$1.50

PORTLAND ATARI CLUB

JULY 1985

IN THIS ISSUE

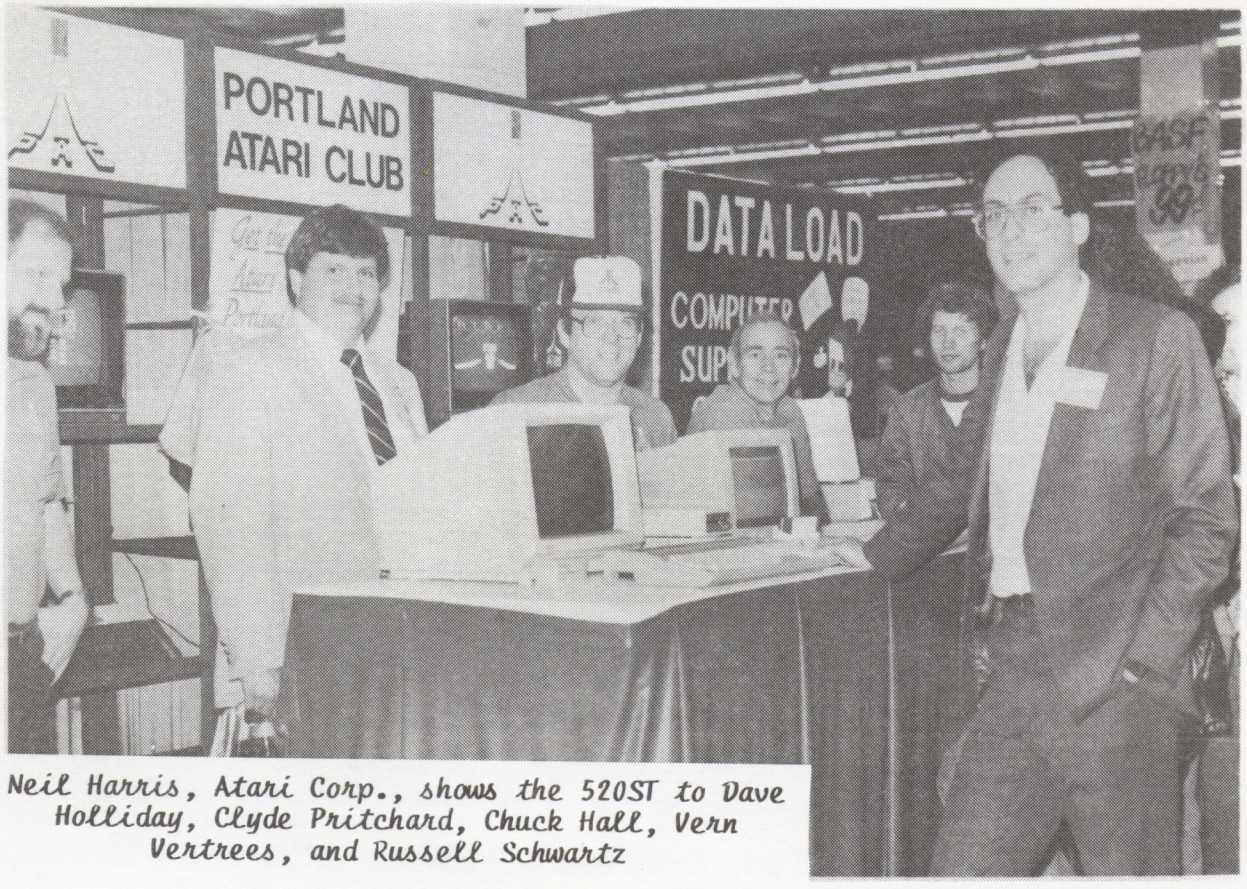
President's Column, Chuck Hall ---------- 1
Board Meeting Notes, Dan Gibson ---------- 3
Special Projects, Dave Holliday ---------- 3
Membership Secretary Notes, Debbie Pritchard - 4
Special Interest Groups, Tom Brown ---------- 4
SIG Contact List ---------- 5
PAC Help Hotlines ---------- 5
Slipped Disk, Lloyd Sulter ---------- 6
Beginner's SIG, Elanna Schlichting ---------- 7
The Writer's Tool-Vers. 2.2, Clyde Pritchard - 8
Puzzle Time, Chuck Hall ---------- 9
Printer Driver's for AtariWriter,
Clyde Pritchard ---------- 10
Editor's Note, Clyde Pritchard ---------- 10
Letter Wizard, Jim Link ---------- 12
Field of Fire, Lloyd Sulter ---------- 13
Hitchhiker's Guide, Steve Billings ---------- 14
Bounty Bob Trivia, Clyde Pritchard ---------- 15
CES Info - COMPUSERVE, Clyde Pritchard ------- 17
Dealer's Corner ---------- 19
Puzzle Time - Part Two, Chuck Hall ---------- 19
Letter to the Editor, Clyde Pritchard -------- 19
600XL Memory Upgrade, Allan Coker ---------- 20
Puzzle Answers, Chuck Hall ---------- 20
Calendar of Events ---------- back cover

