

PORTLAND

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FEBRUARY 1986

ATARI CLUB

IN THIS ISSUE

NEXT GENERAL MEETING

MONDAY, FEBRUARY 3, 1986 - 6:30 PM

BPA AUDITORIUM, NE 9TH AND HOLLADAY

PAC BULLETIN BOARD SYSTEMS

24 HOURS - EVERY DAY

#1 - 503-245-9405 - 300/1200 BPS

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President's Column, Vern Vertrees -----	1
1986 Election Results, Debbie Billings -----	1
Board Meeting Notes, Dan Gibson -----	2
SIG Contact List -----	2
Special Interest Groups, Thomas Brown -----	2
Explorer's SIG, Elanna Schlichting -----	3
Membership Notes, Clyde Pritchard -----	3
Special Projects, Chuck Hall -----	3
BBS Update, Steve Billings -----	4
Unclassified Ads, Clyde Pritchard -----	4
CES-The First Day, Jack Powell-ANTIC -----	5
CES-The Second Day: Products, Jack Powell-ANTIC -----	7
STTerm, Steve Billings -----	9
Ramblin, Chuck Hall -----	10
ST Disk Format, Chuck Hall -----	11
New Book, Chuck Hall -----	11
Assembler Lesson 4, Chris Crawford -----	12
Dealer's Corner -----	13
23 Matches, Dave Hein -----	14
PAC Help Hotlines -----	15
Backup 130XE, Chuck Hall -----	15
Church vs Computer ?, Chuck Hall -----	16



"OF COURSE, WE MAY BE A BIT
PREJUDICED."

CLUB BUSINESS AND ACTIVITIES

President's Column
Vern Vertrees

First I would like to thank all of you for the chance to lead this club. It is truly an honor.

I would also like to thank Chuck Hall and all of last year's board for the great year they gave us. I hope that this year we can do as well. I would like to congratulate all of the new board members on their new positions. I have had the pleasure of knowing each one of them and I'm sure they will work hard to keep this club the best in the west. I think this last year has been great for all of us who own ATARI computers. We got the new 130XE, the 520ST, the new ATARI modem and the promise of more to come. WOW not bad for a company that was supposedly dead.

It must have been tough for our presidents and boards in 1983 and '84 to keep us together and our spirits high, but they did, and they did. Our thanks to all of you.

I would like to thank the Tramiel family who not only took over a failing company, but in a years time put it back on top.

I must also thank our local computer stores for their support with both hardware and software when all the chain stores gave up. It must have been a tough decision for them to stay with a computer that most outsiders said was dead. We can now thank them all by shopping in the stores listed in our newsletter.

I'm pleased to hear about the new products ATARI is rumored to have under their hat, Like the 1040ST with 1MEG of memory, a built in Double sided drive and power supply. Then there is the true 32-32 bit TT computer that should blow the socks off of the rest of the market. Commodore eat your heart out. We should know much more about these machines in the weeks ahead.

At our next meeting I hope to have more hardware and software to give away and I think Jim Berry has someone lined up to show slides and tell us about the computer show now going on in Las Vegas. Don't miss it!!

Now down to business. I would like to hear from all of you to get your ideas and thoughts on what you would like this club to provide for you. I know also that this is almost impossible. There just isn't enough time for me to talk to each one of you personally, so I am asking you to talk to any one of the board members. The board and I will then put together a program to help you. As I have stated before, we have many talented people willing to give their time to help all of us. Please do not hesitate to call any one of us no

matter how small your problem seems.

Now for what I would like to do in the year ahead. I would like to have give away prizes at each meeting. I think that this is appreciated by all. Also I would like to see good entertainment. Something we can all enjoy. Your Ideas in any of these directions would be appreciated.

I hope to have more in the next news letter that I didn't have time for in this one. I hope to see you all at the meeting in February.

1986 Election Results
Debbie Billings

The election results for new club officers held at the January 6, 1986 general meeting were as follows:

124 Ballots were cast.

President-	Vern Vertrees	95
	Art Cashin	28
Vice President-	Elanna Schlichting	115
Membership-	Jim Miller	112
S.I.G Coord.-	Tom Brown	114
Program Dir.-	Jim Berry	114
Special Proj.-	Chuck Hall	107
Club Librarian-	Jerry Andersen	64
	Floyd Suiter	58
Sergeant at Arms-	Tom Addis	111

Congratulations to the new board members and welcome back to the reenlistments.

Board Meeting Notes **Dan Gibson**

The December board meeting was held at 7pm on December 30th at IB Computers. Attending were the following, Chuck Hall, Dave Holliday, Dan Gibson, Tom Brown, Jim Miller, Jim Berry, Steve and Debbie Billings, Don Adams, Russell Schwartz, and Vern Vertrees.

January Meeting

The January general meeting will begin at 6:30 with PAC software sales until 7:00 to 7:15 when the main meeting will start. The first order of business will be to vote for 1986 Board positions. For those positions with more than one candidate each person running will have a few minutes to speak at the meeting. You can find the results of the elections elsewhere in this newsletter. Lloyd Suiter will be demonstrating Silent Service, a new submarine simulation game. Check out Lloyd's review in last month's newsletter. In addition, we will have a Megaroid Challenge in which ten people will be selected at random to play this new 520ST game. The winner will walk away with fame and fabulous prizes. Lastly, we will be giving away at no charge for the tickets the following items: An Atari XM301 modem, a complete library of the PAC disks, and 10 pieces of software. We will also be selling PAC T-shirts for \$5.00 a piece. Plus you get a free kids size T-shirt with each purchase.

The PAC BBS's

The Board voted at this meeting to upgrade both PAC BBS systems. For the 1st BBS we purchased a 130XE and a Basic XE cartridge for \$180. For the 2nd BBS we purchased an 850 interface, 1200 BUAD modem, software, and two cables for \$350. Now both BBS's are 300/1200 BUAD and are running the new ForeM XE software.

Miscellaneous

The 520ST's are out selling the Amiga at IB Computers 7 to 1. There are 70 pieces of software available for the ST now with more coming every day. The 800XL's are almost sold out. When they are gone the 130XE will be the only Atari 8-bit machine sold at retail in the U.S. Monitors and printers for the 8-bit line appear to be on hold from Atari with all the attention going to the ST,s. The 520ST's will be available in chain stores soon. A new 1 meg. ST will be sold only through computer stores.

Treasurer's Report

As of this writing, the balance in our checking account stands at \$2,158. At the last meeting software and T-shirt sales totaled \$353, and \$1,200 for memberships.

SIG Contact List

The following people have generously offered to take telephone queries in the areas indicated.

