worst of the pirate world.

However, in the fight against piracy--which is killing the ST software market, and thus the ST, just as surely as the sun is risingsometimes slightly unsavory tactics are called for.

I am very interested in your reaction to this. I'll give my online addresses, and post office address, if you'd care to tell me what you think.

It's the first time I know of software developers deliberately going on the offensive, actively sabotaging pirate boards. And unlike copy protection, it doesn't harm the honest individual, who won't use pirated software.

What if pirating were no longer easy--but dangerous? What if, say, 1 of every 2 programs that you download from a pirate BBS damaged your hard disk when they ran? What if the word "pirated software" came to mean what "casual sex" has come to mean in the age of AIDS?

Now before people start writing before they think, let me repeat myself. I don't want any "Dave Small's proposal is terrorism" letters. This is NOT my proposal. It is something that happened to me BY ACCIDENT with Dr. Typo, and that I found out other developers are doing deliberately.

I make no stand. I'm not doing this myself. I see pros and cons. The developers, for instance, cannot admit they are doing this for fear of liability lawsuits from an irritated pirate; remember some of the kooky lawsuits that people have collected on.

And I'll refuse to remember what developers have told me in confidence, thanks. I appreciate their candor.

But ... given what piracy has done, the damage ... What do you think? Is this strong a medicine required? Is it justified? Should it become commonplace? Should a war on pirates be declared? I'll put some of the more coherent letters in a later column; let me know if I can use your name, and quote from your letter, okay?

> Here's addresses: BIX: dsmall Compuserve: 76606,666 GENIE: DAVESMALL Usenet: hplabs!well!dsmall

And a postal box .. (this isn't my home address!)

9678-B E Arapahoe #133 Englewood, CO 80112



AND EASIER.

LDW BASIC is a powerful, integrated programming tool that lets you edit, compile, and execute your BASIC programs without exiting to the desktop. It also creates a program file which can be executed directly from the desktop. You will never have to load the BASIC language interpreter or run-time module to execute your program.

LDW BASIC Rev. 2.0 is very easy to use, yet it's more powerful than any other development system for the Atari ST. It supports a full set of high level GEM access statements and functions which let you:

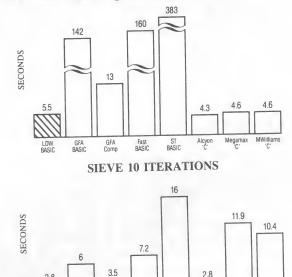
- Create and use your own windows, menus, dialog boxes, buttons, edit fields and check boxes.
- Use desk accessories while running your BASIC program.
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VIRUSES ON THE ST A Netherlands Editor's View of the Disease

By Richard Karsmakers

You might have heard (of) computer viruses already. Or you might not have. But it is a fact that these nasty things have penetrated their way into everyday computer life, even on the Atari St. Viruses are no longer restricted to mainframes, Amigas or MS-DOS machines, for some people have now also gained the mad idea to make them for the St--even "Virus Construction Sets" are now known to be existing in Germany! A lot of nonsense is said with regard to computer viruses on the ST; lust for sensation, rumors and panic happen to form the major substance of everything that is spoken with regard to this subject. And what is even worse: Some people largely underestimate the potential danger of a computer virus. With this article, some of the commonly heard rumors will be discarded--and maybe the virus, too.

What IS a virus? A computer virus is a small piece of program code that has but two tasks: Multi– plying itself and conditionally exe– cuting a piece of its program code that has more or less negative consequences for the computer user and his/her data carriers. Just like with biological viruses (you will soon notice how striking the resemblance is!), the multiplication takes place unseen, and at equally high speeds. Most of the time, one only discovers a virus once it's too late.

There are two types of viruses: The most 'popular' is the **bootsector virus**. This occupies the disks' bootsector (the first sector on the first track of a disk, that also contains disk format information) and is loaded into the computer system every time one starts the system (either by reset or turning it on) with an infected disk in the drive. It then manipulates a few pointers in RAM memory so that harmless Operating System functions (like reading the bootsector of a disk) are altered: They'll then not only perform their regular tasks, but also multiply the bootsector virus onto every disk that is inserted in the disk drive.

The less well known and much more difficult to find computer viruses are called link-viruses. These viruses merge (link) themselves to a program file (e.g. a word processor, a spreadsheet, or even a game) and infect other programs on that disk each time that these programs are loaded and run. The only link-virus momentarily known on the ST was actually published by a German magazine called "Computer & Technik" (it's probably not worth mentioning that many people have since not bought this detestable magazine anymore, due to damage caused).

Both virus types have one thing in common: When a certain condition is true (compare to the incubation period of a biological virus), they execute their dangerous code. Examples of these conditions are: A certain date and time in the system, the fifth time a virus is multiplied, or ... the possibilities are innumerable. And the "dangerous routine" can vary from scrolling the screen and fooling around with the sound chip (quite harmless) to erasing your entire disk (not quite harmless--and data are afterwards unrecoverable!). "Creative" virus program-

mers can make a virus do just about everything their maddened brains come up with!

There is a third type of computer virus, too. It's called a **substitute virus**, and none of these have been seen on the ST as yet. These viruses are much like linkviruses, but do not change the program file length whereas a linkvirus makes it more or less larger.

In November 1987, the first virus was seen on the ST, accidentally discovered in Germany. Now, several months after the initial appearance of the first virus, feedback was received from countries as far as Greece, New Zealand and Denmark. The virus had spread rapidly! But especially in Holland, West Germany and England, lots of people seem to be suffering from this nasty phenomenon.

The virus principle is already older, but the first viruses started appearing on home computers in 1983. The most fantastic stories about German hackers infecting a Nuclear Physics Center and people trying to make a virus time bomb that would "explode" on the 40th anniversary of the state of Israel in a Jerusalem institution go around. Nobody exactly knows what's true about these stories

It is hardly to the point to dig into the mentality crisis obviously present in the confused brains of people who write these viruses, so let's start to refute some of the stories surrounding the virus on the ST--as was stated earlier.

1) EVERYBODY can become the victim of a computer virus! This can happen through accidentally "infected" original software (the salesman demonstrated the program on an infected computer system), using accidentally infected Public Domain software or using a disk in an accidentally infected system at a user group or at a friend's.

2) When you turn your computer off and on (for about 10 seconds, just to be sure), it is IMPOSSIBLE that a virus is left in your computer. Some people said that a virus nested itself in a computer's ROM. Well, unless there's a way to make 5 volts convert into 20 volts only by software and unless it's possible to create ultraviolet radiation by a couple of POKEs, this is COM-PLETE NONSENSE! And didn't we learn that ROM meant "Read Only Memory", in which it is impossible to write?! Only on machines that have a piece of RAM memory permanently supplied with juice (e.g. the keyboard processor's RAM of the Amiga 2000 and the Atari MEGA ST), it is theoretically possible to store a virus permanently, although the MEGA ST's keyboard processor only has 128 bytes of usable RAM. Removing and re-inserting the batteries will help (but don't fear: Such a virus does not even exist on the ST).

3) Not one virus on the ST can ignore the write-protect notch. So if you keep your disks writeprotected at all times, it is impossible to let them be infected by any virus! Unfortunately, some of the disks containing your most valuable data (work disks, source disks, games that save hi-scores--all according to Murphy's Laws) are left un-write-protected most of the time, and are thus the most vulnerable ...

4) Some people, trying to sound interesting (like they know it all), have stated that there is but one remedy for an infected disk. Regardless of what it contains (e.g.

a couple of thousand addresses of business associates or maybe all your program source material that "only" took you a couple of months to program), you would just have to destroy it (throw it away, burn it, whatever). Of course, this is complete nonsense. Using a so-called "Virus Killer" (a program that can recognize and destroy viruses), it is possible to restore infected disks without harming any of the other data present on it. This might by THE solution for programmers that are on the edge of the roof of a high office building in their residential community right now; especially after they found out that copying all files to another disk might also infect the target media.

5) Formatting a disk does not always help, either. Apart from the fact that all data is unrecoverably lost when this is done, it is also a fact that some viruses adapt the "disk format" routine to their own use: The disk is not only properly formatted, but also neatly supplied with a fresh copy of the virus... Here, the only solution is, again, the "Virus Killer".

What can be done against viruses? In the first place, you should try to keep your disks write-protected as much as possible. This reduces the problem a lot, but unfortunately it still leave Murphy's Laws active: The virus always strikes there where it finds a non-write protected disk (containing your most valuable or important data). So that's why some people have written the "Virus Killers" which were already hinted at earlier. There are about half a dozen of these virus killers, which all have their specific disadvantages. The first ones, written by Frank Lemmen from Holland, could only discover and annihilate the first virus. Others could only recognize "executable bootsectors" (which in only a couple

percent of all cases actually indicated an actual virus). But now there's a virus killer that can destroy ALL known ST viruses---including the notorious link-virus that cannot be repaired by ANY of the other virus killer programs.

The virus killer that is referred to here is the "Virus Destruction Utility" version 3.0, designed and developed in Holland but written in English as to make sure that many people can use it--for the virus problem is international, as you'll understand. This "Virus Destruction Utility" does not merely recognize and destroy all known ST viruses while leaving all other (harmless) data intact, but also recognizes a majority of other programs that use the bootsector so that these are not accidentally accused of being a virus and destroyed (examples of these packages being Firebird's "Return to Genesis" and Microdeal's "ST Soccer", to name two current releases). When such a program's bootsector already happens to have been destroyed by another virus killer (or perhaps one of the viruses itself, while multiplying itself to this sector), the "Virus Destruction Utility" also knows how to repair many of these. Immunizing one's disks is also possible, so that no boot-sector viruses are written on them anymore without you even having to bother about keeping them write-protected (though this is often not possible by programs that actually use the boot-sector). The latter two options can save you a lot of trouble. And money, too.

[Ed: Karsmaker is the Editor of ST News in Helmond, Holland. His article was first reprinted in the June 1988 Miami Valley Atari Computer Enthusiasts' newsletter. This is again a reprint of a major portion of it.]

'88 Summer CES What a difference a year can make *Kirk Osterman*

So you thought video games were a thing of the past. Or maybe you thought the 'new' Atari was more interested in high-tech personal computers and laser printers than frivolous games. Well, guess again.

It was only a year ago, twelve short months ago mind you, that Atari had a two-story display at the '87 CES where it show-cased everything from ST's to XE's, from PC clones to the XEP80 and SX212 modem. Oh yeah ... they also showed the XE Game System. It was kind of out of the way because it was on the second level of the display and due to safety precautions only a few people at a time were allowed up to see them.

Well this year it was time for the video games to steal center stage. In fact there were no 130 XE's shown and only a couple 1040's huddled in a corner connected to some MIDI equipment. That was the extent of it. The rest of the Atari display was devoted to 2600's, 7800's and of course the XE Game System not to mention the nearly 45 new game titles Atari will be releasing for these machines. Among these new titles from Atari are Gato, a submarine simulator; Into the Eagle's Nest, a World War II adventure; and Necromancer an action/arcade game, all for the XE Game System. For the 7800 Pro System some old favorites like Ballblazer will become available.

Before you cry foul that Atari has abandoned us loval computer owners, remember that the CES is a CONSUMER show. This show is designed for the K-Mart's and Toy-R-Us's of the world. With the resurgence in the video game market it only makes sense that Atari, the creator of this market, would highlight these products. In fact, mass-merchandisers like Sears, Montgomery Ward and ACE Hardware have recently decided to carry Atari video games. So, maybe we should leave the computers to be shown at COMDEX (COMputer Dealer Exposition) where they belong.

But wait a second, don't get me wrong. Just because Atari wasn't showing its computers, that

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. ...

doesn't mean there weren't any at the show. Actually it wasn't too difficult to find one. For example, Jet from Sublogic was being shown on the ST and it looks like it will be a real hit! The detail of this game, or maybe I should call it a simulation, was really nice. In fact, if you were to eject from your plane, you can watch yourself parachute to the ground. Also being shown were three new titles for the ST from Mindscape. These include Indiana Jones, an arcade clone, and Roadrunner, a cartoonlike game where you play the roadrunner with Willie Coyote chasing you. One interesting note is that at least with the game, Willie catches the roadrunner once in a while! And finally, the winner of the "Best Name for a New Software Product" award: Captain Blood. This is a graphic adventure set in outer-space which uses

fractal geometry to generate the landscapes of the 35,000 planets in the game which you can explore.

Other soon to be released titles for the ST include Platoon from Data East which claims that it will allow you to "experience the full impact of the film as you lead your platoon into the jungles, villages, bunkers, foxholes, and underground tunnels of war-torn Asia."

Yet another movie to become a game title is Star Wars from Broderbund. This game is based on the coin-op version, but unfortunately was not being actually demonstrated on the ST at the show. Apparently since this title was originally a European import, some differences in the ST ROMs prevent it from working properly here in the US. You can expect this to be ironed out by some time in August.

Two other graphic adventures shown include Warlock from Three-Sixty software, and Heroes of the Lance from SSI.

If you haven't noticed, every thing mentioned about this CES was game related. This wasn't intentional, it was simply what was being shown this year. You can't blame Atari for making such an effort since Nintendo beat Atari by a margin of better than twoto-one in video game sales last year. It's interesting to note that Atari's goal is to double sales of its video games in the up-coming year with what it calls a media blitz which goes so far as to have "Testimonials" from leading software companies endorsing the XEGS. Let's just hope that Atari will put an equal effort into its computer support and advertising as it does for its video games.



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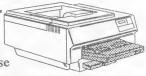
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CURRENT NOTES

ATARI IN LONDON

Atari England display an abundance of expensive new game software, with a much healthier complection than Atari U.S.

By Milt Creighton

This is actually the third time I've done an article on the state of Atari's fortunes in the United Kingdom. It's been interesting to see how things have evolved over the years there. The first article I wrote in the spring of 1986 suggested Atari was doing better in the US than in the UK. There wasn't much European software; most of what was displayed on the shelves came from the US. In addition, prices were much higher there for everything even though there did seem to be a lot of excitement among those who had bought the machine...

Leaner in '87?

Then last year the reviews were somewhat mixed. Some of the smaller shops seemed to have dropped the ST, but the larger stores were selling ST computers as fast as they could get them. There was a bit more European software and some of it was first rate. It was still expensive though.

This year the changes weren't so dramatic. The market has continued to evolve, of course, but the differences seem to be subtle, changes of mood and texture. Walking along Tottenham Court Road, the electronics district in London, computers were more visible in the storefront windows than ever before. Atari was not the most prominent brand on display;

that was reserved for the British Amstrad, a company who now makes IBM-compatible desktop and laptop clones.

I also saw a couple of Computerland-type business computer stores with the usual complement of IBM and clones. IBM PS2 models were even prominently displayed in the windows of one of the major electronic/camera store chains. Commodore was present and the Amiga too, but the Amiga was not very visible compared to the C64 and the C128. And Atari, oh ves. Atari was there. Many of the smaller shops have 1040ST computers in their windows again, though I have to say the physical appearance of the display items leaves a lot to be desired. Several of them had their older ST software on clearance sale too, but it didn't appear that they were closing out their ST sales.

Atari Magazines

Checking the newsstands I found that Atari computers were even better represented than last year. There were no fewer than four glossy-cover Atari magazines, two of them devoted exclusively to the ST, and I heard there were others that had been sold out.

That number of magazines might be hard to understand unless you know the British. They are a nation of readers. I don't know of any other city in the world that can support so many different newspapers. A normal newsstand will have

up to a dozen different London morning papers and four or five evening newspapers later in the afternoon. Everyone reads on the buses and subways, so I suppose it's not so surprising that they can support four Atari magazines.

Many New Titles

Leafing through the articles I was struck by two things: the upbeat mood of the writers and the number of program titles I hadn't heard of before. The enthusiasm was evident in what I read. There is excitement over Atari's future and all kinds of rumors about the new gadgets Atari is rumored to be developing. A lot of the talk is centered around a new TOS-compatible laptop with a backlit, supertwist LCD screen said to exist at least in prototype. It is the kind of talk that used to be prevalent here in the US just last year.

As for the software, most of it was games, and arcade games at that, but there were dozens reviewed, advertised, and generally talked about in the magazines that were new to me. Many of these programs have been around in Europe for months or even a year and have not made their way across the Atlantic. For example, there was a review of the French game called Captain Blood that looked spectacular, and others such as Eye, Football Manager (a soccer game), Championship Water-skiing, Space Ace, Tetris, Bad Cat, OutRun, Crash Garrett,

Enduro Racer, a game construction kit called *Starlight:* The Games *Creator*, both a *Scruples* and a *Scrabble* game, and lots of others.

There were productivity programs, too. The Silica Shop catalog (perhaps the largest Atari dealer who has a chain of stores and does a land-office mail order business as well) lists 12 desktop publishing programs or upgrades. Some of them such as Signum II, Home Publisher, and Calamus Professional are not even available in the US, even in their earlier versions. There were 13 word processors listed, several I hadn't heard of such as Express and Protext. But upon investigation, I found nothing to compare with WordPerfect, WordWriter ST, Microsoft Write, or WordUp.

Double the U.S. Price

As I've already said, one of the things that struck me the first time I was in a UK software store was the price of the goods offered for sale. In a word -- expensive. If a piece of software costs \$30 in the US, it generally costs an equivalent number of pounds in the UK. With the exchange rate being what it is at present, that means you'll pay almost twice as much for the same product in the UK.

Some of the larger stores are offering summer incentives to boost computer sales at a time when the product is hard to come by in the US. While dealers here are going begging there appears to be no shortage of any kind in the UK or in Europe in general. One of the store managers told me he had no trouble at all getting Megas and could fill an order for almost any number of machines. I tried to keep from grinding my teeth as he explained all this, because I knew that trying to find a Mega for sale in the US was like going on a grail quest. (It had taken me well over a month to find an ST4 just before

leaving on this trip).

The summer sales incentives are perhaps the biggest at Silica Shop. The current offering bundles a 520ST-FM with a built-in double-sided drive and about \$800 worth of software for \$775. Now that doesn't include a monitor which you have to buy separately. The monochrome monitor add-on costs an additional \$195 and the Atari RGB color monitor will set you back nearly \$800. You add it up and see if it's a good deal.

>the bundle includes software that costs \$800 with a double-sided drive.. built in, and all for \$775.....

The software package includes 16 arcade games, one military flight simulator game, one strategy game, one "role–playing" adven– ture game, and three sports games. Get the picture? Where's the data base, the spreadsheet, and the word processor? Well, you do get a "Starter Kit" from Silica Shop that includes *NEOchrome* and *1ST Word* and some public domain programs, but if you want to do anything serious with the machine you'll have to buy software.

There are some products advertised in the UK you can't get here, items from third-party developers mostly. For one, there is a cartridge expander from Robtek for about \$100 that allows up to four cartridges to be plugged into the ST simultaneously. The information doesn't say whether more than one cartridge can be used at a time, but I suspect it's nothing more than four cartridge slots and a fourposition, multi-contact switch. Somebody will put one out here for \$50-60. Also, K-MAX is offering a 7.5 MIPS, RISC parallel processor (an add-on transputer) for about \$1500. There isn't any software, of

course, so it's being offered as a development system. Somehow, I wasn't even tempted.

The larger Atari stores had a LOT of software compared to earlier years. I noticed that some of the better packages,e.g. Timeworks *Desktop Publisher, Word UP* and *Fontz!* from Neocept had near simultaneous releases in the Europe and the UK. The Timeworks program I can understand because it was developed by GST Software, the British Company that did 1*ST Word.* Neocept is harder to explain, but I think it is due to the vigor of the Atari market in the UK versus the U.S.

Never Seen in the US

Somewhat more ominous is the possibility that some US companies are marketing their products in the UK and Europe, but not bothering to release at all in the US. There is a company called US Gold which markets games in the UK, some of them purporting to be US products which have never seen the light of day here. Some of the titles I am pretty certain are Japanese, like OutRun from Sega (the 1987 arcade game of the year in Europe), but it bore the US Gold sticker. I think it's a subterfuge and the games are actually microcomputer translations of games that are or were hits in US arcade parlors. I suspect that they are mostly Japanese. Still, OutRun is quite well done. I don't know what to think about it not being marketed here.

One other interesting quirk I encountered concerns bit-copiers. In three years of prowling through UK Atari software shelves I had not encountered a single bit-copier. ProCopy was not to be found on the shelves and no one had heard of any of the others popular in the US. So when I read in one of the magazines that Evesham Micros had released a new disk backup program called Dissector, I decided to investigate. Not one of the London stores carried it and most didn't even want to talk about it. In fact, the way they acted you'd have thought I was trying to buy some sort of contraband.

Finally, I was able to get one store clerk to talk about it. It seems that the backup programs, while not being illegal in themselves, cannot be used for any legal purpose in the UK. In the US it is permitted to make copies of copyrighted software which you purchase legally, provided those copies are solely for your own use. In the UK, even that is illegal. And stores who sell bit-copiers in the UK can be sued if their customers use them for illegal purposes! Bitcopiers are contraband there.

So then, Atari is doing well in the UK. In fact, there is some reason to believe it's doing better there than here. Dealers have no problem getting merchandise to sell and, perhaps more importantly, Atari ST computers do not seem to have settled into a specific market niche the way they have in the US. Atari cuts right across the broad spectrum of use in the UK, well behind Amstrad in popularity but apparently not as far behind IBM and Apple as here. Atari also seems to have contained the market penetration by the Amiga, something they haven't managed to do in the US market.

You have to be glad that Atari is doing well in the UK and Europe. It is strong evidence the ST still has momentum, but it's also somewhat disheartening not to see the same sort of enthusiasm here that is so evident there. I guess it's good that Atari managed to contain Commodore in the UK, but I have the feeling they did it with resources taken from the US market and that's causing some of the US dealers to go under. At the moment, it's pretty clear who is receiving most-favored nation status from Atari--and it's not us. Earlier I spoke of the feeling that the UK market hadn't changed in any essential way, that the changes were more a matter of mood and texture. I think that's probably not really accurate; the changes in the UK market are the evolutionary kind you would expect in a healthy situation. The changes in mood and texture I felt are probably my perceptions colored by the situation here. They haven't changed so much in a year and neither have we, but the mood has. The trend there is up.

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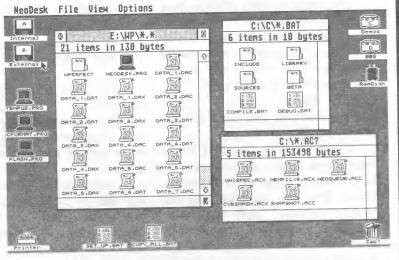
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CN SPECIAL

The Dark Side of the BBS World

Part 1

This stuff is out there--pirate BBS's, credit card info, phone phreak programs, and worse...available on your local BBS.

By David Small (C) 1988

The Problem

There are thousands of BBS (Bulletin Board Systems) running throughout the country. A BBS is generally a small computer system, let's say an ST, generally with a hard disk, hooked up to a modem.

Other users with modems can call the BBS up; the modem autoanswers the phone, and their two computers can talk.

The two primary things that happen on a BBS are:

1) Discussions. There's usually a "rumour" section, with latest news, and so forth. Sometimes there's sub-discussion areas concerning specific topics -- "C", GEM, Assembler and so forth are pretty popular.

2) File Transfer. The BBS has a library area which users can download files from, or upload files to. These files are supposed to be "public domain" stuff--programs and data files which the authors have said can be freely given away. A good example would be hints for Dungeon Master, or many of the public domain disk formatting programs/desk accessories available.

Again, if you DON'T have a modem, you are missing an entire world out there -- files and information available for the price of a call.

Long distance call? Not necessarily; there are usually BBS's in your local area. Also, there's a long-distance service, called PC-Pursuit, which lets you call longdistance BBS's for extremely low rates; it's intended for use by BBS'ers.

There are also nationwide networks that resemble huge BBS's. The Atari sections on Compuserve and GEnie are good examples. There are thousands of files there to download, people whose job it is just to maintain the libraries (called Sysops), big discussion areas, and more.

