

PORTLAND

ATARI CLUB

NEXT GENERAL MEETING

MONDAY, JANUARY 7, 1985 - 7:00 PM

BPA AUDITORIUM, NE 9TH AND HOLLADAY

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Vigilant-A



IN TRAMIEL'S SCOPE

1984 TIW TOENIES

PORTLAND ATARI CLUB

(Not affiliated with ATARI, Inc.)

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Membership is \$20 per year and includes a subscription to this newsletter and access to members only functions. Single copy price of the newsletter is \$2. General meetings are open to the public and are held at 7PM on the 1st Mon. of each month (2nd Mon. in the case of holidays) on the date and at the location listed on the cover of this newsletter.

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CLUB BUSINESS AND ACTIVITIES

PRESIDENT'S COLUMN
Chuck Hall

First of all, I wish to thank all of you for your support. Even for those of you who didn't support me at the election, I hope that I can win your support and confidence throughout the coming year. I will be meeting with the new board members throughout this month to outline what I believe their prime responsibilities and duties will be. By the time we have our first board meeting I hope that we will all be ready to jump in and go to work. And we have a lot of work to do.

Now that ATARI has made the announcements (informal as they may be) that new hardware is definitely coming out we are sure to see a surge of new software, technology, and etc.

Jack Tramiel has now appeared in public and has started explaining what is up and coming for ATARI. If you get ANTIC, ANALOG, or INFOWORLD, you know that he is now granting interviews and slowly letting out where ATARI is headed. We cannot expect too much to soon, for all of those products take time to develop, test, and market. The lineup so far looks like this: In January at the CES show in Las Vegas there will be the revealing of the new 800 XL+, which among other enhancements will include 128K. You still will not be able to address the 128K all at one time, but it will be available through a technique called bank selecting, which the people with RAM boards are already familiar with. As you probably already know, the price of the 800 XL is now at \$119.95. If you pay more, you are getting taken. Once the new 800 XL+ is released, the price is to fall even more. I would expect to see it at \$99.95. But even now at \$119.95, you are buying an awful lot of machine. The ATARI 1050 disk drive has also been drastically reduced. Wards and Video Concepts sold them out at \$169.00, and the price at IB, (as of Saturday, Dec. 8) was \$189.95. Who would have believed it. I bought a complete system Saturday for a friend; 800 XL, 1050 Disk Drive, Legend Printer, and an Axiom Interface for less than I paid for my first ATARI 800. I know that most of you new comers (or should I say late comers) to ATARI get tired of hearing us talk about all that money we spent for our first computers, but if it wasn't for us paying those prices back then, you wouldn't be able to pay such cheap prices today.

One of the new 16 bit machines is supposed to be announced in January also. Reportedly it will contain two SONY 3 1/2 " drives. A 32 bit

machine is supposed to be announced in a trade show in Germany in April. There have been reports that there will be two 16 bit and two 32 bit machines released. We will probably have to wait and see. If they do come out that way, then we will probably see something similar to the 400/800 situation we had for awhile, or like the 600 XL/800 XL situation we had for an even shorter period of time, where you had a low end, inexpensive machine, and also a high end full blown machine.

ATARI was supposed to begin heavy marketing for the Christmas season. It looks like they forgot about Portland. I saw full page ads in Seattle. You may have seen the one I had at the last meeting. I still haven't seen anything here locally at all. But ATARI will hear about it. Believe me.

A new monthly ATARI consumer magazine "ATARI EXPLORER" should begin publication soon. Apparently the price will be about \$3.00 an issue. I can't wait for this to start coming out. It will be nice to once again be informed on a regular basis about what is happening at ATARI. And of course that is one of my promises to you. As I find out anything about ATARI I will do my best to get the word out to you.

Another area in which I am deeply interested is in doing something for the advanced beginner. I am not really much beyond that point myself. One thought I have had is to hold workshops periodically. A workshop would have a specific application as its subject. Such applications might be 1) Binary files- what are they and how to work with them; 2) Printer graphics- how to program them on my printer; 3) BASIC XL - what's the real difference; 4) Redefined character sets - how they work, and how do I make them. These are just some ideas. The list of topics is endless. My idea is that a small group of quasi-experts would hold the workshop for others in the club who are interested. One suggestion I received on this idea was to hold these workshops at the general meeting. Unfortunately, I do not believe that our current facility (more on that later) lends itself to that easily. Besides, I could see a workshop of this nature going on for some time. Please do not mistake these for SIG groups. A new group may get started because of the level of interest in one of these topics, but that is not its purpose. I would expect it to be a one-time shot. I would hope that those leading

continued...

the workshop would make available enough supporting documentation and materials (at club expense) to make these a real worthwhile activity. I invite your input and comments on this idea. I also invite volunteers to lead workshops to come forward. If there is enough interest in this I will make up a schedule of possible workshops and print it in the newsletter.

As those of you who have been attending our meetings know, our facility is rapidly becoming difficult to deal with. Because of new regulations all members and guests must be identified before allowing them to enter. We must follow this rule. If not we don't have a place large enough to meet. Which brings me to a plea. Does anyone out there know of a place that would hold a group of our size. We would have to have seating for at least 300, hopefully more. We would have to have power for the computers. We would have to have room for tables to display dealer products and demos, and also hopefully an area where our current backroom people can wheel and deal. If you know where such a place exists please let me or Jim Link our vice president know. He is responsible for attaining our facility. Even though the parking is a little rougher where we are now, and we do have to wear badges, the price is still right. We use this facility for free. Although not a prime pre-requisite, it sure does help.

One last subject and I will get out of here for awhile. We have an increasingly large amount of business being conducted in the back room. That is fine as long as it is all above board and fair. The primary rule here is "buyer beware". The club cannot be responsible for any transaction that takes place there. There is one thing that I do request of those dealing and buying. Be fair to each other, and please buy authorized products only. We realize that this is a prime drawing card for our members but also realize that the temptations can be somewhat overpowering. If anyone has a real complaint about any practices going on in that area then we request that you let us know about it in one form or another. We will take what steps we can to investigate.

On a brighter note, I will now depart and let you continue on with something else. I have previewed part of this month's newsletter, and this looks like one of the finer issues we have

ever put to press. It is gratifying to see that we are beginning to see more and more members come forward and begin to participate. Thank you all again for your support and I will see you Monday, January 7th for our next meeting.

MEMBERSHIP NOTES

Debbie Pritchard

Membership Notes is a new column that I would like to use to welcome all the new members. At the December meeting we accepted membership from ten new families, join with me in wishing them welcome. They are:

Tom & Sherry Addis
Rick Asche
David Blakeslee
Don Green
Tom Heston
Heather Holt
Wendell Stude
Michael Sturgeon
Lloyd Suiter, Sr.
Walt Wakefield

Some of you may also have noticed an additional sheet of paper attached to the back cover of your newsletter, it's a renewal form. This will enable you to mail your renewal into the post office box (and beat the rush) or have it all prepared to give me at the next meeting. We hope this will be helpful to you.

If you are in doubt as to when your membership dues are up, just check out the label on your newsletter. There is a date on the last line, that's it!

Hope to see you all at the next meeting.

BOARD MEETING NOTES

Sharon Berry

The November board meeting was held at 7 p.m. on November 26 in the basement of IB Computers. Attending were the following: Lloyd Suiter, Gary Hanson, Chuck Hall, Jean Hall, Russell Schwartz, Dan Heims, Dale Chipman, Clyde Pritchard, Debbie Pritchard, Gail Horner, Steve Billings, Debbie Billings, Jim Berry, Sharon Berry, Tom Comerford, Jim Harton and Jim Link.

WHO HAS WHAT???

The first order of business was a listing of software, hardware and various equipment belonging to the club that is in the possession of outgoing board members. Gary Hanson has the club booth. Dan Heims' list includes Master Memory Maps, reports on public domain software, prices from cassette duplicating companies, assorted diskettes and the 810 drive. In Dale's possession are the 410 recorder and boxes of cassettes. Incidentally, Dale will be helper to the upcoming Club Librarian. Gail Horner has relinquished her items to Debbie Pritchard, our next Membership Secretary. These items include File Manager 800, various forms and books, and Syn File. Steve and Debbie Billings have our modem equipment, including two drives. Jim Berry, who is running again for Program Director, has the club system, including the 825 printer, donated by Phil Bock. Lloyd has the 4" printer.

DECEMBER MEETING

Next was talk in preparation for the December general meeting. Jim Berry had originally planned for Don Geisen of Mindset to speak at the meeting. However, due to the special nature of the meeting, Mr. Geisen has been delayed until January. The December meeting was scheduled to include the election of new board members, sale of polo and teeshirts, the raffle, software demonstrations and dealer demonstrations. Software demonstrations were to include Atariwriter, F15 Strike Eagle, Mig Alley Ace, Solo Flight, and Summer GAMES. Dealers to display at tables were to include Video Showplace, Computers Etc, Comp-U-Source, Comp-U-Desk, and IB Computers. Five or six people volunteered to bring in their systems. Lloyd agreed to bring extension cords, tape and the 4" printer. Lloyd moved, Chuck seconded and the motion passed to run an ad in the Oregonian for the December meeting. Several board members said they had originally heard about PAC from the ad in the paper. Jim Harton and Jim Link volunteered

to monitor people coming in the door to see that they have their identification badges.

RAFFLE

Gary said he would sell raffle tickets at the December meeting. A blank disk would be given for each dollar's worth of tickets purchased. Lloyd ordered a NEC monitor which was on sale at Jafco. However, Jafco was out of stock and did not know when it would receive more. Consequently, whoever draws the winning ticket for the monitor will have to take a rain check good for whenever Jafco gets in a new supply. Other raffle items were to include a computer desk, File Manager 800, the 4" printer, one tee shirt, and a few pieces of software, including some from IB Computers.

BOARD ELECTION

The agenda for selection of board members was planned. Members were to be given one ballot per family. Competing candidates were to be allowed a brief time for a speech, which would contain mention of goals. The ballots were to be counted by the end of the break. Steve and Debbie Billings were voted upon to count the ballots.

BOARD MEMBER DEATH KNELL

The Texas Atari group has amended its bylaws to include a resolution that a board member be expelled after missing three meetings. Lloyd made such a motion, Chuck seconded it and it passed unanimously. This amendment to our bylaws shall state that any board member who misses three consecutive meetings of either nature (board or general) without prior notification of the President shall be expelled from the board. Furthermore, shall a board member miss any five meetings during the year without notification of the President, he or she shall likewise be dismissed from the board. A replacement shall be appointed. The dismissed board member shall have to be voted back in.