NEXT GENERAL MEETING

MONDAY, JULY 1, 1985 - 7:00 PM

BPA AUDITORIUM, NE 9TH AND HOLLADAY

PAC BULLETIN BOARD SYSTEM
300 BPS - 24 HRS - 7 DAYS
503-245-9405



Neil Harris, Atari Corp., shows the 520ST to Dave Holliday, Clyde Pritchard, Chuck Hall, Vern Vertrees, and Russell Schwartz

PORTLAND ATARI CLUB

(Not affiliated with ATARI, Inc.)

PAC Board of Directors

President:	Chuck Hall	293-0552
Vice President:	Jim Link	232-1138
Secretary/Treasurer:	Dan Gibson	665-6912
Membership Secretary:	Debbie Pritchard	648-0461
Program Director:	Jim Berry	223-3712
Club Librarian:	Lloyd Sulter	648-2274
Special Interest Groups:	Thomas Brown	644-6674
Special Projects:	Dave Holliday	642-4717
Sergeant-At-Arms:	Floyd Sulter	231-0485
Newsletter Editor:	Clyde Pritchard	648-0461
Advisor:	Lloyd Sulter	648-2274

PAC NEWSLETTER STAFF / SIG MEMBERS

Clyde Pritchard, Editor - Pat Warnshuis, Editor Emeritus

Steve Billings - Art Director, Final layout
Debbie Billings - Final layout
Larry Brigman - Member
Tom Comerford - Member
Chuck Hall - Technical Editor, Columnist
Jean Hall - Production, Mailing Assistant
Dave Pelinka - Advertising Manager, Columnist
Ruth Pettinger - Mailing Coordinator
Debbie Pritchard - Production Coordinator

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

Commercial Advertising rates are; full page (7 X 9 1/2) - $50, half page (7 X 4 1/2) - $25, quarter page (3 1/4 X 4 1/2)- $15. Ads must be prepaid and a 1/3 discount is given for 3 consecutive ads. The copy may vary in content, but the space must be the same in each issue. Send camera ready copy and check payable to PAC at the address below. Contact David Pelinka, Advertising Manager at 503-659-1969 (evenings) or the Editor for other arrangements. Ad deadline is the 5th of the month prior to publication. Only Authorized Atari Dealers may advertise Atari brand products.

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.

Exchange newsletters, articles, correspondence and ads should be sent to the following address:
Portland Atari Club, Attention: (appropriate board member), P.O. Box 1692, Beaverton, OR 97005

Printing done by HILLSBORO QUICK PRINT, 435-B S.E. WASHINGTON ST., HILLSBORO, OR 97123, 640-3649

CLUB BUSINESS AND ACTIVITIES

PRESIDENT'S COLUMN
Chuck Hall

First thing I want to do is to lay to rest the rumor I passed on to you at the last meeting. Microbits (MPP) is not out of business. Apparently there is some reorganization going on, but they are still working and according to a couple of sources will complete their new products as scheduled. I know that many of us are relieved to hear that. We have lost many good Atari product and software developers over the past couple of years and I know that you all join me in wishing Microbits well.

