

P.A.C.



A.C.E.

Portland Atari Club and the Eugene Eugene Original Computer Enthusists

A User Group Newsletter typeset entirely on the ST Computer

COMPUTER NEWS

JANURARY, 1988

PORTLAND, OREGON

 ARTICLES
 REVIEWS
 PUZZLE
 ADS
 LISTINGS
 NOTICES

 CIRCULATION
 1500

SIG HARTMAN VISITS PAC

By Bill Pike (PAC)

On December 5th Mr. Sig Hartman joined the PAC for their first ever Christmas Party. Mr. Hartman brought the latest news from Atari to our user group along with quite a few other goodies for the raffle.

This project started back in August when David Moore (Special Project Director) paid a visit to Atari in Sunnyvale.

As we drove to the airport we still were not convinced that Mr. Hartman would arrive. We felt that we were still working with the old Atari that would promise anything but give little if nothing.

After a lot of running around to get things ready for the Christmas Party in the morning, and massive cleaning of a car both Dave and I were more than a little nervous. There we were in our "I Speak Atari" hats trying to find out where the Short-term parking was and checking our watches every few minutes.

We finally got to the gate and still were discussing what to do if Mr. Hartman was a No-Show.

Then surprise, surprise, surprise, who came walking out of the boarding ramp but a white haired gentleman with a brown garment bag and attache case. There were also two cardboard boxes waiting for us in the baggage area with the Fuji symbol on them full of goodies for the raffle. **ATARI HAD COME THRU.** As it turned out Sam Tramiel could not have picked a better spokesman

than Mr. Hartman.

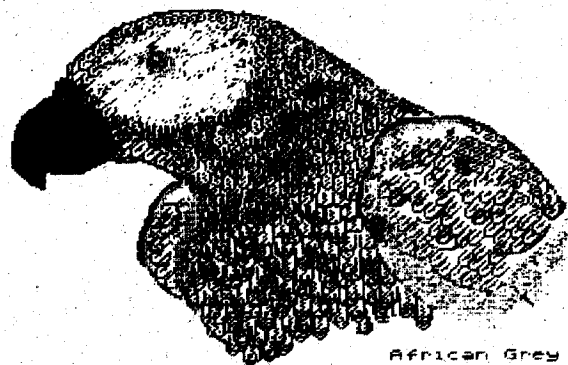
Most of the trip to the hotel was spent in a three-way discussion of the lack of support for USER-GROUPS as well as the lack of support for Atari owners. Sig replied to our questions, admittedly some of them were rather pointed, stating the new policy of Sam Tramiel and Atari of MUCH greater support for User Groups and Atari owners. Also brought up during the trip was Sam Tramiel and Atari's support and lack there of for the 8-Bit systems. Sig said that Sam Tramiel was anxiously looking to support the 8-Bit but that there is a lack of software being written.

The new Diamond (ST Jr.) was mentioned to him and he said that Sam Tramiel and Atari had received several copies of this program but it still had some bugs in it. He said that if Atari can get a bug free version of the program that Sam Tramiel would consider including it with the XE series computers as well as helping advertise and market the product. There wasn't much time left after the previous grilling to discuss much else except the time to pick him up

from the hotel to go to the meeting.

The meeting started out with, what else, food. There were sandwiches, soda, potato chips, and cake with the Atari symbol on it. After the eating slowed down it was Mr. Hartman's turn.

The first thing that Mr. Hartman said was to assure us of a fundamental change in the policy of Atari. Sam Tramiel and Atari is going to give much more support to the User-Groups. Some of this support will be in the form of a much closer contact between the



African Grey Parrot

Happy New Year

user groups and Sam Tramiel and Atari. The support will also come in the form of donated, by Sam Tramiel and Atari, equipment and software. There was also discussion of a published list of all the User-Groups in the United States and a listing of all the Atari User-Groups worldwide. Another thing was mentioned was that the Federated Stores that Atari purchased would be

royalties.

There were questions regarding the lap-top ST. Mr. Hartman said that it was still in unfinished form and that Atari was still working on it. The questioning moved to the TT machine (68030 processor based, True Thirty Two bit machine). He stated that the machine would be upward compatible with the existing ST's and Megs. Also

giving out lists of local User-Group information and the possibility that Atari might pay for 1 years membership to a local User-Group with each computer purchased.

Sam Tramiel and Atari was also interested in assisting user groups to have shows and public events, Atari would loan front money as well as assistance in contacting other groups who have put on shows. We were assured a number of times of the support of the 8-Bit machine as well as the ST machines. Several times Mr. Hartman ask, almost pleaded for those who were writing 8-Bit software to please submit the programs to Sam Tramiel and Atari for possible purchase and

that the TT would be able to run either the standard ST operating system or UNIX 5.3. There were questions regarding the lack of ST's and Megs in the USA and why were all the machines being shipped to Europe. The reply was that the machines were selling faster than they could be produced, however that Sam Tramiel is committed to shipping many more machines (ST's and Megs) to the U.S. in the coming year even though this might cut into the European market. The DRAM shortage was discussed and we were informed that this had alleviated to some degree. The possibility of a 16-Bit Game Machine was brought up. We were Continued on page 8

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 PORTLAND ATARI CLUB
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PORTLAND ATARI CLUB

This newsletter is written and published by members of the Portland Atari Club (PAC), a group of people with a common interest -- the Atari Computer. All articles are written and donated by members or are reprints of public domain material from other groups. Opinions expressed are those of the authors and do not necessarily represent the opinions of PAC or those of any other organization. Material appearing in this newsletter may be reproduced for non-commercial use, providing credit is given to the author and PAC or other originating group. Commercial use must be coordinated through the editor. Material for publication may be submitted either on disk as non-formatted 8-Bit or ST ASCII files, or on hard copy (printed, typewritten, or legibly handwritten). Media may be sent to the editor at the address below. Contact the editor for instructions on uploading submissions to the PAC BBS.

MEMBERSHIP

Membership is \$25 per year and includes a mailed subscription to this newsletter and access to members-only functions, such as downloading access to BBS files. A membership application is printed in each issue of this Newsletter. General meetings are open to the public and start at 6:30 p.m. on the first Monday of each month (Except in case of holiday) at the NW Service Center at NW 18th and Everett in Portland. Exchange newsletters, article, correspondence and ads should be sent to the following address:
Portland Atari Club, Attention: (appropriate board member),
P.O. Box 1692, Beaverton, OR 97005.

The Pres's Column BILL PIKE

First of all, I and all the board members hope that you enjoyed the Christmas Party. We look forward to serving you in the coming year. There have been a few plans for the coming year that the board would like to implement. We hope that you will find them enjoyable as well as informative.

The first thing that we would like to do is to improve the demonstrations at the General Meetings by having many more outside people coming in to speak and demonstrate both new, and popular old products. We intend on having more raffles at the General Meetings but would like suggestions on prizes, OK what kind of prizes would you like to see? Remember the club purchases almost all the prizes, they are not donated. How much money do you think that the club should spend per meeting for prizes?

By the way we still don't have a ST Disk Librarian. Perry Bailey, remember he is the gentleman who didn't run for re-election and is now the advisor, has said that he would prepare the master disks and Randell Leong will be taking over the copying and labeling of the disks until a librarian can volunteer, be conscripted, get suckered into the job. If you really want to make this club a success here is a good way to do it. Take the board position.

We are upgrading the Newsletter software to Page-Stream from Softlogik, this is Publishing Partner Pro. We will be getting the version 1.1 not the original version. Our newsletter is now getting into Western Aussylund. We are currently trading disks of articles with other clubs to give wider coverage for those who are writing articles. Our local reviews and some articles are finding their way onto Compuserve and Genie and being published in many newsletters around the country as well as appearing in Z-Mag. Since we have been

offering subscriptions to the newsletter we have had about 10 subscriptions, none of which come from the local area. We have also gained several full club memberships from other states such as Hawaii, Ohio, New Jersey, and Florida.

One of the problems that we are currently facing is that of lack of usage of the PAC BBS's. We appear to be getting average of 10-12 calls a day on PAC #1 and 6-8 calls a day on PAC #2. One of the things that we are considering is upgrading PAC #2 to Express BBS Pro, this would allow XModem, XModem CRC, Modem, and YModem Batch file transfer. This would also allow the co-sysops to work on the board news, feedback, and files from their home rather than having to be physically present at the board. We are also looking at improving the power-supply to remove line noise and voltage fluctuations, this should eliminate most of the crashes that the board is experiencing. We are unsure as what to do about PAC #1. As you have probably heard the writer of Forem ST has basically told the ST BBS's to get lost. There were other words used but I think that you get the drift. The programmer also has refused to release the source code so that others can work with the program. Anyhow we have a orphan program running PAC #1. Does anyone have any ideas??

Remember this is your club not the board's, what would you like to see?

The board has stated that we will support ANY SIG (Special Interest Group) that two or more members wish to form. How about it folks, what SIG groups would you like formed, remember you will have to support the groups formed by attending the meetings and in general assisting the group. We currently have The 8-Bit Explorer SIG that meets at David Moores home, the Midi SIG that meets at the home of Dave Holliday, the Eastside ST SIG that meets at Teri Williams home, and the Westside ST SIG that meets at my home.

ADVERTISING RATES:

Full page - \$80, half page - \$40, quarter page - \$20. Ads must be prepaid and a 20% discount if given for 3 consecutive ads. The copy may vary in content, but the space must be the same in each issue. Send camera ready copy and check payable to PAC at the address below. Ad deadline is the 10th of the month prior to publication. Please contact Teri Williams (503) 771-7337 on all matters pertaining to advertizing.

CLUB OFFICERS AND BOARD MEMBERS

President.....	Bill Pike	- 646-4471
Vice President.....	Brian Hunt	- 289-3954
Secretary-Treasurer.....	Dutch Leonard	- 257-0481
Membership Secretary.....	Paul Karczag	- 256-4199
ST Program Director.....	Nabil Pike	- 646-4471
8-Bit Program Director.....	Paul Gittins	- 667-2403
ST Disk Librarian.....	OPEN	
8-Bit Librarian.....	David Hunt	- 286-6276
Special Projects Director.....	David Moore	- 297-3702
Sergeant-At-Arms.....	Randall Leong	- 246-6348
BBS Director.....	Melvin Waller	- 230-0248
Newsletter Editor.....	Teri Williams	- 771-7337
Advisor.....	Perry Bailey	- 287-8903

The board isn't able to read minds, if we have no feedback from the membership we can only guess what direction the members wish the club to go and if only a few members say anything then the board will be forced to think that most of the membership feels the same way. Most of the board members meet after the General Meeting to compare notes and see what the membership wants. So bring your ideas to any board member either in person or on the BBS's I guarantee that they will get prompt and full consideration.

Finally, I and the other board

members, would like to thank all of you for the support that you have shown to the changes that have been implemented over the past year. We felt that these changes were necessary to clean up many things that had been hanging fire for several years.

Again thank you for your confidence in re-electing the board.