JANUARY BOARD MEETING

A discussion was held concerning the turnover of board members. It was decided that the resigning board members should have a one-on-one meeting with incoming board members to discuss procedures. It was also decided that there would be a joint meeting in January with all incoming and outgoing board members attending. After exhausting discussion of the best day for this meeting, Lloyd flipped a coin to decide the date. The flip came up tails, deciding the date for January 2. A brief skirmish

ensued, concerning the legitimacy of Lloyd's coin...(only kidding, folks). The site for this meeting will be the Round Table Pizza Parlor on Barbur Boulevard.

ATARI INTERFACING PROBLEM

Jim Berry said that Axlon hasn't researched the expansion box for the XL series, due to the possible sealing of the parallel bus port. The 800 XL+ would probably be the model with the port sealed off. Chuck spoke of the urgency for us to contact AUGI concerning the importance of leaving the port accessible. Gail made a motion, Jim Berry seconded it and it passed that we purchase postcards to send to Atari regarding the problem. (Note: Latebreaking word has it that the sealing of the port was an unfounded rumor).

VICE PRESIDENTIAL DUTIES

A discussion was held concerning duties of the upcoming vice president. Jim Berry feels a strong need for this board member to communicate with AUGI (Atari Users Groups International). Jim Link spoke of the need to interface with dealers and make available our newsletter.

TREASURER'S REPORT

As of this writing, the balance in our checking account stands at approximately \$3400. The projection TV fund totals \$1922. Our reserve fund contains \$1065. The ticket sales from November totaled \$300. November software sales brought in \$130.

SIG CONTACT LIST *Chuck Hall*

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
BEGINNERS	
Elanna Schlichting	285-4471
BULLETIN BOARD	
Steve & Debbie Billings	246-1751
BUSINESS APPLICATIONS	
Chuck Hall	293-0552
NLSIG (NEWSLETTER)	
Clyde Pritchard	648-0461
PACE (Portland Atari Club Educators)	
Trudie Mishler	230-9545
Chris Fouts	206-687-4951

OFF THE WALL *Plato's Pal - M.A.C.E.*

This quickie is literally off the proverbial wall...from a club newsletter posted at the January meeting. Credit goes to Mr. Peter Bamford and the New Jersey faction by the name of Atari Computer Enthusiasts, what else!

This neat programming utility is the cure for CONTROL+1 fingering. When activated, the screen displays a page of listing and automatically stops. The SELECT key will produce the next page and so on. Want to back up? Use the OPTION key. Want to start over? Use the START key. The BREAK key is used to halt the "parade" in order to allow editing, as usual.

LIST this utility to disk or cassette. Add it to your loaded program by the ENTER command. To use, merely type GOTO 32000. If you prefer to have space around your statement lines, try this; remove the "? CHR\$(28): GOTO " from line 32030. That's it, from off the wall.

```

32000 GRAPHICS 0:CLR :DIM A(300):TRAP 32080
32010 I=0:X=PEEK(136)+256*PEEK(137)
32020 ? CHR$(125);:A(I)=X:FINISH=0
32030 LIST PEEK(X)+256*PEEK(X+1): X=X+PEEK(X+2):
IF PEEK(84)<20 THEN ? CHR$(28): GOTO 32030
32040 IF PEEK(53279)=3 AND I THEN I=I-1:
X=A(I):GOTO 32020
32050 IF PEEK(53279)=5 AND NOT FINISH THEN
I=I+1:GOTO 32020
32060 IF PEEK(53279)=6 AND I THEN 32010
32070 GOTO 32040
32080 TRAP 32080:FINISH=1: ? "END OF THE
LISTING";CHR$(253):GOTO 32040
32090 REM PROGRAM NAME: EDIT. TYPE "ENTER" TO
STORE, "LIST" TO USE
32091 REM TO USE, TYPE IN "GOTO 32000" FLIP PAGES
USING "SELECT" OR "OPTION", USE "BREAK" TO EDIT
32092 REM "START" TO LIST FROM 1ST LINE IN
PROGRAM

```


ATR-8000 SIG *Jim Scott*

The second meeting of the ATR SIG was well attended in spite of its proximity to Thanksgiving. We had two members with 16K ATRs this time, so don't be discouraged by all the CP/M talk if you're a 16K owner.

We started out with a session for comments, questions, and even some answers. Some members are looking for a good CP/M book, and looked through 3 that we had at the meeting: The CP/M Handbook by Zaks, CP/M User Guide by Hogan, and Mastering CP/M by Miller. The 1st is probably the most complete, but not the best tutorial.

There was some discussion of the high cost of BASIC for CP/M. Microsoft BASIC 80 lists for \$350 (ouch). Consequently, the best Pascal (Turbo) and a couple of good versions of C are quite reasonable. If anyone knows of a GOOD, cheap BASIC for CP/M, let me know.

We took some time to step through CP/M start-up and look at some of the programs on our ATR CP/M utility disk. Some of them are fairly complex and have on-disk documentation. When we do this in the future, we'll let some of the other members try their hand at the keyboard.

Maybe no one else has had the problem of "un-doing" a disk format (formatting a double sided disk to single sided), but it came up again at the meeting. We were formatting a disk for a member who doesn't have CP/M yet, but wanted to copy the utility disk. Getting ahead of ourselves, we formatted his disk double sided in another DOS first (e.g. Atari from CP/M).

While on the subject of formatting, note that suspect disks (or drives) are more easily checked by the CP/M format program than the Atari, since the status of each track is reported during the format process. You don't need a separate disk utility. However, CP/M, like Atari, does not lock out bad sectors.

We looked at the DT-80 terminal cartridge, and agreed that it is the best thing short of an 80 column terminal. As Don Adams stated in his review, it works much better on a monochrome monitor. However, if used on a Commodore monitor with separate luma and chroma, it works fairly well with the right adjustments.

Meetings are still on third Tuesdays at 7:30 (my house; 281-6724 for directions). Remember, we don't take attendance, so you don't have to feel bad if you miss a meeting. Even if you come only when you have a problem or a question, everyone will benefit.

BEGINNER'S SIG *Elanna Schlichting*

The Portland Atari Club Beginner's SIG has begun with two very helpful and informative meetings. The goal of the group is to assist new owners (or longtime procrastinators) in making optimal use of their machines. At the first meeting, Clyde Pritchard and Chuck and Jean Hall came to talk about the basics: the hardware, some of the differences between the old and the new equipment, how the pieces connect, what a floppy disk is, it's design and function and how to tell if a cheap disk is worth buying. Recommendations were also made on which books to start with (Your Atari Computer, Kids and the Atari), which magazines to use (Analog, Antic, PAC Newsletter, Compute) and where to go to buy equipment, software, books and etc. (all our loyal standbys were duly mentioned).

The second meeting was led by ex-president Lloyd Suiter with Chuck and Jean Hall assisting. We were given the latest news on Atari and its future products and also what sales were happening locally. Lloyd then gave instruction on how to use the disk drive. He explained the use of basic DOS II functions, tips on working a disk drive, shortcuts in running programs, personal software recommendations and demonstrated a few Poke locations. The next meeting will be on Jan. 10 - location not yet determined. We would like to invite you who are not able to attend the meetings to give us your questions and we will answer them in the newsletter. If you have a question, don't hesitate to ask - why let anything keep you from using your computer? Also, those of you who may have information to share with us or would like to correct information published, just let us know.

A ONE LINER *Blackhawk Ace*

Try the one line program below the next time you see an idle ATARI at a shopping mall.

```
1 SE. RND(0)*4, RND(0)*15,
  RND(0)*15: SOUND RND(0)*3,
  RND(0)*12, 10,4: ? " ATARI ";
  CHR$(RND(0)*255);: GOTO 1
```


CAI RESEARCH
Trudie Mishler

Recently Lloyd Meskimen, computer coordinator for the Portland Public Schools, was interviewed by KGW-TV. The topic was do parents need to feel guilty if they don't buy their kids a computer. Connie Stanton, the district's curriculum librarian, researched and came up with 80 studies. What was found:

Computer Assisted Instruction reduces the time required for learning, raises test scores and improves student attitudes about computers.

EXPLANATION: For "training activities in education, i.e. those learning activities which require definite responses, the computer does better. Time was reduced 40-80%; test scores, percentiles and raw data were increased; students like the computer more.

When "education" was involved, i.e. for more complex learning activities, the teacher did better. The teacher is required to analyze complex curriculum, extract key concepts, plan learning strategies and work one-on-one. At this point the computer takes on a different role, that of information presenter. It can search, sort, display data, present simulations etc. in a way to supplement the teachers work.

The result is that a human/tool partnership is needed for maximizing the instructional process. The only thing better is one-on-one instruction, with teacher, parent, sibling etc.

Regarding parents buying for the home, first the parent should decide if they need one for themselves. By modeling appropriate behavior, they increase the benefit for the youngster. If they work with the student to learn, more benefit is received. But they can get as much, or more, from one-on-one assistance.

Editor's Note: For those of you new to PAC, Trudie is one of the leaders of the PACE (Portland Atari Club Educators) SIG (Special Interest Group). She and Chris Fouts, the PACE co-leader, are both teachers. If you are interested in learning more about computer applications for education, get in touch with one of them. You will find their phone numbers in the SIG Contact List elsewhere in the newsletter.

PAGE SIX
Clyde Pritchard

Hope your mailbox didn't collapse from the weight of this month's newsletter, it's 24 pages long, full of great articles and programs for you to type in and run. Anyway, if your mailbox is o.k. (or even if it's not), and you are one of those who needs to renew their PAC membership this month, use the handy renewal form that we stapled to your newsletter and renew your PAC membership so you can keep getting your newsletter. I received some nice compliments on the newsletter at the last meeting, so I know we must be doing something right, so if you agree, renew now!

Alright, enough of the sales pitch. Whoops (no offense BPA), I guess I should mention that if you bought your newsletter at one of the local dealers, and want to join PAC so that you can get every issue of the newsletter on time (and before it hits the news stands), there is a PAC membership application stapled inside your newsletter. All it takes is an envelope, a 20 cent stamp, a check for \$20, a pen, and a wet tongue. Do it now!

Now for my thank you's. Thanks to all of you who have supported the newsletter with your comments, ideas and input. I know I missed mentioning the names of a few of the people who have helped out with articles for the newsletter this past year, and for that I apologize. I really appreciate the work that all of you do, and it's what helps make our newsletter one of the best. Keep up the good work!

I still wasn't able to get in all of the backlogged material from last month. Some of it is from PAC members, and some is from other newsletters. It sure is hard to decide what to put in and what to leave out. Part of the problem is size, and the other consideration is my perception of you, the reader's needs, interests, etc. This is why I need to hear from you, so I know what you want to see. That way I can try to find material on the subjects you most want to hear about. I have heard from the beginners, but I am having a hard time finding anything except articles on BASIC programming for beginners. Many of the beginners that I talk to are not interested in, or ready for programming, they want to learn more about their machines, applications, and computing in general. If any of you could find or write some material for the beginners in our group, they (and I) will appreciate it.