At the last meeting I presented to you an offer of reduced rates for the Explorer magazine which is produced by Atari. Since there were many of you not present I will repeat the offer here. A normal 3 year subscription is $39.95, and a 1 year subscription is $15.00. Atari has offered user groups a fund raising plan, whereby they will reduce these rates to the group and let them keep the difference. As we are currently in pretty good shape, I would like to pass these savings directly on to you at their special rates. So if you would like to take advantage of this offer please mail a check made out to the Portland Atari Club and mail it to our P.O. Box, or get it to me at the next meeting. The next meeting will be your final chance at the reduced rates. What are the reduced rates? Well, how about only $29.95 for three years, or only $12 for one year! I wish I had known about this prior to sending in my $39.95. So if you are interested, and have been holding off on sending in your subscription, then this is the chance you have been waiting for. Several clubs have taken advantage of this offer, and I have heard that one of them even sent in 21 subscriptions. It seems to me, that a club as large as ours should be able to beat that. This is one of your chances to let ATARI Corp., know that this club is a real supporter of theirs. So, if you have been thinking about subscribing, I urge you to do so now. We can not let some other club (smaller) have a better response than we, can we?

I also extend my apologies to Bill Pike. Bill was to demonstrate a new product out called RELAX. I have heard some good things about this and I am sorry we did not get it in last meeting. We will attempt to schedule Bill again this meeting, and get him on sooner. Both of the last two meetings have run differently than in the past, but then they have been rather extraordinary also. I will try to return us to a more normal format next meeting, unless something really exciting comes up like a visit from Atari, or? But this is just an indication that we are flexible, and I hope to remain so. To keep us in a rigid fixed format can get boring for both me and you. We have also not had a real question and answer period, but we will definitely have one next meeting. In the meantime, you are always welcome to write your questions down for the newsletter. Members are also allow free classified ads, on a space available basis. Unless of course something really exciting comes up, like a visit from ATARI or?

Speaking of visits from ATARI. I know that many of you missed out on meeting Neil Harris at the CEE show. We just did not have time to get to all of you. I posted the information on our BBS and other BBS's, plus let as many of you know as I could. It was a sincere pleasure having Neil here. Especially since he came on such short notice. He did an admiral job of answering all of those oft repeated questions from you and the public at the show. I want to thank Pat Warnshuis for graciously playing host in providing accommodation for Neil while he was here, and also wish to thank you are members in putting your best foot forward while representing our club. Neil was very complementary about our club, and of course those of us that got to spend some time with him have nothing but respect and appreciation for his efforts while here.

He and I did get to talk a bit during his visit. One late Saturday evening over some gourmet mexican food, we even let our hair down (well, if I had hair I would have let it down) and he gave me the true inside scoop on what ATARI is really all about. Did you know that Neil really runs Atari? Yeah, and if it wasn't for him nothing would get accomplished. And I don't know if he really wanted me to let this out, but all of the development done at Atari, is really done on a Coleco Adam, and a couple to TI99-4A's. But the real mind blower was their plan to begin marketing 520ST's thru 7-11 franchises. (If anyone believes any of that last paragraph, I've got a real deal for you on a summer home on the slopes of Mt. St. Helens.).

But back to the real world. Those of you at the last meeting got to listen to the contents of the letter offering 520ST's to to the User Groups. As of this writing I have 21 orders (cash in hand) with a possibility of a few more before I actually send in the orders. I think that kind of response is outstanding. We were even able to add to our membership based on this offer.