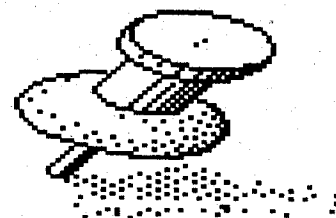
I sincerely hope that the next year will prove to be much more entertaining, educational, and most of all fun.

- BILL

PAC HELP HOTLINES:

BBS USAGE		dBASE III	
Steve Billings	246-1751	Calvin Partridge	297-3641
Melvin Waller	230-0248		
ST LOGO & C		PASCAL	
Randal Schwartz	626-6907	R. Deloy Graham	649-6993
DOS Operation		ST Graphics Adv. games	
Wayne Winterbottom	667-6073	Jim Miller	641-6356
dBMAN		ST GENERAL	
David Addison	645-6985	Chuck Hall	626-3717

8-BIT AND
ST DOOR
PRIZES



PAC
GENERAL MEETINGS
MONDAY, JAN. 2th
MONDAY, FEB. 6th

6:30 PM

NORTHWEST SERVICE CENTER
1819 NW EVERETT, PORTLAND
(LOTS OF FREE PARKING)

FOR INFORMATION CALL BILL PIKE 646-4471

GENERAL MEETING
MINUTES 5 DECEMBER 1988

The meeting opened with several tables full of goodies including software, hardware, and munchware. This was the first "annual?" Christmas party. Atari was there in the person of Mr. Sig Hartman. Supra was there with their F-10, 10meg removable hard-disk drive, their 2400 baud modem, and their 8-bit networking system. IB Computers was also represented along with Portland Computer Accessories.

As for the munchware, there were two cakes with the Atari symbol on them, three 6 ft. sub sandwiches, and four kinds of soda.

The hardware that was raffled were two Atari XEGS game systems, donated by Atari. Atari also donated a large number of 8-bit cartridge game programs and 2 copies of Microsoft Write, the newest wordprocessor from Atari, and about 12 copies of the newest educational software.

There was also a donation of a \$15 gift certificate from Portland Computer Accessories.

Elections were held by secret ballot. All board members who ran for re-election were elected. David Hunt was elected 8-bit disk librarian.

BOARD MEETING MINUTES
20 December, 1988

The board meeting convened at 7:30pm. Absent were Brian Hunt & Paul Gittins (sick). (NOTE THE TREASURER'S REPORT APPEARS ELSEWHERE IN THIS NEWSLETTER AS DOES THE MEMBERSHIP SEC. REPORT

The board approved a budget of \$100/yr each for both the ST and 8-Bit disk librarians to acquire public domain programs for the club disks. This is to be used along with disk exchanges between clubs and the traditional methods of acquiring programs.

The board approved the purchase of Express BBS PRO for PAC #2 to provide better access for the membership as well as improving the ease of operation of the BBS.

The board approved the appointments of assistants for the Newsletter Editor, ST Disk librarian, and the 8-Bit disk librarian along with others on a need basis. The assistants shall have the privileges of board members with the following exceptions.

(1) They will have no vote on the board of directors.

(2) They will receive 1 month free membership for each month served. These assistants will be the responsibility of the appropriate board member with the approval of the board.

The next board meeting will be at the home of Teri Williams on Jan. 17th at 7:30pm.

West Side ST SIG
by Bill Pike (PAC)

The group met on the 4th Thursday of the month. We compared the word processor programs "First Word +" and "Microsoft Write". Each of the programs has features the other doesn't have. FirstWord Plus has a built in spelling checker and allows the switching between Expanded, Pica, Elite, and Compressed type styles without

having to put the control codes in to change between styles. It also supports the standard font types such as italic, bold, underline, etc. There is also a easy way to use ASCII function. You can also create your own printer driver if no existing one is close to what you need or modify a existing driver to suit what you want it to do such as do a NLQ emulation for the Epson FX.. Microsoft Write uses the GEM interface and font sets. The ATARI Lazer Printer, Epson FX, and one of the Star printers can access several different font sets in 5-6 different point sizes of type per set. Other printers cannot do this even though there are other drivers on the disk. There is also a ASCII driver for those printers not covered. You cannot create your own printer driver. There is no spell checker, and a add on Spelling Checker, such as Thunder, CANNOT be used.

Microsoft Write, if you have one of the lucky printers, is a cross between Desktop Publishing and a Word Processor.

Next meeting will be on Jan. 24th at 7:30pm call 646-4471 for directions.

PORTLAND ATARI CLUB
BALANCE SHEET
NOVEMBER 30, 1988
ANNUAL REPORT

ASSETS

CURRENT ASSETS	
CHECKING	1,538.91
RESERVE	1,044.19
TOTAL CURRENT ASS.	2,583.10
TOTAL ASSETS	2,583.10

LIABILITIES

TOTAL LIABILITIES	.00
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CAPITAL

RETAINED EARNINGS	2,583.10
TOTAL CAPITAL	2,583.10
TOTAL CAPITAL & EARNINGS	2,583.10

PORTLAND ATARI CLUB
OPERATIONS REPORT
NOVEMBER 30, 1988
ANNUAL REPORT

INCOME

ST DUES	967.00
8-BIT DUES	1,620.00
ST DISK SALES	3,164.00
8-BIT DISK SALES	1,366.15

NEWSLETTER ADS 848.00

TOTAL 7,965.15

EXPENSES

ST DISK COSTS	1,194.14
8-BIT DISK COSTS	453.82
BBS#1 TELEPHONE	236.39
BBS#1 EQPT & MAINT	575.57
BBS#2 TELEPHONE	312.31
BBS#2 EQPT & MAINT	609.61
NEWSLETTER COSTS	3,994.43
MEETING ROOM COSTS	480.00
ADMINISTRATION COSTS	369.36
TRAVEL COSTS	.00

TOTAL 8,216.63

DIFFERENCE
(INCOME LESS EXPENSES)
(251.48)

MISC INCOME 1,038.96
MISC EXPENSE 47.00

OPERATIONS NET 740.40



NEW MEMBERSHIPS

Bob Beck
Melvin Anderson
Fredrick Huntington
Bob Hill
Andrew Lantham
James Wrathall
Software Depot
Martha Richards
Miles & Alice Erickson
Hillsboro H.S. Science Dept.
Jim Fischer
Jeffrey Peterson & Family

Membership Renewals

Theodore Nibbler
William Arata
Max Manowski

NEW SUBSCRIPTIONS

Mark Litchman
Gary Carlson
David A. Carl Calström
Richard Mathison

SUBSCRIPTIONS RENEWALS

Steve Golden
James Horn
Max G. Boles

PAC BBS'S

PAC BBS #1 Steve Billings, Sysop 245-9405
PAC BBS #2 Mel Waller, Sysop 238-7130
ACE BBS Eugene, OR (503)343-4352

BBS'S are on-line 24 hrs.

MIDI & ST EXCHANGE

(614) 848-5947

upto 2400 BPS, 24 hours, 7 days, 65megs
National Fido Mail and Usenet Mail for ST & Midi

International Electronic Musicians Users Group (IEMUG) ST HUB!
also home of: Rick Duff Music BMI & Archie Software.

This BBS is FREE of charge outside of your normal phone charges.

Meg's of ST Midi files, as well of Megs of ST Files.
Most ST Midi files you'll find outside of pay services!

8 International Music Message Bases shared with thousands of BBS's
across the world! 7 International ST Message Bases.
13 National Message Bases for Music Vendors. Midi Support for all
Computers, including over 60 Megs of PD Midi files. Home and
Moderator of the National Atari ST Echo & ST_Music Echo.
1:226/210 on FidoNet. Rick Duff Owner and Sysop.

New users welcome.

PORTLAND ATARI CLUB

Please fill out the following information,
then forward annual dues of \$25.00 to:
(Renewals are \$20.)
NEW: Newsletter Only (year) \$10.00

PORTLAND ATARI CLUB
Attn. Membership Secretary
P.O. Box 1692
Beaverton, OR 97005

MEMBERSHIP APPLICATION

RENEWALS
\$20.

NAME: _____
STREET: _____
CITY: _____
PHONE: _____ 8-BIT OR 16-BIT _____

FAMILY MEMBERS NEEDING CARD:

(FOR OFFICAL USE)

EXPIRATION DATE: _____
DATE RECEIVED: _____
CARD SENT: _____
CHECK? _____ CASH? _____

80 Column Displays

For The 8-Bit Atari
Ron Starkey, PACUS Report

Almost all surveys you see about the use of home computers indicate that the most frequent application is word processing. The screen display for word processing is a critical factor in the easy use of any word processor. An 80 column display is extremely valuable in word processing since a pica pitch text page is 80 characters wide, normally 65 characters with a total of 15 spaces for right and left margins. The 80 column display allows you to see an entire line of text much as it will appear on the printed page.

All other popular 8-bit computers presently available have a model (e.g. Apple IIC, Commodore 128) with an 80 column display built-in. But not the 8-bit Atari line! What options does that leave for those of us who want to stay with the 8-bit Atari line and have an 80 column display?

Read on to find out.

For the Atari 800 computer

Bit-3 80 Column Board

This is the premium way to obtain an 80 column display. It is a board that replaces the third 16K RAM board. This means you will have to have a 16 and a 32K RAM board in the other two expansion slots to obtain a full 48K computer. This Bit-3 Full View 80 board is compatible with Atari BASIC, LJK's Letter Perfect word processor and LJK's Data Perfect data base. It will work fairly well with OSS's BASIC XL if you use a wedge provided by OSS. The

Bit-3 board is no longer being produced. The discontinued Austin Franklin 80 column board operates along the same lines as the Bit-3 but did not gain as much popularity.

Ace 80 Cartridge (For Right Slot)

This cartridge is one of the few ever produced for use in the right cartridge slot of the Atari 800 computer. It provides a very readable 80 column font and is compatible with Atari BASIC and BASIC XL directly. Using patches that come with the cartridge allow use with Letter Perfect and Data Perfect. The Ace 80 allows display of the entire ATASCII character set including all Atari graphics characters. It is produced by Amiable Computer Enhancements, P.O. Box 11059, Lansing, MI. 48901. This is the best way to use BASIC XL with an 80 column display.

Omniview Chip

This chip replaces an operating system chip and produces a reasonable 80 column display. It is by no means as good as the Bit-3 or Ace 80 display. There are patches available that allow its use with Letter Perfect. The Omniview chip comes with an 80 column word processor called Omnewriter. For \$10 the manufacturer will provide a modification of your AtariWriter Plus program so that you will have an 80 column version of this popular word processor. Available from Newell Industries, 602 E. HWY 78, Wylie, TX, 75098. Requires installation that is not for the timid.