NEWS AND REVIEWS

SPECIAL REPORT - THE NEW ATARI CORP.
Antic Magazine - Compuserv

SUNNYVALE, CA--The new Atari Corp. today dropped the price of the Atari 800XL to "under \$120" from \$179 -- and hinted that some major retailers may drop the price to \$99.

Atari 1050 disk drives will be cut to below \$200 for holiday shopping, and the 1010 data recorder and 1027 printer will also be reduced in price, according to Vice President for Marketing, James Copland.

An Atari 800XL with disk drive, 1027 printer and key software should be available now for under \$600, Copland said. Atari Christmas sales will be supported with a multi-million dollar print advertising campaign with the theme, "Even Scrooge would give one..." The ads will feature a quote about the 800XL from the December ANTIC Buyers Guide.

At the January Consumer Electronics Show, Atari will show a line of three to five 8-bit machines compatible with the current 800XL and a new line of 16-bit machines. All products are to be on the market during the first quarter '85.

True to their "Rock Bottom Pricing" strategy, Atari will also introduce a new modem and full-sized color printer at CES. In an exclusive interview with ANTIC following his press conference today, Tramiel underlined his commitment to Atari telecommunications and said that the 1985 modems will upload and download at 300 and 1200 baud and connect without any interface box.

Telecommunications was emphasized by Sig Hartman, President Atari Software, who told ANTIC that the Plato cartridge was their number 1 new software product. Hartman had evidently been (unsuccessfully) trying to develop a Plato terminal emulator at Commodore for the C64 since 1983.

Tramiel pledged to start a new program of support to user groups. "When a person buys a computer, he shouldn't be left out in the cold. We'll give him as much support as we can if he needs help," Tramiel said.

The first look at the new 32-bit Atari computers will come in April at a computer show in Hanover, Germany. After the conference, Sam Tramiel privately confirmed that this machine would utilize the new National Semiconductor 32032 and would be a "VAX in a box." Copland would only say that this new machine would be a "user-friendly reliable computer at rock-bottom prices."

"We give the people what they want. Our work ethic is to constantly strive for improvement," Copland said, echoing Atari owner Jack Tramiel's philosophy of "computers for the masses, not the classes."

"We always try to reduce the computer's cost to what's affordable for the customer," said Tramiel. "Our goal is to make the best computers at every meaningful price point between \$100 and \$1000."

The new Atari Corp will not charge more than \$49 for software, said Tramiel.

Although he would not outline specifics, Tramiel said all the 8-bit machines will be compatible, at least one will offer 128K, and at least one will be a portable, luggable computer.

The new 800XL will look almost exactly like the older machine, but will contain improved new design technology, according to company president Sam Tramiel.

The company's line of 16-bit and 32-bit microcomputers will use a proprietary operating system and VLSI custom graphics coprocessors developed by Atari in Sunnyvale, according to Sam Tramiel.

These computers will also feature GEM, the Macintosh-like Graphics Environment Manager produced by Digital Research, according to Sam Tramiel.

GEM is an extension of the operating system and supports overlapping windows, pull-down menus, icons, mice and other advanced user-friendly features.

Meeting with the press en masse for the first time following their purchase of the company, Atari executives were almost astonishingly open about their confidence in the future. Atari Corp. is projecting \$1 billion in sales during 1985, Copland said.

Copland said Atari expects to sell at least a half million 800XL's within the next five months, using a network of major mass retailers and distributors.

Orders for the 800XL have exhausted Atari's current inventory, and the company is now manufacturing 150,000 new machines monthly at factories in Taiwan and Ireland. Another facility will be operating in Japan soon, according to Sam Tramiel.

At test markets in Detroit and elsewhere, the newly low-priced 800XL sold out almost overnight, with no advertising, said Sam Tramiel.

continued...

"Most people six to 26 know how to use computers. We don't have to educate them on how to use computers the way IBM does. I believe American parents want to educate their children to the greatest possible degree," Jack Tramiel told ANTIC, adding that he intends to offer price incentives for schools to purchase Ataris.

Tramiel's philosophy is very clear. "We sell products to individuals--personal computers. We do not intend to compete in business computers."

However, Tramiel also said he is prepared to knock out anyone who sells computers, including Apple and IBM, if they choose to compete with him.

"After I left Commodore -- due to philosophical differences with the management -- I noticed business was becoming very dull. Everyone was sitting around, being very greedy and trying to get as much money as possible. There was a need for new life and excitement in the computer business," Tramiel said.

"The end-user is intelligent. He knows what he wants," said Tramiel. He said he intends to support his customers by increasing the existing software base, working closely with third-party software developers.

Tramiel said the new machines will be backed by a 90-day warranty, during which time a customer could obtain a new, replacement unit if problems develop with the computer. After that, customers could take their machines to any one of some 1,500 service centers around the country or mail it to Atari for service.

"We like to convert proven products into personal use-- for the lowest price," said Tramiel. His company, although it continues to design its own chips, will not conduct leading-edge research.

The next step for Tramiel, after his current plans, is to "turn around mainframe technology for a hand-held computer."

Executives hope to take Atari public in 1985, after raising \$150 million through three \$50 million private and stock-market placements.

"In 1987, there will be 50 million personal computers sold worldwide, and over half of those will be below \$200," Tramiel predicted. "Back when I was in the calculator business I correctly predicted that the price would drop to \$9.95 (from over \$1,000) within 10 years."

Tramiel also said he would decide in January if Atari will continue producing and marketing the company's 2600 game machine.

This report is presented as a service to CompuServ Atari SIG members by ANTIC Magazine. Look for more of these same-day dispatches on major Atari news by ANTIC on CompuServ.

PAC Editor's Note: This is an example of the kind of information that you can have access to when you enter the on-line world. Many thanks to ANTIC Magazine for this great service. Thanks also go to Don Adams for downloading this from CompuServ and passing it on to me so that I could pass it on to you.

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### COMPUTER BUZZWORDS *San Leandro Computer Club*

ANSI - A hacker who can't sit still.  
 BATCH - A minor gripe.  
 BUFFER - A nude computer user.  
 CURSOR - A hacker who BATCHES a lot.  
 DISK DRIVE - A popular address in Carmel.  
 END USER - Programmers who sit a lot.  
 FREQUENCY - A disease suffered by video game freaks.  
 GIGABYTE - A painful sting on the giga.  
 INDUSTRY STANDARDS - Nonconforming guidelines.  
 LINE FEED - "I've never met anyone as interesting as you before, etc."  
 MACHINE LANGUAGE - Zoom, putt-putt, chug-a-tug, clank, clang, clunk.  
 OHM - Is where the heart is... "OHM SWEET OHM"  
 QWERTY - To be a little strange.  
 RAM - Where most of the bugs are kept.  
 ROM - Where you put the bugs that won't fit in RAM.  
 SOFTWARE - What programmers wear under their hardware.  
 TERMINAL INTELLIGENCE - To be so smart it kills you.

And from some sharp minds at DAL-ACE...

AUTO-EXECUTE - What a car does when the warranty expires.  
 DAISY CHAIN - What L'il Abner gave his wife.  
 SERIAL PORT - Where foreign breakfast foods are unloaded.



## MAC/65 TOOLKIT Don Adams

One of the advantages of having a macro assembler is the capability of writing often used routines in the form of macros and then just inserting the macros into your assembler language programs. Some examples of some useful routines could be a routine to get an input from the keyboard or even better yet, input from any device. Maybe you would want to make a macro that will set a graphics mode. These macros can make programing in assembler easier because you only have to debug them once (hopefully).

Mac/65 is probably the most popular macro assembler for the Atari computer. It is extremely fast and has very few bugs in it. OSS, the producer of MAC/65, has released a "toolkit" called, you guessed it, **The MAC/65 Toolkit**. The list price is \$39.95. It consists of a disk with four library files that contain numerous macros. The four libraries are KERNEL.M65, PMGR.M65, CPARSE.M65 and SCROLL.M65. OSS claims that these libraries can cut your programming time in half. This may be true because the macros are written so that they have the same names as BASIC commands (e.g. DRAWTO, COLOR, etc.).

The KERNEL.M65 library contains macros that deal with I/O, graphics, integer math, program control, and various miscellaneous macros. Miscellaneous macros do such things as set-up the music or sound capabilities of the Atari, do two byte memory pokes, move and clear blocks of memory and a wait macro, which issues a delay in a program.

The graphics macros include COLOR, DRAWTO, FILL, GR (GRAPHICS), LOCATE, PLOT, POS, SETCOLOR, and TXTPOS (sets the cursor position on a text screen).

The integer math macros allow you to do integer division, subtraction, addition, and multiplication. You can also generate random numbers. Notice that these are integer values (ones without decimal points), not floating point values.

The I/O library includes GET, PUT, BLOAD (load a binary file), OPEN, CLOSE, INPUT, AND PRINT. These are macros that take care of things that I have trouble getting to work. My Technical Reference Manual won't have to be so close now.

The Program Control library deals with several different functions; DO loops, a GOSUB statement, and logic tests (IF's), and a TRAP statement. Any programs that you generate using the KERNEL.M65 library will include the TRAP statement automatically. I kept running out of space on a program that I created using graphics mode 8. I was always given an error message that indicated that I was running out of memory. Without this message, I would have spent a lot of time trying to figure out what the problem was.

The library PMGR.M65 has routines that allow Player Missile Graphics to be set-up easily. There are macros to; move players, move missiles, test collision registers, etc. I did not try any of these because I have never really learned how to set them up from BASIC. I'll have to leave this to some of the graphics experts out there.

The last group of macros is used to set-up fine scrolling. This library is more complicated than the others. There is a demo on the disk that displays the merits of this library. The scrolling is extremely smooth and well controlled by the joysticks.

The last library contains macros to parse the command line when using DOS XL or OS/A+ or SpartaDOS. This allows the user to put parameters such as other file names on the same line as the command to run the program. For those of you that use DOS XL, an example would be to copy all the files on drive 1 to drive 2, you would issue the command "COPY D1:\*. \* D2:". "COPY" tells the command processor to execute the program "COPY.COM". "D1:\*. \*" says all files on drive 1. "D2:" says that you are going to send the files to drive 2. To demonstrate this program, OSS has included a program called "COPY1.COM". They have also included the source code for this program.

The macros are easy to use because the nomenclature is the same as that used in BASIC. Also, the selection seems to be very good. I'm sure that we all will still be creating our own macros, but these will be welcome additions to our libraries.