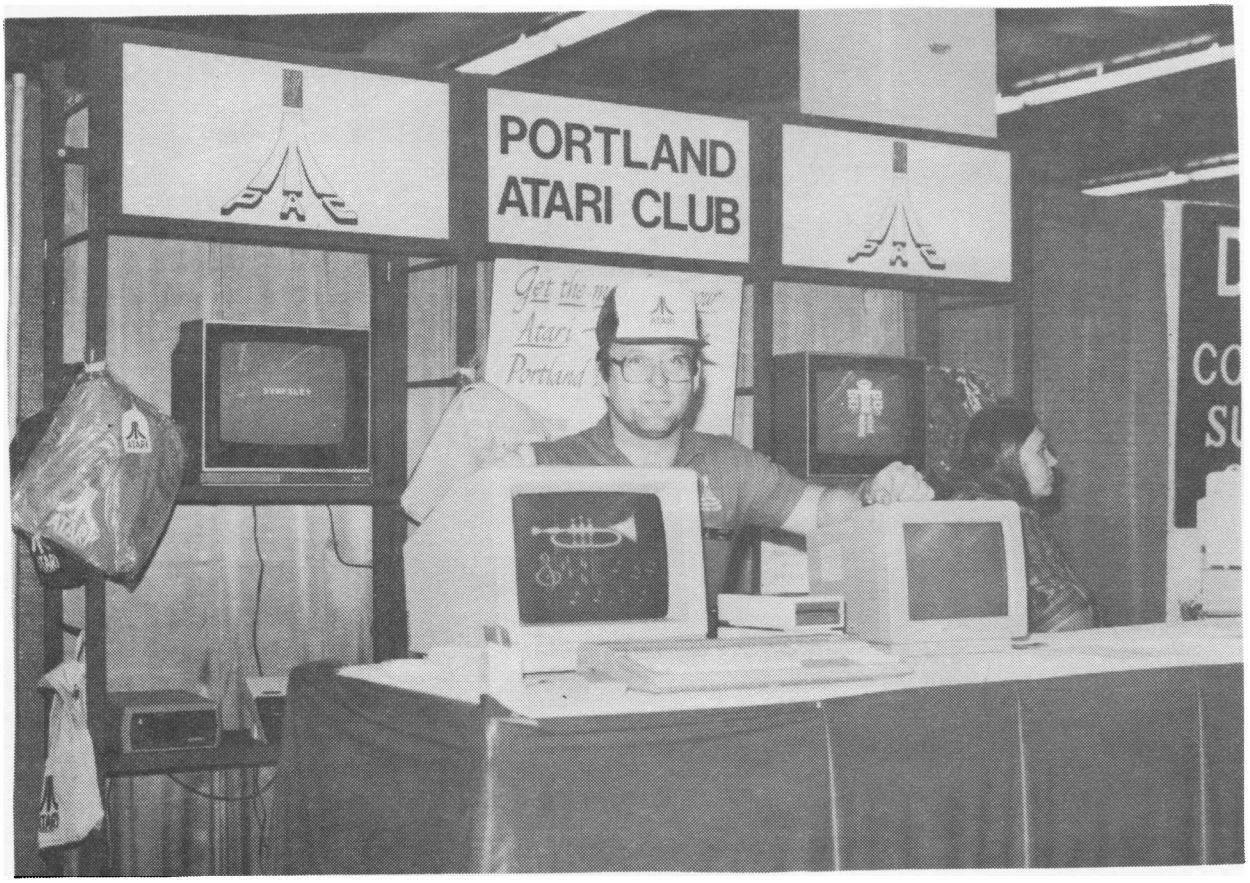
One plea I would like to make this month. It

continued...

is very enjoyable writing articles for the newsletter. But I know that you would like to hear some other points of view. One of our members even complained that the newsletter wasn't technical enough. We can only print what gets submitted. It does not matter if you know how to write, or not sure about the appearance of your article. That is the editors job. If you would just try to get something down on paper (or disk preferably), Clyde can take it from there and do whatever is necessary. Or if you have an idea for an article and just don't know how to get started, then give one of us a call, and we will be glad to help. The first sentence is always the most difficult for me, but after that the words just seem to flow. So I am now asking you to help us improve he content of our newsletter. Also if you have any ideas on how the newsletter can better help you, then let us know. It is truly your newsletter, and if no one tells us what they want to see, then we can only put in what we like, or what we have. Its up to you.