As with any tool, though, BBS's can be misused. Enter the pirate.

Pirate BBS's

There are really several forms of piracy.

The first is when you buy a disk at a store, let's say, a game, run a copy of it off, and give that copy to a friend.

This goes on all the time. There are lots of programs available for both the 8-bit and ST Atari machines that make this copying easy; the people who sell these programs have made a lot of money. (The people whose programs are being copied have generally gone broke, but that's another story).

And it's not the worst form of piracy. Sure, it's illegal, but it isn't the worst problem.

The next form is where you take the files from the disk you bought, and upload them to a local BBS. Then *anyone can download* the files, and thus the program, in one phone call.

When someone posts a copyrighted program on a BBS, that BBS becomes a "Pirate BBS".

Suddenly, instead of one copy of a file being handed to a friend, there are literally hundreds of copies being downloaded. Some of those copies then make their way to other BBS's, are downloaded more, and so forth; the process resembles an atomic explosion's chain reaction. This is the worst form of piracy, because of the extent of damage done to the software publisher. It isn't one copy, one potential sale lost; it is *thousands*.

There are thousands of pirate BBS's in the United States.

There is also an extreme amount of "connectivity" between these BBS's. The same clique of people call between them; when they find a new file on one, they promptly upload it to another. These pirates are calling long distance, usually. Often, it takes no longer than *one day* for a pirated piece of software to make its way across the US.

There is also getting to be more exchange of software between pirates in Europe and the United States. It isn't uncommon at all to find foreign pirated software on US Pirate BBS's.

"Cracked" software

Software developers usually aren't unaware of this problem. So they "copy protect" their programs; copy protection usually means the program checks that it's running from an original disk before it will operate properly. (The original disk has some sort of unduplicatable mark on it).

If the files from this disk were uploaded to a BBS, they wouldn't do the downloader any good; the software wouldn't operate.

Or, perhaps, they change the disk so it no longer even has easily-uploadable "files".

So, a pirate goes into the program, and defuses the copy protection, usually in assembly language. The program is now referred to as "cracked". Then, the program can be uploaded to BBS's.

The "cracker" generally takes some pride in being able to figure out the copy protection, and puts his "handle", or moniker, on the program, so that other pirates know who did it. It's Andy Warhols' "15 minutes of fame" in action. These "handles" are just like the old CB radio handles—"Dr. Death", "Captain Wizard", "Dr. Typo." Of course, no pirate with sense puts his real name on the cracked version of the program.

There is an entire social structure in pirate BBS's, of pirates that know one another by their pirate moniker, but not by their real names, and that exchange software.

Let me take you on a BRIEF tour (I have edited out the irrelevant stuff, since column space in this magazine is limited) of ONE pirate BBS out of thousands.

It's called COASTLINE. It is a very common form of pirate BBS; on one level, it functions as a regular, legitimate BBS, with messages of interest to ST users, and public domain downloads. But

when you get on good terms with the operator, they "raise your access level" or "open access doors," which lets you into the pirate section.

(Recent Note: COASTLINE has been closed down. The operator turned out to be a young teenager, who is now facing a huge federal lawsuit for copyright violation. While many pirate BBS operators feel free to rationalize their actions, and some say there are no laws covering pirated software, there really are; and since COASTLINE was available interstate, that makes it a federal, or FBI, matter. This young man's parents claim they had no idea what their kid was doing with his computer and modem all those hours, and I feel that's probably correct. Nevertheless, the youth may end up with a criminal record, his parents with a massive liability, all because of his pirate activities.)

Table 1 lists the programs available for download from COASTLINE last time I checked. (Again, this has been edited for space considerations).

Anyone who's been to an ST store recently is going to recognize many of the names of these programs.

This is thousands of dollars of copyrighted software; you are also looking at a young man's probable criminal record. It's real, as is the lawsuit against him. His equipment's already been confiscated.

Uploads/Downloads

Pirate boards usually have an upload/download policy. If you upload ONE program, you can

Table 1. Download Files on COASTLINE BBS.

Name		My description
ARAKIS .ARC	345668	Araki's Biology Tutor –– from Atari
MARBLE .ARC	291072	Marble Madness – Electronic Arts
BRBARIAN.ARC	240922	Barbarian – Palace Software
EAGLES .ARC	233530	Into the Eagle's Nest
CRACKED .ARC	185868	Crack'd from Atari
SIDEWALK.ARC	181376	Sidewalk British text adventure game
GALAXIAN.ARC	168704	Galaxian classic Atari game
INDJONES.ARC	144384	Indiana Jones
HADESNEB.ARC	134144	Hades Nebula
CHOPPERX.ARC	101794	Chopper X from Paradox
LABELIT .ARC	79872	Label Master Elite from MiGraph
SENTRY .ARC	70554	Sentry from Firebird
EASEL1 .ARC	54272	Easel ST (replaces desktop w/ picture)
CROWNDOC.ARC		Documentation, Defender of the Crown
GALLERYX.ARC	18057	X rated picture gallery
PROPLUS .ARC	17281	Pro-Copy ST
TERRPOD1.ARC	207990	TerrorPods
DEFENDCR.ARC	585344	Defender of the Crown
TESTDRIV.ARC	412672	Test Drive from Accolade
ARKANOID.ARC	106497	Arkanoids
GFACOMP .ARC	347136	GFA Basic Compiler from Michtron
F15EAGLE.ARC	132143	F-15 Eagle
FONTS .ARC	196312	Fontz
TEMPUS .ARC	47662	Tempus text editor
NEWSSTN .ARC	81920	News Stand
HARDBECK.ARC	56663	Beckemeyer's Hard Disk Utilities
INLNK17 .ARC	140288	Interlink 1.7
PRCPY150.PRG	20096	ProCopy 1.5

download THREE programs. This forces you to upload new programs if you want to keep downloading stuff. This also encourages new piracy, since the Sysops reject uploads that they already have --that aren't new.

Pirate software done this way is known as "Warez"; the mis-spelling is intentional. Similarly, information on phone phreaking (we'll get there in a moment) is called "philes".

What Am I Doing On These Boards?

You're probably asking yourself, what is Dave Small doing on these boards anyway? Well .. the Magic Sac, which I made, often appears on these boards in pirated form. I've seen at least ten different pirated versions of the Magic Sac, three from Germany, two from England, and one from France (complete with foreign language OS!). I try to keep track of when the latest version of Magic Sac has been "cracked", because then it's time to release a new version.

Side note: At last I've written something good enough to steal. My mentor, Wayne Smith, says that's the ultimate judge of whether what you write is any good. It sort of takes the sting out of being pirated, and the memory of all the work the Magic Sac was.

I've infiltrated a number of boards, under several different names, just to keep track. I have no doubt I've seen only the tip of the iceberg; there are thousands of pirate boards out there. (If it makes you feel any better, the number of IBM pirate boards is awesome; one I know of has a list of download– able software fifteen pages long, single spaced).

However, after I started looking around, it occurred to me that this might make a good article. Hence, the article you're reading is going to follow along a kind of journey I took through BBS systems, reading and learning, and watching trends. There are things out there I can't believe I'm seeing.

Piracy, as you'll see, is just the beginning.

The Effect on You

These pirate boards have helped destroy ST software availa– bility. This isn't a matter of giving one copy to a friend. This is a matter of destroying *thousands* of potential sales. That's enough to kill a product, and a company.

The only reason Data Pacific stayed in business after the pirates cracked the Magic Sac was because of constant new releases. No one cared about a pirated version of Magic Sac 2.0 when 3.0 came out, and so forth. Version 5.9 was recently cracked; it's time for 6.0.

Another example: Word Perfect nearly got out of the ST market when *WordPerfect ST* appeared on pirate boards; it was a very close call. Ron Luks of Compuserve organized an online conference with Word Perfect to help encourage them to stay; this turned out to be crucial. Otherwise, you wouldn't have *WordPerfect* to use today.

What's sad is these BBS's are usually run by teenage kids, who have little real world experience, and don't know the damage they're doing. Some have misty notions that software houses are making millions of dollars. "So what harm?", they say.

The truth is, ST software manufacture is such a dicey business, and generates such low profits, that many companies won't get into the ST market. Three friends of mine who were into the ST went bankrupt, and have paid a high personal price for their machine loyalty. That's the reason you can't buy as many programs for the ST as you can for the IBM or the Mac--the companies can't make any money at all. Remember, they have to pay some programmer (typically, at \$40K/year) to write that program; if they can't even make back their salary and expenses, they won't write the program.

There are other rationalizations the BBS operators use.

The BBS operator might have ideas that there is so much piracy, he'll never be caught.

Ask the COASTLINE operator. If convicted on felony charges, he won't ever be allowed to vote; it'll affect his insurance policies, his possible employment, for the rest of his life.

The situation is quite similar to what a teenager can do with his life with a car or with drugs; things that grey the hair of many a parent's head. Pirate BBS's are the teenaged drinker-drivers, or drug users, of the computer world.

If you are the parent of a computer user, you should be keeping an eye out for this. I don't mean lock up the modem when you're not there; just keep an eye out. If you see your kid get involved with the pirate boards, have a talk with him about what can happen. If a lot of games suddenly appear on your ST that you know haven't been bought, it's one warning sign.

Remember that the phone company keeps records of all long distance calls made, and it's an easy matter to trace WHO uploaded a given file, since the pirate BBS's keep date/time stamps.

Since piracy often involves a lot of long distance calls, pirates have become experts on making these calls for free.

In Part 2, we'll take a look at the theft of MCI or AT&T calling card numbers, credit card theft, and some of the even darker aspects of the BBS world.

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DEUS EX MACHINA

Most of you know how well the Atari eight-bit computer handles letters and short articles. Novels are no different.

By Patrick H. Adkins

In something approaching a literal sense, my Atari 800XL computer system was a gift from the gods.

My interest in personal computers began in the late 1970s, when the earliest models were starting to make a stir and I first realized that a sort of super typewriter was in the offing. I've been writing since the age of ten--fiction, mostly--and much of that time I've entertained the ambition of eventually becoming a professional writer. Early reports of what we now refer to as "word processing" left me intrigued and envious of those whose prosperity already allowed them to possess such a wondrous device, which lay far beyond the meager means of a not-quitestarving would-be artist. Until my fictional endeavours produced something a lot more substantial than an occasional encouraging note from an editor, I certainly could not justify such an extravagant purchase. So I reluctantly classified home computers as an unaffordable luxury and pushed them out of my mind.

It wasn't until much more recently, when I discovered that this technology had actually become much more affordable, that I really started paying attention. An article by science fiction writer Algis Budrys in *Science Fiction Review* first pointed this out to me. In his article, Budrys related in detail his experiences with word processing, and ended by describing the system he had settled on. As I recall, it was a 48K Atari with Atariwriter. My

interest was piqued; when I found myself walking past a display of computers in our local K-mart, I took the trouble to carefully examine the machines. I tapped away at the keyboards, studied the screens, and tried (unsuccessfully) various combinations of keys to see what the machines would do (nothing much). I left with the impression that the Atari wasn't bad. The keyboard, while not quite what I was accustomed to, was quite acceptable--certainly better than the rather "clunky" Commodore.

Now I was starting to daydream in earnest about owning such a wondrous device. I searched out the Consumer Reports article Budrys had mentioned, and was still further impressed. The magazine rated the Atari as its best buy in home computers for word processing. Its primary advantage was that it produced a very clear display on a standard television set; a monitor was not necessary. I began to realize that for well under a thousand dollars I could have a word processing system very nearly as good as what other people were paying five thousand or more to acquire.

But my basic problem remained. I had a long novel still making the rounds. Every time it was rejected, I packaged it back up and sent it out again. I had recently bowed to the advice of knowledgeable friends and begun including a cover letter pointing out that the 600-page manuscript could be published as two separate books with only a little revision. If I couldn't find a publisher for the book I had already written, I certainly had no justification for investing what was still a considerable sum of money in word processing equipment--to write still other books I wouldn't be able to get published. So I did the next best thing and started buying occasional computer magazines, particularly *Analog Computing* and *Antic*.

Then it happened. I received a letter from the editor at the Berkley Publishing Group asking if I would divide the manuscript as I had suggested and resubmit the first half of the story as a complete book in itself. I jumped at the opportunity, made the necessary changes to provide an ending for the first volume, and sent the manuscript off. Berkley bought Lord of the Crooked Paths--a fantasy adventure set in the Age of the Titans, the elder gods of Greek mythology--and suddenly, with my advance against royalties and the possibility of selling more fiction, I could reasonably justify the equipment I had been coveting.

So you see, my 800XL was indeed a gift from the gods. Without them, I'd still be typing on my old Smith Corona.

Adkins' Law of Reliable Inexpensive Electronics goes something like this: If a piece of sophisticated electronic equipment (like a digital watch, for instance) is cheap, the manufacturer had to save money somewhere. Usually that somewhere is in quality control. If you want a cheap but reliable digitial watch, you have to be prepared to bring it back to the place of purchase and exchange it as many times as necessary until you get one that works. If it functions properly for the first three weeks, the chances are it'll continue to work fine for the indefinite future. To save money, you have to be prepared to supply your own quality control.

CURRENT NOTES

For this reason I bought my 800XL and 1050 disk drive at my local K-mart, sale priced at \$89.95 and 129.95 respectively. I was prepared to pack up the keyboard and carry it back to the store as many times as necessary. As it turned out, I was needlessly cautious. One thing Atari does, is make reliable products. I'm superstitious enough to knock on wood as I type this, but I've not had any problems at all with the hardware.

The purchase was carefully planned out. Because the wheels of the publishing industry grind very slowly indeed, I knew that I would not need a printer for at least a few months. I let that wait. But I had already selected and ordered my word processing package by mail order--The Writer's Tool (an excellent program which, unfortunately, has not been updated to keep it abreast of its competitors) at about \$32.00. This brought my total investment to a niggardly (and highly satisfying) \$260 or so. For the display I used an old 13-inch blackand-white television set with broken sound that I had picked up at a garage sale for five dollars. (That set served me long and well, and has only recently been replaced by a monochrome monitor.)

One of my early projects was the revision of the opening pages of what was to become my second book (the second half of that original 600-page manuscript). I had originally thought this revision would be less troublesome than the work I'd already done on the first half of the story, where I'd had to introduce a new plot line that could be resolved at the end of the volume. I quickly discovered that all the characters and background I had so carefully introduced in the first book would have to be reintroduced here. I hate books that take the easy way and hit the reader with a solid block of "What Has Gone Before." Instead I wanted to sneak in the bits and pieces of information gradually, along the way, as they were needed in the story. I soon found that it was easier to just retype the opening seven or eight chapters. In a way it was fun, too,

since it gave me an opportunity to get acquainted with my computer and word processing program while working with familiar material.

When that was finished, I followed it with a "proposal" for a science fiction novel--the opening three chapters and a long outline. There have also been numerous letters and short articles composed on my equipment.

A printer was added in due time, to print out this various copy. It's a daisy wheel (preferable for this sort of work), and quite slow at 12 characters per second (about 120 words a minute and thus well above my own quite fast 90wpm typing speed--how jaded we soon become!)

Most of you know how well the Atari eight-bit computer handles letters and short articles. Novels are no different. Usually a full chapter will fit comfortably in a word processor file, and on those rare occasions when it doesn't, it's easy enough to divide the chapter into two files. Editing long files of this sort requires use of the typeover mode and commands that insert blocks of blank space, but this isn't a hardship. Usually, when everything seems to be done, I print out the final copy a chapter at a time. My wife and I proof the pages to catch the handful of inevitable mistakes: then I correct and reprint only those pages. Perhaps the best way to phrase my reaction to working with this equipment is to say what many other others have already said: I don't ever want to go back to composing on a typewriter.

I bought my Atari system as a five-year investment, but I've fallen in love with the equipment. It's been a gradually developing relationship. At first I thought of the system merely as a super typewriter, but I've since learned to use other programs--data managers, address lists, and such--and even tried my hand a bit at modifying BASIC programs. Probably I'll never write a complete program myself; I find that prospect quite intimidating, and my mind doesn't really work in that sort of strictly logical fashion. But I do enjoy tinkering.

I love the machine for a number of reasons. Its low cost is certainly high on the list; each component can be replaced more cheaply than a comparable IBM or Apple component can be fixed. If the drive breaks down, the computer doesn't have to go to the shop with it. Because the power supply is outside the keyboard console, there's no annoying fan to listen to; and the power supply, as least to some degree, works to insulate the computer from voltage spikes. The smaller keyboard--without a number pad--makes it take up less room on my desk; if I should decide I really want a keypad, I can always buy one and plug it in when needed. The computer is rugged and reliable, nearly foolproof. I've heard others complain of system crashes while they were writing, but have never experienced this problem myself. All I have to fear is a power outage. (Knock on wood again!)

It would be nice to have an extensive spelling checker and thesaurus option similar to those available with Word Perfect (and I'm not convinced it isn't possible on an eight-bit if full use were made of RAMdisks and hard disks), but those are really the only improvements that might tempt me away from my 800XL in the future.

As I mentioned before, the publishing industry moves with great leisure. I'm still waiting to hear on that science fiction "proposal." In the meantime, I'm beginning work on what will be the third in an ongoing series of books about the ancient gods (possibly giving new meaning to the phrase deus ex machina), and looking forward to completing my first novel written entirely on my Atari.

* * * * * * * *

Patrick H. Adkins' Lord of the Crooked Paths, a \$2.95 paperback from Ace Books, is available at most bookstores. His second novel, Master of the Fearful Depths, will be published in July, 1989.

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CN SPECIAL

DESKTOP PUBLISHER

Despite some shortcomings, Timeworks Desktop Publisher currently holds the premier spot for ST-based publishing applications ... A professional product well worth its modest price.

By Wm. Price

The ST, once criticized for lack of software, is now beginning to see an abundance of programs in several areas. The most obvious example is word processing where there are now well over a dozen titles available. Coming up fast, however, are desktop publishing applications. First out was Publishing Partner which was followed by Fleet Street Publisher from England. Next, the MagicSac made available to ST users PageMaker and Ready, Set, Go! pc ditto offered the ability to use Ventura Publisher and the IBM version of PageMaker. Advertisements are now beginning to appear for Calamus, a "high powered" and high priced ST publishing system developed in Germany.

While reviewers are still waiting for the veil to be lifted from G.O. Graphics DeskSet for the ST, Her Majesty has again graced the colonists with a GEM-based system from England-- Timeworks Desktop Publisher. Timeworks develops and markets software for the IBM PC, Commodore, and recently for the ST. Their Word Writer, Data Manager, and Swift Calc, although not sophisticated in supporting more complex requirements, have performed admirably for most home applications, and are extremely easy to use.

Word Writer was developed by GST Software of England. With skilled resources that also developed both C and Assembly Language compilers for the ST, GST drew upon professionals experienced in the publishing in-

dustry to develop *Desktop Publisher*. Timeworks provides marketing and responsive user support.

Publisher, which closely parallels Ventura Publisher in capabilities, is very powerful and beats the socks off ST competition. Of course, all desktop publishing systems have a few irritations--some necessary and some thoughtless. For power, Timeworks Desktop Publisher rates 9.0 smiling faces. What's missing is not fatal to results, but rather a lack of features that would make it superior. For comparative ease of use, it rates a 7.5. and this takes into consideration the fact that any desktop publishing is complex. It's not the same as using ST Doodle, and Publisher's results are superior by leaps and bounds. However, for speed Publisher rates a 4.0--a frowning face. Screen refreshes are s-l-o-w. But the effort put into Publisher is worth the results--the beauty of the rose survives the thorns. To that end, this article assesses Publisher strengths and shortcomings. And, to assist you in getting the most from Publisher's superb style sheet capabilities, there is a guided tour to using these features so that the capabilities can be fully exploited.

Printing Capabilities

Up front, the major concern is quality of output--the results. *Desktop Publisher* is of a different mold from other Timeworks software. It tackles the more complex functions of typography and page layout to support full featured and quality typesetting. *Publisher* is a substantial cut above other systems. It is robust, it works, and it does its job well. Publisher is now used to produce Current Notes. and the Editor/Publisher has become a razzle-dazzle expert and power user. Typeset quality from the Atari laser printer is very good while that produced on dot matrix printers surpasses Fleet Street Publisher and competes with the early version of Publishing Partner. GDOS bit mapped fonts are supported for both laser and dot matrix printers. Copy produced on the new HP Desk Jet--a 48 pin (nozzle) ink jet printer--is commendable.

GDOS fonts include Swiss (Helvetica), [this article is printed using Swiss 10 point], Dutch (Times), IDIRIURY ILANIE--a 1930's Broadway all caps display type, Rockface, Ravinia, and Madison. (As a side note, original font names such as Helvetica, Times Roman, and Century Schoolbook are proprietary and protected. The fonts themselves are not. Hence the cloned styles with different nom de plumes.) Unlike PostScript fonts, where a wide range of sizes can be scaled from a single set of character data, GDOS requires an entire alphabet set for each point size. Bit mapped GDOS font data is both disk and RAM demanding. The range of font sizes is limited.

Timeworks includes drivers for most popular printers such as 9 and 24-pin Epson, NEC, the HP Laser Jet, and the Atari SLM-804. The HP Desk Jet can be driven as either an HP Laser Jet or an Epson FX. If there are any limitations, it's with the GDOS system of fonts and not with *Publisher*. Although I have not yet used *Publisher* with a *Post*- Script printer, a driver and screen fonts are included and *Publisher* should produce high quality copy equal to that of any other desktop publishing system that supports *PostScript*.

A word of caution for those who like to alternate between printers. Alternative printer drivers are not available from within Publisher. Desktop Publisher must be installed to generate a run-time system. During this installation processwhich takes from 15 to 20 minutesa single printer is selected and screen and printer fonts are sized and installed for the designated printer along with its driver. If more than one printer is required, separate installations of the system are required. Since Publisher is not copy protected, a complete set of new disks may be written for a second printer.

Floppy disk installation went smoothly, however I encountered a minor hitch for the hard disk. Somehow the ASSIGN.SYS file got written to the wrong path. If you encounter this problem, simply edit this file with an ASCII processor and define the appropriate path name. For example if *Publisher* is installed on Drive C, the first line of the ASSIGN.SYS file should read

PATH = C:\PUBLISH\GEMSYS.

Copy the modified file to the root directory of the drive partition where *Publisher* is installed. Also insure that GDOS.PRG is the last file copied into the AUTO folder.

RAM Hungary!

Along with bit mapped font demands for capacity, the system itself also demands RAM. Designed to run on a 520ST, the program and its resources are segmented so that they can be paged in or overlayed when called upon. The full system consists of some 378,000 bytes. Fonts, depending on the printer used, can demand another 425,000. Paging can be observed when help files are called, or when other than routine functions are exercised.

The demand for RAM by Timeworks Publisher, and the slight slowdown of operation caused by overlaying, is most pronounced when printing is initiated. GDOS bit mapped fonts for each type family and point size used in the document are paged into RAM to overlay portions of the system that are not required to support printing. When page make-up is resumed, overlayed segments are paged back into RAM from disk. Because of these frequent disk accesses, a hard disk or two floppy drives, although not essential, would certainly improve performance.

Features

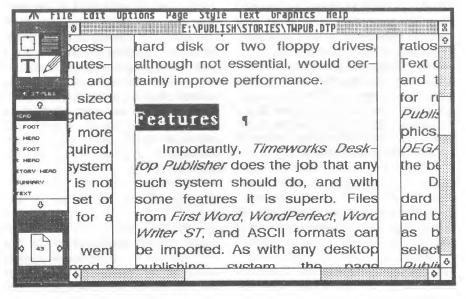
Importantly, Timeworks Desktop Publisher does the job that any such system should do, and with some features it is superb. Files from First Word, WordPerfect, Word Writer ST, and ASCII formats can be imported. As with any desktop publishing the system, page layouts and repeating elements such as running heads and folio or page numbers must first be designed and created. Although Publisher's editing features are adequate, constant remapping and refreshing the screen is slow. It is best to perform text editing with a word processor and import finished text into Publisher.