### SPARTA DOS Don Adams

SpartaDOS is a disk operating system for the Atari computer system. It is distributed by ICD, Inc., which is a combination of Mighty Byte Computer and Spartan Software of Minnesota.

Why do Atari owners need another DOS? I currently have copies of about 5 different disk operating systems. Why would I spend money for another one? Well my reasons for SpartaDOS are simple. I own an ATR-8000 and I wanted a DOS that was similar to the commands used by CP/M, but also allowed me to use the RS232 port on the ATR-8000. Up to this point, the only choice for the ATR-8000 user was MyDOS, which is menu driven, with the same commands as Atari DOS 2.0. This is fine if you use the Atari most of the time, but I tend to use CP/M more than I use the Atari. OS/A+ supports DS/DD disk drives but it won't support the RS232 port because of the requirement for a special RS232 handler.

SpartaDOS will support the RS232 port on the ATR-8000 and the RS232 port on the Atari 850 interface (with two handlers).

SpartaDOS is similar to CP/M, but as the documentation states, the goal was to imitate MS-DOS (and PC-DOS). The thing to remember is that many of the commands are the same for MS-DOS and CP/M but that MS-DOS has several things that CP/M doesn't.

SpartaDOS, like MS-DOS, will time and date stamp all files as they are created. How many times have you been working on a program and created several different versions on the same disk, all of them having some bug within the code? I always try to figure out which was the last version that I created. Now you will know because the time and date are listed in the directory along with the actual file size in bytes, not sectors. The space remaining on the disk is listed in sectors. The clock is set when you execute the SET.COM file, which will ask you for the date and time. To get a continuous display of the date and time, you can run the TIME.COM file. This will display the date and time at the top of the screen, even when you are using a language such as BASIC. The clock is capable of keeping time even when the disk drives are being used. It will not display the correct time, but it will make up for lost time during the time the drives are not being accessed.

According to an ICD product release, a cartridge called R-Time will be available in December, 1984. This cartridge will contain a 5

year battery, will work in the left or right cartridge slot on the Atari 800, and will keep time for the computer. This clock will be easily accessed through SpartaDOS with some simple PEEKs into memory. The cost will be 79.95.

SpartaDOS also supports sub-directories, which are very important to users of DS/DD disk drives. Atari DOS 2.0 and all other disk operating systems for the Atari computer have a limit of 64 files per directory. MyDOS allows multiple directories so you can have a file on the disk that contains another directory that takes up 8 sectors of space, but will allow you to have another 64 filenames. You can have as many of these sub-directories on the disk as there is disk space. Under SpartaDOS, 128 filenames are allowed per directory and you can create as many directories as there is disk space. Each directory takes only 2 sectors. There are several commands, that are again similar to MS-DOS, that make a new directory, change to another directory, and delete a directory. A directory must be empty before you can delete it. Also there is a command called TREE which will show the directory paths on a disk and optionally the filenames in each directory.

Each directory must have a unique 8 letter Volume Name. This name can consist of any of the symbols that a filename can contain (A-Z, 0-9, and \_). The DOS uses this to determine if you have changed disks or not and what disk format is being used on each disk.

SpartaDOS will allow you to use Batch Files. A special batch file will run on a cold boot, just like AUTORUN.SYS runs on a cold boot in Atari DOS 2.0. Unlike DOS-XL, SpartaDOS does not support both AUTORUN.SYS files and STARTUP.BAT files. Also, a batch file will execute commands within another program, which is not possible under OS/A+ or DOS-XL. This means that you can for example boot up the disk operating system, load the RS232 handler, load the BASIC cartridge, load the modem program that you are using, tell BASIC XL to go to FAST mode, and run the program without ever touching the keyboard. Under DOS-XL, batch file would end after the command CAR was entered to go to BASIC. You can also execute a file called CLR.COM, which will clear the screen. Another file called PAUSE.COM will wait until you hit a carriage return and still another file called DIS\_BAT.COM will remove the batch file processing. This is sometimes necessary because



some programs won't run while the batch file capability is enabled.

One of the things lacking from all other disk operating systems for the Atari is the ability to support full input/output (I/O) redirection. What does this mean? In CP/M, it is possible to send what is being typed on the keyboard to the printer or the RS232 port or the CRT or any other peripheral connected to the computer. There are many applications that use this feature but the one that I am most familiar with is in setting up a RCP/M (Remote CP/M). A RCP/M is a computer that is set up so that other people may operate it by connecting to it with a modem. A RCP/M may contain a bulletin board program and a database containing files that can be downloaded and space for files to be uploaded. When someone calls an RCP/M, they are operating the computer just as if they were sitting at the computer operating the operating system from the keyboard. If you want to see the disk directory, you could do so by typing DIR, and the operating system would display a disk directory.

An Atari bulletin board system (or an Apple or Commodore for that matter) has a single program that the person calling operates. The caller never leaves this program. In a RCP/M, the caller may use five or six programs while the caller is on the system (e.g. XMODEM.COM, RBBS.COM, SD.COM, TYPEL.COM, AND CHAT.COM). The input and output to and from these programs are received from and sent to the modem because the disk operating system (CP/M) says that it will be coming from here. In the Atari bulletin board the input and output is received from and sent to the modem because the program says that it will be coming from there. With SpartaDOS, bulletin board system could conceivably set up like a RCP/M (RSpartaDOS?). This will be a challenge to someone.

SpartaDOS uses a different disk format than Atari DOS 2.0, so the files must be converted from one system to another. This is easily done with the SPCOPY.COM program which will give you a menu of the source disk's directory, and let you tag the files you want to copy from one disk to another. This is similar to SWEEP.COM in CP/M. SPCOPY will not read OS/A+ version 4.10 files. These must be converted to DOS 2.0 format, then to SpartaDOS format.

SpartaDOS can tell what type of drives you are using. No more configuring the system for you

system and then reconfiguring every disk when you add a new disk drive. It is capable of supporting 5 1/4", 8" and hard disk drives (Yes, I said hard disk drives. The hard disk drive controller for the ATR-8000 is due anytime now.). It will support double sided and single, double and quad density formats. Another words it will support just about any format available. I had no trouble using my double sided/double density 5 1/4" drives or my 8" single sided/double density drives.

The main question with any new disk operating system is how much software modification will be necessary. With SpartaDOS there is some that can be performed and some that doesn't matter. The communications program that I use checks the I/O Control Block Status Register to find out if a carrier has been detected. The value returned by MyDOS is 120. Under SpartaDOS, the value is 60. This is a simple thing to change.

Another compatibility problem has to do with the directory. Since SpartaDOS keeps file size in bytes and also time and date stamps files, the directory displayed by a program would have problems (this takes about 30 columns on the screen). ICD decided that they would have to take care of this. They have two forms of the directory. One form displays all the information (date, time, file size in bytes etc.) the other displays the filename and 3 zeros for the file size. In other words, you do not know how large the file is in sectors. This may not be a major problem in most cases, but could be in others.

What won't SpartaDOS do? It won't lock a file like all the other Atari DOS's will. To take care of this problem the distribution disk contains an UNERASE Utility. The only problem with this is that if your disk has been written to since you erased the file, the file may be unrecoverable.

Another thing that you can't do is to append non-binary files together. You can't do this under DOS-XL or OS/A+ either. You can use the APPEND command to append two or more binary files together.

ICD says that they are going to continue to produce several utilities for the system. Also I think that a program similar to SWEEP in CP/M needs to be made for the Atari that will allow you to Copy files, copy a number of selected files, rename files, delete files, etc. Remember

RAMBLIN...  
*Chuck Hall*

that in SpartaDOS, it is not hard to load a binary file as long as it has COM as a filename extension. Just type the first part of the filename and the program loads and executes without any further typing.

Do I like SpartaDOS? Yes, I think that it has some good features, but I doubt that I will convert all my disks to SpartaDOS. I will have to work with it some more before I decide to do that. Would I recommend it to someone else? It would really depend what the other person's needs are. If they find that they need to time stamp files or maintain some similarity in disk operating systems to either MS-DOS or CP/M, then I would recommend it. If a programmer is running a large number of binary files or needs the batch file capabilities, SpartaDOS will fill their needs. If they are used to Atari DOS 2.0, then I would probably recommend MyDOS. I may change my mind when I get the R-Time Cartridge so that I don't have to enter the date and time every time I have to reboot the system.

```

100 REM * DWG.BAS *
110 REM * FROM A2D2 NEWS-PASCO, WA *
120 REM * TRY IT, YOU'LL LIKE IT! *
130 REM LOAD A SCREEN DUMP PROGRAM AHEAD
140 REM OF THIS PROGRAM. THEN HOLD START
150 REM TO PAUSE DISPLAY, AND USE DUMP
160 REM PROGRAM TO PRINT THE PICTURE.
170 REM PRESSING A KEY ON THE KEYBOARD
180 REM WILL STOP THE PROGRAM AT THE
190 REM END OF THE NEXT CYCLE.
200 GRAPHICS 9:REM ALSO TRY 10 AND 11
210 FOR X=0 TO 79
220 IF PEEK(53279)=6 THEN 220
230 C=C+1:COLOR C:IF C=15 THEN C=0
240 PLOT X,Y:DRAWTO 79-X,Y
250 DRAWTO 79-X,191-Y
260 DRAWTO X,191-Y:DRAWTO X,Y
270 Y=Y+2:IF Y>191 THEN Y=0
280 NEXT X:IF PEEK(764)=255 THEN 210

```

I thought I would keep my Ramblin column going even though most of my material will now be in the President's column. Here, I will impart information that I as an ATARI owner and member of PAC come across. It will be shorter than in the past (Yaaayyy).

One new store I visited this month is the Software Galeria (yes editor, only one "I"). They are on Scholls Ferry Rd, just past Wash. Sq. They don't have much for the ATARI, some INFOCOM games and a couple of books. They do carry ANTIC, and it might be an easy place to pick it up. They will let you preview software (S/W) on another machine, i.e. Apple, and order it for you at 15% off. It takes about 3 days to arrive. I don't like to wait, if I see something I like and have the money then; it's mine.

There was a super sale which I attended this week. You didn't know about it? All I did was read about it in the classifieds. Several of us keep telling you that with a little looking and digging you can find all kinds of bargains. How about these: ATARI Bookkeeper, with key pad- \$10; without key pad \$2; Many APX and ATARI Inc., S/W- \$2; Light pen- \$5; AEC educational S/W- \$2; Micropainter- \$14; All Electronic Arts at 20% off **dealers cost**, (Now I know how much they pay); Super Sketch (new graphics product with a drawing pad)- \$24; New educational S/W from a new company called SPROUT- \$10, (This S/W is super, super great. To me it is the best I have seen. Look for upcoming reviews); Need I say more. To say the least I enjoyed myself immensely. So did Clyde and Debbie Pritchard. They were there with Jean and I, and we were like kids in a toy store. But then in a way I guess we were, weren't we? Anyway, I will be up late many a night trying out all of my new stuff.