We are still trying to get a summer picnic going. We have a couple of volunteers working on it now. If you have experience with this type of activity, or would just like to help then please contact any board member, or Phil Bock at 206-694-4548. We are probably looking at an August time frame. Any other activities you would like to see the club get involved in are only possible if you speak up.

One new product from Atari that has been somewhat overshadowed, is the 130XE. I have mine now, and am enjoying it tremendously. I hope to have a demonstration of it at the next meeting. It is the next step up for those of you who are not yet going to step up to the ST line. Looking forward to seeing you all at the next meeting.



Chuck & Jean Hall once again supporting the club

BOARD MEETING NOTES
Dan Gibson

The May board meeting was held at 7pm on May 22nd at IB Computers. Attending were the following, Jim Link, Clyde and Debbie Pritchard, Chuck and Jean Hall, Dave Holliday, Dan Gibson, Lloyd and Floyd Sulter, Jim Berry, Steve and Debbie Billings, Russell Schwartz, and Steve Culliton.

Backroom Sales

The Board once again spent time at the beginning of this meeting discussing ways of controlling backroom sales. The Board is proposing an ammendment to the bylaws stating that anybody selling at the PAC General meeting must be a member of PAC.

The CEE Show

The next order of business was the upcoming CEE Show at the Memorial Coliseum. It appears at this point that we have enough volunteers. Thanks to all of you who are participating. We will have a closed booth this year. People will not be allowed inside to handle the equipment. We will have several types of demonstrations going on, hopefully, on the new Atari computers. Our main purpose will be to provide information and support to the public in general and Atari users in particular. We will also be giving away freebies supplied by Atari through Dave Duberman and will also be handing out fliers describing the club.

The PAC BBS

The Board elected to upgrade our bulletin board system. We purchased from Duane Bolster an ATR 8000 (64K) and a double side double density disk drive for $350, in addition to a 300/1200 Qubie modem for $200 from Pat Warnshuis. We also bought a 130XE from IB Computers. With these additions we are in a position now where we can support two Bulletin Board Systems. We will be deciding where these boards will be and what will be on each, in the near future.

June Meeting

At the June general meeting Bill Pike will be demonstrating the Relax System and Lloyd will be premiering three new PAC club disks, Entertainment I, Games VII, and Utilities III. We will be showing a video tape from Atari on user group support.

Miscellaneous

It was stressed that all board members should be submitting articles for the newsletter on a monthly basis. This will ease some of the burden from Chuck and we will have a more diversified newsletter. Microbits has extended an offer to PAC members in which we can order direct, through Jim Link, Microbits products at a 10% discount. Items will be shipped directly to your home and all shipping and handling charges are included. The PAC will also receive 10% of all sales, from Microbits. We hope to be able to offer more of these deals in the future. Speaking of deals, PAC members can now subscribe to the Atari Explorer magazine at special rates ($29 for 3 years). More information available at the next meeting.

Treasurer's Report

As of this writing, the balance in our checking account stands at $2,389. At the last meeting software sales totaled $478, the auction brought in $222, and $720 for memberships.

SPECIAL PROJECTS
Dave Holliday

I would just like to thank everyone again for working at this years Computer and Electronic Expo. Judging from the number of people who raised their hands at the meeting as being first time attendees I believe that this show was more than successful for us this year. We received ten memberships at the show with one coming from as far away as Alaska. We also received recognition from the Oregonian on two seperate occasions. One being a photo of our exhibit and a second being an article from Bob Lindstrom.