XEP80

A box that connects to your

computer via joystick ports 1 and 2. It will work with the AtariWriter 80 if, and when it becomes available. It is compatible with Atari BASIC, but not with BASIC XL or XE. With Atari BASIC there are some problems in listing a program. You can not stop the listing with the control-1 sequence, so you will frequently have to scroll to the end of a program when you list it. The XEP80 is reported to be able to display half a screen of high resolution graphics (graphics 8?). None of the other 80 column display devices allow the display of a graphics screen. The major problems are related to fact that it connects via the joystick ports and it contains a printer interface. The printer will thus be connected via a joystick port rather than either the serial I/O cable as do most Atari printers (such as the 1027) or the 850 interface (or equivalent, e.g. ICD's P.R. Connection.) This will require a lot of switching if you want to use a printer with anything other than AtariWriter 80. I hope AtariWriter 80 will allow you to choose the printer interface you want to use. Perhaps you could configure the program to print via an 850 type interface, or the serial I/O port, or via the interface in the XEP80. Another minor inconvenience is the monitor must be connected to the XEP80. This means you will need to switch the monitor connection for other applications.

For XL and XE computers

Ace 80/XL Cartridge

See comments above for the Ace 80 cartridge. Since it fits into the only cartridge slot (equivalent to a left slot) on the XL and XE computers you can not use it with BASIC XL or XE, or for that matter with any other cartridge. The Ace 80/XL cartridge can also be used in the left slot of an 800 computer.

Omniview Chip

As is the case with the Omniview chip for the Atari 800 this requires a moderately difficult installation. One installation alternative is to piggy-back the chip and attach a switch so you can choose the standard Atari chip or the alternative operating system of the Omniview chip. This operating system is the same as that of the older 800 computers. Therefore with the Omniview chip installed there is no need for a translator program on these XL or XE computers. Can be used with BASIC XL.

XEP80

See the discussion above. This display device is better suited for the XL and XE computers since the joystick ports are not on the front of the computer as they are in the 800. If you are interested in this device, but think it needs improvement, write Atari and tell them to make an 8-bit computer with built in 80 column attachment box that attaches via the XL or XE computers parallel port.

80 Column Board For The ICD MIO

The MIO is a multi-functional ramdisk that connects via the parallel port on the back of the XL and XE machines. No good news as of this writing. The latest

word is that the production of the 80 column upgrade for the MIO is on indefinite hold. If you are interested write ICD. ICD Inc., 1220 Rock St., Rockford, IL, 61101. If they get enough requests I think they will market it.

My choice. The Bit-3 board if you can get one. The best alternative is the Ace 80 cartridge. My choice would also have to include an "if" choice. The ICD MIO 80 column board since this would probably be the first choice for XL and XE owners if it were available.

ULTRA SPEED PLUS

Burley Kawasaki, S*P*A*C*E*

I've always had a secret fascination with hardware upgrades. In my opinion, two of the best upgrades currently available are the 256K RAM enhancement and the US Doubler drive modification. Each of these products is quite useful and fairly inexpensive. I've had them both installed for quite some time, and I wonder how I ever got along without them. However, they do have certain deficiencies. In order to use the extra memory as a ramdisk, handlers and patches must first be loaded into memory. This precludes using a ramdisk with boot disks or protected software. Secondly, the ultraspeed mode of the US Doubler can only be used in connection with SpartaDOS. If your software is not compatible with SpartaDOS (or you don't want to spend the time to convert everything over into SpartaDOS disk format), then ultraspeed is not very useful.

Finally there is a solution to both of these problems! The answer is found in the Ultra Speed Plus operating system from Computer Software Services. It has built-in ramdisk handlers which support expansion up to 2 megabytes. Since the handlers are part of the OS, your ramdisk can be used invisibly with ANY software. The upgrade also supports the US Doubler's ultraspeed mode, allowing high speed disk I/O with ANY ordinary DOS. The high speed disk I/O is switchable at any time in case protected software doesn't work correctly in ultraspeed mode. Other high speed drive modifications that the Ultra Speed+ OS supports include: Super Archiver, Happy (810 or 1050), Duplicator, Klone, and Atari's new XF-551. Here are some additional features:

XL-FIX OPERATING SYSTEM:

This acts like a "Translator" and allows your XL/XE to run older software. Since the code is ROM based, it works with more programs than software translators. Computer Software Services sells this ROM chip alone for \$70 if you buy it separately.

SECTOR COPIER: A mini sector copier is built into the OS, allowing you to copy disks without using DOS. When using a ramdisk larger than 180K, you can duplicate a single or double density disk in one pass.

BINARY FILE LOADER: A version of the MACH-10 menu is built in, allowing the loading of binary programs without using

DOS. It supports all three densities.

DRIVE CONFIGURATION: The Ultra Speed+ OS lets you re-assign drive numbers to any floppy drives or ramdisks at will. There is no need to physically change any switches or cables. For instance, physical drive #1 can be changed to a "virtual" drive #2. Whenever the computer wants to access from drive #2, it will actually read from drive #1. You can boot from any drive (even a ramdisk). All drive configurations are controlled through a simple built in menu. An optional switch may be installed which will let you swap drive #1 and the ramdisk at any time. This is useful when using two-sided disks (e.g. Print Shop, Infocom games, etc.). Instead of physically flipping the disk, side #2 may be first copied into the ramdisk. Then, simply flipping the switch will cause the ramdisk to look like "drive #1."

MEMORY TEST: An improved memory tester is built into the OS. It tests ALL ram and will identify which chips are defective.

MISCELLANEOUS FEATURES:

Toggle internal BASIC on/off; toggle disk I/O sound on/off; toggle high speed I/O on/off; reverse use of OPTION key when booting; keyboard lock (ala 1200 XL); toggle screen DMA on/off; faster keyboard speed; keyboard click toggles on/off; one-key cursor control; easy cold-start without memory loss. These features can be invoked at any time by keyboard command.

I ordered the Ultra Speed+ OS with UPS blue label (2nd day air), and it arrived promptly on time. The documentation is pretty good, and gives complete instructions and diagrams. Installation is simple if your Atari's chips are already socketed. If they aren't, the upgrade is a bit trickier; you will need to de-solder chips from the board. The package consists of three chips: a normal XL/XE ROM, the XL-FIX ROM, and the Ultra Speed+ ROM. The three ROMs are already assembled in one convenient package. Unlike other upgrades which require piggy-backing of chips, you simply remove the existing XL/XE OS chip and insert the upgrade package in its place. Five solder connections must be made to other chips on the board. Also, you have to drill a hole in the back of the case. A three position switch is provided to select between the three operating systems. Computer Software Services can install the upgrade for you, or you can ask the help of someone else in the club who knows what they are doing. A special thanks goes to Rich Gratzner, who installed both my Ultra Speed+ ROM and my Wiztronics memory upgrade.

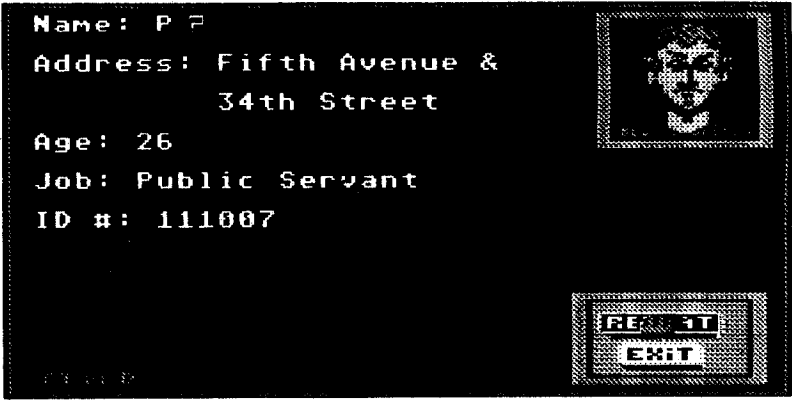
The Ultra Speed+ OS costs \$69.95, and I feel the added features are well worth the price. It let me maximize the abilities of my existing hardware upgrades. It is very similar to the IRRATIONAL OS. While the IRRATIONAL OS costs a good deal less, the Ultra Speed+ has more functions and is easier to purchase.

MAN HUNTER NEW YORK by Sierra

by Jim Miller PAC

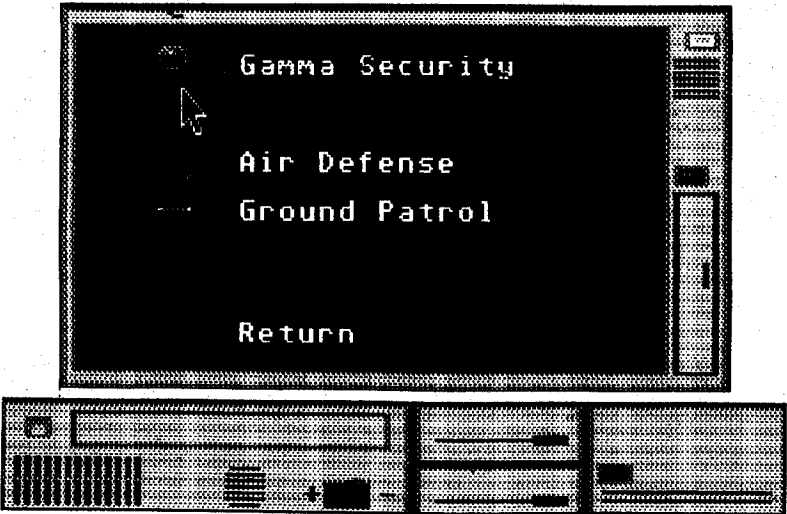
Manhunter took some getting used to. It took me a good while before I understood the method of play. Once I understood how to use MAD (a computer) to look up different characters and got the method of tracking under my belt, the game moved along quite well. Tracking different characters with MAD became a very important function. You watch them travel around on a map and then enter the locations and perform certain functions in different buildings or parks etc.

It is very important to follow them and see where they go exactly so that later you can go there and see what they did. Using observation skills one can solve the problems that come up in the game. Below is a example of a file brought up in mad indentifying one of the characters (I've erased the name so the game is not spoiled).

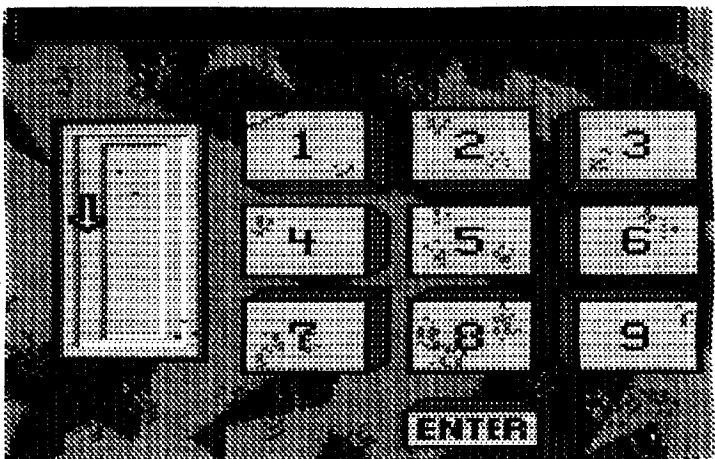


One finds computers that need secret codes in order to access them or safes that need a combination. Where does one find these answers??? How does one get through a door that needs a combination and all one sees is a picture hanging on the wall.

Below are some pictures showing a computer that you need to find the code to break into it. Another pictures shows a safe that needs to be broken into!