Adventure Games	Russell Schwartz	646-6418
Assembly Language	Leroy Baxter	653-1633
BASIC Programming	Nick Yost	981-0838
	Lee Gassaway	642-2455
BBS Usage	Steve Billings	246-1751
	Don Adams	245-7168
	Russell Schwartz	646-6418
C	Randal Schwartz	643-1089
Cassette Operation	Lee Gassaway	642-2455
DOS Operations	Gary Lippert	233-7069
FORTH Programming	Ron Chaffer	283-5691
	Ricky Wooldridge	224-7163
Hardware Operation	Gary Lippert	233-7069
Modem Operations	Gary Lippert	233-7069
Operating System	Nick Yost	981-0838
	Leroy Baxter	653-1633

Special Interest Groups **Thomas Brown**

Meeting Information

Here is a list of meeting dates/times for some of the SIG's:

Assembler SIG

Dates: 1st & 3rd Tuesday
Time/Place: 7:30 PM. / Call.
Leader: Clyde Pritchard
Phone: 648-0461

Explorer's SIG

Dates: 2nd & 3rd Tuesday
Time/Place: 7:00 PM / Call.
Leader: Tom Comerford 246-4694
Wayne Winterbottom 669-1367

Modem & Communications SIG

Dates: 2nd & 4th Monday
Time/Place: 7:00 PM / Call.
Leader: Jerry Andersen
Phone: 655-3914

ATARI ST SIG

Dates: 1st & 4th Thursday
Time/Place: 7:00 PM / Tektronix Bldg 50
Leader: Pat Warnshuis
Phone: 246-3724

For information on SIG activities call SIG Leaders or myself, Tom Brown, 644-6674, I'm always looking for new ideas and ways to help the existing SIG's, so let's hear from you.

Sunday 12 - 5

We have finally settled on a new piece of software for the P.A.C. BBS's. The previous software that we were testing on the #2 BBS was apparently abandoned by the developer along with all its bugs. The software was simply not pleasing the users and it crashed a whole lot.

Don Adams and I then started looking for another alternative. We contacted Matthew Singer, who wrote the FoReM 26M that has been running on the PAC board #1 ever since Russell Schwartz set it up a couple years ago.

Matthew Singer was very cooperative. He told me that he had developed a new FoReM program that was written exclusively for the Atari 130XE computer and OSS BASIC XE. I asked Matthew if he could send me a copy of the documentation for FoReM XE so that Don and I could review it and present it to the club Board of Directors for approval.

Well, to make a long story a little shorter. Singer sent the entire program (more on that later). Don and I were very impressed by the software. It was very professional looking and the Sysop support programs were excellent. This was something that was missing in the Mindlink software, which did not even have a program to search the password list.

The FoReM XE software runs quicker than the older FoReM thanks to the wizardry of BASIC XE and seems to be much more compatible with terminal software written for the 520ST. We are still testing it out so if you have any problems transferring files leave me a message and tell me what modem and software you are using.

Needless to say, if you have called either of the club bulletin boards we are now using the FoReM XE software. I am very impressed by it. There are some features that were not available on the previous BBS. The first time you sign on you will need to revalidate your password and this will take a bit of time. After you are re-established, the password search will be much faster. The new board uses an index resident in memory to find your password instead of searching the whole list. It also keeps track of the date and time you last called and will inform you of what conferences contain messages which have been left since you last called. Once in the message base there is a command to read 'New' messages. This will then show you all the new messages that you have not yet seen. Nice feature.

Don and I are very happy with it. Other than the unfortunate problem of losing all the old

passwords and messages, people seem to think it is pretty slick and a big improvement. If you have not called the board lately you will have to reenter your name and password. PAC members will not be deleted even if they do not use their passwords often. Non-members are deleted if they do not use their password at least once a month.

If you are a club member and don't have access to the download files, leave a message to the Sysop and let us know so that we can correct it. We have been know to make minor mistakes on rare occasions.

As I said above, Matthew Singer sent us all the BBS files to get the boards running, unfortunately he forgot to send the documentation files. I am working on putting together a new help file that I will run in the newsletter explaining all of the new features. Don and I have been able to figure out most of the features, but I have written back to Singer requesting the documentation file. I think when I get that I will be able to complete the help file.

Thanks for all your patience in the time it took to settle on an upgrade to the system and for the time it takes to re-establish your password. I have been trying to get the passwords upgraded at least once a day to get everyone back on line. I hope you like the new software and just remember that this is -YOUR- bulletin board. If you have any suggestions or complaints (suggestions preferred) please let us know and if it sounds like a good idea we will try and implement it. If there is another message conference or type of download section you think would be useful we can probably do it!

Unclassified Ads

A bit on information for the new members. You can place an ad in this section any personal, computer related items that you want to buy, sell or trade. There is no charge. Please limit the size of your ad, because this section is printed only when space is available.

For Sale: Atari 810 Disk Drive with "Happy" hardware modification. Includes cable, power supply and Happy 5.2 software. Perfect condition. \$250 or best offer. Also for sale, Epson 8K serial buffer card. \$50. Next item up for sale: 48K memory cards (2) for 400 or 800 machines. Each card has 64K which can be accessed if modified. \$40 each. Call Dan Heims at 244-0545.

NEWS AND REVIEWS

CES - The First Day
Jack Powell - ANTIC

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January 9, 1986, Las Vegas, NV - The Consumer Electronics Show! Only six weeks have passed since ANTIC attended the massive COMDEX in Las Vegas (just enough time for three holidays, two turkeys and an armload of gifts). And now, here we are - back in "Sin City" for an equally massive CES.

Family of ATARI Products - Atari Corp. displayed their "family of Atari products" in a huge booth with over 81 monitors featuring videotapes of everything from Dig Dug on the 2600 video machine to Star Raiders on the 520 ST.

Whereas Atari had displayed primarily ST software support at COMDEX - a show primarily for the high end of the computer industry - their exhibit here at CES is focused on the mass-market; the K-Marts and the Toys-R-Us outlets.

The Atari exhibit is three huge walls of monitors. Looking from left to right, while standing in the middle of the purple corral, one first sees 12 monitors displaying 2600 games, including Pole Position, Stargate, Moon Patrol, and Joust. The 2600 has been redesigned as a smaller unit and will sell for \$39.95. Release date is expected to be February 1st.

To the right of the 2600 screens are twelve 7800 screens. The 7800 video game machine was developed by the previous Atari company and exhibited at the June 1984 CES just weeks before Jack Tramiel bought Atari and temporarily squelched the project. The machine features excellent color graphics (due to the "Maria" graphics coprocessor) that appear to be slightly better than the 8-bit computer line, but not quite up to coin-op (or ST) standards. Maria has exceptional bit-block transfer capabilities.

At CES, the 7800 was displaying crisper and faster versions of the same games as the 2600, plus Pacman, Xevious, Asteroids, Food Fight, Robotron, Galaga, Centipede, and the first two Lucasfilm games: Rescue at Fractalus and Ball Blazer. Although Atari told us the machine was ready to market immediately, they have not yet settled upon a price. The unit should sell for between \$69.95 and \$79.95.

ST Third Party Software - There were an additional 48 monitors showing videotapes of

mostly ST software coming from third party developers. Unlike the COMDEX exhibit, where Atari was surrounded by third party ST developers (using Atari's equipment), at CES, the third party support was represented on cycling video displays with company title credits.

Atari was also displaying the "Boink" comparison of bouncing balls on the three 68000 machines - the Macintosh, Amiga and 520 ST. Over in the 8-bit area, however, Atari was delighted to have just received a new Boink demo for the 130XE from XEVIUS - a software store and ST development company from Seattle, which had been responsible for the previous 8-bit Boink.