I again would like to thank all those people who helped with the show everyone acted in a very professional manner and I was personally thanked by several people about this professionalism. If you did not attend the last meeting I mentioned that we would have a possible exhibit at Washington Square. Now that we have some exellent photographs of the booth this should be arranged within the next few months. Those people who were not needed at the CEE show will probably contacted by me to help with the exhibit. So I will be in touch in the next month or two.

We have not received much of a response on a club picnic. If you are still interested in this, please call me or talk to me at the meeting, then we could possibly arrange something for late summer.

MEMBERSHIP SECRETARY NOTES
Debbie Pritchard

The June meeting was another great one for memberships, due in part by the excellent job done by those who worked the CEE Show. Thanks to all of you. We have added 42 new members, which brings our total family membership up to 459.

I would like to thank Gail Horner for helping us out with the membership desk, while I helped Jean Hall with the distribution of the Atari bags. We really appreciated her help, thanks Gail.

To the new members who are listed here, we hope your association with the Portland Atari Club is a long and enjoyable one. If you are interested in becoming involved in the club in some special way please don't hesitate to call one of the board members, or the SIG leaders. We will be glad to help you get started in the area you are interested in.

Join with me in welcoming these new people.

Donald Jeter
Mike Wagner
Frank Barberis
Micro Care, Inc.
Norm Piercy
Ken Romig
Darrell Swanson
Denise Demaray
Elizabeth Clarke Casale
Al Siebert
Ken Stone
Raymond Wilcox
John Gibson
Antonio Lopez
Fred Nickel
Jim Gumm
Barry R. Lavine
Ramon Corona
Bob Davies
Warren Tripp
Darlene S. Rinkes
Larry Layton
John Fromwiller
Gil Blankenship
Mark C. Reich
Brain W. Stach
Tracy Johnson
Mark Breakey
Kenneth Raiche
Bruce Blackburn
Douglas Kammerer
Carl Christman
Ivan Harris
Charles Bruce
Monte Olsen
John Roethe
David Whitney
William Allensworth
R. Deloy Graham
Perry Bailey
Chuck Legg
George R. Hudetz

SPECIAL INTEREST GROUPS
Tom Brown

Communications SIG: The first meeting for this new SIG, is Thursday, June 11, 1985 at 7:00 PM. The meeting will be held at the home of Jerry Anderson in Oregon City. Please call Jerry at 655-3914 for directions. Details of future meetings and the direction the group is going to take will be the main focal point of this meeting. From the show of hands at the May PAC meeting there are many members who own and use modems -- So I am asking you to support this SIG and share your communications knowledge with all of us.

Business Applications SIG: This SIG group will meet at Lee Gassaway's home (1660 SW 196th, Aloha) at 7:00 PM on June 19th. I suggest that they may wish to change the day of the week they hold their meetings on, as that coincides with the Board meeting, whose members you then preclude. This will be primarily a re-organization meeting, so if you are interested in Business Applications, I urge you to attend.

PACE SIG: Trudie Mishler is resigning as leader of this SIG, due to work obligations. We will miss her at this position. She has assured me "That she will be available for consultation". Chris Fouts indicated that attendance and interest has fallen off drastically, and we will have to poll our membership to determine if this SIG is going to remain active at this time.

Beginners SIG: The Beginners SIG is one of our biggest success stories. This group is now meeting the second and third Tuesday's of each month. The first meeting in June will be a second presentation of Atari Writer by Debbie pritchard, and the second meeting will have Chuck Hall as guest.

ST SIG: This group meets the second and fourth Thursdays of each month. This is where it is at if you are interested in the ST's of in the C language. Our next few meetings will be on developing routines in C for our general use.

Assembler SIG: This group meets the second and fourth Wednesdays of each month at University Hospital. A major project in Assembly Language is about to get underway.

For the other SIG groups please contact me or the SIG leader listed in the newsletter. Support your club and increase your enjoyment of your Atari computer - Join a SIG or two.