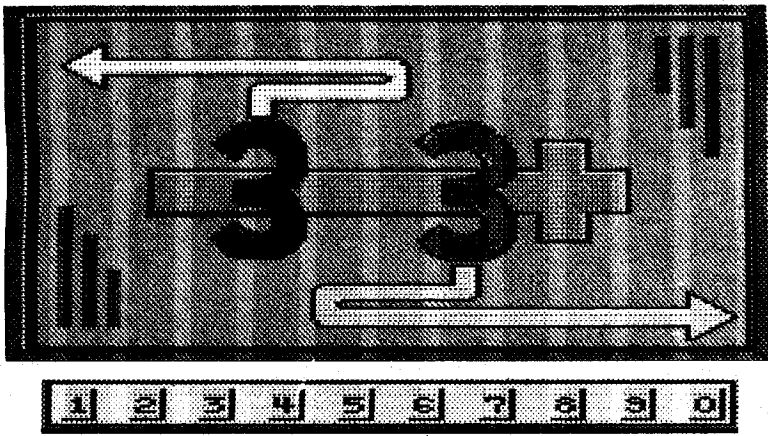


What's the code word????



Break into safes?

I really enjoyed solving the puzzles to the pictures found hanging on walls in order to figure out the combination to the locks of the door nearby. Can you solve the one below?



Solve the combination!

The game is not copy protected. But you do need the manual to solve the game. It ask you a question such as "What is the third word in the second paragraph on the sixth page". The game can be played on a 520 ST with a single drive. But expect many disk swaps if you are. They include a install program so it can be placed on a hard drive. Controlling a object with keyboard such as a flying object was quite difficult. There was not immediate response to the keyboard.

The plot was not as good as say DeJaVu from Mindscape. Not all the parts were necessary to really figure out the whole except that you had to do it, in order to finish each day and go home.

The games played within the game were quite different. They included carnival games such as throw the ball a stuffed dolls and knock them over. Have you ever tried throwing knives between someone fingers who will kill you instantly if you hit his fingers????

I hate mazes!! There were several. One was very difficult to figure out since there were many ways to go and you couldnt see and until you tried the ways to go.

I thought Kings Quest Two and Three were eight and nine respectively out of a ten score. I thought DeJa Vu was a eight while shadowgate was nine. I rate this game a seven. It is worth the money spent and I don't regret it.

Copyright Law

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(C) Copyright 1986 Breslow, Redistributed by permission

I am an attorney practicing copyright law and computer law. I read a series of queries in net.legal about copyright law and was dismayed to find that people who had no idea what they were talking about were spreading misinformation over the network. Considering that the penalties for copyright infringement can include \$50,000.00 damages per infringed work, attorneys fees, court costs, criminal fines and imprisonment, and considering that ignorance is no excuse and innocent intent is not even a recognized defense, I cringe to see the network used as a soapbox for the ill-informed. For that reason, this article will discuss copyright law and license law as they pertain to computer software. My goal is to enable readers to determine when they should be concerned about infringing and when they can relax about it. I also want to let programmers know how to obtain copyright for their work. I'll explain the purpose of software licenses, and discuss the effect that the license has on copyright. For those of you who are programmers, I'll help you decide whether you own the programs you write on the job or your boss owns them. I will also mention trademark law and patent law briefly, in order to clarify some confusion about which is which. Incidentally, if you read this entire essay, you will be able to determine whether or not the essay is copyrighted and whether or not you can make a printout of it. This is a long article, and you may not want to read all of it. Here is an outline to help you decide what to read and what to ignore:

1. The Meaning of Copyright from the Viewpoint of the Software User
 - 1.1 A bit of history
 - 1.2 The meaning of copyright
 - 1.3 The meaning of public domain
 - 1.4 A hypothetical software purchase
 - 1.5 Can you use copyrighted software?
 - 1.6 Can you make a backup copy?
 - 1.7 Licenses may change the rules
 - 1.8 Can you modify the program?
 - 1.9 Can you break the copy protection scheme?
 - 1.10 Summary
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 - 2.1 How do you get a copyright?
 - 2.2 How do you lose a copyright?
 - 2.3 How do you waste a stamp?
 - 2.4 Do you have to register?
 - 2.5 How copyright comes into existence
 - 2.6 The copyright notice
 - 2.7 Advantages of registration
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 - 3.2 Programs written as an employee
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 - 4.2 Is it valid?
- 5.1 Trademark law explained
- 5.2 Patent law
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1. The Meaning of Copyright from the Viewpoint of the Software User

1.1. A bit of history. If you're not interested in history, you can skip this paragraph. Modern copyright law first came into existence in 1570, by an act of Parliament called the Statute of Anne. Like most laws, it hasn't changed much since. It was written with books and pictures in mind. Parliament, lacking the foresight to predict the success of the Intel and IBM corporations, failed to consider the issue of copyrighting computer programs. At first, courts questioned whether programs could be copyrighted at all. The problem was that judges couldn't read the programs and they figured the Copyright Law was only meant to apply to things humans (which arguably includes judges) could read without the aid of a machine. I saw some mythical discussion about that in some of the net.legal drivel. Let's lay that to rest: programs are copyrightable as long as there is even a minimal amount of creativity. The issue was laid to rest with the Software Act of 1980. That Act modified the Copyright Act (which is a Federal law by the way), in such a way as to make it clear that programs are copyrightable. The few exceptions to this rule will rarely concern anyone. The next question to arise was whether a program was copyrightable if it was stored in ROM rather than on paper. The decision in the Apple v. Franklin case laid that to rest: it is.

1.2. The meaning of copyright Now, what is copyright? As it is commonly understood, it is the right to make copies of something -- or to put it the other way around, it is the right to prohibit other people from making copies. This is known as an exclusive right --

the exclusive right to reproduce, in the biological language of the Copyright Act -- and what most people don't know is that copyright involves not one, not two, but five exclusive rights. These are (1) the exclusive right to make copies, (2) the exclusive right to distribute copies to the public, (3) the exclusive right to prepare derivative works (I'll explain, just keep reading), (4) the exclusive right to perform the work in public (this mainly applies to plays, dances and the like, but it could apply to software), and (5) the exclusive right to display the work in public (such as showing a film).

1.3. The meaning of public domain. Before we go any further, what is public domain? I saw some discussion on the net about public domain software being copyrighted. Nonsense. The phrase public domain, when used correctly, means the absence of copyright protection. It means you can copy public domain software to your heart's content. It means that the author has none of the exclusive rights listed above. If someone uses the phrase public domain to refer to freeware (software which is copyrighted but is distributed without advance payment but with a request for a donation), he or she is using the term incorrectly. Public domain means no copyright -- no exclusive rights.

1.4. A hypothetical software purchase. Let's look at those exclusive rights from the viewpoint of someone who has legitimately purchased a single copy of a copyrighted computer program. For the moment, we'll have to ignore the fact that the program is supposedly licensed, because the license changes things. I'll explain that later. For now, assume you went to Fred's Diner and Software Mart and bought a dozen eggs, cat food and a word processing program. And for now, assume the program is copyrighted.

1.5. Can you use copyrighted software? What can you do with this copyrighted software? Let's start with the obvious: can you use it on your powerful Timex PC? Is this a joke? No. Prior to 1980, my answer might have been No, you can't use it! People actually pay me for advice like that! Well think: you take the floppy disk out of the zip lock baggy, insert it in drive A and load the program into RAM. What have you just done? You've made a copy in RAM -- in legalese, you've reproduced the work, in violation of the copyright owner's exclusive right to reproduce. (I better clarify something here: the copyright owner is the person or company whose name appears in the copyright notice on the box, or the disk or the first screen or wherever. It may be the person who wrote the program, or it may be his boss, or it may be a publishing company that bought the rights to the program. But in any case, it's not you. When you buy a copy of the program, you do not become the copyright owner. You just own one copy.) Anyway, loading the program into RAM means making a copy. The Software Act of 1980 addressed this absurdity by allowing you to make a copy if the copy "is created as an essential step in the utilization of the computer program in conjunction with a machine and ... is used in no other manner" By the way, somebody tell me what a machine means. If you connect 5 PC's on a network is that a machine or several machines? A related question is whether or not running software on a network constitutes a performance. The copyright owner has the exclusive right to do that, remember?

1.6. Can you make a backup copy? OK, so you bought this copyrighted program and you loaded it into RAM or onto a hard disk without the FBI knocking on your door. Now can you make a backup copy? YES. The Software Act also provided that you can make a backup copy, provided that it "is for archival purposes only" What you cannot do, however, is give the archive copy to your friend so that you and your pal both got the program for the price of one. That violates the copyright owner's exclusive right to distribute copies to the public. Get it? You can, on the other hand, give both your original and backup to your friend -- or sell it to him, or lend it to him, as long as you don't retain a copy of the program you are selling. Although the copyright owner has the exclusive right to distribute (sell) copies of the program, that right only applies to the first sale of any particular copy. By analogy, if you buy a copyrighted book, you are free to sell your book to a friend. The copyright owner does not have the right to control resales.

1.7. Licenses may change the rules. At this point, let me remind you that we have assumed that the program you got at the store was sold to you, not licensed to you. Licenses may change the rules.

1.8. Can you modify the program? Now, you're a clever programmer, and you know the program could run faster with some modifications. You could also add graphics and an interactive mode and lots of other stuff. What does copyright law say about your plans? Well ... several different things, actually. First, recall that the copyright owner has the exclusive right to make derivative works. A derivative work is a work based on one or more preexisting works. It's easy to recognize derivative works when you think about music or books. If a book is copyrighted, derivative works could include a screenplay, an abridged edition, or a translation into another language. Derivative works of songs might be new arrangements (like the jazz version of Love-Potion Number 9), a movie soundtrack, or a written transcription, or a long version, (such as the fifteen minute version of "Wipe Out" with an extended drum solo for dance parties). In my opinion, you are making a derivative work when you take the store-bought word processor and modify it to perform differently. The same would be true if you translated a COBOL program into BASIC. Those are copyright infringements -- you've horned in on the copyright owner's exclusive right to make derivative works. There is, however, some breathing room. The Software Act generously allows you to adapt the code if the adaptation "is created as an essential step in the utilization of the computer program in conjunction with a machine" For example, you might have to modify the code to make it compatible with your machine.

1.9. Can you break the copy protection scheme? Moving right along, let's assume your store bought program is copy protected, and you'd really like to make a backup copy. You know this nine-year-old

whiz who can crack any copyprotection scheme faster than you can rearrange a Rubix cube. Is there a copyright violation if he succeeds? There's room to argue here. When you try to figure out if something is an infringement, ask yourself, what exclusive right am I violating? In this case, not the right to make copies, and not the right to distribute copies. Public performance and display have no relevance. So the key question is whether you are making a derivative work. My answer to that question is, "I doubt it." On the other hand, I also doubt that breaking the protection scheme was "an essential step" in using the program in conjunction with a machine. It might be a "fair use," but that will have to wait for another article. Anyone interested in stretching the limits of the "fair use" defense should read the Sony Betamax case.