The latest Boink features a spectacular, spinning 3-D fuji in place of the familiar ball. Additionally, one side of the fuji displays the well-known scrolling rainbow. Very impressive. You can find it in DL4 of the 8-bit SIG*Atari by or before January 14th.

Star Raiders, the classic 8-bit arcade game, is being adapted by Atari for the ST by programmer Rob Zdybel. A demonstration of the ST version was lighting up a monitor in the Atari area. The game is about one-third complete, and there's no warp drive yet, so we can't report on that particular effect - sorry. But the ships are displayed with solid modeling rather than wire-frame. And, currently, the most impressive part of the demo is the control panel on the lower half of the screen. It's a very detailed graphics display reminiscent of the control panel in Koronos Rift. Atari has no price yet on this software, which it hopes to get to market by early March.

Meanwhile, on the 130XE, Atari was showing the long-awaited **Star Raiders II**. The game looks remarkably similar to a previously un-released arcader called "The Last Starfighter", which some insiders may have seen about a year ago in a beta version.

But Atari has done a lot of work on the game to improve its playability and make it look more like a sequel to Star Raiders. The star field now moves in response to your joystick giving the illusion of spacial dogfighting. It's more difficult to lock in on your destination planet and the orbiting algorithm has been fixed so you can slow yourself down by pulling on the joystick - but you can no longer go backwards. This makes bombing runs a lot more of a challenge. Other added goodies include shields, space stations and a tactical display. Star Raiders II should be in the stores very soon at a price of \$39.95.

Hardware - Atari displayed no new hardware at this CES. The 1040 ST is not on display, and the rumored 80-column card and 3 1/2-inch drives for the 8-bit machines were also absent. According to Atari spokesmen, both the 80-column interface and the smaller drives will be announced at the Hanover Fair in Germany.

When the drives are shown, they are expected to be single-sided, holding 325K - formatted. The access time on the 3 1/2-inchers will be about twice as fast and DOS 2.0S and 2.5 files may be "upwardly" ported to the new drives but you won't be able to port files in the other direction.

Atari will be marketing a packaged 130XE which includes 1050 disk drive, 1027 printer, and bundled software. The "starter package" will sell for \$399, and the software will be Silent Butler, Star Raiders, Music Painter, Paint, and AtariWriter. The package will become available February 1st.

The 1040 ST - Although Atari was not displaying the 1040, they did officially announce its existence. Photos reveal a machine identical to the 520ST, with the exceptions - as previously reported by ANTIC - that the disk drive slot is where the mouse and joystick ports once were, and

the ports have been moved to the right-front under the keyboard. The depth of the back section is about 1 1/2 inches deeper than the width of the current drive slots. Also, it appears as if there is a slightly different eject mechanism in the drive.

The new machine, featuring one megabyte of RAM and built-in double sided disk drive, will sell for \$999.95 (monochrome) or \$1199.95 (color).

Atari has slated the 1040ST for exclusive distribution to "authorized" computer dealers and said the 520ST will be given wider distribution "beyond computer specialty dealers." The 520ST will be aimed toward the consumer who wants to trade up from an 8-bit to a 16-bit.

Atari also announced the availability "next month" of a 20 megabyte, 5 1/4 inch hard disk peripheral - the SHD-204. No other details were provided on the eagerly awaited peripheral.

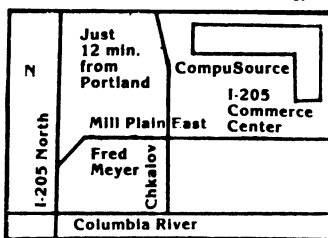
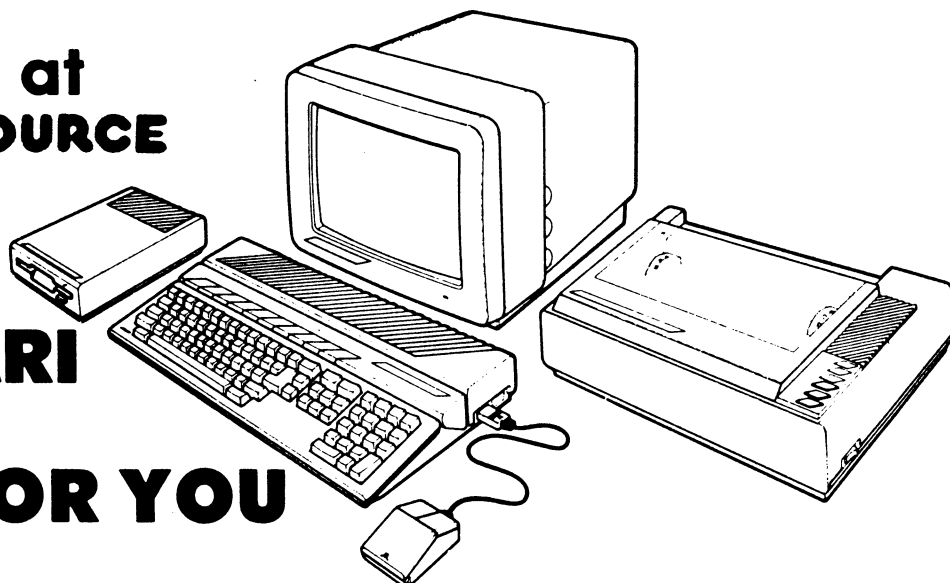
Summary - Once again, Atari is "packing them in." Every time we stopped by their exhibition area the crowds were thick. ST Software developers are scattered throughout several CES exhibition halls. Over the next four days ANTIC will bring you the latest details and keep you up to date on the products and the press releases.

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CES - The Second Day: Products
Jack Powell - ANTIC

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January 10, 1986, Las Vegas, NV - Though most CES insiders agree this year's Vegas show has far fewer software exhibitors, a thorough search reveals a wealth of Atari related goodies at this giant, electronic toy store.

Many developers, having decided the high cost of booth space is not worth the exposure, are displaying their wares in hospitality suites scattered throughout this desert city, while still others simply wander the fair and show off their wares at other's booths.

In one hospitality suite, **Datasoft** was displaying the recent 8-bit products, *Goonies*, *Zorro*, and *Alternate Realities*. The latter fantasy role-playing epic is currently being adapted for the ST by a team of programmers led by John Butrovich. Philip Price, the game's original author, will act as creative consultant.

The ST version of AR will take advantage of the ST's greater power and RAM capacity to include many concepts Price had always wanted in the game. There will be magic spells, for example, and you will be able to get a job and earn money - as well as meet others and earn their admiration... or their hatred.

The ST AR was started two months ago and Activision hopes to have the first disk - *The City* - to market by Christmas of 1986. The second disk of AR will be *The Dungeon*. It is also currently under development for both the ST as well as the 8-bit machines. No release date has yet been set but both versions will debut simultaneously. A third disk, *The Arena*, is currently being brainstormed. *Arena* will allow users to pit two developed characters against each other.

Batteries Included was demonstrating their fine collection of Atari software. The *Isgur Portfolio System* - a high end financial package - has been released for the IBM. According to BI, it will be available for the ST sometime in 1986.