The Moore Co., is also getting rid of a lot of the ATARI Inc., S/W through Computers Etc., and IB computers. You might do well to stop by and see what they have. Remember, most of this S/W used to sell for as much as \$50. Now it goes for \$10 or less. We are probably seeing the end of these types of prices for some time. Anything coming out after this will be costing us retail again. I have seen some of the new educational S/W, and it is mighty powerful. If you have children you probably want to take a look at it.

As I said, this will be a short one, so I will leave for now and start looking for bargains to talk about next month.



## HOW TO DO IT....

ASTRA DUAL DRIVE MODIFICATION  
*Drew M. Featherston and David Abrahams*DENSITY STATUS LIGHTS  
FOR YOUR ASTRA DUAL DISK DRIVE

Edited by Bill Pike, PAC

When ASTRA Systems, Inc. first thought of producing disk drives for ATARI computers, we decided to aim for a product that would offer maximum utility at the lowest possible price. That decision meant that we had to leave off the nifty bells and whistles available on other drive. One consequence of that is that the user of ASTRA drives must try to remember what density the drives are in--particularly drive #2.

A number of ASTRA users have asked if there is any way the unit can be made to indicate the density status of both of the drives in the system. There is, indeed, such a way.

Introducing LEDMOD (Light Emitting Diode MODification). The approach I'll describe here details the building of a small circuit board along with a description of the way by which it must be wired into the circuitry of the controller board in the ASTRA drive. To succeed with this modification you'll need to know how to use a soldering iron, and be somewhat adept at using tools--especially a drill.

Let me get the disclaimer out of the way first. ASTRA Systems, Inc.(Or PAC), will in no way accept responsibility for any damage--direct or consequential--caused to the ASTRA drive, or to anything connected to it, by the installation or use of this modification. Moreover, installation of this modification in a drive still under warranty may void the warranty.

To begin with, assemble the tools you will need for this project. A Phillips screwdriver, small needlenose pliers, and awl (for removing the center pins in the nylon rivets on the controller board), a 25 watt (no heavier) soldering iron (preferably a grounded one), fine-gauge rosin-core solder, a wire stripper suitable for fine gauge wire, a small pair of diagonal cutting pliers (dikes), a power drill with an assortment of bits, and, if you have one, a small vise (wire wrap tools optional).

The components needed are readily available in any reasonably well-equipped electronics store. In fact, most Radio-Shack stores will have everything you need. Altogether, there are seven electronic devices: three integrated circuits (IC's) <(2)7400> & <(1)7474>, two

bi-color light emitting diodes (LED's), and two current-limiting devices (390ohm 1/4 watt resistors).

As you proceed with this project please keep in mind that space is at a premium inside the case of your ASTRA unit. The circuit board must be kept as small as possible. We recommend that you use 14pin wire-wrap DIP sockets for the IC's/ Mount these three DIP sockets close together on a small piece of perf board of the type used for wire-wrap projects. If possible, complete the wiring connections with a wire-wrap tool. That way, your wiring will be neater and more compact. In any case use 30 gauge wire-wrap wire for all wiring in this project. If you don't have access to wire wrapping equipment, you can still do the necessary wiring, but it will be more difficult. Once you have tested your unit successfully, we suggest that you solder all of the connections neatly (watch out for solder bridges and cold solder joints), and then trim the normally rather long wire-wrap pins as short as possible.

Notice that the schematic seems to call for three connections between the LEDMOD and the controller board in your ASTRA. Actually, two additional wires will be needed as well. Pin 14 of all the chips (IC's) are connected together and this wire is connected to the 5 volts plus test point on the main controller board. Also pin 7 of all the chips (IC's) are connected together and connect to a good ground (return). Thus five wires will connect the LEDMOD to the controller board of the ASTRA. When you add these wires to your small board, therefore, leave them rather long to give you some flexibility in locating the LEDMOD in your case, similarly, when you wire your LED's into the circuit connect them to rather long wires, as well.

With your board built and double-checked (triple-checking won't hurt), it is time to install it into your ASTRA unit. As you proceed, please take your time and work carefully and methodically. Remember that you are working on a delicate and rather expensive piece of electronic equipment.

Clear a space at your work area, Clean it carefully, cover it with a clean cloth and disassemble your ASTRA. First, turn your system over on its back and remove the six screws around the perimeter of the base. DO NOT remove the smaller headed screws toward the rear of the

unit. When you have removed the base screws, turn your unit over on its feet, remove the bezel (unless it is glued in), and remove the case by lifting from the back first, tilting it up until the case clears the heat sinks. Now slide the case forward (toward you) slightly. The case should be free of the drives at this point and can be moved to one side. PLEASE NOTE that the case is connected to the unit by the umbilical cord of the switch/LED cable. Do not attempt to disconnect this cable. With the case somewhat out of the way, remove the mounting screws (4) from the top drive, disconnect the cables attached to that drive (there are two sets of cables, one is a flat ribbon cable, for control and data, and the other is a series of larger wires for power) and place it out of harm's way. Do the same for Drive 2 (the bottom drive).

Spread before you now is the green underside of the controller board. Careful now, that side of the board is a veritable porcupine of sharp points, treat it with respect. Use the awl to push out the center pins in the nylon rivets holding the controller board to the brackets. (The board may be either on top of the brackets, as mine was or under the support brackets) If your controller board is mounted underneath the lips of the brackets, then slide the board out away from the power supply about two inches. Identify the (7 wire or) 14 wire ribbon cable plugged into the power supply and, sliding your index finger under the cable close to the DIP connector socket, gently lift the connector out of the socket. Once the cable is free, you may slide the controller board out of the base/bracket assembly completely. If your board is mounted on top to the bracket lips, then simply tilt the board up; you may not need to disconnect the (7)14 line cable. Don't lose the nylon rivets and center pins--you'll need them for reassembly later.

Examine the component side of the controller board and locate IC's U7 & U13. U7 is a small 16 pin DIP chip numbered 74367 (this is the drive select chip), while U13 is a large 40 pin chip designated WD1795 (mine wasn't) this is the disk controller chip. While examining that side of the board, take the time to locate the "plus 5v" test point and locate a ground connection, as well. The metal case of the crystal (the shiny metal can at one end of the board) is a good ground.

The connections to the IC's are to U13 pin 37 (Double-Density select), and to U7 pin 13 (drive #1 select), and pin #5 (drive #2 select).

) We recommend that you make your connections to the solder side of the board rather than the component side. That may make it a little more difficult for you, since you will need to think about both sides of the board, making very sure that the connections you make are the correct ones. We also suggest that in order to avoid applying too much heat to any of the legs of an IC, you follow the appropriate trace to a safe place on the board. For example, instead of soldering the lead from your mod directly to a safe place on the board. For example, instead of soldering the lead from your mod directly to pin 37 of U13, follow the trace from that pin to a "feed-thru" connection in the board. Then, when you apply your soldering iron to that connection, you can actually push the wire from the mod into the hole that lurks beneath the solder, thus soldering it more securely. This approach can be used with most, if not all, of your other connections to the controller board. (I was unable to find the traces and had to solder to the pin connections on the solder side of the board very carefully)

With the LEDMOD connected to the controller board, it's time to test it. If you are careful, you can reconnect everything in the ASTRA unit without reassembling it. Slip a couple of disk jackets over the (upright) brackets (that supported the drives) to prevent the drives and the boards from shorting out. Next, reconnect the controller board to the power supply by plugging the 14pin DIP plug on the ribbon cable into the socket on the power supply board. Stand the controller board on its side with the 34 line ribbon cable pointing to your left (as you face the front of the ASTRA). Next, plug one of the drive power cable plugs (white mine, was gray) into drive #2 (the bottom drive). Drive #2 should be on its side with the top of the drive facing to your left. Do the same for Drive #1 with the remaining plugs. Fan the two drives out slightly, and check to be sure that the controller board is not touching any metal surface.

Connect the drive to the computer by plugging in the data cable, plug the drive unit into an outlet, and turn the drive on. If everything has gone well, the drives should both



spin for a short time while the read/write heads calibrate to track 0. When they have stopped, look at your LEDMOD. Both of the LEDs should be glowing GREEN, indicating that both drives are in single density. If this is not the case, turn your unit off and recheck EVERYTHING. Once you have gotten to the point that both LEDs are glowing GREEN, you are ready to test them in double density. Boot the system with whatever DOS you are using and configure drive #2 to Double Density. One of the LEDs should glow RED label it drive #2. Do the same for drive #1. If the other LED turns RED the CONGRATULATIONS!!! YOU'VE DONE IT!, if not well back to the drawing board.

Assuming that you have gotten this far, it's time for the fun part (sure it is). Now you've got to decide where to put your LEDs. We would suggest that you mount them in the case beside each drive and right next to the front bezel. Whether you choose to put them on the right or the left, is of course up to you, but either of those locations seem to offer the most logical placement of the indicator. Select a drill bit that will accommodate the LED, but will be too small to let the base of the LED pass. Measure, mark and center-punch the sites you have chosen and CAREFULLY drill your holes. Test the LEDs for fit, make adjustments where necessary, and, when you are satisfied glue the LEDs in place (SuperGlue maybe).