Editing features include Cut, Copy, and Paste. Additionally, Find and Find and Replace are provided. Automatic hyphenation can be turned on or off. Although the system will not automatically kern letter pairs to adjust improper spacing, manual kerning can be performed.

Frames are drawn to hold either text or graphics, and *NEO*, *IMG*, and *DEGAS* picture files can be imported, cropped, and resized. When resizing, original aspect ratios can be retained or changed. Text can be flowed around objects and the offset or border distance for runaround can be specified. *Publisher* excels in handling graphics, and the printing of color *DEGAS* and *NEO* files is probably the best from any system.

Drawing tools include the standard straight line, circles, ellipses, and boxes. Line thicknesses as well as background fill patterns are selectable from drop-down menus. *Publisher* can also automatically generate frame borders along with a tint or fill pattern.

The page window can be toggled from reduced size, where a Tool Box of four icons and an associated function library are displayed along the left, to full screen size. Scroll bars can be used to reposition text in the page window, and pages can be displayed in full, reduced, or enlarged size to facilitate viewing. *Publisher* can be con-



"Paragraph" mode with largest possible view of text.

sidered full-featured in these res-

However, there are a few limitations. Unlike *Ready, Set, Go!* only one document can be opened at a time. Therefore, segments of text or graphics cannot be transferred from one document and appended to another. Nor can typeset text be exported and converted to a neutral ASCII file. Finally, *Publisher* cannot automatically scroll within the window. This is a severe shortcoming, so more on this later.

The Big Difference

Publisher operates like other desktop publishing systems in highlighting and selecting text, designating fonts, their sizes and styles. But that's where similarities end. *Publisher* is outstanding in its use of style sheets for defining and applying typograpy and layout specifications to elements of text. This feature, and the way it is implemented by Timeworks, provides one of the most powerful tools to be found in publishing systems.

Publisher lets you apply this style sheet capability in two ways. First, text can be highlighted and selected to apply type styles and formats from style sheets. The style is applied by simply clicking on a name in the style Library window or by pressing an assigned function key. Or secondly, style name tags can be imbedded in word processing files. When imported into Publisher, styles and formats will automatically be applied. And if you wish to change the font size, style, or text layout, just revise those specifications in the style sheet and text will automatically be changed to the new specifications.

Page Layouts

Publisher's style sheets are its most powerful feature, but since their uses are not so straight forward, let's briefly explore how to exploit these capabilities. The page size and layout must first be defined. This is one of a few areas where *Publisher* is not so obvious

in its menus. In some cases, options are nested within other options which may seem unrelated. And drop down menus are some-times ambiguous as to the route to follow. In other cases, such as SET TABS, there are preconditions, not readily apparent, that must be met before a menu item can be selected. This is a system that requires reading the manual before it can be fully used. Even once learned, the flow between functions is not as smooth and as clear as it is with *Ready, Set, Go!*

To continue with designing a page size for your document, click on FILE/New. When asked if you want to load an existing style sheet, answer NO. This will cause the PACE FORMAT window to appear and allow you to select from four standard page sizes as well as portrait or landscape perspective. Additionally, left and right master pages with different margins can be selected. Next, you may wish to choose a system of measurement in inches, centimeters, or pica/ points. This is defined with **OPTIONS/Ruler** Spacing. Selecting Show Rulers will display the usual carpenter's square across the top and down the left side of the page window.

This "blank" page must be given a layout using OPTIONS/Set Column Guides. From 1 to 9 columns can be specified along with the gap or gutter size between columns and sizes of the four page margins. Publisher sums the gutters with left and right margins to calculate column widths. The resulting outline marks are simply snap-to guides. They do not produce a usable page that will accept text either from the keyboard or from importing a file. Frames are needed.

Frames

Publisher requires "frames" to house all text and graphics. So the next step is to create these frames using column guides. In the upper left corner of the screen, the Tool Box presents icons for the four modes in which *Publisher* performs

its functions—–FRAME design and repositioning, PARAGRAPH style application and specification, TEXT editing, and GRAPHICS placement and editing. Below the Tool Box is a Library window that displays functions available in each of the four modes. Later these functions will be used with highlighting to apply specifications to text. For now, select the FRAME icon and, with the mouse, draw frames around the column guides. A page layout is now ready to accept text or graphics.

At this point, produce and then save the design as a master page. Using PAGE/Go to page, select Master page. The page reference icon at the lower left will now show MASTER. If different left and right page formats are needed, click on the right arrow to create a second (even numbered) page. Ruled lines at top and bottom of the page can be drawn using the Tool Box GRA-PHICS mode. However, unlike Ready, Set, Go! and Publishing Partner, a frame must be created before lines can be drawn. This extra step is an irritant, and so too are the frame outlines and sizing boxes that obscure the small drawing area. Since Publisher supports frames over frames and frames within frames, this can be handled in several ways. One is to draw a super frame around the entire page image area. Running heads and running footers for the master page can also be specified using TEXT/ Headers and footers. [Another, simpler, way to produce a line on the master page is to use the border option of a frame. There is a frame drawn around the footer below with a top border specified resulting in the desired line at the bottom of the page. - JW]

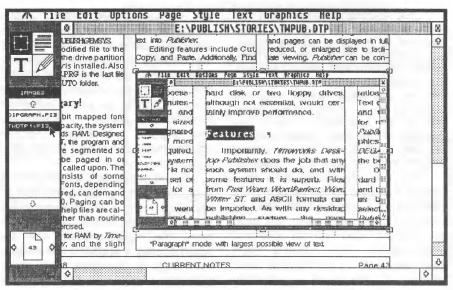
When creating frames and drawing lines, another irritant is encountered. The page window will not automatically scroll as you drag a frame or line to the window's edge. *Publishing Partner* is also afflicted with this shortcoming. However, *Ready, Set, Go!* does provide this essential feature. Contents of the page window are automatically scrolled when the mouse pointer reaches the window border. A framing or drawing function usually spans an entire page. So with Publisher, the viewing area must be set with the PAGE menu as Size to fit. This may appear on the surface to be a satisfactory solution. However, when sized to fit, the ruler scale becomes coarse and fine tuning frame dimensions becomes more difficult. [By double-clicking on a frame, a dialogbox with exact dimensions for x,y position, width and height of the frame pops up. Use this to set exact frame placement. -JWJ Perhaps automatic scrolling is a problem with the way screen refreshing is implemented. In this respect, Ready, Set, Go! has all the competition beat, and its screen refreshing and automatic scrolling are fast!

After master pages have been designed, it is a good practice to save them immediately with a name for the layout. This is accomplished with FILE/Save style sheet. The page layout with all of its associated paragraph or element styles is saved. Subsequently, when this master layout is used, working copies of the page design can be produced by clicking on the right arrow of the page reference icon or by selecting PACE/Add page.

This introduces another minor irritant. Only one page can be added at a time. If 10 more pages are needed, it takes 10 clicks on the right arrow and 10 more clicks to answer YES on the pop-up window menu. The PAGE/Add page feature will not operate in any mode other than FRAME. However, clicking on the page reference icon arrow will add pages in any mode. A slight inconsistency. But what *Publisher* really needs is the ability to specify the number of pages to be added in a single operation.

Style Sheets

With the master page layouts created, styles for text to be placed in these frames need definition. Timeworks refers to this as "Paragraph Styles". A more appropriate terminology might be "text element



"Frame" mode, "Actual" view: Placing a graphic in the body of the text.

styles" since it applies to headings, sub headings, and other types of text as well as paragraphs.

These specifications are set by selecting the Tool Box PARAGRAPH mode and using TEXT/Paragraph style. This produces a pop-up window with five separate selections: Justification, Font & Size, Dimensions, Set tabs, and Word Spacing. The title for this window is PARAGRAPH STYLE for (NAME). Importantly, this series of specifications will apply only to the text element named. So at the bottom of the menu, select New style. Another window, captioned PARA-GRAPH STYLE NAME, allows up to 10 characters for the new name as well as designation of a function key to be assigned to the style. Later, during actual use of style sheets, pressing a function key will apply all of the style specifications to a highlighted paragraph.

Names such as Body Text, Chap Hdr, Para Hdr, Sub Hdr, Footnote, etc. can be used to identify elements. Be brief. Since text files can be imported from word processing systems with imbedded style name tags, lengthy titles will add to the keyboarding chore and increase risks of typographic errors.

Style tag names in text are bounded by greater than and less than signs. The name examples shown above would be entered as <Body Text>, <Chap Hdr>, <Footnote>, etc. Brevity may be as little as <1>, <2>, <3>, but these conventions should be readily recognizable for the elements they represent. Although it introduces an extra step, search and replace could be used to revise short tag names before exporting word processed files to *Publisher*.

After an element name has been assigned, the separate selections for Justification, Font & Size, Dimensions, Set tabs, etc. can be Justification specified. encompasses flush left, flush right, center, and justify. Set tabs on this menu cannot be used until Table on a Justification sub-menu is selected. (This is another example of the not so obvious. Since Set tabs, which appears first on the higher menu, is inactive, it is not so apparent that the precondition for activating this feature is in a sublevel menu under Justification.)

All selections for positioning text are relative to frame boundaries created during page layout and not to the page exterior. Under Dimensions, space above an element can be specified to cause a drop from the preceding line of text. And indentations from the left frame can be specified separately for first line and for all subsequent lines in the element. This is useful for insets such as indented outlines or tables of content. Line leading different from the type size can be set for each element to produce greater spacing between lines. For example, text in 10 point size can be set with 10, 11, or 12 point leading depending on the white space required between lines. This paragraph is set at 10 Leading. The other paragraphs in this article use 11 Leading. Most of the remaining articles in CN are set at 12 Leading.

There is one related item missing in the style menu windows--a selection of styles for bold, italic, or normal. Since these styles are such an integral part of an element specification, they should have been included on the Fonts & Sizes menu. As Publisher is currently designed, font styles are applied in a separate highlighting operation. When PARAGRAPH mode is selected, these font styles are available from the drop-down STYLE menu. In the Library window, select the style sheet name that bold, italic, etc. is to be applied and then select the type face from STYLE menu. This will be incorporated with the style sheet's specifications and will automatically be applied to all related text elements in the document.

This specification process is repeated for each element of text that is to have different typography or format. Continue the process by selecting New style and entering a new paragraph style name. After all elements have been specified, save these important sets of data with FILE/Save style sheet. The page layout design along with all style sheets will be saved with an STY extender.

If different document layouts are needed, e.g. 2 column and 3 column formats with different type sizes, separate page designs and style sheets must be created for each document. This process is time consuming, but dividends are paid by the style sheet method when these specifications are applied to text in a collective manner.

The Fruits of Labor

Applying style specifications to

text is a simple task. This is where *Publisher* shines with productivity. *Ventura Publisher* was the first of the desktop genre to fully employ style sheets. *Ready, Set, Gol* added this feature, and *PageMaker*—not to be outdone by these essential capabilities—quickly followed with an upgrade. *Publishing Partner Professional* will also, reportedly, include this feature.

Recall earlier that there are two ways of applying styles. If text is imported from a word processing system with imbedded style name tags, the specifications will be automatically applied. Importing with tags is probably the most productive utilization of *Publisher's* features.

If text files without tags are imported, the application of styles is equally easy. With the PARA-**GRAPH** icon selected in the Tool Box, the names of all style sheets will be displayed in the Library window to the left of the text screen, and the mouse pointer will be turned to a paragraph symbol. Click on a line of text and the entire paragraph, up to a carriage return, will be highlighted. Now click on a style name, or alternatively press the appropriate function key, and the specifications will be applied to selected text. These specification are collective and complete. In one click on a style name or press of a function key, all definitions for justification, font and size, dimensions for indentations, line drops, and word spacing are applied.

A critical part of this facility is a carriage return at the end of each text element. It defines where selection of text is to be terminated. For example, if a return is not placed at the end of a header, all body text that follows will be set in the type style and format of the Carriage returns are header. essential to marking the ends of different text strings. Therefore keyboarded or imported word processing files must be punctuated with these markers. Unfortunately, carriage returns in ST Writer files are not preserved.

What if you don't like the style or format? Changes are easy and

equally as powerful. In the Library window where style names appear, select the element name for changes. Under TEXT/Paragraph style, select appropriate specifications and make the change. Revisions will automatically be applied to all elements that have been identified with the style. And don't forget to save the revised style sheets.

For those that have used systems without style sheets, the power of this feature will be readily apparent. For example, in systems lacking this capability, an element of text is highlighted and a style such as bold face is selected from a drop down menu and applied. Fortunately, the element of text will remain highlighted but the menu disappears. Thus the menu must be selected again and perhaps 12 point size chosen. Then another menu must be selected to apply a format of flush left or justify. Try this for several elements and the meaning of "desktop publishing mouse elbow" and low productivity becomes abundantly clear. For long documents, this is a chore. The price paid for typeset quality is excessive effort.

Not so with *Publisher's* style sheets! Typeset quality can be achieved without overly sacrificing productivity. Some may argue with this conclusion. Indeed typewritten text from a word processor requires much less effort. But the results are inferior to the presentation quality that can be achieved with typesetting.

With *Publisher*, all specifications are applied with one click on the text and another on the style name. The effort is devoted to designing style sheets. And this effort is required only once for each type of element—not for every one of the text elements that occur repeatedly throughout a document. Furthermore, the investment in style sheet design can be used over and over again. *Publisher* is the ideal tool for long documents or for ones with a variety of style.

For those that have flirted with the idea, *Publisher* offers the right features to get your feet wet, or more appropriately, ink the press. Dot matrix output is good, and the HP Desk Jet reviewed last moth gives an even better product. You will be pleased with the quality of presentations and the productive power afforded by *Timeworks Desktop Publisher*. Despite some shortcomings, *Publisher* currently holds the premier spot for ST based publishing applications.

Timeworks Desktop Publisher is furnished on five master disks with an additional sample artwork disk. Very thoughtfully, Timeworks has supplied extra labels for the installed system: STARTUP, FONTS, DATA, and OVERLAYS disks. The manual is looseleaf, hardcover with a hard case. It contains over 200 pages with a 38 page appendix covering Troubleshooting, Glossary of Terms, Font Library, Art Library, and Installing Two Printers. This is a professional product well worth its modest price of \$130. *Publisher* will also be available for the IBM PC as *Publish IT*. Operating under DRI's *GEM*, files can be exchanged between the ST and PC versions. GST and Timeworks are to be appluaded and supported by ST users. They chose the Atari ST to launch this new product.

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STAR MICRONICS NX-1000

STAR MICRONICS NX-1000 PRINTER More Fonts and Single Sheets Too? Review by H. Earl Hill

Ever since the first Atari 8-bit computers arrived on the scene, Atari aficionados have had a love affair with Star Micronics printers. Perhaps out of perversity, instead of turning to the larger volume computers like Epson, they went to the Star Micronics brand. Undoubtedly, a lot of this gravitational force was due to the Star combination of utility, reliability and reasonable price. A precursor of "Power Without the Price?"

The first model most of us cut our teeth on was the Star SG-10, a tank of a printer, which is still going strong for a lot of its owners. Then those of us fortunate enough to scrape together a few dollars more, opted for the next model, the Star NX-10.

Features such as single sheet printing and being able to select boldface, NLQ, and multiple characters per line from the front control panel proved irresistible. Never mind that we had to give up forever the inexpensive drop-in ribbon spool. We'd just have to get along without it to get these new features.

Time marches on, and along with the inevitable upgrading of equipment comes a new Star printer within our price range. Even though the NX-10 manual is hardly worn out from use, it seems to be somehow imperative to get that NX-1000 model. After all, doesn't it have true single sheet feeding while being able to "park" (whatever that is) the fanfold paper? And what about all those built-in fonts? Courier, sanserif and orator in NLQ? And under \$200? Wow!

Physical Specifications. The NX-1000 is a serial impact dot matrix printer, with a 9-pin print head. Claimed life of the print head is 200 million dots. Dots a lot! It uses a nylon fabric ribbon cartridge with a stated life of 1 million

characters. If nothing goes wrong, that translates to a lot of ribbon cartridges to be purchased over its life. Maybe the idea behind this is the same as the safety razor – give 'em away and sell the blades!

It has a Centronics-compatible, 7 or 8 bit, TTL-level interface with a 4K data buffer. To achieve the widest possible market, it emulates both the Epson LX-800 and the IBM Proprinter II. The power switch is conveniently located on the printer front. Unlike the NX-10, the interface cable connects at the right front.

This is fine if your printer is to the left of your computer, but a little awkward if the situation is reversed. It would have probably been better if it had been placed at the side rear, but this would have been impossible since it plugs into the side of the computer board. However, the side cable placement does leave the paper path unobstructed, in contrast to the NX-10.

The NX-1000 is sleek and attractive, with a slightly smaller footprint than its predecessor, the NX-10. It measures 15.1" x 11.3" x 4.3" (metric conversion measurements) and with its light beige plastic shell, complements the design of the Atari ST very well. It is a little lighter than the NX-10, 10.3 pounds versus 13.2 pounds.

All the conventional print pitches, Pica, Elite, plus condensed and proportional variations of these are available from the front control panel. The standard line spacing is 1/6 inch, with others programmable. An automatic sheet feeder is optional.

Installation. Set-up of the NX-1000 is as painless as it could possibly be. You will see some new parts, the most prominent of which is an intricately molded plastic paper guide, used to deliver

the single sheets. This hooks in behind the platen. The single sheet feeder can be removed, if you wish, without affecting printer operation. However, Star recommends using it horizontally for regular printing, or upright for single sheets. Being rather complicated, it would be advisable to treat the feeder with care to avoid breakage. Unlike the SG-10 and NX-10, there are two covers. The defeat switch found on the NX-10 is happily not present, so you can do your thing with the covers off. As with most printers of this type, power should always be off when you turn the platen knob. Turning it by hand while the power is on can damage the printer's gears. The power cord is at the left rear.

Two self tests are built in. A short and a longer one. The long self test shows off the printer's variety of fonts. They retained the capability of doing a hex dump. The black ribbon (this is not the color model) cartridge snaps easily into place. It is now small like those on the Panasonic printers. Unlike the larger cartridge on the NX-10 which does a less-than-admirable job of covering the dip switches, the dip switches are quite exposed. As in the NX-10, they come in two groups of eight and four. The manual describes the setting of these switches quite clearly. Most of the settings are conventional, with the exception of a switch setting for upper or lower-case Orator style.

Key Features. Certainly one of the most powerful features of the NX-1000 is its ability to handle single sheets, e.g. letterhead stationery. That, plus the selection of fonts, appears to be the reason most people decide to upgrade. Instead of a single sheet, it is possible to load multi-copy forms (up to triple-ply). This loading is

true single sheet, not a quasi function as exists on the NX-10. Loading a single sheet requires, like a lot of things, more time to describe than to do. The manual does an excellent job of itemizing the steps. For some reason, a loose instruction sheet is included for single sheet loading with slightly different instructions. Both of them seem to lead to the same end result. There are two functions, manual loading and semiautomatic loading. The former is with power off, the latter with power on.

With fanfold paper loaded, it is not necessary to unload it to print single sheets. To load single sheets either manually or semiautomatically, you go through the paper "parking" procedure. The steps are well documented in the manual. When you are finished with single sheet printing, you "unpark" the fanfold paper by the numbers and you are ready to go again.

Several other essential features are the forward and reverse microfeed, top-of-form control, margin setting, and buffer clearing. These can all be set from the front panel.

Print Quality. The nine-pin printhead gives both draft, draft italic, and NLQ characters. The quality of the draft mode is adequate but not spectacular. The NLQ mode is quite acceptable for its intended purpose. Overall, no improvement appears evident from the quality of the NX-10. The print pitches are conventional. There are three NLQ styles (Courier, Sanserif, and Orator), with italics for all. Orator comes with lower case or small capitals. You also have, besides the panel pitches, condensed, proportional print, bold, large characters, emphasized, double-strike, download characters and dot graphic characters available via software. Unlike the NX-10, there is no bold print option on the front panel controls. This, I guess, is the negative price of progress.

The NX-1000 is a dual-function printer (standard and IBM). The standard character set of 96 ASCII characters, the IBM set of 244

characters, and 192 (draft) or 78 (NLQ) download characters are there for the choosing. There are 14 international character sets, and 14 characters for each, selectable by software or dip-switch settings.

Specification printing speed is 120 cps in draft pica, and 30 cps in NLQ pica mode. This is identical to the NX-10. In draft mode, printing direction is selectable bi-directional or unidirectional. In NLQ and graphics, it is unidirectional. Both styles are logic seeking. Printer noise is definitely less than that of the NX-10.

It appears that Star has finally made this line of printers 100%Epson compatible. I have encountered no problems using Epson mode from any programs I have used with it so far. This includes word-processors, graphics programs and spreadsheets.

Documentation. Perhaps the best way to discuss the users manual that comes with the NX-1000 is to contrast it to the NX-10 instruction booklet. In fact, after using the NX-1000 manual it almost makes a person feel as if Star assumed you had owned an NX-10, and therefore this manual could be a supplement. As any of you know who have had an NX-10 (or even an SG-10), the instruction manuals are outstanding in their organization, clarity, and completeness. This, unfortunately, is not 100% true of the NX-1000 manual.

To begin, it is 105 pages long versus 230 pages, and slightly smaller in page size. There is a somewhat odd placement of the printer features, the type styles, and the print pitches before the Table of Contents. The pages appear to have been afterthoughts, and would probably have been better included in the main chapters or perhaps just after the Table of Contents. The number of chapters have been reduced and the previous extremely well done ASCII code and character font tables have been severely decimated, nearly to oblivion. On a scale of 1 to 10, the set up

STAR MICRONICS NX-1000

instructions in the NX-10 rank as a 10, but with only a 4 for the NX-1000. It's not that they're terrible, it's just that they could have been so much better. The printer control command section is, however, well done. The numericorder command-summary pages have been replaced by a reference card. Whether this is an improvement is probably a matter of individual preference. An included color printed Users' Guide does a good job of summarizing the front panel controls. However, one wishes they would have made it a little larger and included instructions on paper unparking as well as parking. All in all, the manual does an adequate job of helping you get your printer up and running. And, wonderof-wonders these days, it has a decent index!

Wrap Up. During several months of use, the Star NX-1000 has proved itself as a reliable, versatile machine. Having additional fonts such as the Orator, plus being able to print single sheets is a welcome addition. But, and this is a big but, why couldn't they have put the dip switches on the outside? Having all this capability in the dip switches and then hiding them inside is like trying to use an Atari joy-stick with one hand. The least you can say is that they are not hidden under the ribbon the way they are in the NX-10. This is progress?

This may be just experience with one machine, but there have been several instances of paper jamming with fanfold forms. Also, the ribbon cartridge had to be replaced within several months, a long way from the 1 million draft characters. One wishes for the Panasonic cartridge with its extended life switch.

For the casual to moderate user with a limited amount of money available, the NX-1000, despite some limitations, should serve its purpose well. The good NLQ, new fonts, and single sheet capability make it a good printer for the new purchaser, or a nice stepup from an SG-10 or an NX-10.

ATARI ST/MEGA

dBMAN Version 4.00K

Industrial Strength Database Management - Round II Review by John Barnes

Dominant Position

Versasoft Corp has now released version 4.00k of dBMAN, thereby demonstrating a commitment to maintaining a dominant position in database management software for the Atari ST series of computers. A few (minor) bugs are fixed, a number of new functions are added, a couple of new commands are introduced, and the syntax is modified for some others. The main thrust seems to be enhancing compatibility with dBASE III and dBASE III+. The new documentation reflects this. Atari users do not need to bemoan the absence of dBASE because they have something that is every bit as good.

All in all, the improvements are incremental rather than radical. dBMAN Version 4 is no prettier than the earlier versions, it is no easier to use, but it remains the standard by which all others must be judged.

Developing applications in dBMAN requires considerable programming skill, but it is possible to get finished results that are probably cleaner then anything that can be brewed up with other systems for the Atari ST.