1.10. Summary Let me summarize. Copyright means the copyright owner has the exclusive right to do certain things. Copyright infringement means you did one of those exclusive things (unless you did it within the limits of the Software Act, i.e., as an essential step....).

2. Copyright Sounds Neat -- How Do I Get One? Or, How Do I Know if this Program is Copyrighted?

2.1. How do you get a copyright? If you've written an original program, what do you have to do to get a copyright? Nothing. You already have one.

2.2. How do you lose a copyright? If you've written an original program, what do you have to do to lose your copyright protection? Give copies away without the copyright notice.

2.3. How do you waste a stamp? If you mail the program to yourself in a sealed envelope, what have you accomplished? You've wasted a stamp and an envelope and burdened the postal system unnecessarily.

2.4. Do you have to register? Do you have to register your program with the U.S. Copyright Office? No, but it's a damn good idea.

2.5. How copyright comes into existence Copyright protection (meaning the five exclusive rights) comes into existence the moment you fix your program in a tangible medium. That means write it down, or store it on a floppy disk, or do something similar. Registration is optional. The one thing you must do, however, is protect your copyright by including a copyright notice on every copy of every program you sell, give away, lend out, etc. If you don't, someone who happens across your program with no notice on it can safely assume that it is in the public domain (unless he actually knows that it is not).

2.6. The copyright notice The copyright notice has three parts. The first can be either a c with a circle around it ((C)), or the word Copyright or the abbreviation Copr. The c with a circle around it is preferable, because it is recognized around the world; the others are not. That's incredibly important. Countries around the world have agreed to recognize and uphold each others' copyrights, but this world-wide protection requires the use of the c in a circle. On disk labels and program packaging, use the encircled c. Unfortunately, computers don't draw small circles well, so programmers have resorted to a c in parentheses: (c). Too bad. That has no legal meaning. When you put your notice in the code and on the screen, use Copyright or Copr. if you can't make a circle. The second part of the notice is the "year of first publication of the work." Publication doesn't mean distribution by Osborne Publishing Co. It means distribution of copies of the program to the public "by sale or other transfer of ownership, or by rental, lease, or lending." So when you start handing out or selling copies of your precious code, you are publishing. Publication also takes place when you merely OFFER to distribute copies to a group for further distribution. Your notice must include the year that you first did so. The third part of the notice is the name of the owner of the copyright. Hopefully, that's you, in which case your last name will do. If your company owns the program -- a legal issue which I will address later in this article -- the company name is appropriate.

Where do you put the notice? The general idea is to put it where people are likely to see it. Specifically, if you're distributing a human-readable code listing, put it on the first page in the first few lines of code, and hard code it so that it appears on the title screen, or at sign-off, or continuously. If you're distributing machine-readable versions only, hard code it. As an extra precaution, you should also place the notice on the gummed disk label or in some other fashion permanently attached to the storage medium.

2.7. Advantages of registration. Now, why register the program? If no one ever rips off your program, you won't care much about registration. If someone does rip it off, you'll kick yourself for not having registered it. The reason is that if the program is registered before the infringement takes place, you can recover some big bucks from the infringer, called statutory damages, and the court can order the infringer to pay your attorneys fees. Registration only costs \$10.00, and it's easy to do yourself. The only potential disadvantage is the requirement that you deposit the first and last 25 pages of your source code, which can be inspected (but not copied) by members of the public.

2.8. A test to see if you understand this article. Now, someone tell me this: is this article copyrighted? Can you print it?

3. Who Owns The Program You Wrote?

3.1. Introduction The starting point of this analysis is that if you wrote the program, you are the author, and copyright belongs to the author. HOWEVER, that can change instantly. There are two common ways for your ownership to shift to someone else: first, your program might be a "work for hire." Second, you might sell or assign your rights in the program, which for our purposes means the copyright.

3.2. Programs written as an employee Most of the programs which you write at work, if not all of them, belong to your employer. That's because a program prepared by an employee within the scope of his or her employment is a "work for hire," and the employer is considered the author. This is more or less automatic if you are an employee -- no written agreement is necessary to make your employer the copyright owner. By contrast, if you can convince your employer to let you be the copyright owner, you must have that agreement in writing. By

the way, before you give up hope of owning the copyright to the program you wrote at work, figure out if you are really an employee. That is actually a complex legal question, but I can tell you now that just because your boss says you are an employee doesn't mean that it's so. And remember that if you created the program outside the scope of your job, the program is not a "work for hire." Finally, in California and probably elsewhere, the state labor law provides that employees own products they create on their own time, using their own tools and materials. Employment contracts which attempt to make the employer the owner of those off-the-job inventions are void, at least in sunny California.

3.3. Programs written as a contractor Wait a minute: I'm an independent contractor to Company X, not an employee. I come and go as I please, get paid by the hour with no tax withheld, and was retained to complete a specific project. I frequently work at home with my own equipment. Is the program I'm writing a "work for hire," owned by the Company? Maybe, maybe not. In California, this area is full of landmines for employers, and gold for contractors. A contractor's program is not a "work for hire," and is not owned by the company, unless (1) there is a written agreement between the company and the contractor which says that it is, and (2) the work is a commissioned work. A commissioned work is one of the following: (a) a contribution to a collective work, (b) an audiovisual work (like a movie, and maybe like a video game), (c) a translation, (d) a compilation, (e) an instructional text, (f) a test or answer to a test, or (g) an atlas. I know you must be tired of definitions, but this is what the real legal world is made of. An example of a collective work is a book of poetry, with poems contributed by various authors. A piece of code which is incorporated into a large program isn't a contribution to a collective work, but a stand-alone program which is packaged and sold with other stand-alone programs could be. So where are we? If you are a contract programmer, not an employee, and your program is a commissioned work, and you have a written agreement that says that the program is a "work for hire" owned by the greedy company, who owns the program? That's right, the company. But guess what? In California and elsewhere the company just became your employer! This means that the company must now provide worker's compensation benefits for you AND UNEMPLOYMENT INSURANCE.

4. A Brief Word About Licenses.

4.1. Why a license? When you get software at the local five and dime, the manufacturer claims that you have a license to use that copy of the program. The reason for this is that the manufacturer wants to place more restrictions on your use of the program than copyright law places. For example, licenses typically say you can only use the program on a single designated CPU. Nothing in the copyright law says that. Some licenses say you cannot make an archive copy. The copyright law says you can, remember? But if the license is a valid license, now you can't, you can give away your copy of a program if you purchased it, right? That's permitted by copyright law, but the license may prohibit it. The more restrictive terms of the license will apply instead of the more liberal copyright rules.

4.2. Is it valid? Is the license valid? This is hotly debated among lawyers. (What isn't? We'll argue about the time of day.) A few states have passed or will soon pass laws declaring that they are valid. A few will go the other way. Federal legislation is unlikely. My argument is that at the consumer level, the license is not binding because there is no true negotiation (unless a state law says it is binding), but hey that's just an argument and I'm not saying that that's the law. In any case, I think businesses which buy software will be treated differently in court than consumers. Businesses should read those licenses and negotiate with the manufacturer if the terms are unacceptable.

5. I Have A Neat Idea. Can I Trademark It? What About patent?

5.1. Trademark law explained. Sorry, no luck. Trademark law protects names: names of products and names of services. (Note that I did not say names of companies. Company names are not trademarkable.) If you buy a program that has a trademarked name, all that means is that you can't sell your own similar program under the same name. It has nothing to do with copying the program.

5.2. Patent Law Patent law can apply to computer programs, but it seldom does. The main reasons it seldom applies are practical: the patent process is too slow and too expensive to do much good in the software world. There are also considerable legal hurdles to overcome in order to obtain a patent. If, by chance, a program is patented, the patent owner has the exclusive right to make, use or sell it for 17 years.

6. CONCLUSION I know this is a long article, but believe it or not I just scratched the surface. Hopefully, you'll find this information useful, and you'll stop passing along myths about copyright law. If anyone needs more information, I can be reached at the address on the first page. Sorry, but I do not usually have access to the network, so you can't reach me there.

Thank you. JORDAN J. BRESLOW

Michtron's Announcement:

Due to a recent announcement, my mail has increased due to the concerns of users that had purchased GFA. Michtron announced at Comdex that they will no longer market GFA Systemteknik's line due to a breakdown in the relationship. GFA Systemteknik wants to market their product in the USA. Though this normally would be a great concern for users that have purchased this basic, it is not. I know you have read and heard the rumors but after a long conversation with Gordon Monnier, Michtron's president the morning before the announcement, he informed me that he will indeed support the product. As Mr. Monnier said, "It only makes sense for us to continue to support the product online." They will also continue to answer questions on the Michtron's BBS and on the phone. My hats off to a great company. They deserve a gold star and more for their product support. Good luck with the Hi-Soft line. May it be just as successful. Darlah I Pine



Bumpas Reviews

JIM BUMPAS, ACE

PAGE STREAM

Many of you know by now that "Publishing Partner Professional" is now called "PAGE STREAM" (a better name, in my opinion). Soft Logik sells this version for \$199. I spent about an hour producing a page. I crashed the program three times. I would have crashed only once if I had read the "bug list" on the letter which came with my copy.

The other time it crashed was when I tried to load a ".GEM" file from one of my Easy Draw disks. I've been told the .GEM loader can only handle small files. Ditto for the .IMG loader.

The program looks great, and I heartily approve of getting 10 fonts with the program. And I like what they're trying to do with features, to give it object-drawing features. They're also giving it word-processing features, including spell checking, etc. And the letter talks about even more new features to come in future versions (along with a coupon for a free upgrade). I can't complain about the support Soft Logik gives their customers. They've always been responsive.

But I do have a strong suggestion (and an implied complaint): Let's get the version of the program which is on the market working completely and fully without bugs and crashes before we see even more new features which might evoke new bugs and crash problems.

Let's get one working version which people can use to produce work usefully and not just tantalize us with tastes of powerful features which might be nice if we could only get them to work reliably.

THEN after you're on the market with a good, solid, working version you can play around with new features. We need more than a promise, we need good, solid software to produce work.

MONITOR MASTER

If you have both color and monochrome monitors for your ST, then you'll appreciate what Monitor Master (\$50, from Practical Solutions) can do for you. You no longer have to worry about wearing out cables by twisting them all the time to get the other one plugged in. You no longer have to worry about bending pins in the connectors as you un-plug and re-plug them every time you change monitors. A quick press of the button on the Monitor Master is all you need to change from color to monochrome and back again.

The Monitor Master unit also has connectors for hooking up an external amplifier for audio output and an RCA connector for output to a composite monitor or

TV (if you have an RF modulator in your ST). The documentation advises turning off the ST when making the switch. And I've heard the same advice for plugging and unplugging cables. I've never consistently remembered to do this, and I'm not exactly sure why they recommend it. Monitor Master uses no power supply.

This product is a must for those who want the convenience of easy switching back and forth between monitors. And it can pay for itself in a practical way, too. Having to replace a couple of connectors or cables, along with having your system down until you fix it could well be worth more than the \$50.

PALADIN

PALADIN (Omnitrend, \$40) is a good graphics adventure game and scenario generator. Strategic ability is highly stressed in this program, rather than mere riddle-solving like many games in this genre.