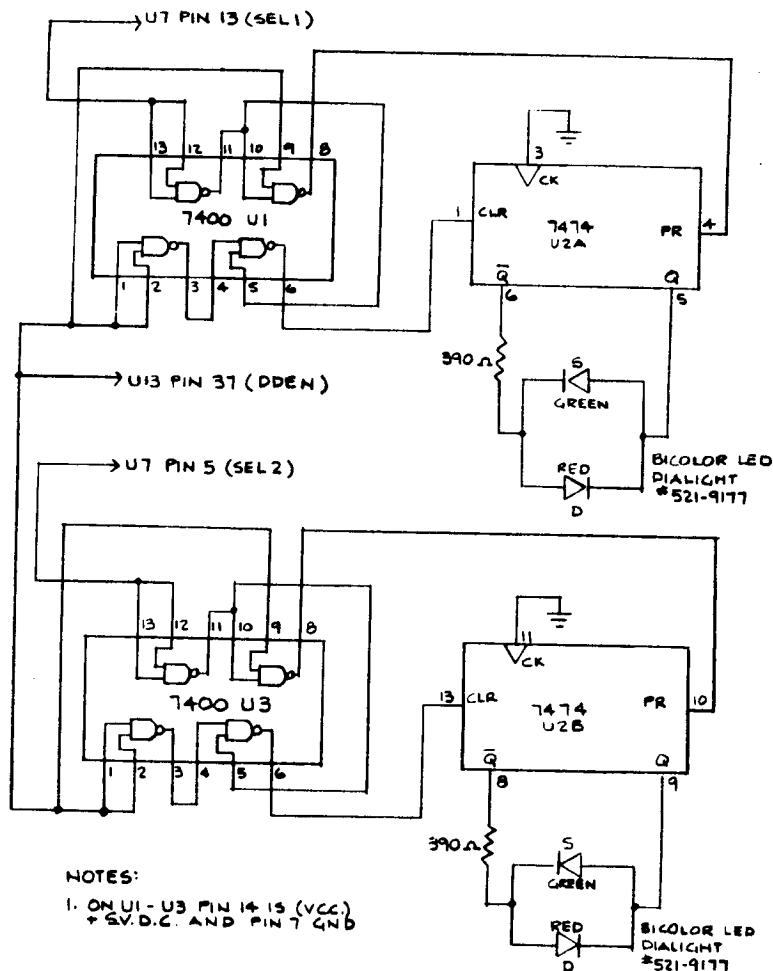
Whew! If you've gotten this far, take a break-- you've earned it.

Back now? OK, let's wrap this project up. If you haven't reassembled your ASTRA yet, now is the time. Turn the directions for disassembly around and, starting with the controller board, put your unit back together.

There is one loose end left to deal with: where to put the LEDMOD? We suggest that you wrap your little circuit board with cardboard (a small section of toilet paper tube). That may be held in place with electrical tape. The cardboard offers better protection than the tape by itself. If you have kept the size of your board to a minimum then you can probably attach it to one of the side brackets (between the controller board and the bottom drive with a tie-wrap. You MIGHT even succeed in tucking it under the controller board.

In any event, when you replace the case, watch all those wires. You don't want to get this far only to pinch a wire or two between the case and the base.

Once everything is back together and working formally, sit back, pat yourself on the back, and enjoy the luxury of being able to tell at a glance-- in living color-- the density status of both of your drives.



## CONVERTING TO SYNFILE+ *Clyde Pritchard*

As I mentioned in my Page Six column last month, I have been working on a project to convert data from FileManager 800 and other formats to SynFile+. I don't have a "generic" conversion program ready yet, but I will start off by describing the conversion process.

As it turns out, I think that I will need to write two separate conversion programs. One will be for a data file that has a single record that contains multiple fields and is terminated by an EOL (End Of Line) character, like FileManager 800. The other program will process a file that has records made up of repeating groups of fields, each field followed by an EOL, like the APX Diskette Mailing System by William Bartlett, or the mail-merge data files used by Letter Perfect and The Writer's Tool.

Why do you want to create a DIF file? Well, the main reason is to convert a database file (or spreadsheet) into a format that can be used by another software package. Most spreadsheet software has built-in features that allow input or output of DIF Files, but this is not always the case for database packages, or that nice public domain filing system you are using now. For example, the club's mailing list is on FileManager+, and we want to convert it to use SynFile+. SynFile+ has features to input and output DIF files, but SYNAPSE didn't provide a utility to process other filing system data (including their own FileManager+ program) to DIF Files. This is somewhat understandable, especially for systems other than FileManager+, but the other thing that they forgot was detailed information on how to create a DIF file.

In any case, the basic requirement for conversion from any type of data file to SynFile+ is to create a DIF (Data Interchange Format) File. The DIF File concept seemed to come about with the advent of VisiCalc, and has become one of the standard techniques for passing data between different pieces of software that use unique data formats.

SynFile+ has options to output a DIF File in order to pass data to programs like SynCalc and VisiCalc, and it also has an option to input a DIF File created by these or other programs. The only problem with this is that the SynFile+ manual tells you almost nothing about how the process works, or what the format of the DIF File must be.

By working backwards, and reading a few IBM PC manuals from work, I determined what the DIF File needs to look like, and how to create one with my own program. If you don't want to wait for me to finish my programs, the following information should help you write your own.

The basic structure of a DIF (Data Interchange Format) file is a set of control information followed by the data. The control information gives the number of records in the file, and the number of fields per record. The data that follows the control information is formatted as a series of tables that contain the data for the 1st ==> Nth fields of each record in the file. This means that if a file contains the fields NAME, ADDRESS and PHONE; the DIF File will contain the Control Information, then a Table for the NAME field of each record in the file, followed by a Table for the ADDRESS field, followed by a Table for the PHONE field.

This seems quite strange at first, but if you know that the original purpose of DIF Files was to transfer spreadsheet data, it makes a little more sense. This is because each table in the DIF File represents a column in the spreadsheet, which means that each entry in the DIF Table represents the value in each row of that column on the spreadsheet.

When the DIF technique is applied to a database file such as a Mailing List, things get a little strange. A database file can be thought of as a table, with each record representing a row, and each field representing a column. Therefore, when a DIF File is created from a database file, you get the strange result described above. Why does it matter that the DIF File looks funny? Well, to create it properly means that you must read through the database from the first to the last record one time for each field in each record. This means that if you have 20 fields in each record and 500 records, you will do a minimum of 10,000 disk accesses just reading the data base. You also have 20,000 writes to the DIF file being output, plus a few more for the control information. Why 20,000 writes? Well, each field in each table is separated by a control field, and every item in the file (data and control information) is written as a separate record. I say record, because each is separated by an ATASCII EOL (End Of Line) character.



One way to reduce the number of I/O's (Inputs/Outputs) is to use the Burst I/O technique, also called Block I/O. Using this method, you can tell the system to read as many characters from the file as you have allocated in a buffer area in RAM. This technique reduces the number of I/O's, but increases the complexity of the program. This is because you replace the individual I/O's with routines to parse the input data to extract the fields, and other routines to build the output data in another buffer area. The buffer areas are defined (in BASIC) as large String Arrays (DIM BUFIN\$(5000)), and the routines must keep track of where data is being accessed and placed, and when the end of the buffer is reached so that the next piece of the file can be read or written at the proper time.

All of these considerations make life interesting for the programmer. Oh!, one more thing. How many disk drives do you have? The process of creating a DIF file will be greatly enhanced by the use of two disk drives. If your file is large enough, you will need two drives to even consider trying to create a DIF File.

Therefore, as I said earlier, I decided to work backwards in order to figure out how to create a DIF file for input to SYNFILE+. I did this by using SYNFILE+ to create a DIF file, and looking at the result. Here are my observations:

The first section of the DIF File is what I call Control Information. It looks like this:

```
TABLE[EOL] (EOL = ATASCII EOL Character)
0,1[EOL]
""[EOL]
VECTORS[EOL]
0,n[EOL] (n = Number of Rows)
""[EOL]
TUPLES[EOL]
0,8[EOL] (n = Number of Columns)
""[EOL]
DATA[EOL]
0,0[EOL]
""[EOL]
-1,0[EOL] (End of Control Info.)
```

Next are the tables of data for each column. A table of text data looks like this:

```
BOT[EOL] (Beginning of Table Indicator)
1,0[EOL] (Constant Control Information)
"Bill"[EOL] (Variable Data)
1,0[EOL]
"Jane"[EOL]
.
. (Repeat Control Info and Data for
. each field "n" in the file.)
.
1,0[EOL]
"Tom"[EOL]
-1,0[EOL] (End of Table Indicator)
```

A table of numeric data looks like this:

```
BOT[EOL] (Beginning of Table Indicator)
0,-0.9[EOL] (0=Constant, then ",", then Data)
V[EOL] (Constant for Numeric Data Value)
0,2[EOL]
V[EOL]
.
. (Repeat Control Info and Data for
. each field "n" in the file.)
.
0,1.65[EOL]
V[EOL]
-1,0[EOL] (End of Table Indicator)
```

The last thing in the file is an End Of Data Indicator Record. It looks like this:

```
EOD[EOL] (End of Data Indicator)
```

As I described earlier, the DIF File must have one table for each Column (Field) in a database record definition, and each table must have one entry for each record in the database file. Therefore, if you have a mailing list file with n=X number of fields, and n=Y number of records, you will have X tables, each with Y entries. If a field in a record is null, you must create a null entry in the DIF file.

Also, for text data, do not pad the field with spaces, because trailing spaces are significant in SynFile+ when you are printing mailing labels. This means that when you specify that you want the Last Name field to immediately follow the First Name field on the label, you will end up with spaces between them if the First

continued...

**BBS UPDATE**  
*Steve Billings*

Name field has trailing spaces. The underline character that SynFile+ puts into each field on the form is used to suppress trailing spaces. You should not fill your fields with spaces and eliminate the underline if the data is shorter than the length of the field. If you need to recreate the underline, you can do it by using the right arrow function to move to the end of the field, and then using the Delete Back Space Key to remove the spaces. This will leave you with only one trailing space, which can be removed by using the Up Arrow function while the cursor is anywhere in the field with the trailing space. You must have at least one underline in the field for this to work.

There is a Public Domain Program available for creating a DIF File from FileManager data files. It is written in ACTION!, so you need to have ACTION! to use it until someone makes a run-time binary file version of the program. Don Adams and I tried to use the ACTION! program to convert the PAC mailing list, but ran into a problem. Although the DIF File created by the program seemed to be formatted properly, it would not load into SynFile+. We will try to do some more testing and find out what the problem is and come up with a fix if the problem is in the program versus in our data or the way that we used the program.

Because the ACTION! program wouldn't work for us, I wrote a series of programs to convert the club's mailing list to SynFile+, and the process does work. The next step is to consolidate the series of programs into a single process. I can't say when I'll be able to get it done, so don't hold your breath. If you want to try it yourself, I hope this information will help.

Once you get the DIF File created, you can use the "DIF==>SynFile+" option on the SynFile+ FILE Menu to create a SynFile+ data file from the DIF File. After this process is done, you will probably need to use the Create and Edit Form options to get the SynFile+ File to look like what you really want. This will probably involve the Merge function as well. More on this part of the process next month.

By now most of the regular callers are probably tired of looking at the PAC FoReM introduction and the out of date bulletins. I am not surprised, I am trying to think of something new to say in the bulletins, but it hasn't reached my finger tips yet.

In the mean time if you wish to skip this introduction on the BBS, just hit the (Control+C) on your terminal and you will immediately be presented with the inquiry for a password or command selection prompt, interrupting and bypassing the transmission of the welcome and or bulletin files. At 300 baud these files are tiresome if you can already quote them word for word.

O.K. The membership on the PAC BBS is hovering around 250. The PAC membership portion has been slowly increasing to about 90. This is great, because the PAC members are always the most polite and considerate users of the board. We appreciate that very much.