SUPER ATR SPECIAL!!
16K W/88 DRIVE...$299.95

IB COMPUTERS
1519 S.W. Marlow Avenue Portland Oregon 97225 (503) 297-8425

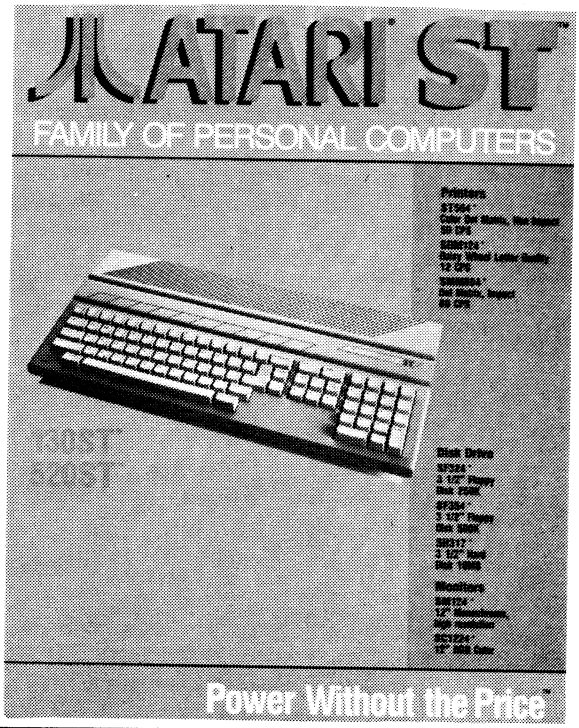
ATR 8" DRIVE (SS).....$199.95
SINGLE 1/2 HT. DR. CASE...$49.95

NEC®
15 LQ PRINTER
$299 with tractor

ATARI XE
130 XE IN STOCK
$189.95

PRINTSHOP....$39.95
GR. LIBRARY..$21.95
PAPER REFILL.$16.95
UNDERWARE
RIBBONS..$14.95

LARGEST SELECTION
OF THINGS FOR
ATARI



SIG CONTACT LIST

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	
Thomas Brown	644-6674
MODEM & COMMUNICATION SIG	
Jerry Anderson	655-3914
NLSIG (NEWSLETTER)	
Clyde Pritchard	648-0461
PACE (Portland Atari Club Educators)	
Trudie Mishler	230-9545
Chris Fouts	206-687-4951
ST SIG	
Pat Warnshuis	246-3724
SWAG Subgroup	
Allan Coker	206-254-5100

PAC HELP HOTLINES

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	Russell Schwartz	646-6418
Cassette Operation	Lee Gassaway	642-2455
DOS Operations	Gary Lippert	233-7069
FORTH Programming	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

CLASSIFIED AD

ATR8000 with CPM and MSDOS, two double density/double sided disk drives. $950.00 includes software, call Gary Davis at 620-3191

SLIPPED DISK
Lloyd Suiter

Here is a list of the new disks from the PAC Library. For a complete list of all the programs in the library see the May issue of the PAC newsletter.

The new additions include a new title in our library. This new title (Entertainment) will consist of the best programs from Education, Games, and Demos. The programs will almost always be binary load type programs. I hope to have several different type of menu programs for you to pick from also.

I have had several call about the Utility 3 disk. There are several programs on the disk but most of the questions are how do you use the fonts. On the disk are sixteen different fonts that can be incorporated into your programs. However, you must do some work too. First you must write a program that you want to use the fonts in. Second you must place the utility in your program so it will load the font character set to your program. And third, you must have the file containing the fonts you want on the disk that the program your creating is on..

If you run the program called FNTADD.LES you will get a small demonstration of how the utility works. After the demo list the program and change the Font name in the Data Statement to another Font name and run the program again. This time the screen will change to reflect the the character graphics of the new font.

This is a very useful method of changing the font of a program but as with almost all utility type programs they are there to help you, not do every thing for you.