The game may be played entirely with the joystick. The screen contains buttons for most game functions. And the buttons are plenty large enough to make them easy to use. These buttons are "icon-based" so their appearance suggests their purpose. The use of color and graphics is well-done, and the animation adds a nice touch.

The screen view is overhead, and map-like. Each character in the player's party takes up a separate space. Characters have special characteristics and each carries its own set of objects and weapons. The object of the game is to conduct your "Paladin" character through his various "quests" and take those actions which will enhance the character.

The program disk comes with 10 "canned" quests for you to use to guide your Paladin on the path of improvement. These quests are rated for difficulty, so you may begin with the easiest and proceed to the more difficult.

Where this program really shines is with the "Quest Builder", or scenario generator, which you can use to create an unlimited number of quests. You draw your own maps, which extend through several screens. You have access to all the terrain features used in the canned scenarios, as well as character and monster figures, weapons, treasures, etc.

If you enjoy graphics adventures, and you enjoy planning out your course of action, this game is for you.

Give it a look.

-- Jim Bumpas

Creative Computer, Inc.

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PROCOPY - version 1.	\$29.95
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HURRY - RECEIVE A BONUS
FILL THIS CARD BY TRADING WITH
CREATIVE COMPUTER

HAVE THIS CARD PUNCHED BY OUR STAFF WITH EACH
PURCHASE AND RECEIVE
\$\$\$ CREDITS \$\$\$
TOWARD FUTURE PURCHASES

(\$5) (\$5) (\$5) (\$5) (\$5) (\$5) (\$5) (\$5)

... CONTINUED from page 1 SIG HARTMAN

informed that this is in the works. The long talked about Atari PC was asked about. Yes, Sam Tramiel and Atari is in the final stages of preparing to market this in the U.S. Yes, the machine is basically what the advertising has said. The Transputer (Abqu) was spoken of and that it still was under development as a stackable unit to the Mega machines. The machine would have true multi-processing capability as well as a expansion port to daisy-chain several Transputer units together for added speed and memory. The possibility of a add-on math co-processor for the ST and Mega machines was asked about. The reply was that nothing was immediately in the works for this.

Several other questions were adeptly handled by Sig then the meeting went to the distribution of goodies, by raffle.

There were two XEGS's (XE Game Machines), copies of the new word processor, for the ST, Microsoft Write from Atari, about a dozen educational programs, and about a dozen game cartridges for the 8-Bit machines. All of this was donated to the club by Sam Tramiel.

There was also a \$15 dollar Gift Certificate donated to the raffle by Portland Computer Accessories.

We would like to express our thanks to Sam Tramiel for the opportunity to meet with Mr.

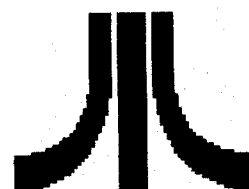
Hartman. We also appreciate the donation of all the software and hardware that made the meeting so successful. We look forward to a much closer relationship with Sam Tramiel and Atari than in the past.

Sam Tramiel and Atari was willing to send one of it's most able executives to meet with a SINGLE User-Group. We hope that this foreshadows a much greater support of the User-Groups by Sam Tramiel and Atari, possibly a rotating schedule of Atari people meeting with User-Groups.

Atari is still supporting the 8-Bit machines in fact during the trip back to the airport Sig asked us to share the upgrade information on the 130XE machine. He was also taking some of our suggestions as far as a new 8-Bit with a 65816 microprocessor and 320K of memory as well as a expansion bus and the possibility of emulation modes for the other popular 8-Bit 6502 based systems.

We hope that this event will prove to be the rule rather than the exception in our contacts with Atari.

We look forward to the release of the Diamond operating system.





NEW RELEASE INFO:

A DAY AT THE RACES

After three years of research and development we are proud to announce "A Day at the Races". It was designed and written by Marshall Lake and Piet Francke and is being distributed by TEAM Software.

"A Day at the Races" is a simulation of the horse race track environment. Much more than the horse race itself, this simulation allows you to buy and sell horses, choose jockeys, and of course wager on races. Each horse and jockey have their own distinct attributes and abilities which affect the outcome of each race. Just like at a real track it is up to you to discern which abilities each horse and jockey possess and to attempt to pick the probable winner of the race. It is as close to the real world of horse racing as you can get without going to the track. The actual horse race itself is presented in exciting, nail-biting real time. Dynamic data base files are kept for the horses and the jockeys. All the various statistical items (including horses' past performances) are maintained to assist in an intelligent wager, horse purchase, or jockey selection. "A Day at the Races" is a multi or single player game.

This simulation was designed specifically for the Atari ST line of microcomputers. There is nothing like it available for ANY other microcomputer today that we are aware of!

Knowledge of horses or the race track is not necessary at all to enjoy "A Day at the Races". The simulation is presented in such a manner as to make it easy for all users to understand. Depth is combined with simplicity to create a real-world environment which can be enjoyed by everyone whether or not they are race track aficionados.

"A Day at the Races" operates in the GEM environment, is entirely mouse controlled, and makes full use of the ST's superb graphics and sound.

The simulation requires 512K of RAM with TOS in ROM, at least 1 disk drive, and a color monitor. Optional equipment include a second disk drive and a printer. "A Day at the Races" IS installable onto a hard disk drive. Using a printer, you may obtain hard copy output of the RacingProgram, the Racing Form, the Cheat Sheet, various standings, and many other statistics that are available. You will, of course, be able to view these items on the screen, also.

This program will be available by October 15, 1988.

TEAM Software
P. O. Box 7332
Washington, D. C. 20044
(703) 533-2132
(603) 679-1211

Please send any comments to
MLAKE.

FIBERS IN YOUR FUTURE

By Nick Berry, S*P*A*C*E

When people in the electronics and computer fields talk about fibers, they are not referring to a balanced diet. "Fiber Optics" is what it's all about and they will soon replace metal based shielded cable as the primary means of transmitting electrical signals.

So where will fiber optic cables be used? Well, Ma Bell and her competitors are all rushing headlong to replace the existing phone lines with fiber optic lines. Big companies are using optic fibers to tie their computers together in Local Area Networks (LANs).

We will eventually see this technology drift down into our homes with fiber optic cables for connection to printers, external drives, modems, etc..

But why bother, what's the big deal with fiber optics? In a computer network (LAN), traditional shielded cable (expensive stuff) is limited to a maximum length of about 50 ft. Not much for a company situated in a large sprawling complex. And even shielded cable can be susceptible to Electromagnetic (EMI) and Radio Frequency (RFI) interference. Fiber Optics, on the other hand, can transmit data at speeds of 3 megabytes per second at distances of over a mile (with glass fibers). Fiber optics conduct simple

pulses of light, so there is no electricity flowing through them as in conventional wires. No possibility of shorts, shocks or damaging spikes. All of this is possible with inexpensive plastic fibers and cheap LEDs to provide the light source. For higher speed and long distance transmissions, the phone companies use more expensive glass fiber and laser lights. No doubt, as the manufacturing technology advances, plastic fiber will totally replace glass fiber which is difficult to work with and more susceptible to damage.

So what effects to the average computer user will fiber optics make in the near future? Already, we've seen that the phone companies are changing their main lines to fiber optics. This, combined with digital signals, as opposed to conventional analog signals, will provide reliable, noise-free transmissions for our modems.

Finally, as fiber optic lines eventually work their way into our homes, the current design analog modems will become obsolete dinosaurs. With high-speed, error-free digital transmissions over normal phone lines, new digital modems will make the current 1200, 2400 and even 9600 baud units laughable.

Transmission speed will be limited only by our own hardware. Imagine downloading an entire megabyte of data in less than a second. It's just around the corner folks, coming at the speed of light!

CASIO CT-640 ELECTRONIC MIDI KEYBOARD

By Nick Berry, S*P*A*C*E

Back in the July PSAN, Marc Ingle reviewed the Casio model MT-240 keyboard. After reading his article, I became interested in checking out this new keyboard.

My wife and I have always looked at and wanted these various electronic marvels, but have held off because of high price and, like everything else in the electronics world, they were constantly changing. Now while the electronic keyboards are still changing, they have also come down dramatically in price. So I checked out the MT-240 to see it with my own eyes and discover that this mid size keyboard is truly "mid size". The keys on this baby are rather small. Now while it wasn't a big deal for a non-musician like myself, it was for my wife, who can play, and wanted normal sized keys. Back to square one.

Recently, while we were shopping at Costco in Tacoma, we saw the Casio CT-640 on display. We saw the full sized keys. Excellent! There was a musician type playing with it at the time, and the Piano voice on it actually sounded like a real piano. Fantastic! Now for the clincher, does it have MIDI ports. I look around at the back side and am greeted by a MIDI IN, MIDI OUT and something the MT-240 doesn't have, MIDI THRU, which allows MIDI signals to be passed on to yet another MIDI instrument without change.

Besides these pertinent ports, there are the Left and Right stereo output jacks, AC adaptor jack, a jack for a Sustain control, another for the optional Foot Volume control and lastly a Tuning Control knob for adjusting the pitch when tuning it to other instruments.

The price was \$275, over \$100 more than the MT-240, but the extra features were well worth it. Needless to say, a keyboard found its way into our cart and eventually home.

The CT-640 comes with batteries, so you can use it right away, which we did. While these batteries are inexpensive carbon cells, they have yet to go dead after a couple of weeks of continued usage.

The CT-640 has 30 different tones, or voices, one of which contains 19 different percussion instruments. By combining any two of the tones, it is possible to access 456 tones in all.

There are 20 different Auto-rhythms adjustable from 40 to 256 beats per minute. The Casio Chord system allows you three different ways to use the Auto-accompaniment feature (auto bass line and chord patterns). It allows anyone to play like they know what they're doing, even a complete music idiot like myself.

Finally, it has a memory function which allows you to record up to 1250 notes of music using any and all features of the keyboard.

To complete the total package and integrate it with my ST, I needed MIDI cables and some software. A pair of off the shelf 5ft. MIDI cables and Music Studio from Activision have suited my endeavors quite nicely. I've taken a number of Music Studio song files from GENIE and a bunch from Marc Ingle (thanks Marc) and changed the tone presets to match the voices in the Casio.

Getting the various songs to play properly on the CT-640 has been entertaining and educational as well. I've even starting to learn a few things about music.

As a stand alone keyboard, the CT-640 is an excellent unit. As a MIDI keyboard for casual home use it is still a fine choice.

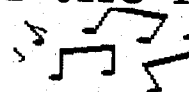
For use as a professional MIDI keyboard, however, it is rather lacking. Only the 30 basic tones are usable in MIDI mode, no combining of tones is allowed. There are only 4 MIDI channels available, #1 to #3 for the tones and #4 for the Auto-rhythm, and looking at a MIDI implementation chart of typical MIDI functions, there are only a few which the CT-640 supports. To be fair, though, The CT-640 was not designed to be a professional MIDI keyboard, the Casio CZ series handles that end of things.

What the CT-640 is, is a full featured, full sized, MIDI capable keyboard offered at a reasonable price for the typical home user.