Users of earlier versions of dBMAN must, however, prepare themselves for a few surprises until they get their database files converted and some of their command files rewritten. Read the README and UPDATE.DOC files carefully before proceeding. The syntax of some commands has been altered in unexpected ways. Some users report that a couple of new bugs have been introduced. I occa-

sionally catch a fleeting glimpse of a couple of bombs on the screen when the program exits. I am told that this may be caused by incompatibilites between various versions of TOS ROMS and is probably harmless.

I was surprised to find that the PACK command no longer recovers unused file space until Versa-Soft explained that the old scheme had used lots of extra disk space and that there is a relatively simple workaround.

Updates

The price of the update package for current users of dBMAN depends on where you are starting from. Version 2.02 users will have to shell out \$80 plus \$3 for shipping. Version 3.01 users will spend \$45 plus \$3. Check with Versasoft to make sure that these prices are correct before sending in your order.

As a result of the abortive effort by Atari Corp to market dBMAN there was, for a time, a lot of confusion in the marketplace. Some people were turned off when they found that the package they took home contained Version 2.02 and they had to update to later versions by sending money directly to VersaSoft. Marketing is now handled exclusively by VersaSoft, who has bought up all of the stock that Atari Corp had on hand. The package for version 4 has a gold sticker on it showing that the product was a START Magazine Outstanding Software award winner for 1987. Look carefully before you buy.

dBMAN version 4 lists at \$249.95, and advertised prices at Washington area stores range upwards from \$190. This is definitely a high-end product.

New Features

Many of the new functions (e.g. CMON, CDOW, RTRIM, REPLICATE) in dBMAN ver 4 appear to be aimed at enhancing compatability with dBASE.

MEMO fields are now supported, thus permitting fields containing fairly extensive text. Importing the contents of memo fields from external word processors is possible if one uses the simple trick of APPENDing from a suitably "DELimited" text file.

The neatest new commands are BROWSE and SHOP. BROWSE lets you display a selected set of fields and records on a scrollable screen. Cursor controls allow you to move to any field in any record so displayed and update it in the manner of a spreadsheet. This can often be an advantage over the tedious EDIT command.

SHOP is used to position the record pointer in an auxiliary database file so that information can be transferred to the record in the primary database file. An order entry system could use this feature to get a catalog number for an item.

CN's publisher tells me that the new SET FORMAT TO [<file>] is very handy for modularizing data entry screens. Programming these is normally very tedious.

Starting with version 3, dBMAN incorporated a number of functions that let it operate as a GEM

application. The ASSIST procedure effectively illustrates the use of drop-down menus and pointand-click item selection. The functions provided by ASSIST are, as the manual clearly states, enough to get the user started creating database structures and inputting data, but they do not take you far down the road to a tailored application.

Programmers who have the stomach for GEM programming can use the ASSIST.CMD file and the other example files for clues to some pretty fancy programming.

dBASE III and III+ Compatibility

dBMAN has tried to stay compatible with Ashton-Tate's dBASE line since day 1. The conversion routines provided by dBMAN make this a cinch for database and report files. There are still enough incompatibilities in program files to force the user to look very carefully when attempting to convert programs.

The function repertoire of dBMAN remains richer than that of dBASE III, thus providing more possibilities for the programmer.

Programmers who want to try their hand at database programming can find lots of PD applications in the MS-DOS world, and on the shelves of their nearest Crown Books or B. Dalton. I found "Advanced Techniques in dBASE III PLUS," written by Alan Simpson and published by Sybex, to be especially good.

Version 4 of dBMAN is much closer to dBASE III than its predecessors have been. It requires less imagination to devise workarounds for features that were previously missing.

The support they give their product and their willingness to upgrade and improve it differentiate VersaSoft from the run of the mill Atari developer. With a total of 6 to 8 people, VersaSoft is somewhere between lean and substantial. The company president, and author of the original dBMAN, is Charlie Tseng. I spoke with Eric Small, Versasoft's director of marketing and technical support guru, to get a better feeling for the company and to see what they might have coming down the line.

Into the Future

With the maturing of the Atari market VersaSoft has felt a need to diversify. It is a little-known fact that there is a version of dBMAN for MS-DOS machines. It is not easy to find, but it is available from Triangle and CSS. VersaSoft is working on a big push into this market.

An equally invisible Macintosh version featuring full windowing has been on the market for a while. The Atari version of this product is some distance off, but it should be a dazzler when it comes. Multiple open windows and full telecommunications support are promised features.

VersaSoft also markets Multi– Manager, a multi–user point of sale system in which a Mega ST acts as the host to up to seven terminals. A multi–tasking version of dBMAN is available for ope– ration under the MT C–shell.

Version 5 of dBMAN is not far off. This upgrade will include a screen generator, a fully relational report writer, and about 15 new syntax commands. Version 4 owners will be able to get the upgrade for about \$40. Look for the company's announcement soon. NEO and PI? files as data objects are on the more distant horizon.

VersaSoft is making their compiler available for \$99.95 through September. Compiled applications are supposed to run between 4 and 20 times faster than the interpreted versions.

When asked what kind of support they were getting from Atari, Eric stated that they had had an early start in the development game, but they were now comfortable enough with the machines to be able to handle problems on their own.

Conclusion

dBMAN Version 2 users should definitely upgrade to version 4. This is a much more solid product. Version 3 users may not be in such a big hurry, but their cost is not so high, either. It does appear that periodic investments in upgrades are worthwhile for serious users of this product.

New users will find a product that is much closer to the industry standard than anything else in the Atari marketplace. The vast literature on dBASE is certainly an excellent starting point for the person who is new to relational database technology. Database academics will insist that dBMAN and dBASE are not relational at all, but they will be confounded by the sheer quantity of productive work that has been done using these relatively simple (and economical) tools.

The commitment that Versa– Soft exhibits toward keeping abreast of new needs is certainly something that is worthy of sup–

> To upgrade your copy of dBMAN check with Versa-Soft at 4340 Almaden Expwy, Suite 250, San Jose, CA 95118. Update pricers vary as to software type and version and offerings are subject to change as new products are introduced.

ATARI ST/MEGA

Regent Base II A Product Aimed at the Power User

Review By Christopher Anderson

There are essentially two basic truths about databases: everyone needs one, and far too few are willing to use one. Unlike word processors and other straightforward tools, a database can rarely be efficiently used "out of the can." It must be customized for most applications, a task which sounds suspiciously like programming--and to most people, programming means Experts.

Regent Base // is not going to change this state of affairs much. In many ways it is a very attractive program; it's powerful, flexible and sometimes even fun. But make no mistake, you can not do a thing with it without doing some programming.

Regent Base // stakes out the same turf on the ST that *dBase III+* has taken in the IBM world. They're both relational database programs, which means they can cross-reference from different files. They share the same modular design--the editor, form designer, and database manager are all separate programs, accessible from a central "control center." And both are exceedingly difficult to learn, but are capable of producing databases that are extremely easy to use.

The difference is that while in many ways *Regent Base II* is a better program, *dBase III+* has stimulated an entire cottage industry of related programs, books and manuals devoted to easing the user's way through the program's baffling design. *Regent Base II*, on the other hand, comes with the old (and very inadequate) manual for *Regent Base 1.1*, 25 pages of supplementary material describing

the changes in the new version, and the reputation of Frank Cohen, the program's creator. While Cohen and Regent Software are one of the ST's most supportive companies, and their telephone support is a model for the industry, through most of the learning process you're on your own.

While the copy of *Regent Base* // that I used for this review was a pre-release version, Regent has announced that the program will be in the stores by the end of June. One can expect, therefore, that the commercial version will be little changed from the beta version supplied to Current Notes.

Owners of Regent Base 1.1 will feel right at home with this update. As before, clicking on the mysteriously-named MENU.PRG takes you to an icon-based control panel from which you can launch previously written "forms" (why do I have to learn a new vocabulary just to look up a phone number?). Once in a form, predefined (by you) buttons and editable fields carry you through the standard database processes. If you were careful (and expert) in your design of the database, using it can be a joy; icons abound and it feels like a professionally-written custom package. But if you've never used a Structured Query Language (SQL) database package before or haven't spent several hours with the manual, you'll have a lot of work ahead of you.

By designing *Regent Base* as a relational SQL database, Regent Software has obviously left the casual user market to other pro-

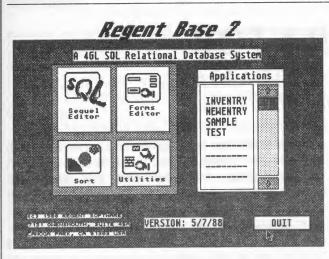
grams which are easier to use. Regent has clearly aimed its product at the "power user," and power is really what *Regent Base II* is all about.

Unlike most other ST database programs there is no menu-driven way to manipulate records. To create and use a database, you must first design a form, then write a program to respond to it. If you want to let your database search for a name, for example, you'll have to put a button on the form (Call it, say, "Search.." Leave creativity to someone else), then write a few lines of code to execute the search when the button is pushed.

If you think of it as a development tool, rather than a readyto-run database manager, Regent Base // is easier to appreciate. One of its major improvements over Regent Base 1.1 is the Forms Editor. Those familiar with a resource editor will feel right at home here. You drag "objects" (editable fields, buttons, boxes, etc.) onto a blank form, sizing and modifying them to taste. Editable fields can be as large as the screen and incorporate some very sophisticated word processor-like features. In fact, the SQL Editor which comes with the package is little more than a full screen editable field.

Icons can be imported (from DEGAS, for example) and used instead of buttons. Simple graphic objects can also be created and placed on the form. It should be noted, however, that several features in the beta version did not work properly (the snap-to-grid function and the screen redrawing

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are particularly buggy) and others were maddeningly inconsistent.

The SQL Editor and the editable fields have also been improved since version 1.1. In the redesign, Regent has taken several good ideas from the Macintosh world. To highlight a word, for example, you double-click it. Block defining is smooth and precise, much better than the often useless rubberband box method found in many GEM programs. Cut and Paste is always available, even when running a database form. However, the editor assumes that you will use the mouse for most of your cursor control, certainly not a given for all ST users, and the omission of all but the most basic cursor key support is frustrating. A major flaw is that while it may be advantageous to have the Clear/Home key erase all the text in a small editable field without warning, it is a decided disadvantage in the Editor.

Regent has made major speed improvements in searching and sorting. It claims benchmarks of 1000 records sorted on three keys in under six seconds, and equally quick indexing. These benchmarks would make *Regent Base II* one of the fastest database programs available for the ST. It is difficult to test these benchmarks, however. The included sample forms crashed at almost any provocation, more often than not requiring a reboot.

Other improvements are found within the expanded SQL commands. It is now possible to have the database dial a phone number, write a check or run another program. An extended print format command makes printing mailing labels easier, if still not as painless as it is on most other database programs. Stand-alone programs can be created through an agreement with Regent Software, which will compile your code into a .PRG file for a fee. These enhancements come at a cost, however. *Regent Base II* now requires at least a megabyte of memory and will not run on an unexpanded 520 ST.

For owners of *Regent Base 1.1* the upgrade to *//* is an easy decision to make. The new program improves on the original in nearly every area. Many of the *1.1*'s bugs have been corrected in *//*, though some new, less serious, ones have popped up. And the new language extensions open up the possibility of writing powerful, elegant stand-alone programs with-out re-inventing the wheel.

Potential new users ought to think carefully about how much power they need. Writing a useful database manager with *Regent Base II* is, as they say in the scientific world, "non-trivial." The pay-offs can be substantial, but if you just need to automate your address book, you might go for one of the excellent "flat file" database programs that are available for the ST. They're likely to be a lot less frustrating in the end.

But for those users who really need the flexibility of SQL and the power of a relational database, Regent Base II is the best currently available. You'll lose a weekend or two learning to use it, but the results just can't be beat.



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OBLITERATOR SPACE AGE BARBARIAN Reviewed by Brian & Don Elmore

Riddle time!! What would you get if you were to clip Hegor the Barbarian's golden locks, making them more "GI–Joe" like in appearance; perform some plastic surgery enlarging his ears; garb him in a designer type space–jump suit, and provide him with an impressive array of personal weapons ranging from a pistol to a bazooka?? Why, *Drak the Obliterator*, of course!! Everyone knows that. PSYGNOSIS LTD has done it again! By "retooling" *Hegor* they have spanned the centuries and come up with another sure winner. Don't ask about the "ear job," I don't know why!

Like the Barbarian, the Obliterator game box contains a well-written manual of instructions, a poster depicting one of the aliens (suspiciously similar to the mean momma in the two "Alien(s)" movies) and two game disks. As with Barbarian, the Obliterator game disks are heavily protected, and if I were to find fault with this fantastic adventure, it would only be to comment that the game does not necessarily load on all ST's. I found one Mega ST4 and one 1040ST upon which it would not load. I am using my upgraded (to one meg) 520ST and have experienced no trouble loading it. The instructions state that if the title screen does not appear within 45 seconds, there may be a problem with either your system or the program disk, and if your system checks out, then you are directed to take the disks back to the place of purchase for replacement. I strongly suspect that given the heavy protection scheme, and the fact that PSYGNOSIS finds it necessary to even suggest the possibility of a bad load sequence, that the fault will more often be with the disk rather than your system. Other than that possible glitch, you should be in store for a fantastic, space-age adventure.

"Earth is under attack by an alien warship of awesome power...." So does it begin. As Drak, the last of the Obliterators, the Elders have disassembled you and beamed you aboard the alien ship. You must collect five different components to disable the ship's plasma drive, battle shields, weapons systems, and computer datapack plus shuttle activator (to get you off the ship before it is destroyed). According to the story line, the ship is crewed by a mixture of androids, robots and the worst kind of bad guy aliens....a rather accurate description of what awaits you onboard. The final line of your briefing advises you that you are the

only thing that can save the Federation now....! You start out with a pistol (whose projectiles are slow and fairly ineffective). As you roam the decks and walkways of the alien spaceship, you will find (lying around) a rifle, blaster and bazooka. Ammunition for all of the weapons can also be found on the decks.

The screen has a strip of control icons along the bottom, just as Barbarian did. From left to right, you have directional control, halt, into, jump, shoot, defend and action. A tap on the space bar reveals a second strip showing the weapons (and ammunition) that you currently have, the components you must collect, your personal shield indicator and a box for your score. Drak has a personal energy shield that protects him from alien weapons, but which degenerates with use. Shield regenerators can be found throughout the spaceship, simply walk into them and Drak is rejuvenated (shieldwise...). You can control Drak's movements with either the mouse or a joystick...my son and I prefer the mouse. Screen graphics are (as with Barbarian,) fantastic! The details are only too impressive, and as computer literates would say ... the screens are "busy." Computer "notso-literates," like the undersigned, will also find the screens busy....but for slightly different reasons.

Drak must fight the "worst kind of bad guy aliens," and here is where the old saw about a picture being worth a thousand words is worth its weight in gold....if a saw in that sense, has weight. There are lizard-like green things and yellow things. There are red-orange, charged, gaseous clouds. There are "Tron"-like mixmaster blades spinning along the decks. There is a blinking red "floorfixture" that slides back and forth along the deck, giving Drak's feet fits upon contact. There are space cannon attached to the ceilings of selected decks...they fire various types of energy bolts. One, large green ball (on the ceiling) releases an egg which floats down to the deck and then literally explodes into a tiny, metallic object with legs that literally dances (hops) after Drak and makes his day miserable upon contact. The little leggy can be killed, if your reflexes are well tuned, by the pistol or the rifle....I haven't tried heavier firepower. Some of the decks have floating drones and they too, are impervious to Drak's weapons. The green things sometimes track Drak on foot; sometimes they ride

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mechanical kangaroos (well they look like kangaroos to me!) and sometimes they ride replicas of the far-out motorcycles used in "Return of the Jedi." There are also some two dimensional dragon-sort-of creatures that gyrate slowly, and cannot be shot while facing sideways.

So, what chance does Drak have against this vast array of metallic and ectoplasmic monsters? Well, we have a couple of things working for us. First of all, we are on the "right" side, and we must prevail over evil. Secondly, because the program virtually has to rewrite every screen, each time Drak moves laterally along a deck, or vertically to a different deck, regardless of the monsters awaiting, he has a few seconds to compose himself, read his weapon, and...whamo! Transfer from deck to deck is accomplished by entering elevators. PLAYER HINT: regardless of what is shooting at Drak, whenever he exits an elevator, the enemy's first shot WILL ALWAYS PASS BY HIM. Trust me. So, Drak has time to aim and shoot. ANOTHER PLAYER HINT: Don't be shy about using the defend control. This throws Drak into a rather neat forward roll, and can be used to get him out of tight situations. As my son, Brian, so aptly states, when faced with multiple enemies, use the defend function to roll through the screen, thus saving bullets and most likely .. your life. The instructions describe another special shooting function....when Drak faces enemies on the deck, or on the ceiling above him, push the right mouse button and his shooting arm will follow the cross-hairs...up or down, and then pressing the left button will fire at the indicated angle. It works. Brian also recommends that generally speaking when Drak encounters a floating enemy, use the defend function and roll right on by!

YET ANOTHER PLAYER HINT: From time to time (when revitilazing. Drak's screens or when locating one of the alien components) you are asked if you wish to save the game. DO SO! Then, if Drak is zapped or ionized or whatever the greenies do to him, you can re-start without having to go clear back to square (or deck) one. While this review may appear to be somewhat confusing, I guarantee that if you spend an hour or two trying to avoid all kinds of nasties, while collecting the required components...you will be confused too. The game plays very well, the graphics are (as usual) excellent, and if you decide to purchase the *Obliterator* and help Drak save the planet Earth....you are in store for a very pleasurable computer session(s).

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ATARI XL/XE

SHILOH: Grant's Trial in the West Review by Len Poggiali

For its fourth Civil War simulation employing Chuck Kroegel and David Landrey's brilliant play system, Strategic Simulations, Inc. has chosen to showcase the Battle of Shiloh. Although there appears to be no definite pattern determining SSI's choices of which engagements to focus on, each of the company's four choices to-date (Antietam, Gettysburg, Chickamauga, Shiloh) have made a good deal of sense not only in terms of the size and scope of each battle but also in regard to the historical importance of each.

Antietam (September 17, 1862) not only was the single bloodiest day in American history, but the results of that battle gave Lincoln the victory (actually a stalemate) he needed in order to publish his Emancipation Proclamation freeing the slaves in all Confederate states. Gettysburg (July 1-3, 1863), the costliest conflict in terms of human life and a three-day battle, is considered by most historians to be (along with the capture of Vicksburg on July 4, 1863) the turning point of the war. The two day-battle of Chickamauga (September 19-20, 1863) represented the last major Southern offensive of the war and was the second largest in terms of total casualities.

Shiloh (April 6-7, 1862) owes its fame to a number of reasons. Named after a Methodist meeting house located in Tennessee near the banks of the Tennessee River, Shiloh was the site of the first of the "great" battles of the war, meaning that the total casualty figures for both sides combined (killed, wounded, and missing) were in excess of 20,000 (at about 4,700, First Bull Run had been a skirmish by comparison). In fact, the battlefield losses at "Bloody Shiloh" (as it came to be called) exceeded the totals for each of our

previous wars combined.

Casualities alone do not determine the importance of a battle, however. Four times as many men were lost at Stones River than at First Bull Run, and yet all but the most rabid Civil War buff would be hard pressed to come up with the name of the former, while the latter is indelibly written in the minds of most educated Americans. In actuality the relevance of any historical event depends not only on the event itself but as importantly on what the event led to and what it represented. Shiloh was among the sloppiest, most poorly run battles in American history, and yet its carnage and Grant's ultimate victory held more than immediately meaning apparent.

The losses of life brought on by the ferocity with which the battle was fought (in spite of numerous instances of cowardice on both sides) settled the question once and for all as to whether both sides had their hearts in the war. The South's failed attempts, due in part to the tenacity of the Union leader, spelled the beginning of the end for Confederate hopes of victory in the Kentucky-Tennessee Theatre. Finally, and perhaps most importantly, Shiloh taught Grant never again to underestimate the enemy, and that this was a war to the kill. At Vicksburg, at Chattanooga, and in the eleven months he fought Robert E. Lee, U.S. Grant rarely wavered in his determination to attack the enemy wherever and whenever contact was made.

Shiloh was Grant's battle, and it is no wonder then that the authors of this game decided to call it *Shiloh: Grant's Trial in the West.* Oddly, however, the default setting for the single player game has the computer taking the Union

side against the Confederate human player. Perhaps this is so because for much of the game the Union forces are on the defensive. Being more knowledgable in Union tactics and feeling that if this were Grant's game, I ought to play it first from his perspective, I chose to override the default for that one feature.

As with *Rebel Charge at Chickamauga* '(reviewed in the May, 1988 issue), the player may choose a basic, intermediate, or advanced game. Unlike the earlier game, however, in Shiloh's basic mode, the game may be played using a joystick. Although I found no trouble using the keyboard in either game, the joystick option is certainly a welcomed addition.

A very thorough, easy-to-follow tutorial took me through the process quickly. Essentially four major menus are employed. The first (Jovstick Cursor Menu) includes the following features: GET UNIT (pick up the unit under the cursor); GO TO UNIT (by cycling through to its number and then pushing the fire button); MAP (a choice between a tactical or strategic map); VIEW (highlights all the squares that a unit can see); CLEAR (view the terrain with units removed); OBJ (highlights Confederate and Union objectives); ABORT (takes players back to last square where unit was accessed); EXIT (to Keyboard Cursor Menu); and COMBAT (takes players to Combat Phase).

The first two commands took me to the Access Menu in which I was presented with a good deal of information about the unit I had accessed. This included the unit's name, type, size, weapon, efficiency rating, fatigue, morale, location, movement points, whether it was routed or not, and so forth. I moved my accessed unit

by positioning the cursor on the destination square and then pushing the button.

Entering the Command Menu presented me with another host of choices (some new, some repeated from other menus), including FIRE, which took me to the Target Menu. Here I viewed my unit's line of fire and either picked a specific target, allowed the computer to select my target for me, or decided not to fire at all.

After positioning all of my troops and determining what they would do, I chose COMBAT, and (as I explained in detail in my *Rebel Charge...* review) the computer took over, cycling me through a number of phases until the various offensive and defensive actions were resolved.

Since I chose to fight the entire battle (one may instead opt for an April 6 scenario), I completed this process twice for each turn (representing 1–1/2 hours of real time) for a total of fifteen turns.

On the first day of the battle, I followed the advice given in the documentation--I retreated toward Pittsburg Landing, fighting rarely and trying to save as many units as possible. I made my last stand before the landing where I managed to hold off the enemy till nightfall. The next morning I was heavily reinforced, and so spent the second day regaining most of my lost ground. The game ended in a minor victory for the South, however, because my losses for the first day had been too large. Apparently, I should have avoided using my weaker, less experienced troops for fighting at all that day. These in combat quickly weakened to the point where they routed. In Shiloh ... (unlike Rebel Charge ...) once a force is routed, it never again becomes non-routed. This renders it all but useless.

After having played *Rebel Charge...*, getting into *Shiloh* was quite easy due to the fact that essentially both programs employ the same game system. Nevertheless, there are a number of significant differences with *Shiloh* in addition to those already noted.

These include the following:

• Two Union gunboats, which can travel in river hexes and fire at Confederate forces on shore, are available. It took me some time to figure out what Confederate forces could be fired at from each. In order to tell, the Union player has to call up "View" from the Command Menu and not the "LOS" (Line of Sight) option from the Target Menu. The reason: boats do not have to have a line of sight to a target in order to fire at it.

 In order to simulate the surprise attack the Confederates launched on the first day, the Confederate player gets one additional operations phase at the beginning of the game. In effect, the attacking force receives two complete operations and combat phases before the Union player gets to make a move.

• Until a unit has been engaged in battle, a player will not know a unit's morale or efficiency. He only will know if it is green or regular.