Another shortcut to use on the board is the chaining of commands. When changing message boards or looking at the download files, chain the commands. For instance when you first get the SELECT> try typing 'R,<' this will start presenting the general messages in reverse order (newest message to the oldest). This saves you having to wait for the read prompt and the description of the types of read message commands. This chaining ability is available at various times, try it out. If you know the message base you want to go to or the type of download files you want to look at, you can save a lot of waiting for menus by chaining the commands. Keep the menu summary printed in the newsletter last month handy and use it to help change message boards and file sections by chaining commands.

Another special feature of the message boards are the word processing features. Next time you are entering a message to the BBS or to the Sysop hit the /? command and check out the options available. These features will help you write nice neat messages, but take up a lot of valuable memory space in the FoReM program so put them to use!

Seriously, this board is nice. Take advantage of it, but be gentle. Also a kind word to your hard working Sysops are much appreciated. We try to help our callers, and welcome constructive advice. Don't hesitate to leave us a message or call us for help. Over and out..

### BBS HIGHLIGHTS

*Clyde Pritchard*

The following are summaries of the interesting messages from the PAC BBS. Only minor editing has been done to make them print properly in the newsletter.

MSG#: 0841 Lines=9  
SENT: DEC 3,1984 AT 1:22 PM  
TO: ALL  
FROM: DEAN WAGNER  
SUBJ: HELP

DOES ANYONE OUT THERE HAVE AN MACHINE LANGUAGE ROUTINE THAT WILL MOVE A STRING INTO PAGE 6(1536) FOR USE WITH ATARI BASIC? IF SO PLEASE LEAVE ME A MESSAGE ON THIS BBS. THANKS. DEAN WAGNER

MSG#: 0842 Lines=10  
SENT: DEC 3,1984 AT 2:31 PM  
TO: DEAN WAGNER  
FROM: ERNIE NEGUS  
SUBJ: YES

DEAN: MY PROGRAM "MEGAMAN" ON THIS SYSTEMS DOWNLOAD HAS A ROUTINE (IN STRINGED CODE) THAT IS PROBABLY JUST WHAT YOU'RE LOOKING FOR. THE ROUTINE IS CALLED MOVE AND THE FORMAT IS: A=USR (MOVE,ADR(A\$),1536,LEN(A\$)+1). OF COURSE, IT CAN DO ALOT MORE THAN SIMPLY MOVE STRINGS. -ERNIE

MSG#: 0852 Lines=15  
SENT: DEC 4,1984 AT 11:14 AM  
TO: ALL  
FROM: ERNIE NEGUS  
SUBJ: OSS STUFF

I have learned a few 'secrets' concerning OSS products that I would like to pass on. To enable lower case letters in filenames under DOS XL, MYDOS and standard Atari DOS 2.0, a simple POKE 3822,125 and rewriting DOS to the disk will work. Also to Emit FAST mode in BASIC XL and still have LISTed compatibility with normal Atari BASIC, use:  
10 IF PEEK(185)>128 THEN POKE 185,PEEK(185)+128  
instead of the FAST command. You can test if FAST mode is active by:  
10 IF PEEK(185)>=128 THEN REM fast mode active.  
-ERNIE

MSG#: 0880 Lines=8  
SENT: DEC 5,1984 AT 11:32 PM  
TO: ALL  
FROM: DAVID BLAKESLEE  
SUBJ: 1030 downloading

During monday's meeting several people mentioned software which allowed downloading to a disk while using a 1030. I looked in recent ANALOG and ANTIC magazines and couldn't find anything about it. Can anybody help me?

MSG#: 0903 Lines=2  
SENT: DEC 7,1984 AT 10:49 PM  
TO: DAVID BLAKESLEE  
FROM: BOB ISEL  
SUBJ: Re: 1030 downloading

TRY THE JAN. COPY THEY HAVE AN AD IN THERE.

Editor's Note: Thanks again folks. And to those of you that aren't "on the air", these messages are further examples of how you can get help and information when you have access to the PAC BBS and other telecommunications systems.

~~~~~

PAC HELP HOTLINES

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

HARDWARE OPERATION	Gary Lippert	233-7069
CASSETTE OPERATION	Lee Gassaway	642-2455
DOS OPERATIONS	Gary Lippert	233-7069
MODEM OPERATIONS	Gary Lippert	233-7069
BBS USAGE	Russell Schwartz	646-6418
BASIC PROGRAMMING	Nick Yost	981-0838
	Lee Gassaway	642-2455
OPERATING SYSTEM	Nick Yost	981-0838
	Leroy Baxter	653-1633
ASSEMBLY LANGUAGE	Leroy Baxter	653-1633
FORTH	Ricky Wooldridge	224-7163

23 MATCHES *Clyde Pritchard*

Can you beat your Atari at "23 Matches"? Type this program in and find out. I tried for about 15 min. and didn't win. I'll try again when I'm not trying to get the newsletter together.

Note: The majority of this program is from the DAL-ACE newsletter, 11/84. The paragraph above is by the DAL-ACE editor, Myron Walters. I modified the program to have the "graphic" display of the "matches", and to show the score. I also condensed the program's code to make the listing shorter. The only "magic" POKEs in the listing are the ones that toggle the size of the Graphics 0 text window between 24 and 4 lines using location 703. Also, POKE 752,1 turns off the cursor, but you knew that didn't you? The character used for the matches is a control-Y, ATASCII value 25 decimal, which is why I used the CHR\$(25) to initialize the string M\$ with the matches, along with the fact that my printer doesn't do matches. Hope you enjoy the program and learn something from it too. Good Luck!!!

```

100 REM *** 23 MATCHES ***
110 REM ***
120 REM *** ADAPTED TO THE ATARI
130 REM *** BY BO DAVIS OF DAL-ACE
140 REM *** FROM A PROGRAM BY
150 REM *** BOB ALBRECHT
160 REM *** MODIFIED TO USE CHARACTER
170 REM *** GRAPHICS IN PLACE OF ALL
180 REM *** TEXT BY CLYDE PRITCHARD.
190 REM *** PORTLAND ATARI CLUB ***
200 REM
210 POKE 710,64:POKE 712,64:POKE 752,1:
CHR$(125):ATARI=0:CHUMP=0
220 ? "Let's play 23 MATCHES. We start with":?
230 ? "23 matches. You move first. You may":?
240 ? "take 1, 2, or 3 matches. Then I move.":?
250 ? "I may take 1, 2 or 3 matches. You":?
260 ? "move, I move and so on. The one who":?
270 ? "has to take the last match loses.":?
280 ? "Good luck and may the best computer":?
290 ? "(ha ha) win.":? :? :? "Press START to
Play..."
300 IF PEEK(53279)<>6 THEN 300
310 M=23:IF ATARI=0 THEN DIM M$(67)
320 M$(1,1)=" ":M$(67,67)=" ":M$(2)=M$
330 FOR I=1 TO 67 STEP 3
340 M$(I,1)=CHR$(25)
350 NEXT I
360 ? CHR$(125):GOSUB 710
370 REM *** THE HUMAN MOVES ***
380 ? "There are now ";M;" matches.":?

```

```

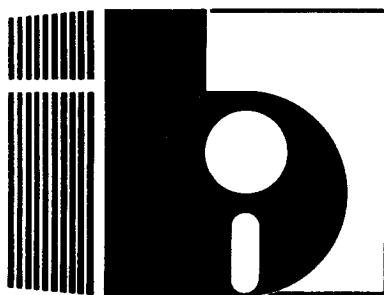
390 TRAP 690: ? "How many do you take";:INPUT H
400 IF H>M OR H<>INT(H) OR H<1 OR H>3 THEN 690
410 M=M-H
420 FOR I=M*3+1 TO 67 STEP 3
430 IF I<68 THEN M$(I,1)=" "
440 NEXT I
450 GOSUB 710:IF M=0 THEN 580
460 REM *** THE COMPUTER MOVES ***
470 IF M=1 THEN M$(1,1)=" ":GOSUB 710:GOTO 610
480 R=M-4*INT(M/4):IF 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<68 THEN M$(I,1)=" "
540 NEXT I
550 GOSUB 710:IF M=0 THEN 610
560 ? "I took ";C;"...":GOTO 380
570 REM *** SOMEBODY WON ***
580 ATARI=ATARI+1:POKE 703,24:GOSUB 820
590 ? CHR$(125): ? "I won!!! Better luck next
time!"
600 GOTO 630
610 CHUMP=CHUMP+1:POKE 703,24:GOSUB 820
620 ? CHR$(125): ? "O.K. So you won. Let's play
again"
630 ? :? "Press START to Play Again..."
640 ? "Press OPTION to Stop...";
650 IF PEEK(53279)=3 THEN 870
660 IF PEEK(53279)=6 THEN 310
670 GOTO 650
680 REM *** THE HUMAN CHEATED! ***
690 ? "You cheated! But I'll give you"
700 ? "another chance.":? :GOTO 390
710 ? CHR$(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: ? "CHUMP ";CHUMP;
840 POSITION 2,20: ? " ";
850 POKE 703,4: ? CHR$(125)
860 RETURN
870 TRAP 40000:POKE 703,24
880 GRAPHICS 0:END

```

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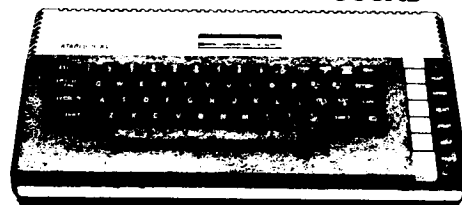
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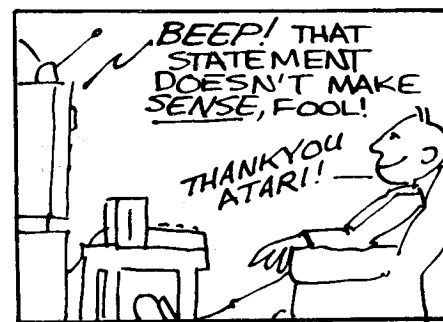
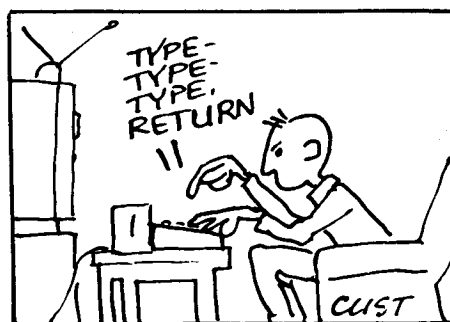
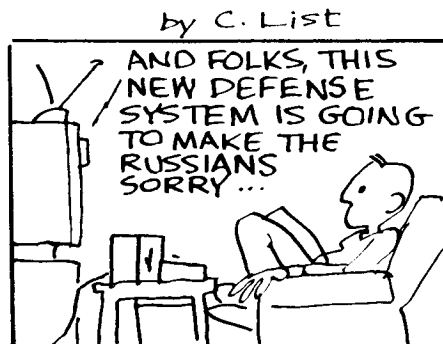
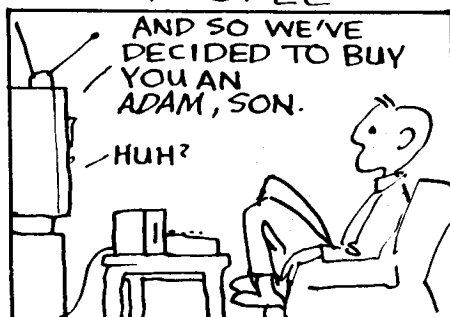
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SANTA CLAUS *Joey Latimer*

This nice little program is from Family Computing Magazine, 12/84. F/C is a fairly good magazine, especially for the beginner. It generally has many articles of interest, programs to be typed in. Each program comes in several versions, and there always seems to be one for Atari. Most of them are small and easy to type. They are also formatted nicer than the listing you see here. Once again, I butchered some nice code to make it fit the NL. The following paragraphs are F/C's write-up for the program. CP.

Santa Claus, or St. Nicholas, is an enduring symbol of the Christmas season. In fact, though, the familiar image of the bearded Santa in a red, fur-collared suit is a fairly modern idea. It's based on a newspaper illustration rendered only a little over 100 years ago by the cartooner Thomas Nast. Now, we've modernized Santa even further by bringing him to your computer screen in living color and animation!

Type in the program as shown, SAVE it to disk or tape, and type RUN. Merry Christmas! Ho! Ho! Ho!