Hmmmm. Kinda sounds like a description for the ST.

Obviously, the two are a perfect match. So if you've been thinking of jumping into the wonderful world of MIDI music on the basis of education and entertainment, you could hardly do better than the Casio CT-640 electronic keyboard.

"Come hear
the Band"
at the next
MIDI SIG
Every
2th & 4th
Monday
of the month



for more info call
Dave Holliday
642-4717

COMDEX '88... THE BEAT GOES ON by R.F.Mariano

- A) The Nutshell
B) Inside The Gold Room

*** Mr. Ralph Mariano is Editor of ST REPORT, an on-line mag. that is available through BBS'S such as Genie, where I downloaded this from. The Editor notes which follows is Mr. Mariano -Teri ***

THE NUTSHELL

The much "heralded" 68030 is NOT in sight. I guess our "SOX" won't get blown off! The portable was here.... but was shown only to a 'select few' in a hotel room, that could mean that it is STILL only a prototype and only a gleam in a production artist's eye. Atari Corporation is currently showing:

~ PC4 (286 Based PC Compatible computer with 5.25 Disk Drive and 30 Megabyte Hard Drive)...

~ PC5 (386 Based PC Compatible with 30 Meg HD)

~ ATW (Transputer Workstation)

~ Ultrascript (Postscript Interpreter for the SLM804)

~ Deskset II (DTP Program for SLM804).

~ Ultrascript is being shown along with Deskset II.

~ A robotics controlling kit is

being shown that will allow the ST/Mega computers to control robot devices through the Cart port.

INSIDE THE GOLD ROOM

Good News and Bad News from the Gold Room

(Atari's full room display)
by Ron Luks SysOp, CIS-Atari Sigs

Bad News:

1. Effective 10am 11/15 GFA has DROPPED MichTron to seek a new US distributor or start its own. [I surmise that GFA had no idea how lucky they were and made the mistake of assuming that the bigger US market was being inadequately serviced by MichTron! <dgg>] Dave Small was approached by GFA and declined to pick up the distributorship.

2. No Atari 68030 box was shown.

3. Supra management reports that they are focusing their development time and efforts on the Amiga due to the strong support they get there, vs. the lack of support from Atari.

4. The "laptop" is still in breadboard and designer's model stages.

5. Many of the developers are in a mood of GLOOM and DISMAY. That's the bad news.

In the main, it is discouraging but NOT fatal, and the following Good News does tend to offset some of the problems.

Good News:

1. Atari is holding a special developers conference tonight (11/16) at 6pm (8pm EST). No one has been advised of the topic(s) or of the reasons for the meeting, so some positive surprises could be in the works.

2. The Atari booth is loaded with developers and products which will be focused on in a subsequent report.

3. Although the "laptop" is a mere prototype at this moment, Atari is targeting release of a whole laptop line with production runs starting in 2-3 months. The model has a nearly ST sized keyboard, will have a blue LCD screen (optionally backlit), a built-in track-ball mouse controller, built-in 3.5" floppy (half meg with optional full meg drive), and "at least 20 meg of HD" and 520 and 1040 RAM options. The target price will be US \$1,500.

4. The ATW (nee ABAQ) Atari Work station was shown. It should be in production fairly soon.

5. MichTron is replacing GFA Basic with Hi-Soft Basic effective yesterday morning. Hi-Soft Basic is extremely polished, fast, and complete. It is Microsoft Compatible but also allows labeling [and procedures?] and directly portable to/from Amiga as well as MS-DOS machines. It has a great compiler and doesn't require manual translation.

6. Supra has completed a \$149.95 suggested retail 2400b internal modem for IBM machines and is considering doing one for the MEGA ST's.

7. Sam Tramiel has apologized for not responding to the many Emails and messages since his CO. In an unusual move to show his good faith with the existing user base, he has announced official online affiliation with CIS and the Atari Fora, and a direct EasyPlex line to Sig and him will be operational shortly. He reaffirmed his desire to hold more CO's with our users and seems to recognize that we are a potent and strongly pro-Atari force!

The "goods" seem to outnumber the "bads" and tonight's conference with the developers in Las Vegas should bring more news of note. It will be posted here as soon as we have it.

*** Overheard in passing Sam T. to Sandy Small, "Well, it looks like we will have a laptop MAC before Apple does!" ***

Editor Note.... At times like this it is difficult at best to remain civilized but as courtesy and politeness dictate, I shall. This must be said though...Is Atari's goal for Comdex to show a PROTOTYPE in a hotel room? Is this their idea of solid marketing procedure? This really cannot be Atari's main thrust in the US marketplace. Gents, there simply has to be more....Money Mis-management is not a mistake, how much for the "Gold Room"? Only to show the laptop in 'hotel room', I wonder if

everyone will respect it in the morning.... So, MAC-like laptop is spoken from the lips of our fearless leader... why just a scant 21 days ago one of his marionettes was telling me off for having praised the MAC Emulator and the good it can do for Atari and the ST.... On a positive note, it's nice to see Ultra Script has become a reality and I share the optimism that the future for Atari is STILL BRIGHT, the trick is to make sure the userbase shares the same feelings. You say, why then do I say the things I say about Atari? Basically, the hard bottom line could be masked in flowery pablum...but then the powers to be at Atar I will think we accept the blunders, bluster and baloney as part of the overall picture... we do not! We WANT the Atari to be the very best out there for the general population... I am sure Atari wants this too. Only by re-thinking their posture in this market and adopting a real marketing strategy will they ever see the * real * horizons of market penetration. Darn I love my ST.....but you Atari, man, you can reallyI have heard this countless numbers of times in the last two years....Haven't you Atari? (End of Part I.)

PART II - COMDEX '88... THE BEAT GOES ON ST REPORT COMDEX HOTLINE #2

Rather than blind the reader with a blast of sugar coated banter, we will say it just like we see it.....(normal, right?)

Atari "portable" nicknamed "BABY HUEY" it is BIG!!!

JR Innovations - GenLock on display....still no FCC approval (Type Acceptance) \$500 - 600

Soft Logic - showing PAGE-STREAM, which, by the way, this author LIKES!

Timeworks - Nothing NEW

ISD Marketing - Showing Calamus. Predicted to be shipping in later this month, shapes up to be another of the 'expensive' type programs which definitely points to a very narrow market, as in those who have a definite use for the program or bux to burn. Calamus itself is very impressive, but then so is the price! Ask W.P. about pricey software in the ST marketplace. \$299.00

INTERSECT - showing MASTER-LINK a super high powered version of the now famous, Interlink. Masterlink incorporates all the fine features of Interlink and an advanced script language which allow you to custom coordinate the program the way you wish. Also, multiple buffers and other high powered editing features. \$59.95

Nite Lite Systems - showing an RS232 LAN (local area network) we, by the way, have one of these systems and find it well made and affordable. \$799.00

Editor's Note: Thank Goodness, The ST has held it's own in the midi world, just ask Tangerine and Fleetwood Mac!

Passport Designs - showing Master Tracks Jr. and Master Tracks Pro V.2.5..Version 3 will have SMPTE (no release date on this one yet) Jr. \$129.95 ~ Pro \$349.95

Legend Software - showing The Final Cut, A toolset for editing and synthesis arrangements. [Good]..\$89.95

View-touch is on Display, the one like the college students used to register for classes in No. Ca.

SEYMORE-RADIX - nothing new

Navarone - showing the new version of ST Scan, it prints straight to the SLM804....works good.

Logical Design Works - showing LDW Power, a fine spreadsheet for the STIBP - Showing all kinds of impressive goodies from GERMANY, powerhouse STs (EST) in fact, this appeared to be the machine so readily described for the last three weeks..... Hopefully, Atari will pick up on this one!

Precision Software - showing SuperBase Professional Ver. 3.0 which is light years ahead of it's competition, and far superior to the previous release. \$349.95

Word Up - Shelby Moore III showing the latest upgrades to Word Up and the HP Deskjet driver.

FTL - showing all kinds of HOT promise for the very near future, Revenge of Chaos (you saw that in last week's STR) a preview disk, an Amiga version of DM, a HINT DISK, now this is slick, it knows where you are in the game, and will show only those hints needs for immediate help! FTL CONTINUES TO SHOW OTHERS THE WAY TO DO IT TO IT!!

Regent Soft - showing Regent Base II and a kit for the STs (520 -1040) everyone should want... SPRINGS TO STIFFEN THE KEY RESPONSE! Way to go!

Editor Note: There will be more information as we compile the tidbits into smooth flowing info.... We are elated to see the grand amount of activity on the part of all the third party developers. Speaking of third party Developers, there has been a special meeting of developers called as a result of the MAJOR unrest among the developers because of Atari's LAX attitude toward the USA market and other irritating postures taken by Slammin' Sammy. I wonder if Sam will explain why a longtime friend of his father and super staunch Atari executive has resigned? I mean THE REAL REASONS... will Sam begin to show the Atari community the real person and not the corporate facade??? Time will tell.....

SPECIAL RELEASE COMDEX '88 STR (c) The FALL, 1988



GFA BASIC 3.0

Howard Bandow, MVACE

For many people, the BASIC language is their first exposure to computer programming. BASIC is an acronym for Beginner's All-Purpose Symbolic Instruction Code. As that description indicates, most versions of BASIC have limited capabilities designed to teach beginning students some fundamental principals of computer programming. For the Atari ST, GFA BASIC is an expanded version of BASIC which has capabilities you wouldn't normally expect to find in BASIC. Like most of the software sold by MichTron, this was developed in Europe, and adapted for the US market by MichTron. When I got the opportunity to review this language, I viewed it as an opportunity to become acquainted with a language that has gotten a lot of attention in the Atari ST world. BASIC wasn't my first language (I'm too old), and I didn't expect to be impressed with this version, since I've always felt too constrained by the limitations of BASIC to spend enough time to become proficient in its use. As you'll see if you finish this review, I was surprised and impressed by the capabilities of this language.

The GFA BASIC 3.0 package consists of a floppy disk, a 646 page wire-bound manual, a warranty card, and some pamphlets containing other MichTron products. The only preparation needed to run the program was to make a working copy of the disk. By comparison, another high-level language with which I'm familiar comes on four floppy disks and requires an installation process which took me more than an hour before I could begin to use it.

The GFA BASIC 3.0 manual is generally well written. It begins with an introductory description which describes the language. This is followed by a chapter describing the use of the editor to develop BASIC programs. Following the editor chapter are several chapters describing related sets of BASIC commands in a tutorial fashion. The latter chapters and appendices provide a great deal of reference information that is more related to the ST's operating system than to the BASIC programming language. There are a few places where the manual could use some improvement. For example, on page 21 the manual explains that pressing the escape key will change the screen to direct mode, but doesn't explain what the direct mode is or how to get back to the editor. I feel that there are three reasons for the lack of clarity in certain parts of the manual. First, the manual was written in German and there are places where some clarity was lost in the translation. Second, there are places where an analogy was made to functions in MS-DOS which were similar to functions being discussed without making that clear. Finally, there are some concepts which are too complex to be fully explained in a manual. This has led to the publication of a number of books supplementing the materials in the GFA BASIC manual. This, along with Mich-

Tron's reputation for technical support, should leave the user with a secure feeling that he'll have somewhere to go when he has questions.