Because the Shiloh battlefield . was much smaller than that of Chickamauga, it is represented by a 30x30 square grid-map in contrast to Chickamauga's much larger 64x54 grid. The option of using either a tactical (zoom in) or strategic (zoom out) map remains, but going from the former to the latter requires a disk swap, which constitutes just enough of an annoyance to make most players stick with the tactical view. This is no hardship, however, because of the relatively small size of the tactical map.

• While the computer is moving, the human player no longer has the option of seeing each move. Admittedly this was more time consuming than choosing to have the screen go blank during the enemy's moves, but it was still nice to be afforded the option.

• SSI has scaled down the size of its packaging considerably. As a result the large, laminated map

provided with *Rebel Charge*... has been replaced by a folded, cardboard one for *Shiloh*. The documentation, however, remains as impressive as always. In addition to easy-to-follow directions, detailed maps, comprehensive charts, and such, a 12-page essay entitled "Shiloh:Amateur Night in Tennessee" is a real eye-opener on just how badly managed the battle was.

My most serious complaints with Shiloh are due not to the changes from the previous game, but with the limitations of working within 48K of memory and with the game system itself. Playing requires enormous amounts of disk swapping and at least ten hours. The latter problem is alleviated somewhat by the save game feature; however, some shorter scenerios would have made Shiloh more accessible to softcore simulation devotees. Also, while the save game feature is fine, reloading the game requires rebooting. Microprose, in its now-defunct Command Series simulations (Crusade in Europe, Decision in the Desert, etc.), presented detailed war games with variable lengths and no need for rebooting when loading a saved game. Perhaps SSI should take a lesson from its competitor.

Still, Shiloh is a great game, allowing relatively basic play for those of us who want to get into the action quickly, and intermediate and advanced play for those who have the time and the patience (and the intelligence?) to venture further. I enjoyed it more than I did Rebel Charge ... because, while the latter requires more chess-like finesse (Chickamauga might have ended a stalemate if not for a critical Union error), Shiloh the game and Shiloh the battle were slugfests from beginning to end. That is not to suggest that strategy is not involved--it is--but it is the strategy of checkers.

[Strategic Simulations., 1046 N. Rengstorff Ave, Mountain View, CA 94043, (415) 964–1353.. \$39.95.]

ATARI XL/XE

BOULDER DASH CONSTRUCTION SET It's Getting Better All the Time Review by Jerry Drake

Two of my all-time favorite games for the Atari 8-bit computer are *Boulder Dash* and *Super Boulder Dash*. Knowing this, you can understand the excitement I felt when I heard that a third Boulder Dash was coming out. This product would not only sport new screens, but would allow me to create my own as well.

The first Boulder Dash, which came out about four years ago, was programmed by Peter Lippa. At first, this game resembled a Dig Dug clone. The concept was simple. You, as Rockford, had to collect as many diamonds as possible and escape with time remaining on the screen. The way this game executed was not as simple, however. Utilizing special effects never seen in games at the time, Boulder Dash dazzled the player with its glowing diamonds and its many impressive details (e.g., when you don't move for awhile, Rockford taps his foot).

This was not your standard single-screen arcade game. Rather, it featured a scrolling screen which, if laid out, would encompass four screens. Not only did this game have great graphics, but it had challenging puzzles as well. In order to get diamonds, Rockford would either see them sitting in the dirt, or drop a rock on a butterfly, or suffocate the blob.

What impressed me greatly was that it seemed as if every object on the screen was there for a purpose. Some screens, if you didn't go in a special way, would be unsolvable. Yet there always was more than one way to solve a screen. Another thing that everybody would notice was that the

game followed the laws of physics. A stack of vertical rocks would not just sit there and ignore Newton, but would come tumbling down.

The most important factor in my choosing Boulder Dash for my favorite arcade game of all time was greed. It was the first arcade game that allowed my friends and me the chance to find out who was the greediest player among us. In nearly all of the screens there always were excess diamonds to be found. Most of our deaths in the game were caused by seeing how many more diamonds we could find, or by how long one could stay on the screen and keep killing those darned butterflies, or by how long one let the blob breathe before suffocating him.

The game had sixteen levels with four intermissions. You could start at any multiple of four, a nice feature for when you got frustrated from not being able to finish a certain screen. Also, there were five different levels of play. After completing all sixteen levels, the game started over at Level A, Difficulty 2. You could start at any of the five difficulty levels, and any multiple of four of the game level. Levels 4 and 5 only allowed you to start on Screen A, however. At higher game levels Rockford moved faster and so did the creatures and rocks. Also, most of the screens had the same concept but were rearranged. This made conquering all sixteen screens plus the four bonuses at all five levels quite a task.

Summarizing the first Boulder Dash we can say it had the following: dazzling graphics, exciting

puzzles, greed!!, killing, and mild action. The only problem with Boulder Dash was that it only had mild action. It was a thinking game, but it never truly tested the arcade player in me. Fabulous it was, but I was never pushed to the limits.

Enter Super Boulder Dash, which was the answer to my prayers. It had the same sixteenscreen format as the original and the four bonus screens (as well as five difficulty levels). Greed was another big factor in it. The graphics were identical. The reason Super Boulder Dash turned out to be ten times better than the original was because there was so much action, that comparing the two was tough. It seemed like the same game, and it played by the same rules. Nevertheless, some screens had me saying, "They could have sold this one screen as a game by itself."

One of the screens in Super Boulder Dash involves killing about 50 (yes, 50) of the fireflies. You dcn't have to kill them to clear the screen, or at least I think it's possible, but it's so much fun doing it. Another screen is just a mad dash to see if you can get all the diamonds while being followed by twenty of our friends the fireflies. There are maybe four or five pure action screens in this game. And for those of you who just like the pure puzzle-oriented screens (the ones in which you have no enemies on the screen except for the rocks) there are about four or five of those.

The best thing about *Super Boulder Dash* for those people who don't own the original *Boulder Dash* is that First Star Software

ATARI XL/XE

decided to include a copy of that program on the backside of the *Super Boulder Dash* disk.

Super Boulder Dash met all of my expectations with the exception of one. Anybody who has played these games knows that the concept would be perfect for a construction set: the screen is made up of icons; Rockford scrolls from one spot to another; he is never in between spots; and even the biggest objects are made up of blocks.

Well, lo and behold, out came the *Boulder Dash Construction Set*, distributed though Epyx's "Maxx– Out" series (*Super Boulder Dash* was distributed by Electronic Arts; *Boulder Dash* by First Star––where all three were programmed). The construction kit also touted a new programmer, Jeff Schneider.

The construction setup is very user-oriented. There is a box on the screen which is moved by the joystick over to a set spot on the screen. The side of the screen is composed of all the available objects for placement on the screen. The user then places the box on the object and pushes the joystick button to select which object they are working with. Then he moves over to where he wants to put the object and pushes the button again. What we have basically is a grid. Inside any of the squares can be placed the objects from the previous Boulder Dash's. Then you must place an exit and an entrance to the cave.

After completing your construction of a screen, you can then test it by pushing the "T" on the keyboard. Users who are quick to try out new games and slow in reading manuals will find themselves looking around for that manual when testing the screen they have created. This is because there are all sorts of numbers that can be played around which set the game levels, Rockford's speed, object speed, slime permeability, and so on. The problem with these game levels is that an otherwise good manual fails to outline these settings. I still am not able to figure out how to set the timer for when the amoeba turns to rock (if anybody out there can fully explain this to me, please do). Nevertheless, allowing the user to set these levels is a definite plus for this kit.

Another nice option is being able to toggle from full screen view to regular screen. This enables the player to plan out elaborate mazes and get a bird's eye view of what they really look like. The line drawing function makes putting up a big wall extremely easy. The dice option, which randomly places twenty of a certain object across the screen, is a surprisingly good feature. I don't know how Jeff Schneider did it, but nine out of ten times when I use this feature, it seems as if whatever I randomly place, arrives at a location to which it was logically meant to go.

Once you have completed a cave or intermission (intermissions are created in the same way as caves, but you are working with 1/4 the size of a full cave) to your liking, you can save it to disk. Once you have a series of caves and intermissions, you can create a game (I usually wait until I have

the standard sixteen screens and four intermissions). Doing this is accomplished by telling the kit what screens and intermissions you want in your game. The kit then memorizes this and puts them all together and runs them in the manner of a typical *Boulder Dash* game.

The screens in the game included in the kit are designed by First Star software's founder and creator of such games as *Astro Chase* and *Bristles*, Fernando Hererra. These screens did not live up to my expectations (Herrera is one of my favorite programmers, however) because he had a tough act to follow. There were no difficulty levels, and we were left with 15 screens (including intermissions). However, I felt that the kit was worth the price of admission alone.

My only hope currently is that First Star supports its kit with data disks containing games created with the kit. After all, how much fun is it playing screens in which you know all the secrets? And how many friends do you have who will lose sleep to keep your interest in *Boulder Dash* alive?

[Boulderdash Construction Set, EPYX MAXX-Out Series, 600 Galveston Drive, Redwood City, CA 94063, (415) 366-0606. \$24.95.]



TIPS'N'TRAPS

Hello, assorted adventurers. Well, like all good things must come to an end, so must this column. That's right, this is probably the last Tips 'N' Traps column that I am doing. I am heading for that great new level of life known as college. And because of this, chances of compiling new articles will become almost impossible.

However, I have a few ideas in mind to continue the progress of T'N'T. I have at least one potential column writer. You'll know if it works out or not, as the September issue will express the fate of the column. If that, by some twist of fate, falls through, the job is open. If not, rest assured, it has been fun.

Thanks again for each and every one of your calls and letters. You all are what made the column what it is today. Since the message bases are still up on the boards, feel free to continue using them. They are VERY useful. Merlin's Litterbox (703) 250–7303. Crusader's Castle (703) 360–1984. And now on to T'N'T #33.

--Jim Stevenson Jr.

BEYOND ZORK

Q. What do I do with the chocolate truffle? How do I change the butterfly back to a caterpillar? How do I get the prince's head out of the trench? What do you do at Froon?

--- "Max Quordlepleen"

A. Truffle ... all I know is to stick it in the water of life ... (I think that's what it's called.) For butterfly to caterpillar, put it in the monkey grinder's grinder after you've disposed of him ... but don't until he kills the nymph!!! To get rid of the grinder, you are going to have to get the sea chest...

--"The Archer"

Q. I got rid of the grinder. When I put the butterfly in, I turn the dial to clock, right? Any help on dealing with the boot in Froon?

-- "Max Quordlepleen"

SPACE QUEST

Q. How do I get by Orat, and how do I get into the door beyond the pit?

--Jim Stevenson

A. Ok, your water can from your survival kit will work to kill Orat. Just drink it before you go in, then THROW CAN AT ORAT. To get by the tentacles, just go to one side of them. I almost forgot, after you kill Orat, GET ORAT PART.

--"The Archer"

Q. I know how to get by the tentacles, but how do you get through the door beyond them?

--Jim Stevenson

A. To get through the door, put the little rock that you find just outside the elevator on the geiser in front of the door. It should open right up.

--"Jammin' J."

ULTIMA IV

Q. One question: How do you find keys in Ultima IV? How do you get the runes when you know where they

are without having an entire guard assault come after you? How do you find out your location?

--"Turbo Lover"

A. I haven't played for many weeks, so I have temporarily forgotten a lot of the game's details, but I -believe- you get the keys from a certain shop, either an Adventurer's Supply or a Thieve's Guild or something. I forget exactly where, but I -am- pretty sure it was a shop of some sort. I'm not sure what you mean about the guards. As far as I remember, you got the runes the same way you got the mantras, from people in the towns. As for location, there is a device which tells you this. I forget what it was, but it may have been a sextant. Actually, I'm pretty sure that's what it was. As for how to get it, you should just ask around, especially the sailor-types. That's a good rule anyway, and you probably already realize it: ask everybody every question that you can think of.

--Chris Leonhard

DUNGEON MASTER

Q. I am stuck on level 6. I was able to get three iron keys and used them. I can't figure out how to get the other two. One is in the plate, pit, switch, forcefield room, the other key is behind a double force field and door. I am able to open the door but can't get any further without being stopped. I have the vorpal blade and the magic wand that gives light. How do I get the last two iron keys?

--Russel Brown

A. Try throwing something heavy into the blue mist when you're standing in front of the iron door in the room with the pit and lever. The other problem can be solved by keeping in mind that heavy objects slow your party ... and they've got to move fast to get through the forcefield to the safe spot left by the open door. It may interest you to know there's ANOTHER forcefield just beyond that. Same problem.

--"Reforger"

TIPS'N'TRAPS

Q. When is a rock r	not a roo	ck?	"Jack Flack"	Q. Does anyor Chaos?	ne know an	easy well to kill	Lord
A. At that point, dru a gold piece.Q. How do you getA. Take the axe, th plate. Pick it up, g arrows and the cha	past "te row it. If go thro	est your stre t should lan ugh the do	"Jammin' J." ength"? "Raven" ad on a pressure	of the demons. him. If he's in yo get next to him a	Trap him in our way to th and cast fuse with the to	Shane mb, how do you g	kill all d fuse room, Dixon
arrows and the chainmail armor. —-"Jammin' J." Q. To anyone who has finished the game: were you able to kill the dragon? —-"Elric Stormbringer" A. Yes, I saved up all my fireball potions, and slept a lot so I could cast fireball spells. I used all of my freeze life boxes and rings, and casted a poison cloud when he was frozen. —-Shane Dixon		mist, and 3 pre- Flip the lever to same time, step on the other side	ssure plates, make the m back into th e of the pit. F mer. Stay a	e room with the pir , I have an easy an hist disappear, and he mist. It should p Press the button an away from the pro- open. Shane	nswer. at the ut you d walk essure		
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ATARI'S SMALL MIRACLES

Thanks to **Joseph Russek** for submitting all three "miracles" this month. The third is somewhat long but still can easily be typed in a short sitting.

"Atari's Small Miracles" are devoted to showing off the versatility of the Atari 8-bit computer with short (usually) BASIC programs. Contributions to this column are encouraged and welcomed. The only criteria is that the code be kept reasonably short, although no specific size limit will be set. If you would like to submit some contributions to this column, contact Len Poggiali, 225 Mosley Dr, Syracuse, NY 13206 (315) 437–2456.

STAIRS

Stairs of various hues appear one at a time until they form a staircase of colors. Afterward the colors change indefinitely.

100 REM GTIA TEST 115 GRAPHICS 10:FOR Z=704 TO 712:READ R:POKE Z,R:NEXT Z 116 REM DATA 0,26,42,58,74,90,106,122,138,154 **117 DATA** 0,17,34,50,66,82,98,114,130,146 129 POKE 704,5 130 Y=0:FOR X=1 TO 8:COLOR X:POKE 765.X 140 PLOT X*4+5.Y:DRAWTO X*4+5,80+Y:PLOT X*4+1,80+Y:POSITION X*4+1,Y:XIO 18,#6,0,0,"S:" 150 Y=Y+5:NEXT X 230 FOR X=9 TO 15:COLOR 16-X:POKE 765,16-X 240 PLOT X*4+5,Y:DRAWTO X*4+5.80+Y:PLOT X*4+1,80+Y:POSITION X*4+1,Y:XIO 18,#6,0,0,"S:" 250 Y=Y+5:NEXT X

300 REM 400 FOR X=1 TO 8:Z=PEEK(704+X):Z=Z+16:IF Z>255 THEN Z=17 420 POKE 704+X,Z:NEXT X:GOTO 400

OXYGENE

This sound demo, created by the Eugene Computer Enthusiasts, presents a screen with the word "Oxygene" on it. As the screen changes colors various sounds are emitted.

5 GRAPHICS 18: POSITION 6,5:? #6;"oxygene" 10 FOR PITCH=1 TO 20 20 FOR TIMBRE=1 TO 15 25 SETCOLOR 4, PITCH, 2 30 FOR AMPLITUDE=1 TO 15 50 SOUND 0,PITCH,TIMBRE,AMPLITUDE **60 NEXT AMPLITUDE** 70 NEXT TIMBRE **80 NEXT PITCH** 100 FOR PITCH=1 TO 15 110 FOR TIMBRE=1 TO 15 120 FOR AMPLITUDE=1 TO 15 130 SOUND 0, AMPLI-TUDE, TIMBRE, PITCH 140 NEXT AMPLITUDE **150 NEXT TIMBRE** 170 NEXT PITCH 200 FOR PITCH=1 TO 15 210 FOR TIMBRE=1 TO 15 220 FOR AMPLITUDE=15 TO 1 STEP -1 230 SOUND 0,PITCH,TIMBRE,AMPLITUDE 240 NEXT AMPLITUDE 250 NEXT TIMBRE 260 NEXT PITCH 300 FOR PITCH=1 TO 15 310 FOR TIMBRE=1 TO 15 320 FOR AMPLITUDE=1 TO 15 **330 SOUND**

0.TIMBRE.PITCH,AMPLITUDE 340 NEXT AMPLITUDE 350 NEXT TIMBRE 370 NEXT PITCH 400 FOR PITCH=1 TO 15 410 FOR TIMBRE=1 TO 15 420 FOR AMPLITUDE=1 TO 15 430 SOUND 0,TIMBRE,PITCH,AMPLI-TUDE:SOUND 1,PITCH,AMPLI-TUDE, TIMBRE: SOUND 2,PITCH,AMPLITUDE,PITCH 440 NEXT AMPLITUDE 441 SOUND 3, AMPLITUDE, AMPLI-TUDE, AMPLITUDE **450 NEXT TIMBRE** 470 NEXT PITCH 500 FOR PITCH=1 TO 15 510 FOR TIMBRE=1 TO 15 520 FOR AMPLITUDE=1 TO 15 530 SOUND 0, TIMBRE, AMPLI-TUDE, PITCH 540 NEXT AMPLITUDE 550 NEXT TIMBRE 560 NEXT PITCH

PRETTY

This month's "longer miracle" more than deserves its title. At first a series of colored lines forms a beautiful three–dimensional pattern. After a few seconds a new screen appears on which another series of lines outline the shape of a polygon. Then a number of box–like figures appear in a variety of screens and so on.

1 GOSUB 1000 5 C=0:Q=1:SETCOLOR 1,5,5 10 DEG 15 XI=80:YI=50 20 GRAPHICS 7+16 30 PLOT XI,YI 40 FOR I=1 TO 1000 STEP 5 42 Q=Q+1 43 IF Q>3.5 THEN Q=1

CURRENT NOTES

ATARI'S SMALL MIRACLES

45 COLOR Q 50 R=I/10 60 T=I 70 X=R*COS(T) 80 Y=R*SIN(T) 81 IF Y+YI<0 THEN 200 82 PLOT X+XI,Y+YI 84 X=(I+C)/16*COS(I+C+90) 86 Y = (I+C)/16*SIN(I+C+90)90 DRAWTO X+XI,Y+YI 100 NEXT I 200 SETCOLOR 2,8,2 210 SETCOLOR 1,8,5 212 SETCOLOR 0.8.8 220 GOSUB 500 300 SETCOLOR 0,8,2 310 SETCOLOR 2.8.5 312 SETCOLOR 1,8,8 320 GOSUB 500 400 SETCOLOR 1,8,2 410 SETCOLOR 0.8.5 412 SETCOLOR 2,8,8 420 GOSUB 500 480 GOTO 200 500 FOR K=1 TO 13:NEXT K 510 RETURN 1000 REM AL'S DEMO 1010 DEG 1020 GRAPHICS 8+16 1030 COLOR 1 1040 SETCOLOR 2.0.0 1050 FOR I=1 TO 360 STEP 5 1060 X=319*I/360 1070 Y=80+80*SIN(I) 1100 IF I>270 THEN 1120 1110 PLOT 0.0 1120 DRAWTO X.Y 1130 IF I<90 THEN 1150 1140 DRAWTO 319,159 1150 NEXT | 1200 GOSUB 6000 2000 REM DBLDOM 2001 DEG 2005 A=INT(1.9*160) 2010 GRAPHICS 8+16 2011 SETCOLOR 2.0.0 2020 FOR I=0 TO 160 STEP 5

2022 B=INT(I/2) 2025 COLOR 1 2030 PLOT 0.B 2040 DRAWTO 1,160 2050 PLOT A,B 2060 DRAWTO A-1,160 2070 PLOT 0,160-B 2080 DRAWTO 1,0 2090 PLOT A,160-B 2100 DRAWTO A-I,0 2110 NEXT I 2200 GOSUB 6000 3000 REM RANDOM BOXES 3020 GRAPHICS 7+16 3025 FOR I=1 TO 32 3030 X1=INT(RND(0)*160) 3040 Y1=INT(RND(0)*96) 3050 X2=INT(RND(0)*160) 3060 Y2=INT(RND(0)*96) 3065 IF X1=X2 OR Y1=Y2 THEN 3030 3070 COLOR INT(RND(0)*3+1) 3080 PLOT X1,Y1 3090 DRAWTO X1.Y2 3100 DRAWTO X2.Y2 3110 DRAWTO X2,Y1 3115 DRAWTO X1,Y1 3120 NEXT I 3125 GOSUB 6000 4000 REM COLLAPSING BOXES 4010 TRAP 4200:J=0 4020 GRAPHICS 7+16 4030 X1=INT(RND(0)*80) 4040 Y1=INT(RND(0)*48) 4050 X2=X1+INT(RND(0)*80) 4060 Y2=Y1+INT(RND(0)*48) 4065 IF X1=X2 OR Y1=Y2 THEN 3030 4070 COLOR INT(RND(0)*3+1) 4080 PLOT X1,Y1 4090 DRAWTO X1,Y2 4100 DRAWTO X2,Y2 4110 DRAWTO X2,Y1 4115 DRAWTO X1,Y1 4120 X1=X1+2:Y1=Y1+2 4130 X2=X2-1:Y2=Y2-1 4140 GOTO 4070

4200 J=J+1:TRAP 4200 4205 GOSUB 6000 4210 IF J<4 THEN 4020 4220 TRAP 40000 5000 REM MOIRE 5005 MX=320:MY=192:MODE=8 5006 MX=MX-1:MY=MY-1 5010 GRAPHICS MODE+16 5011 IF MODE=8 THEN SETCO-LOR 2.0.0 5020 FOR Y=MY TO 0 STEP -1 5025 IF PEEK(764) <> 255 THEN RETURN 5030 Q=Y:GOSUB 5400 5040 PLOT 0.Y 5050 DRAWTO MX/2.MY 5060 NEXT Y 5100 FOR X=0 TO MX 5105 IF PEEK(764) <> 255 THEN RETURN 5110 Q=X:GOSUB 5400 5120 PLOT X.0 5130 DRAWTO MX/2, MY 5140 NEXT X 5220 FOR Y=0 TO MY 5225 IF PEEK(764) <> 255 THEN RETURN 5230 Q=Y:GOSUB 5400 5240 PLOT MX.Y 5250 DRAWTO MX/2+1,MY 5260 NEXT Y 5270 RETURN 5300 FOR X=MX TO 0 STEP -1 5310 Q=X:GOSUB 5400 5320 PLOT X,MY 5330 DRAWTO MX/2, MY/2 5340 NEXT X **5370 RETURN** 5400 IF Q=125 THEN Q=13 5410 IF Q=155 THEN Q=11 5420 COLOR Q **5430 RETURN** 6000 FOR K=1 TO 500:IF PEEK(764) <> 255 THEN RUN "D:MENU" 6010 NEXT K:RETURN

ACCENT ON BASIC COMPUTING

The Low-Down on Modems by Ron Peters

For some of you "politicos", a modem is a Missouri Democrat. However, for most people, a modem is a device that allows one computer to talk to another (usually via a telephone line).

The word "modem" is an abbreviation for "modulate–demo– dulate." A modem simply translates the electronic signal coming from your computer to one that can be transmitted over the telephone lines. At the other end, another modem translates the signal back to one that can be understood by the other computer.

The modem is connected between the computer and the telephone line using a standard telephone cord, and has the ability to dial telephone numbers and control the functions of your computer. Thus, the modem is an interface that allows your computer to "talk" to another computer, even if the two computers are not the same make (e.g., IBM and Atari).