BI is also developing a full-scale telecommunications program called *I*S talk*, and a time management and billing system called *I*S Time*. These too will become available for the ST in 1986.

BI also announced a special purchase policy for educational institutions. For every three or

more BI packages purchased, BI will throw in an equal number of the same title for \$10. Not bad

Soniture, Inc. showed off the *Space Pen*, a three-dimensional light pen, currently available for the 8-bit computers, and soon available for the ST. *Space Pen* requires its own software to take advantage of the third axis, but it will take the place of a touch tablet on two-dimensional software products. *Space Pen* is \$150 on the 8-bits, and \$175 on the ST.

Compute! Publications has a new book: *The ST Programmer's Guide*. The 356 page volume retails for \$16.95 and includes an introduction to ST BASIC, plus explanations of the BASIC keywords. There is also a section on Logo concepts and a rundown of the Logo primitives. In back of the *Programmer's Guide* is an explanation of the GEM VDI calls and how to access them from BASIC. Although GEM theory is explained, there is no listing of AES calls and no explanation of C access to either VDI or AES.

Microprose is showing a new 8-bit strategy simulation called *Conflict in Vietnam*, written by Sid Meier and Ed Bevers. The game, which is due in early March, is similar to the company's *Crusade in Europe* or *Decision in the Desert*. There are five battle scenarios you can choose among, which are based upon five decisive battles of the 60's "non-war".

Microprose was also demonstrating *Silent Service*, for the ST. Programmed by Silas Warner - who did *Castle Wolfenstein* - the game is expected to hit the dealer's shelves in late March. *PrintMaster*, a printer utility similar to *Print Shop*, is being developed for the ST by a company called **Unison World**. The product, which is currently available on the IBM PC and Commodore 64, was not being shown at CES.

Help for the UPRINT - **Digital Devices** makes a printer interface for the 8-bit Atari called *Uprint*. The initial releases of the product had a few bugs in it and the company originally established a replacement policy which they now feel is unfair. They have asked ANTIC to pass the word that all owners of the earlier *Uprint* (you can tell the earlier models by the existence of a copy switch) may receive a free exchange. Simply return your original unit along with \$6 for shipping.

Jim Schwaller of **Extended Software** was showing *Disk Library*, an ST file cataloging utility currently available for \$39.95. *Extended Software* is also related to *Classic Image Software*
 continued...

which is planning the release of a marble-rolling game for the ST called Diablo, due out in late March. Classic Image is, somehow, related to Classic Covers which makes plastic dust covers for all Atari peripherals...right down to the mouse.

Accolade announced a February release date of Sundog. The announcement was made from a hospitality suite and, though Accolade was not demonstrating the program on the ST, ANTIC has seen it and can attest to its superior graphics.

ABACUS Publishing displayed their newest ST books. ST Internals is all about the ports and the BIOS and includes a listing of BIOS system calls. ABACAS also has a 68000 machine language book for the ST. Both these books are currently available. Coming January 27th will be their GEM Programmer's Reference book featuring the VDI and AES calls. All three books retail for \$19.95.

XETEC, Inc. is developing a CAD package for architectural drawing. The ST program, which was demo-ing, will be available in the second quarter at a price no higher than \$99.95.

Back at ATARI - Meanwhile, back at the plum-colored Atari corral, Charles Andrews demonstrated his home-brewed 320XE. The machine has been upgraded to contain 192K RAM over the standard 130XE's RAM. It is completely compatible with any XE software and enables such niceties as two RAMdisks plus one floppy - without touching the 130XE's memory. Atari was interested in the idea, and asked Andrews to display his upgrade machine for awhile to get reaction from the CES crowd. If any of you want to see this product in the Atari lineup, contact John Scruch at Atari.

Bill Wilkinson of **O.S.S.** premiered their Personal Pascal for the ST. It looks like another winning language from this company. Version 1.0 boots to a familiar GEM menu bar with drop-down menus for editing, compiling and linking. Default options for the compiler and linker may also be adjusted from here then optionally saved to disk. Compiler options, for example, include pause on errors, chain to linker, debugging options, and GEM or TOS structure for final output code.

The editor is a command-based text editor that has a full Help screen for all commands, and a cut and paste function very similar to the ACTION! editor. We were particularly impressed with the fact that the editor also has auto-indent. A feature sorely lacking from all ST program editors up to this point.

O.S.S. has designed their own custom calls

to access both GEM AES and VDI. Not satisfied with the original design, they rolled up their sleeves and made a few changes. To open a workstation, for example, you need only one call: InitGem. That's it!

Documentation consists of a very full-looking, 284 page paper-bound book. The language is currently being shipped and retails for \$74.95.

MIDI Marvels - The **Casio** exhibit at CES is a sprawling display of synthesizers, watches and other electronic marvels. In one corner ANTIC found **Micro-M**, a company with a novel approach to MIDI software. Q.R.S. Music Disks are player piano rolls translated to MIDI song drivers for the ST.

The company discovered the original Q.R.S. player piano company was still making the rolls and set about converting all that music to synthesizer code. As a result, for \$19.95 you can buy a disk of Scott Joplin rags. Or, how about some Gershwin? An entire catalog of disks is expected to be available soon. Just pump 42nd Street into your synthesizer and then alter it to suit your fancy.

Also, for the MIDI crowd, **Hybrid Arts** - creators of the MIDI Track-3 for the 8-bit machines - stopped by the ANTIC booth to discuss their latest MIDI software for the ST. DX-Droid, is a patch librarian/editor and the first MIDI product to use a form of artificial intelligence. DX-Droid can actually program your Yamaha DX-7 for you. Programming the DX-7 is said to be so complex, there are people who are paid to do it. DX-Droid will be available in February.

Hybrid Arts will also be releasing a sequencing program called MIDI Track ST, which will be able to read and write SMPTE time code. It can also record and play back system exclusive data. (Those last two sentences are for you MIDI freaks out there.) MIDI Track ST will be available in both a "professional" and a "consumer" version. No release date has been set for MIDI Track ST.

For those of you with a strong interest in MIDI's, you might want to log onto the Hybrid Arts MIDI BBS at (213) 826-4288.



STTerm
Steve Billings

In the other article about the BBS Update I mentioned that I had conversed with Matthew Singer who has written a lot of communication software for the Atari computer. Singer is also actively writing communication software for the 520 ST computer. In an ad in Antic magazine he has advertised a program called ST-TERM.

I also bought this program while getting the BBS FoReM XE software. ST-TERM is a pretty good communication program for the ST, but is apparently not fully implemented yet. Singer is still working on it. What it does offer at this time in version 1.0 is the best package I have seen for the price of \$39.95.

It offers an excellent auto-dial menu that allows you to set all the modem parameters for the particular board you are calling such as baud rate, word length, parity check etc. It also allows you to edit the auto-dial menu from the program. It allows you to set up macro commands and save set-up files. You can also do disk functions such as formatting disks and reading the directory.

It also has an ATASCII emulation mode that allows you to see 8-bit Atari special characters including inverse characters, and even the clear screen works!! Unfortunately you can't set-up

ATASCII as a parameter in the auto-dial menu. It also has an Amodem transfer protocol so you can download from and to Atari 8 bit computer bulletin boards.