```
10 REM * SANTA CLAUS BY JOEY LATIMER *
12 REM * FAMILY COMPUTING: DEC. 1984 *
14 S=(PEEK(106)-4)*256:POKE 106,S/256
16 GRAPHICS 1+16:SETCOLOR 2,0,15
18 FOR X=S+264 TO S+351:READ Q:POKE X,Q:NEXT X
20 POKE 756,S/256
22 FOR Y=14 TO 19
24 FOR X=19-Y TO Y
26 COLOR 98-((X+Y)/2=INT((X+Y)/2)):PLOT X,Y
28 NEXT X:NEXT Y
30 FOR Y=9 TO 18
32 COLOR 67:IF Y/2=INT(Y/2) THEN COLOR 68
34 FOR X=5-(Y<11) TO 14+(Y<11):PLOT X,Y:NEXT X
36 NEXT Y
38 FOR Y=1 TO 4
40 FOR X=10-Y TO 8+Y*2
42 COLOR 229-3*(X=10-Y)-4*(X=8+Y*2):PLOT X,Y-1
44 NEXT X:NEXT Y
46 FOR X=5 TO 13
48 COLOR 229-3*(X=5)-4*(X=13):PLOT X,8:NEXT X
50 FOR Y=3 TO 12
52 COLOR 197+(Y=3)
54 FOR X=7-(Y=3)+(Y=10)*(Y>9) TO
56 11+(Y=3)-(Y=10)*(Y>9)
56 PLOT X,Y:NEXT X:NEXT Y
58 FOR Q=1 TO 7
60 READ CO,X,Y:COLOR CO:PLOT X,Y:NEXT Q
```

```
62 COLOR 200:IF RND(0)<0.4 THEN COLOR 203
64 PLOT 8,5:PLOT 10,5:COLOR 202
66 IF RND(0)<0.4 THEN COLOR 203
68 PLOT 9,8
70 FOR DELAY=1 TO 200:NEXT DELAY:GOTO 62
72 DATA 240,248,252,254,255,255,255,255
74 DATA 15,31,63,127,255,255,255,255
76 DATA 0,0,239,239,239,239,0,0
78 DATA 0,0,127,127,127,127,0,0
80 DATA 255,255,255,255,255,255,255,255
82 DATA 0,102,60,255,60,102,0,0
84 DATA 0,0,0,219,219,219,219,0
86 DATA 126,0,231,231,231,255,255,255
88 DATA 255,255,255,255,255,255,126,60
90 DATA 255,255,126,60,24,129,195,255
92 DATA 255,195,129,24,60,126,255,255
94 DATA 199,5,9,199,13,9,200,8,5,200,10,5
96 DATA 233,9,6,202,9,8,198,16,4
```

~~~~~

## DEALER'S CORNER

|                          |                        |
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| *Compusource             | *Computers Etc.        |
| 11504 Mill Plain Suite C | 1513 NE 122ND (Halsey) |
| Vancouver, WA 98684      | Portland, OR 97230     |
| (206) 254-5849           | 252-0179               |
| *Computerland            |                        |
| (Meier and Frank Dwn)    | Computerola            |
| 621 SW 5TH               | 6224 SE Main (resd.)   |
| Portland, OR 97208       | Portland, OR           |
| 241-5201                 | 239-4315               |
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| 1519 SW Marlow           | 2029 NE Burnside       |
| Portland, OR 97225       | Gresham, OR            |
| 297-8425                 | 661-1946               |

\* Discount is available to PAC members. You will need to ask for it, and show proof of membership to get it.

The chains which also sell ATARI include; Sears, Fred Meyer, and Toys'r'Us

### Supplies:

|                                       |              |
|---------------------------------------|--------------|
| Comp-u-desk                           | Wisco        |
| Beaverton Mall #                      | 2108 SE 10TH |
| Beaverton, OR                         | Portland, OR |
| # Also in Wa. Sq. 2 and Jantzen Beach |              |



# **Portland Atari Club**

## **Public-Domain Software**

### **Games I**

*Smash-Bombers-Towers-Gallery-Robot war-Concentration-Alien-Price*

### **Games II**

*Starship-Cleuso-Electric Mogul-Gunner-Maxit*

### **Games III**

*Froggie-Myriapede-Gobbler-Grubs-Bats*

### **Games IV**

*Livewire-Maniac-Fillrup-Defend-Vultures-Chicken-Maze-UXB-Harvey*

### **Card Games**

*Bingo-Black jack-Bridge-Cribbage-Stud Poker-Yachtzee*

### **Education I**

*Biorhythm/Biochart-Mathdrill-Mathpack-Math2-Metrics-Calendar*

*Typing-States-Americas-Simon-Light Demo*

### **Utility I**

*Menu-Timedclock-Disassembler-Error-Scompare-Peeker-Disk2tape-Autorun*

*RPM test-File Index-Variable list-Renumber-Examine-String Creator*

*Cassorun-Joy Menu-Transprinter-Datagen-Memcheck-Bootcopy-Backup*

### **Utility II**

*Charait-Casdump-Memtest-Stiktest-Scrndump-DirectoryDD-Systat*

*Doswiz-Doc-Deleter-Gemprint-LIKdir-Rpmttest-Autonum-NewDatagen*

### **Demo I**

*Chopstix-Ellipse-Sketch-Giggle-Jazz-Logo-MessageGen-Magic*

*Puff-Dialog-Nightmare-Vegas-Scroll-Fugue-Starship-Soundstik*

*String Art-Digital Clock-Starwars Music-Biograph-Xmas Tree*

### **Demo II**

*GTIA Grafiz-Hymn-Magic-Messiah-Nutcracker-Supergrafiz demo*

*Shuttle Pic-Sunset Pic-Title Generator*

### **Demo III**

*AtariLogo 128-Faucet-Waterfall-Hiway-Scopes-Horse 128-Elch*

*Snowflake-Octadraw-Cubedraw-Pencils-Boxdemo128-Micropic-Vyger*

### **Home and Business**

*Appt Calendar-Adress-Tinyedit+plan-Property-Loan-Stock-DDmenu*

### **Modem**

*An assortment of modem utilities to get you 'online'*

**PAC BB (2 disks)**

*An 'autorun' Bulletin Board (Requires 2 drives) AMIS w/docs*

**MFT/SCOPY**

*A wonderful sector copier and a utility for multi-file transfers*

*For more details contact the PAC software librarians*



# OSS WRITES ONLY PRECISION SOFTWARE... OUR CUSTOMERS WRITE OUR BEST ADS!

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"BASIC XL is a fast and powerful extension of Atari BASIC, totally compatible with virtually all software. Its many features make programming easy, especially games that require player/missile graphics. For people writing business software or translating existing programs from other computers, the new string arrays and other string-handling features make the task manageable. BASIC XL is a truly professional language that should become standard in all future Atari computers. Overall Rating—A." *The Addison-Wesley Book of Atari Software 1984*

**BASIC XL SuperCartridge & Manual (Requires 16K Memory) ..... \$99.00**

## ACTION!

"For those who have found BASIC to be too slow or assembler too difficult, ACTION! is the logical alternative. ACTION! programs can increase speed from 50 to 200 times that of BASIC." *Jerry White, Antic, February 1984*

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## MAC/65

"For the serious machine language programmer or anyone interested in programming in 6502 machine language, this package is a must. A lot of the good professional software on the market, games or otherwise, was written using this brute. Coding machine language with anything else is like trying to swim upstream in quicksand." *ACE Of West Hartford, May 1984*

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## PAC CALENDAR OF EVENTS

### JANUARY

01/02 - PAC Board Meeting  
01/05 - Commercial Ad Deadline  
01/07 - PAC General Meeting  
01/07 - Normal Article Deadline  
01/09 - Newsletter SIG Meeting  
01/09 - Assembler SIG Meeting ?  
01/10 - Beginner's SIG Meeting  
01/12 - Final Article Deadline  
01/12 - Newsletter Production  
01/14 - Newsletter Final Layout  
01/15 - ATR SIG Meeting  
01/16 - Business SIG Meeting  
01/16 - Newsletter to Printer  
01/21 - Newsletter Mailing  
01/23 - Assembler SIG Meeting  
01/29 - PACE SIG Meeting

### FEBRUARY

02/04 - PAC General Meeting  
02/04 - Normal Article Deadline  
02/05 - Commercial Ad Deadline  
02/06 - Newsletter SIG Meeting  
02/07 - Beginner's SIG Meeting  
02/09 - Final Article Deadline  
02/09 - Newsletter Production  
02/11 - Newsletter Final Layout  
02/13 - Assembler SIG Meeting  
02/13 - Newsletter to Printer  
02/18 - Newsletter Mailing  
02/19 - ATR SIG Meeting  
02/20 - Business SIG Meeting  
02/26 - PACE SIG Meeting  
02/27 - Assembler SIG Meeting

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