So, big deal. What would you use a modem for? Well, just about anything, including buying a car, transferring money from your savings to checking account, ordering airline tickets, checking the weather in Bodunk, Iowa, playing a starwars game with ten other people at the same time, talking to a buddy, researching the history of shoelaces as they relate to bathing suits, leaving messages for other people using a system called electronic mail, downloading (copying something from another computer to yours) public domain software, sending work from your office to your home, and on and on, ad nauseam.

Besides the modem and the telephone line, you will need a communications program that con-

trols the operations of the modem. This program can be purchased with (or sometimes comes with) the modem, or can be obtained through a user group like Novatari. There are several public domain or "shareware" programs available (like Amodem or Express for the XL/XE computers) that do an excellent job and cost no more than the price of the disk the program is copied on.

Like cars, modems come in all sizes and shapes. The basic modem is relatively inexpensive, but the optional extras can drive up the sticker price. The basic "sub– compact" modem has less horse– power than the sportier models and thus goes a little slower.

The speed of a modem, or how fast it transmits data, is measured in baud, or bits per second. A 300 baud modem (about 30 characters per second) was standard for many years, but now 1200 and even 2400 baud are common. Like horse– power, the higher the baud, the higher the price tag.

The baud rate is directly proportional to the time it takes to transmit data to another computer. Thus, if you are sending data over long-distance telephone lines, the higher speed will cut your telephone costs. However, if you use your modem to mainly access a local bulletin board, speed is not so important, unless your time is a critical factor.

Wait a minute, what's a local bulletin board? A Bulletin Board System, or BBS as it is usually called, is nothing more than a computer connected to a modem and available by telephone. For example, Novatari has a BBS that is available for club members to use.

NOVATARI'S BBS has a bucket-load of public domain software available to any club member. To get these programs, a member calls the BBS, looks through a menu of software names and descriptions, and selects one or more programs to download. Using the telecommunications software connected to the modem, the program can be transferred from the Novatari computer to the member's computer via telephone line. It's really quite simple.

The Novatari BBS also allows members to leave private messages for other members, leave general messages for anyone to read (for example, seeking help with a computer problem), etc. It's a lot of fun and a great way to get new games, utility programs, or other types of software right over the telephone line, for free.

In the Washington area there are tons of BBS's either run by a local club or just by some "hacker" out of his home. On top of this, there are commercial BBS's, like Compuserve, the Source, or Genie, that have hundreds of options available to the user. Of course, you pay for these options, usually with a sign-up fee and so many dollars per hour of usage.

Using a modem is easy to do, and if you make a mistake nothing is lost. The worst you can do is disconnect from the other computer and have to redial to make another connection.

Give it a try. It's a whole new world of computing that can be dangerously habit forming.

[P.S. This article was written using *AtariWriter+*, saved to disk, and then transmitted via modem to the editor of *Current Notes*,] THE ESCAPE ARTIST by Joe Lambert

In this, and coming issues of *CURRENT NOTES*, I am going to be dealing with a variety of different subjects, but the main emphasis will be in the "ART" aspects of the ATARI ST family of personal computers. Call them pictures, call them screens, images, clip art, cartoons or whatever, they have been popping up in the ST public domain ever since *Neo-Chrome* has been around.

Having started on my ATARI experience with the good old 800 eight bit and using/viewing programs like *Micro-Painter* and *Micro-Illustrator*, I have been on quite a trip. In the previous programs I was restricted to four colors. Although you can do a lot with screens and patterns to simulate more colors, there is a definite limit to the creativity one can achieve. *Rambrant* came along and helped quite a bit, but using the extra colors could only be done using vertical blank interrupts, thus limiting many of your

extra colors to horizontal lines.

But now, armed with an ST and one of the popular paint/drawing programs that are available, an "ATARI ST" can use 16 colors or even more with programs like *Spectrum*. The best of the old Koala Pad picture files that used to look so fantastic are pretty sad next to almost anything produced on the ST.

With desktop publishing coming into its own, almost any ST (or ST compatible) picture file (NEO, PI1–3, PC1–3, IMG, MAC, IFF, TNY or more) can be converted to "clip art" for use on any of the popular desktop publishing programs. The importance of the "PIC FILE" has increased a thousand fold.

Also, with desktop video looming on the horizon, these same files can be used for backgrounds in the animation programs on the market. In many cases, paint/drawing programs are used to create the actual parts that are later made to move in the animation program.

If you are becoming involved in one of the two types of above applications, "picture files" are of a much greater importance to you than in the past. They are no longer just for the "artists" that enjoyed the electronic media to doodle on, or running a slide show to impress your IBM friends with the graphic capabilities of your ST. They are a catalog of art available for use in your new project.

You don't even have to be artistic to create picture files anymore! You can use a scanner or a digitizer, both of which will save in the NEO or DEGAS format.

In a new *CURRENT NOTES* picture disk, I have included the following DEGAS ELITE picture files, most of which I have created or color enhanced.

CNLIB #251: LAMBERT PICS NO. 1 (16 low-res pictures in compressed DEGAS ELITE format: Ace, Spidey, Viking, Space, Phobe, Madonna, Madonna1, Madonna2, Cybill, Dragonpr, Kitty, Elle3, Hosercol, Monkey5, Football, and Cowboy.)

Some of these were created from scratch with *Degas* or *Degas Elite*, others were Koala Pad conversions (see if you can guess which ones they are). Still others were digitized and modified. I prefer to use the 'Degas Elite' over the 'Tiny' format because it is easily loaded into *Degas* for modifying.

They also can be converted in PI1–3 format by either *Degas Elite* or *Pic–Switch* to be used directly with desktop publishing or video software available without converting.

I have been collecting picture files for several years, keeping only the better examples. If you have some new picture files and would like to submit them for possible inclusion

into future CURRENT NOTES PD picture disks (or just want to add to your collection), send them on a disk (any format, double or single sided) to Joe Lambert, 1116 Woodlawn Ct., Pekin II. 61554. I will send you back a disk with the same amount of new pictures in trade for yours. I will also include a list of my collection, for future trades. The more good picture files we spread around, the more powerful ATARI will be in the world of desktop publishing and video and the better for all of us.

Joe Lambert has been involved with ATARI's since 1982, starting with a 16k 800, 410 cassette, joystick and a *Star Raiders* cartridge for \$899. He has been VP and Newsletter Editor for the Peoria A.C.E. and President, Newsletter Editor and (presently) Disk Librarian of STING (ST InformatioN Group). Joe is a full time art director/graphic artist for a major sporting goods store chain based in the midwest and a part-time Atari dealer. Joe also enjoys MIDI applica-



THE XL/XE GAME CART

ONE-ON-ONE With Larry Bird and Julius "Dr. J" Irving

Imagine yourself on a basketball court. The crowd is screaming as you wait for your adversary. On the other side of the court, waiting patiently, is either Julius "Dr. J" Irving or Larry Bird. They want to play a little one-on-one, and you're the challenger. "Unbelievable!" you say. Well, maybe not, if you play Electronic Arts' One-on-One Basketball with Dr. J and Larry Bird.

This game, which was released originally in disk

format by Broderbund in 1983, has been made in 1988 into cartridge format by Atari (\$24.95 list) for the new Atari XE Game System (as well as the XE and XL computers).

The game is simple. You control either Dr. J or Larry Bird (whomever you prefer). You play on a simulated half-court which has a regulation basket. Other notable features are a

scoreboard with both players' names on it; the period the game is in (there are four periods in a game); and the number of personal fouls the player has in a given period. There is also a three-point line where players can test their outside shooting range.

When the game first appears, the player is shown the Game Options Board. This includes five different sections:

PLAY BALL: This option allows you either to play a new game, finish an old match, or even just to watch how the game is played by viewing a demonstration.

GAME SELECT: This option sets the level of difficulty at which both players will battle. The four levels are the following:

1. PARK AN REC: Street ball mainly, hardly any fouls called.

2. VARSITY: You're playin' with the big boys now. Fouls are called more frequently.

3. COLLEGE: They get tougher and tougher. Almost all violations are called more frequently.

4. PRO: The toughest level which demands your best. PLAY MODE: Here you choose whether to play

against the computer or else find a friend to control the other player.

SELECT THE END OF THE GAME: This option allows you to do one of two things: you can choose the number of points you want to play to (e.g., whoever scores 21 points first wins), or you can set a time limit, which is either from 2 minutes to 8 minutes a period.

POSSESSION: With this option you can choose either to play with losers outs or winners outs.

With the game options set you are ready to play. Pressing the joystick button once makes your player either jump or shoot the ball, depending on whether he is playing offense or defense. On offense, if you press the button one time quickly, your man will make a 180-degree turn. This allows him either to face his back to his opponent or turn to the basket.

There are a number of impressive "special effects" to this game. For example, an instant replay is shown on your screen after a well-executed play has been run by either player. The computer decides which is a play good enough to show again. The shattering backboard is another neat effect. If your player goes in for a monster jam, there is a good chance

that he will shatter the backboard. At that time a janitor will come out, sweep the floor, yell at you, and then play will resume. Also, you can play the game at two speeds, either regular speed or slow motion speed.

Here are some tips on how to do well in the game. Dr. J is a little quicker to the basket than Bird so try to take him to the hoop. Bird, however, is a better outside shooter and rebounder so box out and take the long jumper. Dr. J gets tired much easier than Bird so use your time-outs wisely.

As a basketball fan I really appreciated this game. It has all the options of the real game. The moves and the shots that you make are almost like the real-life moves that both the players make. The graphics are excellent (the authors went so far as to have the players' numbers printed on their shirts). The color and sound also are quite good.

So grab your Gatorade and high top sneakers. It's game time, and you have to prove yourself against the best--Larry Bird and Dr. J. So get psyched and play a little ONE-ON-ONE!

Review by Joe Pietrafesa

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...The moves and the shots that you make are almost like the real-life moves that both the players make...

CURRENT NOTES

THE XL/XE GAME CART

DONKEY KONG

Oh, no. He's back from the jungles of Africa! It's King Kong! Well, not quite, you see it's just his cousin DONKEY KONG. He's a little bit smaller and actually quite cute, but he has the same idea in mind that his cousin started: get the girl and climb the highest building.

"Pretty clever," you say. Well, it's not that simple. You see the girl has a guy whose name is Mario. Now Mario doesn't like the idea that an overgrown ape would steal his girl, and he is steaming mad. He'd do just about anything to save her. And he literally does, from jumping barrels to dodging whip cream pies. Mario has come to save the day.

Donkey Kong is a game that can be played by one or two players. By pressing the Option key, you will find that you can pick the level you will start on. The levels are shown not by numbers, but they are personified, with the hammer level being the easiest and the pie factory level being extremely hard.

When starting the game no matter how high a level you pick, you will start out on the barrel jumping board. There are three other boards: the rivet collecting board, the elevator board, and the pie factory board. The higher the level you go, the more challenging the boards seem to get.

Barrel Rolling: Donkey Kong is up to no good. He has Mario's sweetheart, and Mario wants her back. Donkey Kong is clever, so he decides he is going to roll barrels at you. Your only defense is to jump over these menacing objects. After the first barrel comes down, if you successfully avoid it, an explosion will occur. Then from the explosion will come Donkey Kong's sidekicks, the nasty little flames. These flames race after you as you try to get to the top of the building.

The building is a bunch of levels with ladders going both up and down. Mario has to go up, but sometimes to avoid a barrel, he must duck down a ladder. The barrels come rolling one, two, even three in a row. They either will roll perfectly from floor level to floor level or take a side route down the ladders, so there is no place to hide.

To aid you in getting to the top, two hammers are strategically placed on the floor levels. When you jump near the hammer, you will grab it; then you just head for the barrels. The hammer will only last for a limited time so be careful not to misuse your time.

Once you get to the top of the structure, you think you have got the girl... Wrong! Donkey Kong just climbs up higher to the next board.

Rivet Collecting: The second board, a very interesting one, involves collecting rivets from each of the platforms that are on the building. Mario must collect all the rivets, by either running over the rivet or by jumping over it. He must also avoid those nasty little flames because they will be hot on his trail.

On this board there are also hammers strategically located to aid Mario to get all the rivets. Once all the rivets are collected, all the floors will disappear, and Donkey Kong will fall to the bottom level, right on his head. Think you have the girl again...nope! Once again DK escapes with your sweetheart.

Elevator Hopping: In this board you must hop from elevator to elevator. One is going up, and the other is going down. You have to time your jumps just right so you can land on the correct platforms. Watch out for those nasty little flames, and you should reach the top with no problem. But once again, just when you think you have Donkey Kong where you want him, up another level he will climb.

Pie Factory: Just when you thought you saw it all, you realize you haven't seen anything yet. The pie factory is probably the hardest board there is. What you must do is get to the top again, but there are a few obstacles. For one, there are always nasty little flames chasing you. There is an added factor, however. Once you climb the first ladders, you will notice you are on an assembly line for pies! You will find yourself drifting either left or right, and you have to jump over the pies in order to get to the next ladder.

Once you make it to the top, you will say, "Now the girl is mine!" But once again Donkey Kong manages to slip away. "Will it ever end?" you ask. Well, I don't know, but what I do know is that you will go to a harder and more challenging level. So the game goes on virtually forever (or until your three men are terminated).

Donkey Kong is an old favorate arcade game which I really enjoyed playing. The only thing that really bugged me was the repetition of the boards. They did change a little in the hardness of the levels, but overall they were the same. Also, you never do get to save the girl because Donkey Kong always seems to find a way to get away. I like a game in which the goal ultimately can be accomplished.

Overall Donkey Kong can entertain many different kinds of players. For those who want action and speed, Donkey Kong is the game to play. So help Mario in his quest to get his sweetheart because, who knows, maybe you can find a way to help him get her for good?

Review by Joe Pietrafesa

GAME HINTS

Compiled from Various Atari User Group Newsletters Submitted by Cheyenne Carroll

Burt's Brewey--Press the OPTION key to skip to the next screen, press ESC to adjust screen colors.

Canyon Climber—If you complete the first screen and have lost any men, hold down the joystick button as the bridges are exploding and then press START. On the next screen, you will have 3 men, but your score will be reset.

Caverns of Mars and Phobos—Press Shift, Control, and Tab at the same time to go to the next level.

Crystal Castles—On each level of the game (not necessarily each maze), there is a "window" where you can skip ahead 2 levels. On the first board, it is on the left hand side.

Dimension X (original)——Press Control F while loading for a Fort Apocalypse demo, or press Control S to play Slime.

Donkey Kong Jr.--Pause the game, hold down the shift key and type "BOOGA" or "BODA". Un-pause the game and press "S" to change screens, "K" to make yourself immune to snappers, birds, and sparks.

Encounter or Snokie—Press the number of the wave you wish to go to. You must have already reached that level.

F-15 Strike Eagle--Always running out of gas on those long missions? Try using "A" afterburners for energy.

Ghost Chasers——Hit the START button. Then type "FANDA", you will start at a higher level. Type "FRANK" to replenish your supply of men.

Ghostbusters—For your name, type "600". When it asks if you have an account, type "Y". Your account number is 11111111, you will have \$246,000 in your account. Or you could even get more money if you use the name "JAZ" and use account number 99999999. You'll be rolling in the bucks.

Jumpman—On the first level, go to the far right and type "54354" and then the number of the level you want to go to.

Kazoo—–If you are about to get killed, press the space bar to pause the game. The monster will pass through you and you can continue playing by pressing the space bar again.

Lode Runner--Press Control E while loading the editor command menu. Then type 1-character command (P=play level, etc.)

Miner 2049er—At any time during the game, type "213 782–6861" (Be sure to leave a space between the 3 and 7). Then push Shift and the number key for the level you want. You can change levels at any time during the game, but you only have to type the password once.

Night Mission Pinball—Type "FIX" to get maching control menu.

Ollies Follies—To skip to screen 5, type "FANDA"; to go to screen 10, type "FRANK"; to go to screen 15, type "NORBI"; and for screen 20, type "ZOOOM".

Pitfall—Start the game by pressing OPTION and you will have unlimited lives.

Preppie—Pause the game while in play. Press the RESET to restart it. All objects except your man and frog will remain still.

Realm of Impossibility——When you enter a room, press and hold down the OPTION key, making the Zombies ignore you. When you get to an exit, push against it and release it.

Scrolls of Abadon--Type following commands while in play: WALL--allows moving against arrows; ICE--supresses monster temporarily; RES--type when game over for a free man; SPA--creates a shield; FLI--warps you to next level; VIS--makes disks visible without gem; MAP--makes all of map visible.

Spare Change--Pressing Control Z will bring you to the Zerk control panel.

Spelunker—With a sector editor, look for sector 28, and change these bytes: A6 CB 30 2D to A2 07 86 CB, you will now have unlimited lives.

Threshold—Remove the THRESHOLD disk from the drive after it loads. Every time the drive restarts, you will be up 1 level. Insert the disk when the drive is off to start at that level.

Track Attack--On the box car scene, listen for a click from the keyboard. One second later, jump.

[Reprinted from the May/June 1988 issue of the Lowcountry Atari Users Club Newsletter.]

ATARI ST/MEGA

CN REVIEW

SHOOT OUT TurboST and the Blitter Draw on Each Other By Bill Brady

Recently I decided to pass my much modified 520ST along to a fellow OS–9er and jump head first into the Mega world. Before the Supra spun up all the way on my new Mega ST2, *TurboST* arrived to pit itself against the vaunted blitterchip.

Now, being an OS-9 type, I wasn't too enthusiastic about either one. I generally don't run much in

the way of TOS/GEM programs. In fact, I own only a handful. On the other hand, still being an OS-9er, I don't have any bias, (or vested interest), in the TOS/GEM world, so perhaps it is fitting that I should do the "shoot off" required.

	min:sec:00
Turbo	00:41:86
Blitter	01:04:05
None	01:41:86

OK, here is the bottom line: it looks to me like the blitter is about 15% faster than no blitter. *TurboST* is about 70% faster than no blitter and 50% faster than the blitter. This is not the first time I have seen a "software enhancement" out perform a hardware one, but its the first time I have seen such a difference. I deliberately chose a simple test. I was not doing an evaluation of Turbo, just a speed test. What I did was to "show" the file, STWMAN.TXT, that accompanies *Stwriter*, over and over again. After all,

Toad Computer Services P.O. Box 1315, Severna Park, MD 21146 scrolling through text is where we all spend a lot of time, and this operation is almost pure blitter territory. Also this test can be recreated on any ST, the file is available from nearly any PD source. The numbers in the box represent the average of over 20 runs.

The amazing thing is not that the blitter is slower than Turbo, but that it is not that much faster than

'straight' GEM. This means that the underlying premise of Turbo is correct: the problem is software, not hardware. Not being able to resist a plug for OS-9, we have known for years that software is better than somebody elses' firmware. 90% of OS-9 systems run out of RAM,

not ROM. This way when something like TurboST comes along, we can take advantage of it right away, without waiting for new chips. Not all is rosey for Turbo, however. Several people have told me that there are problems with software compatibility. TurboST must be turned off with some word processing/ page layout programs. This is a pity, because this is where you need the speed most. But, for me, it IS VISIBLY faster when you can use it, and the blitter is NOT.

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CURRENT NOTES

TWO USEFUL TRICKS WITH PC-DITTO by Stephen D. Eitelman

The first trick is how to format bootable, MS-DOS disks while remaining under GEM. The second trick is to create a single disk that will boot both pc-ditto and MS-DOS. Why do either? A little explanation is in order here.

After using the now-famous IBM PC emulator pc-ditto for awhile, some disk maintenance becomes inevitable--sort of a computerized house cleaning. Files invariably need to be moved from one disk to another, say to get all those WordPerfect or PCWrite files grouped by subject, delete the first six copies of that term paper, etc., etc. Doing file maintenance under MS-DOS quickly makes one appreciate the efficiency of GEM. Using the DOS command "Copy <filename> b:" to copy files one file at a time is primitive compared with "rubber banding" a group of files to their proper location and then letting GEM do the whole job without additional intervention. Well, it can be done. As has been pointed out more than once in the pages of CN, the disk formats are almost identical. GEM can read and perform disk operations on MS-DOS formatted disks, so just put those MS-DOS disks in the drives and have at them under GEM, Fine.

Eventually, however, an MS–DOS formatted disk is needed and that means a trip back to *pc–ditto* which is a nuisance. In fact, it is possible to format an MS–DOS disk under GEM and even put the three files on it needed to make it bootable. The essential element of this process is to create a "Master DOS" disk that is IBM PC formatted and has the two hidden files unhidden. PC formatted disks can then be formatted under GEM using a public domain program called DCFORMAT and copying the master DOS to it under GEM, never leaving GEM in the process.

Have you ever been annoyed at being required to remove your *pc-ditto* disk from drive A and insert a bootable PC formatted disk in order to get DOS going? Why do we spend all that money on a second disk drive if a disk swap is still needed? A simple trick solves the problem here: just format a bootable disk under MS-DOS (format /s), put whatever DOS files you like on it (e.g., format, print, diskcopy, etc.), then return to GEM and put *pc-ditto* on it. Then *pc-ditto* can be run starting from GEM and when pc-ditto asks for a DOS disk in drive A, just hit return and, voila, booted in DOS and ready to run your favorite application.

Bootable DOS Disks Under GEM.

First, create a PC formatted "Master DOS" disk that contains COMMAND.COM plus the two hidden

system files, IBMBIO.COM and IBMDOS.COM or IO.SYS and MSDOS.SYS, depending on what version of MS-DOS is being used. This disk is created under *pc-ditto* with the standard MS-DOS command format /s. The /s puts the system files on it. Then, change the file attributes of the two hidden files under the GEM desktop from Read Only to Read/ Write. Now you have a bootable, PC-formatted disk that can be copied to another disk with either the GEM DISKCOPY function (drag one disk icon over the other) or use an ST disk copier program such as DCFORMAT. DCFORMAT is available from the Current Notes ST library. Not all copy.programs work reliably, however. DCFORMAT has been found to be consistent.

Once the master DOS disk is created, disks can be formatted for use on a PC or with *pc-ditto* by formatting with DCFORMAT. DCFORMAT allows the MS-DOS boot sector to be written to the disk. Format two sides, 80 tracks, nine sectors per track. When the format process is complete, click on the Write MS-DOS Boot Sector. Then copy the master DOS files to the new disk with DCFORMAT's copy function or exit DCFORMAT and drag the master DOS disk icon over the icon for the new disk. Then the new disk can be used to copy files from other PC formatted disks under GEM and the new disk will run under pc-ditto.

MS-DOS/pc-ditto On Same Disk.

Create a PC-formatted disk, put your favorite MS-DOS files on it and then copy pc-ditto (both program and resource files) plus any other of the files on the pc-ditto disk you regularly use. Save a desktop that you like, any accessories and AUTO folder programs on it. Then you have a disk that will boot the ST, load pc-ditto and them boot MS-DOS, all without swapping disks.

Strange Problems.

I found that there are a number of ways that the master DOS disk could be created, but then that same technique would not work later. One of my favorite utilities is DCOPY20 by Ralph Walden (also available from the CN ST disk library). It has an unhide feature and is also a disk copier and formatter. Sometimes it worked and sometimes it did not, yet DCOPY20 has been completely reliable in other applications.

I used to like *ProCopy*, but have pretty much concluded that it makes *DeskCart* (a commercial plug in cartridge with a whole bunch of accessories, including a battery powered clock and calendar) get mixed up on the date when the months change. Again, sometimes, but not always. That's why I'm not completely certain. But *DeskCart* has been well behaved during the last six months since I stopped using *ProCopy*.

If you want an even more mysterious adventure, try unhiding the two hidden files with Norton Utilities. Now in the PC world, Norton Utilities is regarded as a real workhorse. It has rescued a lot of files in my office. Well, when I tried to unhide the hidden files. I discovered that NU thought the files were archived as well as hidden. When I unhid them and unarchivedthem, then switched back to GEM, GEM could not find them at all! They did not appear in the directory listing. DCOPY20 could not find them either. Yet the disk would still boot DOS under pc-ditto and also boot DOS on a portable PC clone. These anomalies could probably be explained by using a sector editor and some careful analysis, but I settled for finding something that seemed to work reliably. Someone familiar with both GEM and MS-DOS disk formats might want to write an expose for Current Notes on these oddities.