I mentioned that Singer is still developing this software. It has a Kermit protocol now, but the enhanced version will allow batch transfers. The enhanced version will also have a clock on the screen and money minder to allow you to keep track of how much money you are blowing on Compuserve.

There is no indication when the enhanced version will be available or whether there is an upgrade option. I hope there will be. I think this is a good communication program for the ST and the improved version will be even better.

As far as I know this program is only available direct from Matthew Singer at this time. I have not seen it on the store shelves. The only ad I have seen is in Antic.

If you are interested, Matthew Singer can be contacted at; Commnet Systems, 7348 Green Oak Terrace, Lanham, MD 20706.

I think I am going to format the Chat communication program disk that I bought and could never get to download anything and put on it all the stuff I can now download with ST-TERM.



PRINCIPAL
S. Marie Richards
ASSISTANT TO THE PRINCIPAL
B. Hugh Miller
ASSISTANT PRINCIPALS--
STUDENT SERVICES
Robert D. Orsdo
Richard M. Lund
AST Activities

CENTENNIAL HIGH SCHOOL
3505 S.E. 182nd
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(503) 661-7612

December 10, 1985

Chuck Hall
Portland Atari Club
P.O. Box 1692
Beaverton, OR 97005

Dear Mr. Hall:

On behalf of the staff and students of Centennial High School, I would like to thank you for participating in our Science Show. Your contribution of time, effort, and materials helped to make the 1985 Science Show the best one yet. I hope that the interest level was high and the response positive at your booth.

Again, thank you for making our Science Show a success.

Sincerely,

Fred Rau

Fred Rau
Science Instructor

*Ramblin.....
Chuck Hall*

Now that I have turned over the reins of the presidency to Vern Vertrees, I am resurrecting my former Ramblin column. As president, I had to be somewhat careful of what I said in my 'Presidents Column' so that it would not be taken as the official club policy. I no longer have that restriction. And anything that appears in this column is my own view and not that of the Club's. Not that I am going to get radical or anything. Just laying the foundation is all.

I have started picking up a new magazine that is published in England. Walter Germer told me about it and roused my curiosity. It is called 'Personal Computer', and I would compare it to 'Byte' over here. It is available at Rich's on Alder, downtown if you are interested. It does not contain a whole lot about ATARI, but what I have found is interesting. The first thing I noticed is the price of Atari's over there. One outfit called Silica Shop Ltd., who bills themselves as the "UK's No 1 Atari Specialists" lists the ATARI 520ST at L749 (I use L for the pound sign). The English Pound is currently valued at \$1.45. Therefore you are looking at \$1068 for the Monochrome system which sells here for \$799. And you thought we fought for our independence over tea and taxes. I have noticed other prices to be at the same level for other Atari's and other computers. If you think Apple prices (especially Macs) are high here, try buying one over there.

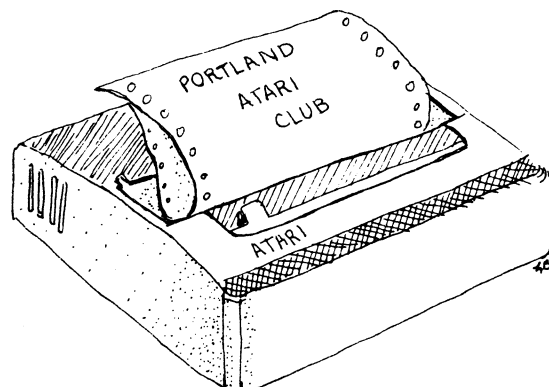
The second thing that hit me was all of the advertising for cassette media. It's as if disk drives are either unavailable or priced out of the normal persons range. Almost all of the software we are used to seeing on disk here is also available on cassette there. Even the software reviews are directed more towards cassette operation. And this is not limited to just England. I have recently received a newsletter from the Netherlands. Although all in dutch, the gist of it is toward cassette operation. If we have any dutch speaking members who would like to do some interpreting for us, we could see if there is anything of interest in the newsletter to pass on. By the way, they state that their Atari club has 2000 members. I get the feeling that there is only one major club in the entire country. After all, the country is smaller than the Willamette Valley.

We haven't seen much yet in these pages for the ST. We have increased our membership greatly because of that machine, and now it is time to

start putting out information on it here. I will have my first software review in the next issue on a Macro Assembler for the ST. I will now also have time to do software reviews once again, and will be concentrating on the ST, because that is where I spend most of my time. I hope to create enough momentum and interest that the ST can have its own section of the Newsletter.

And speaking of the Newsletter, we are in the process of breaking in a new Editor. Clyde has done an outstanding job in putting this newsletter together in the past years, and we have seen it grow to one of the best in the nation. Now he wishes to take a rest. His job is also calling for more of his time, and his wife would like some, too. We have a volunteer, DeLoy Graham who is learning the ropes and will soon be taking over. I ask you to join me in thanking Clyde and Debbie for their great efforts and sacrifices in the past couple of years in putting out the newsletter. I also ask you to welcome DeLoy to our ranks, and give him the same level of support you have given Clyde.

One final note here about the multitude of ST software appearing on the shelves. Several products have been released by Hippo Software. To date, none of these have performed at an acceptable level. This is just a caution to those of you who are looking at ST software. I know we are in a hurry to get some things to do on our machines, but some vendors are not as concerned about the quality of their products as we would expect. One exception might be Hippo Spell. The reviews on this product say it works. That's something anyway.



How To Do It . . .

ST Disk Format
Chuck Hall

In the February issue of Antic there is an article on the layout of the disks used by the ST. I gave Hippo a rip earlier, but this information was provided by Rick Oliver of that company and we thank him. If you own an ST and have not subscribed to ANTIC then I recommend that you do so. It carries the latest word on ST products, and reviews them for us. I have every issue, and have learned most of what I know about my Atari's from them. I am sure we will see more and more technical information about the ST in future issues. Antic is, of course, also making software available for sale and in the public domain for the ST. So try the magazine. You won't regret it. (Can I have a free subscription now Jim?)

Anyway, back to my main topic. The 3 1/2" disk we are using is divided into 80 tracks. They are numbered from 0 on the outside, to 79 at the center. Each track is further divided into 9 sectors, each containing 512 bytes of data. This results in 720 sectors and 368,640 bytes of information. Not all of that is available, of course, as we shall see. The directory takes 7 sectors and the File Allocation Table takes 5. The File Allocation Table actually occurs twice on the disk, taking up 10 sectors. There is also one sector per disk dedicated as a boot disk. This sector contains format information plus a program to load the disk at boot time.

If you have looked at one of your disks using the "Show Info" option of the desktop, and then added up the space used by each individual file, you may have been puzzled by the discrepancy in the two numbers. The reason for the difference is because each file on the disk starts at a cluster boundary. A CLUSTER is two sectors. This means that if you have a file of only 125 bytes, it is going to take one cluster, or two sectors, or 1024 bytes to store it. The extra 899 bytes are just wasted.