The first thing you'll encounter when you run GFA BASIC is the editor. This appears to the user as two lines containing menu selections, below which is a blank screen. Before starting to type in a program, there are a couple of differences between GFA BASIC and other versions of BASIC that you need to know about. First, there are no line numbers in GFA BASIC, so don't type any in. Most lines will begin with a reserved word or a variable name. The second thing you need to know is that GFA BASIC only contains one statement on a line. Other BASIC's are able to accept multiple statements separated by colons (:). As statements are entered, the editor takes care of formatting and syntax checking. Commands in loops are automatically indented; commands and variable names are converted to the correct case; syntax errors will be indicated on screen and you will be prevented from leaving the line containing the error until it is corrected. Selections in the editor menu allow you to Load or Save a tokenized file, to Merge or Save, An Ascii file, to List a file to the printer, to mark and manipulate blocks of text, to find and replace text strings, and to run the program being edited. I really like the editor; it's very easy to use.

The reader should be warned that tokenized files created by GFA BASIC 3.0 are incompatible with tokenized files from earlier versions of GFA BASIC. This means that if your friend has GFA BASIC 2.0 and he's written a program which you wish to modify using GFA BASIC 3.0, you'll have to have your friend save his program in ASCII format. If magazines or other sources distribute just token files (I don't know that any do), there could be more serious incompatibility problems.

I can't begin to cover all the GFA BASIC commands, functions, and features in this review. An indication of the capabilities offered is the fact that the index in the GFA BASIC manual is eleven pages compared to five pages in the Atari ST BASIC manual; and those eleven pages contain a greater portion of commands and functions than does the Atari manual. I will, however, summarize some of the features which seem important to me.

GFA BASIC 3.0 handles six different data types: boolean, byte, word, integer, float, and string. Each can be designated with a specific character suffixed to the variable name. Many functions are available for converting between data types, manipulating arrays and character strings, manipulating pointers to the addresses of variables and array elements, and manipulating memory. Operators are available to act on arithmetic, string and boolean variables. A full set of mathematical functions are available. For operations on integer variables, a set of commands and

functions are available which are faster than the ordinary operators. These include operators which manipulate bits within variables. Provisions for keyboard input and screen output include capabilities for formatted output, cursor positioning, and the definition of macros for the function keys. Using macros a character string of as many as 31 characters can be input by pressing one function key. GFA BASIC includes provisions for sequential, indexed sequential, and random access to disk files. The latter types are used for databases and similar applications. In explaining the file related commands, the manual conveys a lot of information which is useful in any programming language or application using disk files. GFA BASIC also contains commands and functions to exchange data via DATA statements and peripherals such as the parallel port (printer), serial port (modem), the midi port, the mouse, and joysticks.

GFA BASIC has capabilities for the creation of modular, structured programs. Procedures and functions provide for the separation of parts of the program which can be accessed from numerous points in the root program. Arguments can be passed in the calls, either as values or in such a way that the values of some arguments can be changed by procedures. Variables which have meaning only within the procedure can be defined. Procedures can be set to execute at specified times or to execute when errors are encountered. Functions return a single value, which is determined by the values of the arguments passed to them. Functions can be defined either separately, much like procedures, or as single-line definitions within the body of the program. A wide variety of loop and conditional execution functions are found in GFA BASIC. GOSUB and GOTO commands in GFA BASIC can't use line numbers as operators, since there are no line numbers in GFA BASIC programs. Instead, GOTO uses a label and GOSUB uses a procedure name.

Several approaches can be taken to the display of graphics using GFA BASIC. The first uses functions such as LINE, BOX, and CIRCLE to draw either filled geometric shapes or outlines of those same shapes on the screen. Patterns and colors for these shapes can be set using other functions. The next approach is to use commands like those used to drive plotters to "plot" on the screen. Examples of these commands are PU (pen up), PD (pen down), DA (draw absolute), and DR (draw relative). The final approach is to copy regions of the screen's bit-map to and from string variables. This last approach is the quickest and most versatile, but the hardest to apply.

Commands are also available in GFA BASIC to manage interaction with features of the operating system such as the mouse, pull-down menus, windows, alert boxes, and file selectors. If the capabilities implemented as GFA BASIC commands aren't sufficient, you have another option before resorting to other languages. Functions are avail-

able to call GEMDOS, BIOS, and XBIOS routines. The routines which can be called are documented in the GFA BASIC manual. In order to see how hard GFA BASIC is to use, I tried a number of experiments.

First, I typed in some GFA BASIC programs from magazines and ran some programs from disks which came with magazines. The syntax checking while I entered the programs and the run-time error messages made it easy to find any typing errors I made. All the programs I tried ran exactly as they appeared in the magazines. My next experiment was to see how hard it would be to convert an Atari ST BASIC program to run in GFA BASIC. I began by entering the program as it appeared in Atari Explorer magazine, minus the line numbers. When I tried to enter a RESTORE statement, the syntax checker reminded me that I had to change RESTORE's argument to a label from the line number appearing in the original program. I also had to insert the named label before the line containing the first DATA statement. My next problem came on a GOSUB statement. I had to change it's argument to a procedure name and insert a line with the reserved word PROCEDURE followed by the procedure name prior to the first line of the subroutine. With these few changes, the program ran fine. By the way, GFA BASIC really works fast if you use Turbo ST.

From my experience over the past month, I think GFA BASIC has a lot to recommend it.

While it has a lot of sophisticated capabilities, those familiar with other versions of BASIC will be comfortable with GFA BASIC. It also provides a way for BASIC programmers to become familiar with features of other languages at about half the cost of buying one of those other languages. Soon a compiler will be available for GFA BASIC 3.0 and that will allow programs to run faster and on computers where GFA BASIC 3.0 isn't available. If you need more capabilities or higher performance than the BASIC you're using now, but you don't feel ready to learn a new language such as C or Assembly, then I recommend you give GFA BASIC 3.0 serious consideration.

MichTron, Inc.
576 South Telegraph
Pontiac, MI 48053
\$99.95 Retail,

Great-8 BBS
300/1200/2400
24 Hours

[583] 297-7223

Member of the
IND-NET

JANUARY, 1989

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1 	2 GENERAL MEETING	3	4	5 	6	7
8	9 MIDI SIG Cal Dave Holliday for info 642-4717	10 8-BIT EXPLORERS SIG Call Dave Moore for info 297-7223 7 PM	11	12	13	14
15 	16	17 PAC BOARD MEETING 7 pm For location, call Bill Pike, 646-4471	18	19 ST WESTSIDE SIG Call Bill Pike for info. 646-4471	20	21
23	24 MIDI SIG Call Dave Holliday for info 642-4717	25 8-BIT EXPLORERS SIG call Dave Moore for info 297-7223	26	27	28	29
30	31		Happy New Year FEB. 6TH IS THE NEXT GENERAL MEETING			

IB Computers

ST

Revolver → \$41.95
Crack'ed → \$29.95
Road Raider → \$41.95
Virus → \$24.95
Space Harrier → \$41.95
Heroes of the Lance / Advanced D&D → \$34.95
Off Shore Warrior → \$34.95
Art & Film Director → \$69.95

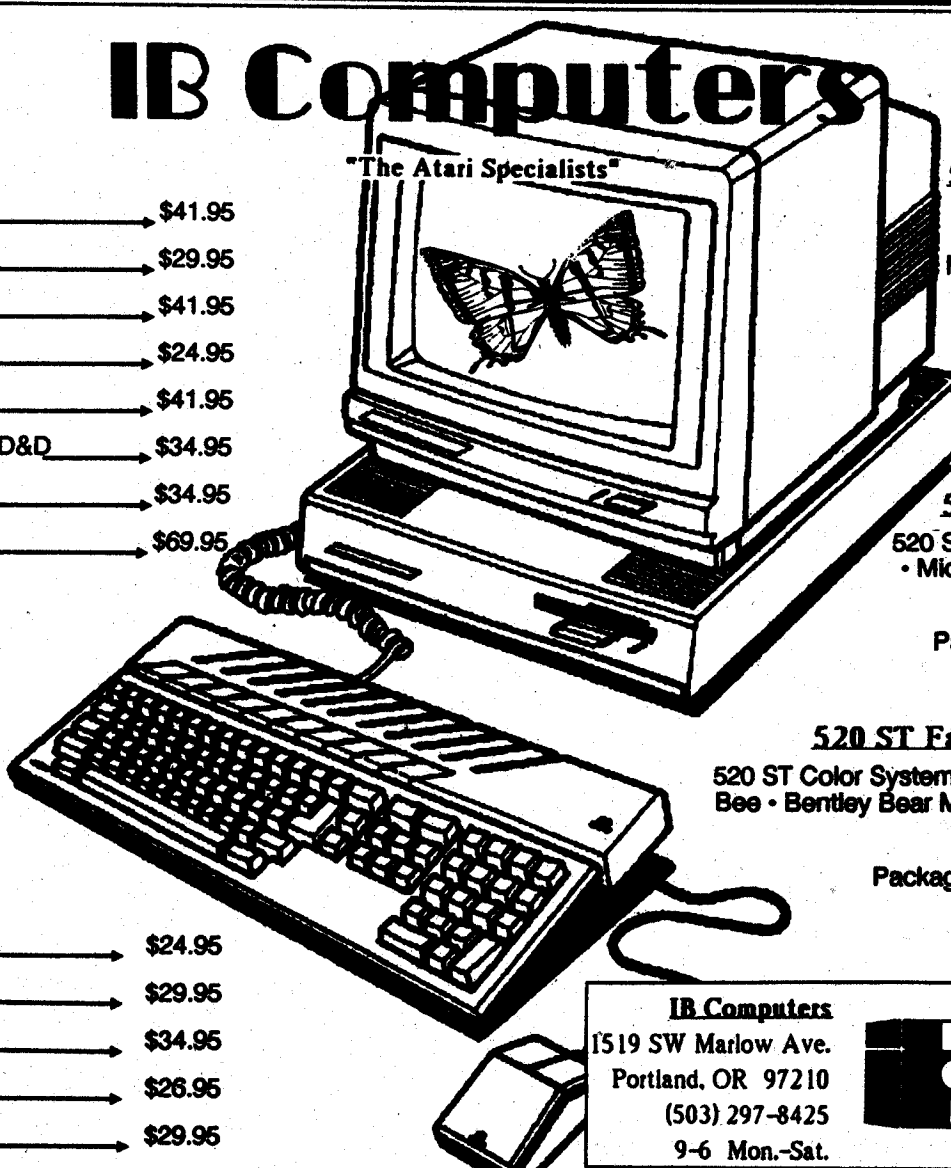
MEGA ST2 TEMPORARY REDUCTION!

Mega2 Color System:
\$1499.95

Mega2 Mono System:
\$1299.95

8-Bit

BattleZone → \$24.95
Gato → \$29.95
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