Classified Ads

Classified ads (non-commercial) are free to subscribers of CURRENT NOTES (\$0.10/word for others). Send your ad to CN CLASSIFIED, 122 N. Johnson Rd., Sterling, VA 22170. ST SOFTWARE: Word Perfect 4.1 – April 15, 1988 update, NEW

SI SOFTWARE: Word Perfect 4.1 – April 15, 1988 update, NEW (\$180 o.b.o.), Data Manager ST 1.1 (\$17), Eight-Ball (\$5). Kyle ALons, R.R. 1, Box 17, Boyden, IA 51234 (712) 725–2543. FOR SALE: ST-Talk, Spiderman, Hippo Almanac (\$5 each)/Rogue, Time Bandits (\$9 each)/Balance of Power(\$12). 8-bit: Worms, Jyym Parson ddy 1.2, Hard Hat Mack, Sharwur, II, Niehtraidere, Oberture

FOR SALE: ST-Talk, Spiderman, Hippo Almanac (\$5 each)/Rogue, Time Bandits (\$9 each)/Balance of Power(\$12). 8-bit: Worms, Jyym Pearson Adv. 1-3, Hard Hat Mack, Shamus II, Nightraiders, Ghostbusters, Tail of Beta Lyrae (\$5 each)/ Deadline (\$10)/Visicalc, Atariwriter (\$15 each)/Scott Adams 1-12 (\$20). Call Alec at (812) 372-0557.

FOR SALE: 100's of Atari 8-bit disk commercial software programs still in shrink wrap with documentation for \$5 each. Send LSASE for free list. C.T.French, 27202 Corcubion, Mission Viejo, CA 92692.

ATARI 800XL, two Indus double density disk drives, Commodore 1702 color monitor with Atari cables, \$400. Call John (703) 524-1112, Arlington, VA.

ST SOFTWARE: Retailer with excess software, New and sealed, below my cost, i.e. GFA Vector \$21,95, Marble Madness \$14,95, Leader Board, \$19.95 and many many more. Send for list or call. Computers & Games, 3326 B Plaza Dr., Muhlenberg Shopping Plaza, Reading, PA 19605 (215) 929–0540.

SOFTWARE ON THE CHEAP! Call David at (202) 252–1766 and make me an offer for--Word Writer 2.0, Publishing Partner, pc-ditto 3.0, Flash 1.5, DAC Accounting, Macro Manager (6 in 1 desk acc), Sun Dog, Bard's Tale, Gridiron, Aliants, Crystal. Buy 2, get 1 free. Free PD PC disks with pc-ditto. Free font disk with Pub. Partner. Will trade, too. Call M-F, 10–3.

WANTED: Atari 800XL and 1050 disk drive. Call evenings for Sharon (816) 637-0239.

Earn Money, Excellent Extra Income! For free details please send a self-addressed & stamped envelope to: Expressed Computers Limited, Rt 3, Box 472, Excelsior Springs, MO 64024.



July/August 1988



CURRENT NOTES

CURRENT NOTES MAGIC LIBRARY

These disks contain Mac programs for use with the MAGIC SAC Macintosh emulator. Disks are \$4.00 each. Order from CN Library, 122 N. Johnson Rd, Sterling, VA 22170. Add \$1/6 disks for S&H.

M0: MAGIC SAC. Version 4.52, (or the most recent ver) of MAGIC program.

M2: TELECOM DISK No.1. BinHex 5.0, Free Term 1.8, FreeTerm.Doc, Kermit, Packlt III (V1.3), Stufflt 1.0, TermWorks 1.3.

M3: UTILITY DISK No.1. DES, Font Doubler, MacDump, Mini Finder, Packlt III (V1.3), Reverse Screen 1.0b1, RMover, Scan, Set File. SLICER. Version Reader 1.1, Write Stream.

M4: GAME DISK No.1. Backgammon, Bash Big Blue, Curves, MacLuff, MacYahtezee, Maze 3D, Meltdown, Missile Command, Munch, PepsiCas, Smile, Snow, Solitaire, Space Bubbles, Vax Runner II.

M5: DISK LIBRARIAN. Disk Librarian V1.82A. Disk Librarian Doc, Short Doc. Contains listing of CN MAGIC LIBRARY.

M6: GAME DISK No.20. Ashes, Black Box, Destroyer, HexPuzzle, Killer Kalah, MacPoly Demo, Office Attack, Point Symmetry Demo, Snake, Solitaire, Trophy List, Wall Game, Wheel.

M7: GAME DISK No.3. Ashes, Break the Bricks, Deep Ennui, Go, Mac Gunner, MacBugs, MacCommand, MacYahtzee, Wiz Fire 1.1

M8: DESK ACCESSORIES No.1. 3DTTT Game, Art Thief, Ascii, Bagels Game, Big Ben, Calculator, CopyFile, DA Tester 1.5, Delete File, Desk Acc. Tester, DeskZap 1.2, Eject&Reset, Extras, File Hacker DA, File Tools, Font Grapper+, Font Grapper3, Hex Calculator, HP 12c, MemScan, MemWindow, MerriMac BlackJack, miniWriter, MockTerminal, MockWrite, Moire, MW Count, Other 3.0, Puzzle, Reader, Rubik's Cube, Sampler, Scrapbook, Scientific Calculator, SetFile 3.3, SkipFinder, TheBox, Tiler 1.5, Trails, Transfer, TrapList, Utils, Word Count, Zoom Idle.

M9: UTILITY DISK No.2. Bind Icons, Change Appl. Font, Convert Desk Acc., Desk Accessory Mover, File Hacker, FontDoubler, Index, Make-Screen, MicroFinder, Purgelcons, RamAStart 1.3, REdit, ResEd, SelectPaint, Show Version, User Interface Demo.

M10: GRAPHICS DISK No.1. Amy, Artisto, ball demo, Big Ben, Brooke, Bugs, Curves, Display Message, Dragon, Fighting 51, Fourth Dimension, GARF, HotSex!, Liar's Club, Living Art, Max Headroom, Moire 3.0, Nightmare, Optical Illusion, Paint Grabber, Painter's Helper #1, Pattern*, Pisces, Rotations, Saddle, The Fourth Docs, ViewPaint 1.5.

M11: PRINT UTILITIES. Coventry-12, Disk Labeler, Fast Eddie, Font Mover, Ink, MacWrite 4.5 to Text, miniWriter, MockWrite, Pica-10, ReadMacWrite, Walla Walla-9.

M12: MACBILLBOARD. Chipmunks, Donald & daisy, Goofy At Bat, Announcement, Babe Ruth, Carrotprint, Classic illusions, Escher, Escher Hands, MacBILLBOARD (MacPaint clone), Max, Mickey and Minney, mm, Quick Tour, T-Shirt.

M13: FONT DISK No.1. Akashi, AlgBlurb, Algebra, Athens, Boxie, Dover, Geneva, Hood River, ImageWriter, LED, London, Los Angeles, Luxor, Mars, Monaco, Park Ave, Pica, Ravenna, Rome, Runes, San Francisco, Seattle, Steel Brush, Ultra Bodoni.

M14: FONT DISK No.2. Bookman, Courier, Coventry, Dali, Genevaa, Hebrew, Manteco, Shadow Box, Sri Lanka, Times, Walla Walla, and font display 4.6 w/docs.

M15: GAME DISK No.4. Alice, Amps 3.0(B2), Bricks, Canfield 2.0,lago, Lets Get Tanked!, MacHeads, Nim, Space Attack, Third Dimension.

M16: FONT DISK No.3. About Lachine, Alice, Avante Garde, Berkeley, Broadway, Camelot, Cartoon, Centura, Chancery, Eon, Exeter, Fallingwater, Fantaste Key, Fantastel, Future, Ham, Helvitica, Hollywood, Lachine, Lineal, Madrid, Pittsubrg, San Quentin, Silicon Valley, Stencil, Unicol plus DAFont2.da and SysFonts.da.

M17: DUNGEONS OF DOOM 4.0. Graphic adventure game.

M18: DESK ACCESSORIES No.2. About Popup.txt, Alarm clock, Art Grapper+, Calculator+, Choose Scrapbook+, DA File, DA Tester 1.5, Disk Labeler, DiskInfo 1.45 + SICNs, Explorer, Gone Fishin', Hex Calc, Label Maker, MemWindow, MiniWRITER 1.34, Multi-Scrapbook, MW 4.5 Counter.DA, Popup 1.0, Pro-Count, ReadiPrinter, Ruler, SFstartup 1.0, Skipfinder 6.1, Sleep, Stars 1.6, Stars II, Sysfonts, TeaTime, Timer.

M19: PINBALL CONSTRUCTION SET GAMES. Pinball Construction Set Player plus 12 Games: Apple, Black Hole, Face, KalinBall, Madonna, Minute-Mag, Patchwork Mess, Phantom, Pure-Gemme, Samurai, The Royal Pain, Wizards Lair.

M20: GAME DISK No.5. Chase'Em, Crystal Raider, Daleks, Golf MacWay, Kill File, Kill, King, King.MacWrite, On-The-Contrary,

StuntCopter1.2.

M21: GAME DISK No.6. Guess, Hacker's Contest, Hot Air Balloon, Match, Ramm1.0, Third Dimension, Trick-Track, Utaan Attack, Zero Gravity.

M22: GRAPHICS DISK No.2. BlowUp 3.0, BlowUp Notes, CalendarMaker 2.2.1, Dynamo, Graphic, MadMenus, Math21, Rays, Simutree, Spiro, Tree, Vanlandingham.

M23: VAMPIRE CASTLE. Graphic adventure game.

M24: DEEP ANGST. Graphic adventure game. 1 Mb ST only.

M25: GAME DISK No.7. Billiards, Cross Master Demo, Flash Cards, Hangman-9.0, MacLuff, Master Guess, Safari 1.0, Venn.

M26: GRAPHICS DISK No.3. 3D Sketch, AniRama, Bin/Graphics, Brownian Motion, Control, Fractal Contours, Fractals, Icon Collector, Julia, MakePaint, Melting Clock, Small View, ShapeArt, StarFlight, Window Demo.

M27: UTILITY DISK No.3. Browse/Shazam!, Clocks: analog & digital, Edit, FEdit 3.0, launch, lazymenu, Magic Beep 1.0, Menu Editor, microFinder, Quick Dir, Quick Print, Ram-Start2.0+, Road Atlas, ShrinkToFit, SicnEdit, SortMenu, SortMenu Code, SuperFinder4.0, TabsOut, Unpit, WayStation.

M28: RED RYDER 7.0. Red Ryder 7.0, Red's 7.0 Stuff, RR7.0 Macros, RR Docs.

M29: PCS PLAYER No.2. Pinball Construction Set Player plus Games: Circus Circus, D &D, Diadora, Max, Merlin, Modern Mistress, Queston, The Royal Pain, Twilight Zone, Whazit.

M30: GAME DISK No.8. Bowl-A-Rama, MacTrek 1.1, Mystery Box 1.0, Shots, Star Trek Trivia Quiz, Window Blaster 1.0.

M31: BLACK WIZARD. Graphic adventure game by Richard Loggins.

M32: FONT DISK No.4. Canberra, Chicago, Humanistic, Music, New Dali, Palencia Application, Palo Alto, Pioneer Shadow plus F/DA sorter and Font Tester.

M33: CLIP ART No.1. AirCraft, Business, Car Logos, Cars & Trucks, Clip Art Demo, Disney, Eyeballs, Flowers, Misc, Seasons, Trees1, Trees2, ViewPaint 1.5.

M34: GAME DISK No.9. 1000 Miles, Asteroids, Cairo ShootOut!, Donkey Doo, Duck Hunt, Pente 1.0. M35: FONT DISK No.5. Beehive, Beverly Hills, Boise, Chicago, Courier, DeStijl, Ham, Happy Canyon, Helvitica, Mod. Chicago, Old English, Square Serrif, Sri Lanka, Worksheet.

M36: CASTLE OF ERT. Shareware graphic adventure game.

M37: MAC-A-MUG PRO DEMO. Version 1.0, Create your own mug shots by combining a variety of different facial features.

M38: VIDEO WORKS PLAYER #1. PD player for Video works animated screens. Includes 11 movies.

M39: DEMO DISK #2. Demos of Anatomiser (learn human anatomy), DeskPaint (desk acc MacPaint clone), and SuperPaint (graphic program with both MacPaint and MacDraw features).

M40: HACK, Version 1.03. Game is similar to Rogue, includes manual with full docs.

M41: RADICAL CASTLE. Graphic/text adventure game.

M42: FONT DISK No.6. 15 new fonts: Berlin, Boston II, Courier, Dorza, Highwood, MicroBoston, MiniBoston, New York, Palo Alto, Sparta, Stiletto, Symbol, Tatooine, Venice, Wartburg.

M43: UTILITIES No.4. DiskDup+, MacSnoop 1.03, RamDisk+ 1.4, ResTools 2.01, Oasis 2.01 (HFS), Font Librarian (HFS), Switch.

M44: FONT DISK No.7. 18 new fonts: 42nd Street, Aldous, Art Deco, Ascii, Blockbuster, Border, Clairvaux with docs, Coptic, Deep Box, Ivy League, Klingon, Las Vagas, Little Box, Madrid, Memphis, Minneapolis, Rivendell, Spokane.

M45: GAME DISK No.10. Blackjack 4.0, Gunshy 1.0, Humpback, New Social Climber, Panic, Puzzle 1.0, Star Trek Trivia Quiz, Video Poker.

M46: DA DISK No. 2. 35 DAS: 3D Tic-Tac-Toe, A-Bus ID Poker, Abacus, Calendar, CheapPaint, Collapse, ConCode, Crabs2, DAFile, DAFont, Disp.Msg, Double Apple, Executive Decision, FatMouse, FixPic2.0, Flow, Fun House, Func Keys, Font, Idle, KeyMouse, KnockOut, Multi-Scrap, MW to Text, New MiniDos, Orig Clock, PaintDA, Poker, ProCount, Ruler, Tiler1.5, Timelogger2.11, Utilities, Wrap, WXModem, Sample It.

M47: GRAPHICS No.4. Cursor Designer, Earthplot3.0, Graphics2.0, Mondrian1.0, MotionMaker2.0, Moving Finger, Wallpaper, Zoomation.

M48D: HYPERSTACKS No.1. Address, Databook, Fractal, Funy Day, Home Desk, HyperNews 1.2, HyperZoetropes, MacGallery, MacVermont #2, Notebook, Periodic Table, and ResEdit IPS. (Double-Sided)

M49D: HYPERSTAKCS No.2. Ear, Illusions, Passing Notes, Shipstack, Silly, and US States V2. (Double–Sided) NOTE M48 and M49 require HyperDA and some form of DA tester (Sample It! on M46 or DA Tester 1.5 on M8 or M18).

M50: FONTS #8. Alderney 9–48; Cairo 18; Cyrillic 12; Greek 10,20; Paint 18; Playbill 12,18,24; Rehovot 10,12,20,24; Runes 12,24; Washington 12; Zodiac 18.

M51: GAME DISK NO. 11. Bouncing Balls, Fire Zone, Mac Word Hunt 2.0, Out Flank, Risk and Word Search.

M52: CLIP ART #2. 27 files: Al&Jimmy, Americana, Arrows, Bigger Guys, Billboards, Borders, Cars, Cartoons, Cats, Celebrities, Egret, Famous People, Farm Animals, Good Guys, Gorilla, Hopefuls, Little Guys, MacLectic Clip Art, More Little Guys, Presidents, Rain/Chef, Skier/Football, Skylines, Space/Race, Statues, Tennis/Running, Wine & Beer.

M53: GAME DISK NO. 12. 3D Checkers 2.0, Bills Casino, BMX-The Racing Game, Helo-Math, Mouse Craps.

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#161: Tinypics No. 9 (C) Vehicle No. 2.
 #162: Hard Disk Utilities. (dir count; source to HD directory, supra V2.61 utilities, ? turtule HD backup V2.15; multiple HD to supra.)

#163: Editor Disk. (Proedit and conTEXT).
#164: Games No. 9. (C) Stone Deluxe, Ship Combat, Lander, and Lunar.

#165: Library Programs. menu.prg, diskcat V1.3, turtle companion.

#166: Utilities No.19. disk editor, musical formatter, multiple formats, modify seek rates.

#167: Terminal No. 6. wterm, bmodem, trans100, amulti V1.4.

#168: GFA Basic No. 2. Source to stone deluxe, ship combat, and recalbdo V2 (record album db).

#169: GFA Basic Help. 7 tutorial/tip files on using GFA Basic.

#170: GFA Basic No. 3. diox V.0.95 (easy user interface for simplifying construction of dialog boxes in GFA Basic, outputs GFA source file).

#171: C Source No. 6. bmodem terminal emulator, sealink transfer protocol, sed and ctag (2 unix utilities).

#172: Juggler Demo. (C) Graphics demo of juggler with 3 balls (from Amiga).

#173D: Cyberscape (C) Animated demo--disk changes to spaceship, flies into and explores insode of ST (1Mb & DS)

#174D: Star Trek Animation (C). animated pictures featuring starship Enterprise.

#176: ST Writer Elite, V2.52. Latest version (3/20). Supports multiple printers. English, German, and Spanish. Complete docs.

#177: Sample Pascal No.4. special keys; statistical analysis, BIOS parameter block; display filenames; complex numbers.

#178: Breach Scenarios. 16 Breach scenarios ranging from easy to the star level.
 #179: Kid Fun. (C) For younger kids: musical keyboard player; concentration; drawing program; doodle program; keyboard piano.

#180: Starnet BBS. BBS with xmodem. #181: Xlisp V2.0. Latest version of XLISP

language. Docs from Ver 1.7 included.

#182: Spectrum Pictures. (C) Spslide5.prg & 8 pics(aztec, goya, phil2, ponpei, renoir, riveria, soralia, the party).

#183: Superneo Demo (C) New Neo picture show plays music, displays user editable scrolling text at bottom of screen (needs old monitor). slideneo, neofun, windows, and 9 pics (dragon, einhorn, midearth, monopoly, moreta, porsche, queen, tutench).

#184: Atari 8-bit emulator. XFORMER: the "official" emulator with library of programs. Includes Megamax C source code.

#185: Utility No.20. analyze copy protection; format disks for Magic Sac, IBM, ST; st maintenance programs (arundisc, brundisc, dspeed, memst1, priveye, ver2 of superboot).

#186: GFA Basic: Monopoly. (C) GFA Basic source code to popular board game.

#187: Wheel of Fortune, V2.0. Game W/26 puzzles (beatles, child, clothes, computer, fauna, filmLit, Flora, Fun, OTBible, Software, Shield, Titles, US Air, Vacation, YumYum).

#188, #189, #190: Mean 18 course disks. Each disk contains four courses designed for use with Mean-18 golf game. #191: GFA Basic No.4: GFA "tip" files 8-11; paint program; 3-D Tic-Tac-Toe

(mono); variable cross reference; line numbering.

#192: MicroEMACS, Ver3.9. Latest version of popular text editor, includes MicroS-PELL spelling checker.

#193D: Cyber Family Demo No.2. (C) (Sphere, Backflip, Bounce, Anticado).

#194: Vanterm, Ver 2.3. Sophisticated terminal program with xmodem, ymodem, and internal ARC support.

#196: Christmas Disk (C). Melodies along with pictures (Deck the Halls, Gingle Bells, Jolly Old St. Nick, Little Drummer Boy, silent Night, We Wish You.)

#197: Music Studio No.3. 65 Music Studio songs (MIDI compatible) w/PD player.

#198: Music Studio No.4. 75 Music Studio songs (MIDI compatible) w/PD player.

#199: Music Construction Set No.1. 32 songs with PD player.

#200: Telecom No.3. K-I-S Terminal V3.; ST Talk Professional Demo; VTX Terminal Prg (All Arc'd).

#201: Flash-Interlink Updates. Requires Flash V1.51 or Interlink. Create FLASH DO files, auto download, logon, update to V1.52. Interlink files for ANSI emulation V1.12 and TXF transfer protocols.

#202D: Cyber Demos & Utilities (C, 1Mb, DS). chasers, elmsk31c, scout, texture. #203: Spectrum Ball Demo. (C) 5 metal balls, hanging from rack, in perpetual motion.

#204: Spectrum Space No.1. (C) spslide8.prg & 8 pics (crab, earth, moonflag, orion, NASA1/2/3, Patch1).

#205: Spectrum Space No.2. spslide8.prg & 7 pics (apollo9/10, astro1, earth1/2, earthris, lem).

#206: Utilities No.20: set screen/text colors on bootup; Epson font editor; calculator and limited screen plotter; fast disk copier; convert IFF pic files to Spectrum; show Spectrum, Degas, & Neo pics from one program; convert AIM to Degas.

#207: Statistically Accurate Baseball. No graphics. Data for 4 teams included ('62 Giants, '70 Reds, '84 Cubs, and '86 Mets). (Not for MEGA).

#208: Games No.10. (C) Milborne, G-Ranger, NIM, Trucker, Darts.

#209: Games No.11. (C) Poker, Black Jack, Roulette, and Slots.

#210: Games No.12. 2 vers of Pacman; jigsaw puzzles from DEGAS pics; drive race car around track; drive car to top of hill in widow maker, make yourself invincible in Time Bandit.

 #211: Games No.13. For Younger Kids: 2 music prgs (Kidmusic and Kidpiano); Make your own Mr. Potatoe Head with KidPotato; and KidMixup – display pics that tell a story.
 #212: Mono Games No.4. Spacewar – battle Klingon cruiser; Megaroids – Asteroids clone, Runner (great arcade game!), Squixx (like QIX).

#213: Mono Games No.5. Adventure writing system; Daleks-graphic strategy game; Krabat2 – play chess against the computer; Stocks and Bonds; Eliminator – interesting variation of card game; breakout.acc and reversi.acc.

#214: Spectrum Animation. Imitation of Amiga demo that shows 4 monitors each with a different animated display.

#215D: A.I.M., Ver 2.3 (DS). Atari Image Management System (C or M). Image manipulation prg from Germany (can read in NEO and DEGAS pics).

#216: Music Studio No.5. (C) 70+ songs for Music Studio. Includes PD player.

#217: Music Studio No.6. (C) 70+ songs for Music Studio. Includes PD player.

#218D: Play It!. (DS) Input sound file from ST Replay and output file that can be played with either of 2 player prgs provided. Includes collection of SND files.

#219: dBMAN Demo Disk. Demo of Ver 4.0 of dBMAN. Databases limited to a max 20 records. (Order #28 for dBMAN Tutorial (V3) and Mailing List program).

#220: Utilities No.21. Your 1st Utility Disk. Micro-Time Alarm Clock, ST Ramdisk and Printer Buffer, Clock/Calendar, ASCII Printout, DeARChiver, Disk Manager, Disk Directory Listing, and Acc Selector and Resolution Setter.

#221: Utilities No.22. ARCSHELL Version 1.8; ARC Accessory;DCFORMAT acc.;7DIS-KFREE (speeds up: 10 fold: GEMDCS diskfree() function); FOLDRXXX (takes care of 40 folder limit in TOS); FSELV55 (replacement for GEM file selector box); SUPER BOOT 3.2 (all-in-one type boot program).

#222: Desk Pak, Plus (Shareware) 10 desk accessories in a single file: clock, calendar, phone book, calculator, appuointments, free ram, note pad, copy file, delete file, desktop. #223: C Source Disk No.7. C source programs for ARC.TTP, a C compiler, formatting disks at 11 sectors/track, disk formatting program, code for accessing TNY file formats, and a cross assembler to 6809

CPU-based systems. **#224: Toy Prolog.** This language operates exactly like the system described in Programming in Prolog by Clockrin & Mellish. (Note complete docs, but they are in GER-MAN!).