The File Allocation Table is then used to track which clusters are assigned to which file.

The directory has an entry for each file on the disk. Each entry is 32 bytes long and contains the following 8 fields:

- | | |
|-----------------------|----------|
| 1) Filename | 8 bytes |
| 2) Filename extension | 3 bytes |
| 3) Attributes | 1 byte |
| 4) Not Used | 10 bytes |
| 5) Time Last Change | 2 bytes |
| 6) Date Last Change | 2 bytes |
| 7) First Cluster | 2 bytes |
| 8) File size | 4 bytes |

If you want more detailed information on this subject you have two options. One is to go out and buy the February issue of Antic, or I will be giving a presentation on this subject at a future beginners ST group meeting.

I will take this moment to remind you all that we have a general meeting for all ST users at Tektronix on the 2nd and 4th Thursdays of each month, and a beginners meeting at the same place, the 1st and 3rd Thursdays of each month. It is held in building 50 and you should be there by 7:00 pm as the doors are kept locked. See you there.

~~~~~

*New Book*  
*Chuck Hall*

I have just picked up the latest edition to my ever-growing technical library. This book is for fun, though. It is the long awaited "Adventure Games, II". For those of you who enjoy adventure games, this is the latest book of clues, maps, and solutions. It is a sequel to volume one, and is just as good. I got mine for \$17.95 at IB Computers. This one takes off where volume one left off. It includes the latest from Infocom (Cutthroats, Hitchhiker, Mind Forever Voyaging, Seastalker, Suspect, and Wishbringer) along with many available for the ST (Crimson Crown, Fahrenheit 451, Forbidden Quest, Kings Quest, Sundog, and Treasure Island). For those of you who can't get past the giant rat in Dallas (not JR) the answer is here. This book is intended to help solve adventure games on all machines, not just the Atari. All in all, it provides help for 46 different adventure games. Along with volume one, this book is a must for adventure gamers.

*Assembly Language Class Lesson 4*  
*Chris Crawford*

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Chris Crawford - Assembly Language Course  
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**Lesson Four: Branching**

One of the most important ideas in computing is the concept of conditional execution. This is the ability of the program to execute different routines depending on conditions at the time of execution.

The significance of this capability is best realized by considering how programs would operate in its absence. A program without conditional execution would not be able to change its program flow in response to conditions.

In other words, it would always execute exactly the same code in exactly the same order. Every run of the program would follow exactly the same sequence and perform exactly the same operations. Not very interesting, right?

To get a grip on conditional execution, we need to look at it in its simplest expression. The simplest type of conditional execution is binary in nature. We have a chunk of code; the 6502 will either execute it or it will not execute it. The decision is made on the basis of a boolean value; a true value will tell us to execute the chunk, while a false value will tell the 6502 not to execute the chunk.

The basic mechanism for doing this is through an instruction that performs a transfer of control. This involves nothing more than altering the program counter. You may recall that the program counter is a register in the 6502 that points to the address of the currently executed instruction.

When that instruction has been executed, the program counter is increased by the length of the instruction (1, 2, or 3 bytes, depending on the instruction). It now points to the next instruction. This little system allows the 6502 to step through a program in sequence.

But there are also instructions that will alter the value of the program counter, allowing the 6502 to jump to another area of memory and another part of the program. The simplest of these is the JMP instruction. It takes the form JMP LABEL.

This loads the value of the LABEL into the program counter. Its effect is to make the 6502 jump to the address of LABEL and continue execution from there. It is directly analogous to a GOTO instruction in Basic.

For conditional execution we need something more. We need the 6502 to have capability to make a binary decision based on a binary value. The solution used by the 6502 involves flags. These are single-bit Boolean values stored together in a single byte of the 6502 called the processor status register (SR).

The status register is eight bits wide but stores only seven flags. These seven flags are labelled N, V, B, D, I, Z, and C. You have already encountered the C (Carry) flag and the D (Decimal) flag. In this chapter, we are concerned only with the N, V, Z, and C flags.

The magic instruction that makes possible conditional execution can take many forms. Its general form is Bfv LABEL. The B stands for "branch". The "f" stands for a flag, and the "v" stands for the value of the flag, either true or false. However, in this case, we do not use the terminology "true or false".

Instead we use the terms "set" or "clear". "Set" means the same thing as "1" or "true", while "clear" means "0" or "false". The label is the address to which the 6502 should branch if the condition is satisfied. If the condition is not satisfied, then the 6502 will simply skip this branch instruction and go to the following instruction.

For example, suppose that we have the following instruction sequence:

```
LDA    #0
BCS    KARELIA
LDA    #5
KARELIA STA    FISH
```

This will first load the accumulator with a zero. Then the 6502 encounters the BCS ("Branch on Carry Set") instruction. It looks at the Carry flag. If this flag is set then the 6502 will indeed branch to the label KARELIA. (For all you geography buffs, Karelia used to be in Finland.) In other words, if the Carry flag is set, the 6502 will skip over the LDA #5 instruction. Thus, a zero will be stored into FISH.

However, if the Carry flag is clear, then the 6502 will not take the branch. It will instead continue executing the next instruction, which will load a 5 into the accumulator. Then it will come to the label KARELIA and store that 5 into FISH. Thus, the value of the Carry flag determines whether a zero or a five is stored into FISH.

The converse of BCS is BCC ("Branch on Carry Clear"). This will cause the 6502 to take the



branch if the Carry flag is clear.

There is also a pair of similar instructions for the V-flag. These are BVS and BVC. They will cause the 6502 to branch on the value of the V-flag.

Now the situation gets unnecessarily confusing. The instructions for the Z-flag should be BZS and BZC -- "Branch on Z Set" and "Branch on Z Clear". Unfortunately, the dumb designer of the 6502 thought he would get cute at this point, so instead he called these instructions BEQ and BNE, for "Branch on Equal" and "Branch on Not Equal". He never mentioned what he thought is supposed to be equal to what. We're stuck with it, so make the best of it. Just remember what these instructions really mean BZS and BZC. If you think in terms of the Z-flag, it will work out just fine. If you try to think in terms of equal or not equal, your attention will be diverted from the real truth of the matter and you may make mistakes. So keep your eye on the ball and think in terms of Z!

The next pair of branch instructions use the N-flag. These are even more insidious than the previous two. They are called BMI and BPL, meaning "Branch on Minus" and "Branch on Plus".

At first glance, these appear to be reasonable substitutions for BNS and BNC. After all, if you load the accumulator with a signed number, and the number is negative, then the N-flag will be set, while if the number is positive, the N-flag will be clear.

Thus, it would seem that BMI is truly equivalent to BNS and BPL is truly equivalent to BNC. This is the source of many a bug in beginner's programs. Consider the following fragment of code:

```
LDA FISH
SEC
SBC BOAT
BPL POSANSR
```

This code is supposed to branch to POSANSR if FISH is greater than GOAT. And indeed, if FISH is greater than GOAT, then when you subtract GOAT from FISH, you will get a positive result, right? Not necessarily!

Suppose, for example, that the value in FISH is \$C1 and the value in GOAT is 1. When the 6502 subtracts GOAT from FISH, it will get a result of \$C0. Note that the highest bit of \$C0 is set to 1. This is the value that will go into the N-flag. In other words, even though FISH is

greater than GOAT, the 6502 will not take the branch, and this code will fail.

The moral of his tale is, don't take those instructions literally. They are misleadingly named. When you see BPL, don't think "Branch on Plus", think "Branch on N Clear". Otherwise, you'll screw up someday.

By the way, the correct branch to use in the above problem is BCS.

Now for a catch with the branch instructions. A JMP instruction is a simple absolute jump -- you specify the target address and it goes there. The designers of the 6502 realized that the vast majority of branch instructions only go a short distance. They therefore decided to implement the branch instruction as a relative branch.

The machine code doesn't specify the target of the branch, it only specifies an offset. In other words, instead of saying, "jump there", it says, "jump so many bytes forward or backward." The allowable range is 126 bytes forward or backward. Thus, you can't branch anywhere you want, only to nearby locations. If you must branch further, reverse the logic of the branch and use the branch to skip over a JMP statement.

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\* Discount is available to PAC members.

\*\* Each month, there will be an item available to PAC members at a special price.

- Some stores are ST dealers only.

### Authorized Service Centers

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Also, Computron - downtown only.

### 23 Matches Dave Hein

This game was first published in the January 1984 PAC Newsletter. At that time, Clyde Pritchard rewrote part of the code to allow use of character graphics in place of all text. Well, that was great, but the game was still impossible to win. Plus the fact that it required too many keystrokes to play. So I went about rewriting it again to make it more friendly to play. It now requires only the touch of a key to make selections, and most importantly, it is now possible to win. The rules are not included in the program because I thought it was long enough already. Here they are.

There are 23 matches on the screen. You have the choice of letting the computer go first, or you may take that option for yourself. After order of play has been decided you can take one, two, or three matches at a time. If you try to take more than three or less than one, the game lets you know about it. (I know you really don't want to cheat... so I'll give you another chance...). Play progresses until there is only one match left. Whoever takes it, loses.

It took me about 20 tries to figure out how to win every time. Now I just torture people with the knowledge as they try to beat the computer. It is great fun, I hope that you give it a try.

#### \*\*\* Program Listing \*\*\*

```
10 REM *** 23 MATCHES ***
20 REM
30 REM ADAPTED TO THE ATARI
40 REM BY BO DAVIS OF DAL-ACE
50 REM FROM A PROGRAM BY
60 REM ***BOB ALBRECHT*****
70 REM MODIFIED TO USE CHARACTER
80 REM GRAPHICS IN PLACE OF ALL
90 REM TEXT BY CLYDE PRITCHARD.
100 REM **PORTLAND ATARI CLUB**
110 REM *****
120 REM MODIFIED TO BE MORE USER
130 REM FRIENDLY BY DAVE HEIN.
140 REM **PORTLAND ATARI CLUB**
150 REM *****
190 OPEN #2,4,0,"K:"
200 DIM H(10):DIM M$(67):DIM NAME$(50)
210 POKE 710,64:POKE 712,64:POKE 752,1:
CHR$(125):ATARI=0:CHUMP=0
220 ? :? :? :? :? "   WHAT IS YOUR NAME";:INPUT
NAME$
230 IF LEN(NAME$)>7 THEN PRINT "YOUR NAME IS TO
LONG.":FOR T=1 TO 450:NEXT T:PRINT "}:GOTO 220
```

```
310 TRAP 40000:M=23
320 M$(1,1)=" ":M$(67,67)=" ":M$(2)=M$
330 FOR I=1 TO 67 STEP 3
340 M$(I,I)=CHR$(25)
350 NEXT I
360 ? CHR$(125):GOSUB 710
363 REM *** WHO GOES FIRST?***
365 ? "WHO GOES FIRST? 1)COMPUTER OR 2)HUMAN";:GET
#2,H:H=H-48:? :?
367 IF H=1 THEN 470
380 ? M;" MATCH(S) REMAIN.":?
381 IF M=1 THEN 580
385 REM ***THE PLAYER MOVES***
390 ? "HOW MANY MATCHES DO YOU WANT TO TAKE?";:GET
#2,H:H=H-48
400 IF H>M OR H<>INT(H) OR H<1 OR H>3 THEN 690
410 M=M-H
420 FOR I=M*3+1 TO 67 STEP 3
430 IF I<68 THEN M$(I,I)=" "
440 NEXT I
450 GOSUB 710:IF M=1 THEN 620
460 REM ***THE COMPUTER MOVES***
470 IF M=1 THEN M$(1,1)=" ":GOSUB 710:GOTO 610
471 IF M=1 THEN M$(1,1)=" ":GOSUB 710:GOTO 610
480 R=M-4*INT(M/4):IF R<>1 THEN 500
490 C=INT(3*RND(0))+1:GOTO 510
500 C=(R+3)-4*INT((R+3)/4)
510 M=M-C
520 FOR I=M*3+1 TO 67 STEP 3
530 IF I=-8 THEN 590
535 IF I<68 THEN M$(I,I)=" "
540 NEXT I
550 GOSUB 710:IF M=0 THEN 610
560 ? "I TOOK ";C;" MATCH(S)":GOTO 380
565 REM ***WHO WON?***
580 ATARI=ATARI+1:POKE 703,24:GOSUB 820
590 ? CHR$(125):? :? :? :? :? "YOU GET THE LAST
MATCH. I WIN!":FOR TIMER=1 TO 500:NEXT TIMER:? :? :?
:~ :? :? :?
600 GOTO 630
610 CHUMP=CHUMP+1:POKE 703,24:GOSUB 820
620 ? CHR$(125):? "I'LL TAKE THE LAST MATCH.
**** YOU WIN ****":FOR TIMER=1 TO 500:NEXT TIMER
625 CHUMP=CHUMP+1
630 ? :? :? :? :? "DO YOU WANT TO PLAY AGAIN?.."
640 ? "PRESS Y FOR YES OR N FOR NO."
641 FOR TIMER=1 TO 350:NEXT TIMER
650 ? "}:? "   Y OR N";:GET #2,H:IF H=78
THEN 870
670 IF H=89 THEN 310:GOTO 650
672 IF H<>89 AND H<>78 THEN 650
675 REM *** SOMEONE ISN'T PLAYING FAIR
690 ? :? :? :? :? "THAT MOVE WAS NOT CORRECT. I KNOW
```



*Backup 130XE  
Chuck Hall*

YOU DON'T WANT TO CHEAT..SO I'LL GIVE YOU  
ANOTHER CHANCE..."