#225: Breach & Empire. 14 additional scenarios for use with BREACH. A collection of maps for EMPIRE players as well as the fixsave.prg which allows owners of older versions of EMPIRE to use the play-by-mail option.

#226: Fractal Zoom Ver 6.A. (C) Create a variety of fractals both at full screen resolution as well as in a smaller "preview" box. Animation options lets you turn your fractals into a zooming movie.

#227: Casting D'Enterprises by Propulse. (C) An impressive demo of the animation and graphics capabilities of the ST. This French "film" runs for about 7 1/2 minutes. (No MEGA)

#228: Supercharged Easy Draw Slide Demo (M). A self-running demo of the capabilities provided by Migraph's new Super Charged Easy Draw.

#229: Easy Draw Utilities. Fonts: (Chicago 7, 10, 14, 18, 28, 36; Courier 7, 10, 14, 18, 28, 36; and Calig (7, 10, 14, 18, 28, 36); Easy Draw Art (18 GEM Pics)

#230: Mono Games No.5. CRIBBAGE--play the computer in a game of Cribbage; DRAWPOKR--A very well-done game of draw poker. MEGAMA11--Mega Maze 1.1 requires a joystick and is an adventure maze of sorts.

#231: C Source No.8. Another collection of C source code. HACKSORC--source to the game HACK. PENICILN--contains the source code to an ACC to help protect against computer virus' as well as the ACC itself.

#232: MODULA-2 Source No.4. GEM-MODUL--a very useful and large assortment of modules that ease the use of GEM functions. MATHTRAP--a collection of modules

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for adding more math functions. THEACC--an ACC that gives 2 formatting formats, numerous copying options and disk DOS type commands all in one ACC.

#233: SHEET. This is a shareware spreadsheet program by Mr. Chor-ming Lung. Complete docs included on disk.

#234: Utilities No.23. ST Floppy Disk Manager V1.0/2.0. Deluxe Slideshow V2.0, show all ST picture file formats. Atari ST File System Checker and Repairer, V1.1 and File System Compacter. PENICILN: virus killer program. Super Directory Data File Reader.

#235: Cyber Demos. (C) (CAMFILM, PSLOGO, RAISINS, and SAUCERB, with ANI-MATE3.PRG)

#236: Playit Demo No.2. More digitized sounds for your ST: ADAM12, DRAGNET, MR ED, SUBETHER, and SYNCLOCK.

#237: Music Studio No.7. 35 more Music Studio songs. Disk includes 2 PD song players and a program to convert the 8-bit Advanced Music System (AMS) songs to Music Studio formats.

#238: Publishing Partner Utility No.2. New PP fonts (CYRILLIC, HELVETIC, HUD-SON, and SATURN). Printer Drivers (HPD, HPF, LQ1000F, NECP7D, NECP7F, and PS_PLUS). Font Editor (w/docs) for creating your own PP fonts.

#239: Clip ART No.5: Holidays and Headers. 28 screens full of excellent clip art. Disk includes PICSW7 and DSLIDE. (C oer M).

#240: Games No.14. BOG v1.2 (Boggle clone with dictionary) a word-finding game; Core Wars (knowledge of assembly language recommended); Escape (adventure-type maze). All 3 games run in either med or high res.

#241: VDOS (Virtual Disk Operating System) Shareware graphic interface from Marathon Press for easier access to frequently used programs. Includes many command options frequently contained within command line interfaces (CLI's) but is much easier to use.

#242: Utilities No.24. ARC SHELL II v1.91 W/disk & folder commands in shell. Desk, Manager v2.1: greater control on bootup. Ledbetter Utilities: collection of 4 utilities from author of Express terminal & BBS programs. M2GRV2: program for use with Tempus editor & TDI Modula-2. VT PRO: editor of VT52 graphics. DEGASAVE: redirects Alt-Help key so screen is saved in DEGAS format file.

#243: BOWLMAN, V1.22. Shareware program by George Terpening, Bowling Manager, helps you keep track of bowling statistics for yourself, your team, and your league (up to 6 teams). Files ARC'd.

#244: MidiPlay Demo. Demo of MIDI-PLAY, V4.25 by Electronic Music Publishing House. Includes 2 songs: Mozart Gavotte and Bach G Minuet 2..

#245: Clip Art No.6. Mac Art 1. Mac Art Library (1-27). 27 screens of Mac clip art. Tinyview, tinystuf, dslide.

#246: Clip Art No.7. Mac Art 2. Mac Art Library (28-51). 24 screens of Mac clip art. Picswitch07, tinyview, tinystuf, dslide.

#247: Clip Art No.8. Sports. 24 screens of Mac clip art for sporting events. Picswitch07, tinyview, tinystuf, dslide, snapshot.

#248: Clip Art No.9. Whimsey. 21 screens of whimsical clip art. Picswitch07,

tinyview, tinystuf, dslide, snapshot. #249: Clip Art No.10. Food 1. 27 screens

of food clip art. Tinyview. #250: Clip Art No.11. Food 2. 22 more screens of food clip art. tinyview, tinystuf, dslide, snapshot.

#251: Lambert Pics No.1. (16 low-res Degas Elite pics: ace, spidey, viking, space, phobe, madonna, madonna1, madonna2, cybill, dragonpr, kitty, elie3, hosercol, monkey5, football, cowboy).

#252: Irata Verlag Demo Disk. (mono, 1Mb) Label Professional Program; SPAT Program (Desktop Publishing); DiskManager (Keep your list of programs of all sorts of extenders (pgm,tos,txt,ext..).

#253: Utilities No.25. Ver.6 of item selector (fselv60.prg); disk formater (cssformt); German patch to TOS to speed up hard disk writes; backup protected disks (hackn100); new Intersect ramdisk (50% faster w/print spooler); translate IBM Wordstar to First Word; Check disks for viruses (vkiller).

#254: Utilities No.26. Graphic Utilities. Conversion programs [Degas and Neo to GIF; Degas to Colr; Degas to Neo; IFF to Spectrum; Koala to Degas; Neo to Degas; PM Icons to Degas; Print Shop icons to Print Master; Spectrum 512 compressed to uncompressed; Spectrum to Degas; Spectrum to GIF]; display all 3 Degas on either color or mono monitor (Degadisp); save screen [Alt-HELP] as Degas pic (degasave); Degas fonts to GDOS (fontconv); pic switch ver.7 (picsw7); display GIF format files (showgif); stutf/unstuff and show Tiny files.

#255: Utilities No.27. 1st update of ST ver of ARC.TPP (ver 5.21)with latest version of shareware program ARC SHELL II (Ver 1.95). Includes source code to IBM version of ARC.

#256: OIDS Demo. (C) Demo runs through quick demo of OIDS then lets you play until you crash your rocket. Includes 6 galaxies for those who already have OIDS.

#257: Baseball. Play baseball (bbgame.prg). Includes programs to create your own teams and evaluate the statistics.

#258: Prime Beta/Demo Ver 1.3. (1Mb). Numbers... unlock the secrets of your life, advise based on numerology: personal numbers, alpha-numeric strengths and weaknesses, personal year, personal month, personal day, personal eras, personal challenges, predictions, mates and partners, choosing names, and addresses.

#259: Graphic Demo Disk. Many Boink; Star Field; Degas Elite pics (500xjrev, amigakil, bill, hardrock, hitguide, hradiosc, armstron, qwert, surfcity); showpic2.prg.

#260: Your 2nd Utility Disk. Two great utilities by J. A. Wrotniak: Address Book (acc and prg) and Zap_Card, a simple data base program ideal for quotations, record collections, recipies, etc All docs included...

All CURRENT NOTES Disks are **\$4.00 each**. Add \$1/(6 disks) for postage and handling. Order disks from CN LIBRARY, 122 N. Johnson Road, Sterling, VA 22170. Discounts are available for larger orders:

10 or more disks	\$3.80 each
20 or more	\$3.60 each
30 or more	\$3.40 each
40 or more	\$3.20 each
50 or more	\$3.00 each
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tage and handling.	

Current Notes PC Library

The disks listed below are in IBM format for use with pc-ditto on the ST or directly with any IBM or compatible PCs using 3.5" drives. Note: all disks require a double-sided drive. These disks each have up to 360K on them. (Only the first 40 tracks of a double-sided disk are used to conform with standard IBM format.) The disks marked with an asterisk (*) are formatted for 720K, that is, they are true double density disks.

PC-01 PROCOMM, V2.3: Terminal Emulator Program (Shareware) also MINIHOST, host BBS system.

PC-02 PC-STOCK, CARDEX: PC-Stock: general purpose stock trend analysis program. CARDEX: a rotary index card file equivalent to a Rolodex.

PC-03 QEDIT: QEDIT: the Quick Editor A fast text editor, uses all available memory, allows split screens and multiple file editing.

allows split screens and multiple file editing. PC-04 PC-OUTLINE, V1.05: An outlining and planning program, allows you to randomly enter any kind of info and then organize it into hierarchial structure.

PC-05 AS EASY AS: Powerful spreadsheet (1,024 rows by 256 cols) with a large set of menu command features.

PC-06 PC-DBMS, FLOW CHART: PC-DBMS: v1.2, data base programs. Flow Chart Utility and Mortgage Calculator program.

PC-07 EASYBASE, BANKBOOK: EASY BASE: Data base for new users with medium size applications. HOME BANK BOOK: keep track of your funds in a bank-book style system.

PC-08 TIMESAVER & PFM: Timesave: calendar/appointment book. PFM: Personal File Management System to help you deal with DOS

PC-09 POKER & STAR TREK: DRAW POKER, V1.0: simulates Nevada video draw poker machine. MS-TREK 1.0, Star Trek Adventure Game.

PC-10 ZIP: The Ultimate Utility Complete file manipulation utility. Includes ARC and de-ARC and terminal program with XMODEM transfer.

PC-11 A.D.A. PROLOG: Version 1.90 Complete Prolog language with documentation.

PC-12 FREE WORD: Version 1.0 PC Word processor with docs, demo, and reference.

PC-13 VISIBLE PASCAL: Pascal learning system, language, editor, docs. Allows simultaneous view of output and source code to help learners debug their programs. PC-14 KIDGAMES: Alphabet, Animals,

Clock Game, Hangman and Mosaic. PC-15* FAMILY HISTORY SYSTEM. A

family tracking system. Disk includes original Basic source plus compiled version, full docs, and sample files. 720K.

PC-16* PC-FILE+: Jim Button's popular database filing program. Includes Utility Disk with 250pp documentation. 720K.

PC-17 PC TUTORIAL: An educational package that covers the basics of a 1st course in computer usage and the IBM PC operating system.

PC-18 PC DOS HELP: An online Help facility for DOScommands.

PC-19* PC-WRITE: Powerful, easy-touse word processor. Program, docs, printer drivers. 720K.

Pinfeed disk labels for 3.5" disks are available for \$4/100.

CLUB CORNER

This space is made available to WAACE member clubs for their use in publicizing activities. Material for this column must be in the hands of the Clubs Editor by the 10th of each month. Send copy to John Barnes, 7710 Chatham Rd, Chevy Chase, MD 20815. Material can also be uploaded to the ARMUDIC BBS.

NOVATARI

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VP-8BIT	Alan Friedman	. 703–425–0575
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ATARIFEST'88	Gary Purinton	703–476–8391

New Members: Dues are \$20/year/family which includes a subscription to *Current Notes* and access to more activities. Join at the main meeting or at a chapter meeting or by sending \$20, payable to NOVATARI, to Earl Lilley, 821 Ninovan Rd.SE, Vienna, VA 22180.

NOVATARI Main Meeting: second Sunday of the month at the Washington Gas Light Building, 6801 Industrial RD, Springfield, VA. Take 495 to east on Braddock Rd. (620) to south on Backlick Rd.(617). Left on Industrial Rd. Washington Gas Light is the second building on the right. 5:30 Telecom SIG; 6:15 announcements, open forum, door prizes; 6:45 VAST and 8BIT SIG meetings.

Chapter Meetings: <u>Mt. Vernon/Hybla Valley</u>, 1st Thursday, 7:30 Contact Ron Peters at 780–0963. <u>Sterling</u>, Sterling Library, 7:30–9:30, 1st Wed. Contact Milo Flagel at 471–5273.

ARMUDIC BBS 703-573-9207 300/1200/2400 Baud, 8 and 16 bit

Access to the BBS requires a fee in addition to the dues. This fee is \$5/year for NOVATARI members and \$7.50 for members of other user groups. BBS access fees are to be made payable to "NOVATARI" and sent to: Ed Seward, PO Box 541, Vienna, VA 22180.

A.U.R.A.

Atari Users Regional Association

President	.Steven Rudolph	301-464-0835
8-bit VP	.Bob Langsdale	301-390-6554
16-bit VP	.James Bonbright, Jr	301-933-4891
Treasurer	.Bob Brock	301-268-2554
Membership	.Dave van Allen	301-593-4654
	.Wayne Heiden	
	.Herb Lane	
	.Jesse Ayer	
Facilities	.Richard Stoll	301-946-8435
Used Equip	Lincoln Hallen	301-460-5060

Meetings: Next meeting is July 21st in the Multipurpose Room at GRACE EPISCOPAL SCHOOL. The school is on the east side of Conecticut Avenue, 1/4 mi. north of the Connecticut Avenue (North) Exit from I–495. Library sales begin at 7:00, the meeting begins at 7:30. July's theme will be word processing. We will have separate XL and ST demonstrations. There will be 8-bit and 16-bit door prizes.

Correspondence: All correspondence, including membership renewals, changes of address, etc. should be sent to: AURA, P. O. Box 7761, Silver Spring, MD 20910. AURA cannot guarantee *Current Notes* subscription fulfillment unless the member provides written confirmation of address changes, renewals, etc. to the address given above.

New Members: Dues are \$20/year and include subscription to CURRENT NOTES. Send name, address, phone number, and check to above address.

May Meeting: The meeting theme was telecommunications. Bob Brock gave a very effective 8-bit talk using taped screens on a VCR instead of a computer. This was especially helpful for this subject because of we lack phone lines at the meetings. ST members were given an opportunity to sign up for complimentary subscriptions to 'ST Informer'.

Word processing was chosen as the July meeting theme because initial responses to our questionnaire revealed that this is the number one application both for 8-bit and 16-bit Ataris. We plan to explore tips, tricks, and traps. Bring all your questions and answers.

8–Bit Library: Wayne Heiden will take phone calls and mail orders for public domain disks from our extensive disk library. Our large collection includes many programs written by AURA members that are not in the NOVATARI library.

ATARIFEST'88

UPCOMING PLANNING MEETINGS: 14 July, Nottoway Rec Ctr, 7:30 pm; 11 August, Same; September, time and place to be announced. WAACE elections will be held 14 July. Get your lists of directors to Gary Purinton before then.

Call Gary for further 'Fest details at 703-476-8391.

N.C.A.U.G.

National Capitol Atari Users' Group

President	Peter Kilcullen	202-296-5700
Vice President	.Mike Pollak	703-768-7669
Treasurer	Allen H. Lerman	301-460-0289
XL/XE Librarian	.Mike Pollak	703-768-7669
ST Librarian	.Enrique Seale	202-295-0112

Meetings: 3rd Tuesday, 5:30 – 8:30 pm, room 543, National Science Foundation offices, 1800 G St., NW, Washington, DC. Closest subway stop is Farragut West on the Blue and Orange lines. Building is identified by sign for Madison National Bank on the corner. Front entrance is on west side of 18th between F and G.

New Members: Membership dues are \$20 and include a subscription to *Current Notes*. Join at the meeting or send check, payable to NCAUG, to Allen Lerman, 14905 Waterway Dr, Rockville, MD 20853.

W.A.C.U.G.

Woodbridge Atari Computer Users' Group

President	Lou Praino	. 703-221-8193
First VP	Arnie Turk	. 703–670–2547
8Bit VP	Darrell Stiles	. 703-494-9819
8-Bit Board Rep.	Stan Rupert	. 703–670–3338
ST VP	Bill Parker	. 703–680–3941
ST Board Rep	Bill Brooks	. 703-895-5404
Treasurer	Chris Moore	. 703–670–5143
Secretary	Frank Bassett	. 703–670–8780
Librarian	Mike Stringer	. 703–791–3331
Past President	Jack Holtzhauer	. 703–670–6475

Meetings: 7–9PM, Community Room, Potomac Branch, Prince William County Library, Opitz Blvd., Woodbridge, VA. Entering Woodbridge from either North or South on Route 1, proceed to the intersection of Route 1 and Opitz Blvd. (opposite Woodbridge Lincoln–Mercury). Turn West on Opitz and take first left turn into the library's parking lot. The Community Room is located to your left immediately upon entering the main building. Meeting Dates: July 19, Aug 9, Sept 20, Oct 18, Nov 22, Dec 20.

New Members: Initial membership fee is \$10/yr plus \$1 monthly dues. Membership includes a subscription to *Current Notes.* Join at meeting or send check, payable to WACUG, to Frank W. Bassett, 15313 Blacksmith Terr, Woodbridge, VA 22191.

S.M.A.U.G.

So. Maryland Atari Users' Group

President	Terry Daniels	. 301-292-7594
	Fred Brown	
Treasurer	Samuel Schrinar	. 301-843-7916
Newsletter Ed	Leroy Olson	. 301-743-2200
Librarian	Sherwood Conner	. 301-292-5752

Meetings: 2nd Thursday, 7:30 pm, John Hanson Middle School in Waldorf, MD. Traveling thru Waldorf either east or west on Rt 5, exit on Vivian Adams located 200 ft west of Waldorf Carpets & Draperies and directly across from the Village Square sign.

New Members: Membership dues are \$20 and include a subscription to *Current Notes*. Join at the meeting or send check, payable to SMAUG, to Sam Schrinar, 2032 Alehouse Court, Waldorf, MD 20601.

F.A.C.E.

Frederick Atari Computer Enthusiasts

President	John Maschmeier	301–271–2470
Vice President	Mike Kerwin	301-845-4477
Treasurer	Buddy Smallwood	717–485–4714
Librarian	Jason Harmon	301–663–1176
Secretary	Wilson Small	301–845–2370
SYSOP	••• •••••	301-831-9092
Bulletin Board	••• ••••••	301–865–5569

Meetings: 4th Tuesday, 7 – 9:30 pm, Walkersville HS, MD Route 194, 1 mile north of MD Route 26 (Liberty Road). July and August meetings will be held at St Paul's Lutheran Church, 14 W. Pennsylvania Ave, Walkersville, MD.

New Members: Dues are \$25/year/family and include a subscription to *Current Notes*. Join at meeting or send check, payable to FACE, to Buddy Smallwood, PO Box 2026, Frederick, MD 21701.

M.A.C.C.

Maryland Atari Computer Club

President	Jim Hill	301-461-7566
Vice President	Dan Honick	301-356-6453
Treasurer	John Cromwell	301-356-6453
Secretary	Bob Brent	301-254-3896
8-bit Librarian	Cam Whetstone	301-486-2609
ST Librarian	Charles Smeton	(none)
Newsletter Ed	Tim Caldwell	301-687-1413

Meetings: last Tuesday, 6:30 pm, Pikesville Library, 1 mi. east on Reisterstown Rd from Exit 20 off the Baltimore Beltway.

New Members: Club Dues are \$22/year and include a subscription to *Current Notes*. Join at meeting or send check, payable to MACC, to James Hill, 8591 Wheatfield Way, Ellicott City, MD, 21043.

CN REGISTERED CLUBS

Members of registered clubs subscribe to CN at a discount rate (\$17/yr). To add your club to the list, send an initial subscription list of 10% of the members or 6 members whichever is less, to CN Registered Clubs, 122 N. Johnson Rd., Sterling, VA 22170.

ALABAMA: Huntsville AUG, 3911 W. Crestview, Huntsville 35816 205-534-1815. ARKANSAS: Little Rock Atari Addicts, 28 John Hancock Cir, Jacksonville 72076 501-985-2131.

CALIFORNIA: Atari Bay Area Computer Users Society, PO Box 22212, San Francisco 94122 415-753-8483. Long Beach ACE, 1667 E. Plymouth St, Long Beach 90805 213-423-2758. San Diego ACE, PO Box 203076, San Diego 92120 619-224-8975. Santa Maria/Lompac ACE, 608 N. Pierce, Santa Maria 93454 805-925-9390.

CONNECTICUT: AUG of Greater Hartford, 503-B East Center St, Manchester 06040.

FLORIDA: Atari Boosters League East, P.O. Box 1172, Winter Park 32790.

ILLINOIS: Central Illinois Atari Users Group, 1920 East Croxton Ave, Bloomington 61701-5702 309-828-4661. Lake County ACE, PO Box 8788, Waukegan 60079 312-623-9567.

INDIANA: Atari Lovers of Illiana Equaled by None, PO Box 2953, Gary 46403 219-663-5117. LCC/ST, Karl Werner, Eli Lilly Corp Cntr, Indianapolis 46285 317-276-3020.

IOWA: Midwest Atari Group-Iowa Chapter, PO Box 1982, Ames IA 50010 515-232-1252.

KANSAS: Ft. Leavenworth Atari Group, PO Box 3233, Ft Leavenworth 66027 913-651-5631. Wichita ACE, 1722 N. Murray, Wichita 67212 316-722-1078.

KENTUCKY: Atari Exchange of Louisville, PO Box 34183, Louisville 40232.

MARYLAND: Nameless AUG, 3475 Manassas Ct, Davidsonville 21035 301-798-0566.

MASSACHUSETTS: Acton-Boxborough Atari Computer Users Society, PO Box 1523, Westford 01886 617-937-8046. MICHIGAN: Michigan Atari General Information Conference, 28111 Imperial Dr, Box M, Warren 48093-4281 313-978-8432. MISSOURI: ACE St Louis, PO Box 6783, St.

Louis, MO 63144. Warrensburg/Whiteman Atari Computer Owners, PO Box 199, Warrensburg 64093 816-747-2543.

NEW YORK: Atari Computer Owners of Rochester NY, PO Box 23676, Rochester 14692 716-334-5820. Rockland Atari

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Computer Users Group, 29 Riverglen Dr., Thielis, NY 10984 914-429-5283.

N. CAROLINA: Blue Ridge Atari User's Enthusiast, Bill Traughber, 106 Alpine Way, Asheville, NC 28805. Charlotte AUG, PO Box 240313, Charlotte 28224 704-366-4320. Peidmont Triad AUG, Rt. 9, Box 274C, Reidsville 27320. Triangle Computer Club, Rt. 3, Box 760, Hillsborough 27278 919-942-2764.

OHIO: Cleveland ACE, 5482 Beacon Hill Ct, Seven Hills 44131 216-749-4853.

PENNSYLVANIA: Allentown Bethlehem Easton's ACE, PO Box 2830, Lehigh Valley 18001 BBS 215-759-2683. Spectrum Atari Group of Erie, PO Box 10562, Erie 16514 814-833-4073. Southcentral PA ACE, PO Box 11446, Harrisburg 17108-1446 717-761-3755.

SOUTH DAKOTA: Rushmore ACE, Gregg Anderson, 3711 Canyon Lake Cr, #202, Rapid City, SD 57702 605-348-6331.

TENNESSEE: Knoxville AUG, 953 Roderick Rd, Knoxville 37923 615-693-4542. TEXAS: DAL-ACE, P.O. Box 851872, Richardson, Texas 75085-1872. ST Atari

League of San Antonio, 3203 Coral Grove Dr, San Antonio 78247 512-496-5635. VIRGINIA: Greater **Richmond** Atari Support Program, 1420 Yale Ave, Richmond 23224 804-233-6155. Southside Tidewater Atari Users Tech Society, 5245 Shenstone Circle, VA Beach 23455 804-464-2100. WASHINGTON: Seattle Puget Sound ACE. PO Box 110576, Tacoma 98411-0576. WISCONSIN: Packerland Atari Computer Users Society, 339 S. Maple St, Kimberly 54136 414-788-1058.

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