```
692 FOR TIMER=1 TO 500:NEXT TIMER: ? : ? : ? : ? :GOTO
390
710 ? CHR$(125):POKE 703,24
720 POSITION 16,2: ? M$(1,9);
730 POSITION 16,3: ? M$(1,9);
740 POSITION 13,5: ? M$(10,24);
750 POSITION 13,6: ? M$(10,24);
760 POSITION 10,8: ? M$(25,45);
770 POSITION 10,9: ? M$(25,45);
780 POSITION 13,11: ? M$(46,60);
790 POSITION 13,12: ? M$(46,60);
800 POSITION 16,14: ? M$(61,67);
810 POSITION 16,15: ? M$(61,67);
820 POSITION 2,18: ? "ATARI ";ATARI;
830 POSITION 30,18: ? NAME$; " ";CHUMP;
840 POSITION 2,20: ? " ";
850 POKE 703,4: ? CHR$(125)
860 RETURN
870 TRAP 40000:POKE 703,24
880 GRAPHICS 0:END
```

This program is a utility originally printed in Antic magazine. Often you find nice utility programs which seem to fall just a little short of where you would like to see them. That was the case here. The program was written to do a one pass copy of a disk on the 130XE and a single disk drive. Bill Pike started working with the program and has added a couple of features. The first is the ability to use an unformatted disk. The program will read your source disk into memory then look to see if your destination disk is formatted. If it isn't, it will format it, then proceed with the copy. If it finds it can not format the disk, it will issue you a message to that effect and ask you to insert a new disk. In the meantime your original data is still safe in memory eliminating the need to start over.

We thank Bill for this effort and encourage others to submit their changes to programs upon which they have improved.

\*\*\* Program Listing \*\*\*

```
100 GRAPHICS Z:SETCOLOR 2,Z,Z: ? " BACKUP 130XE
by William W. Tan": ?
105 ? "modified by Bill Pike 1/1/85"
110 FOR I=1600 TO 1664:READ A:POKE I,A: NEXT
I:B=256*(PEEK(145)+1):M=54017
120 ? "INSERT SOURCE DISK, PRESS START" :C=82:
GOSUB 140
130 ? : ? "INSERT DESTINATION DISK, PRESS START"
:C=80:GOSUB 140:GRAPHICS Z:END
140 IF PEEK(53279)<>6 THEN 140
142 TRAP 149
145 IF C=80 THEN OPEN #5,8,0,"D1:TESTFORM.AT"
146 IF C=82 THEN GOTO 160
148 FOR H=1 TO 125:PUT #5,0:TRAP 149: NEXT H:
CLOSE #5: GOTO 160
149 CLOSE #5
152 TRAP 200
155 IF C=80 THEN ? "FORMATTING":XIO
254,#1,Z,Z,"D:"
160 POKE M,253:X=USR(1600,C,1,220,B): FOR I=Z TO
3:POKE M,225+4*I:
X=USR(1600,C,221+125*I,125,16384): NEXT I:RETURN
170 DATA 104,104,104,141,2,3,104,141,11,3,104,
141,10,3,104,133,204,104,133,203,104,141,5,3,104
180 DATA 141,4,3,32,83,228,173,4,3,24,105,128,141,
4,3,173,5,3,105,0,141,5,3,238,10,3,208,3,238,11,3
190 DATA 198,203,208,224,198,204,16,220,96
200 ? "FORMATTING ERROR-TRY ANOTHER DISK"
210 ? "PRESS START WHEN READY":GOTO 140
```

*PAC Help Hotlines*

The following is a list of our current groups and the contacts for each:

**Adventure Games**

Russ Schwartz 646-6418

**SIGASM (Assembler)**

Clyde Pritchard 648-0461

**ATR-8000**

Jim Scott 281-6724

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Jerry Andersen 655-3914

**NLSIG (Newsletter)**

DeLoy Graham 649-6993

**ST SIG**

Pat Warnshuis 246-3724

*Church vs Computer ?  
Chuck Hall*

This was reported in the Oregonian on Thursday, January 9th.

\*\*\*\*\*

ATLANTA - For now, at least, the Rev. Jerry Falwell has exorcised the "Demon Dialer."

Back on April 7, 1984, Edward Johnson, 46, a bespectacled computer consultant got fed up. His mother had almost signed over her 150 acre farm to evangelist Jimmy Swaggart. He and his brother stepped in to prevent that from happening. He could not get back at Swaggart, but he could get to Falwell; and he did. You see, Falwell has a toll free number which you can use to pledge your worldly goods to his foundation.

Johnson's computer is programmed to tie up the line for 30 seconds, then it hangs up and dials again. As it has every 30 seconds, 24 hours a day, seven weeks a day, for the last 8 months.

"Here we go again," he said. And the computer dialed 1-800-446-5000.

"Old Time Gospel Hour," an operator answered. "Can I help you?" CLICK.

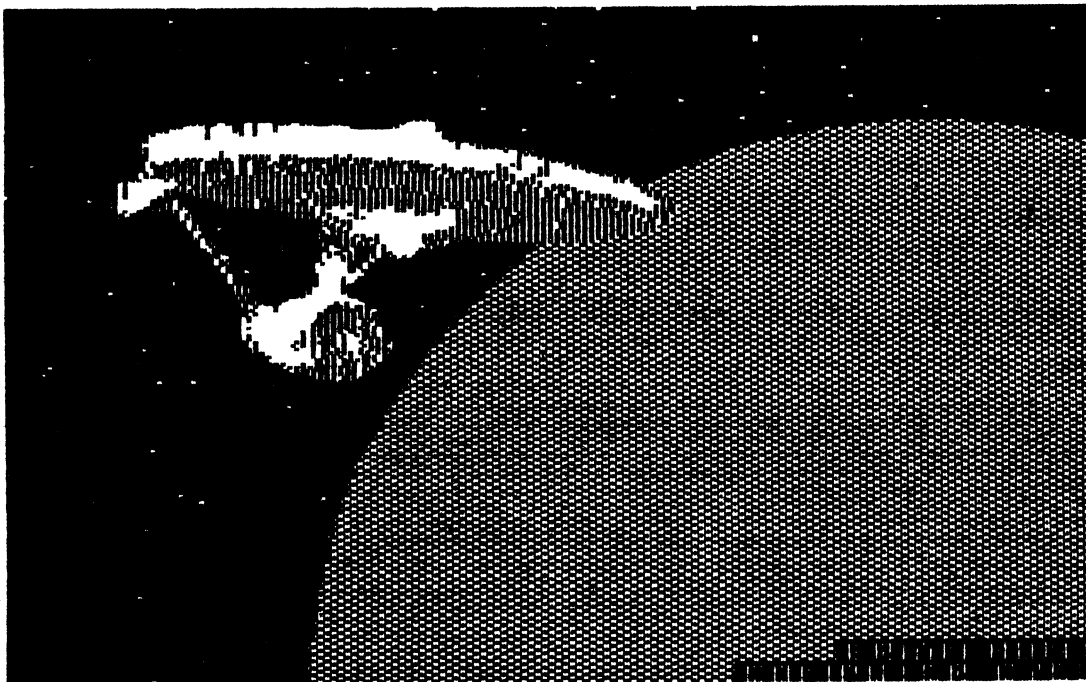
"You can tell by their tone of voice they're not too happy," Johnson said.

Falwell officials estimate their first high-tech protest cost them close to \$1 million in lost pledges.

There is a drawback to the above. The telephone company was able to track Johnson down eventually, and ordered him to desist or they would remove his telephone. He may end up in court if Falwell wants to sue. Johnson states he will continue his protest.

\*\*\*\*\*

The computer Johnson uses? ATARI of course!











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