When you load Utility 3 and Entertainment 1 you must use a translator disk (lots of fun). Each time you want to change programs in on Ent. 1 (if you want to use the menu program) you must turn off the machine off and reload the translator before putting in the Ent. 1 disk. What a pain in the byte! I will have a partial solution to this problem next month, don't miss the meeting.

I am planning to have a new demo disk next month. This disk will include some of the very best demos for the Atari Computer and a demo that was use at the national computer shows by Atari.

So far I have been averaging about 2 to 3 new disks each meeting. I hope that I can convince the board to give me a little time to show off all the work that I have done and the selection of new programs that are available to you.

That's it for now, and remember if you have any questions about any of the programs on the library disks just call anyone else! c u lloyd

Home & Bus II

CHKBOOK BAS	CHKBOOK DOC
LOANPLUS	LOANPLUSDOC

Education 4

SPELLBEE	JANE	FUNCTION
NOTEPRAT	NUMBERLINE	SLIDE
MULTIPLY	MAGICBLACKB	INTLMORSE
METRICS	TYPING	

Utility 3

SOUNDINTBAS	EATTEDITBAS	PAINTER BAS
CREATEFONT	TEXTDUMPPLT	MENUMAKEML
FANCY1 FNT	FANCY2 FNT	PROTECT
SUPERDIRBAS	SUPERDIRDOC	ROMAN FNT
FNTADD LES	GOTHIC FNT	MODERNE FNT
FANCY FNT	AVANT FNT	BLOCK FNT
JERRY FNT	GREEK FNT	HIERO FNT
SCRIPT FNT	COMPUTERFNT	STRANGE FNT
STOP FNT	SPACE FNT	DESCR DIR

Game 6

TRIVIA QUZ	FOOTBALLBAS	CREEPYCAVE
MONOPOLYBAS	CRYPTO BAS	CRYPTO DOC
CLUE		

Game 7

KBERT BAS	RISKY	WORMBEME
PACCNTSTPIC	CLUBDEMO	BOWLERS SAV

Entertainment 1

EARTH	DASH100M	POPCORN
BALLSONG	INVADERS	FIREBUG
RATS		

(Editors Note: On Entertainment 1, if the programs FIREBUG and RATS don't appear on the menu, press number 2 on the menu to load DUP.SYS then select option G on the DOS menu and unlock files DOS.SYS and AUTORUN.SYS. This will allow FIREBUG and RATS to appear on the menu. However, DOS.SYS and AUTORUN.SYS will not appear. Also, take a look at the options on the DOS menu, you may find some of them useful.

BEGINNER'S SIG
Elanna Schlichting

On May 9th the guest of the PAC Beginner's Group was Trudie Mischler of the PACE Group. Trudie brought a boxload of various education programs for us to sample. She gave a short demo of each one and answered questions. We were able to compare and view Atariartist and Microillustrator, the Music Construction Set (great Pachelbel!) and some Public Domain music, Movie Maker, Spinnaker Aerobics, Letter Perfect, Word Find, Zork I, Excalibur and Visicalc. As always, we keep looking for more and more information, so part of the value of such an evening is the opportunity to simply see various programs in action. As expensive as some are, it gives us an opportunity to "try before we buy". Another part is to be able to talk to someone who works with the programs and can give ideas on the different ways the programs can be put to use.

The May 21st meeting was very informal. Part of the time was spent testing and playing with 3 different Public Domain programs to download Koalapad pictures to the printer. The programs were: SDUMP, KWIKDUMP, and KPADDUMP/PICPRNT. (If you are interested in obtaining copies of these programs, please contact Randall Leong or myself.) Jim Miller also brought copies of the DOS 2.5 instructions to go with the copies people had made of the DOS at the last meeting. (Please contact him if you are also interested in a copy.) And of course, we had the usual trading of Public Domain software.

A final note: We have decided to change the Beginner's Meetings days to the 2nd and 3rd Tuesdays of the month. June's meetings will be on the 11th and 18th. On the 11th Debbie Pritchard will be returning by request to present Atariwriter - an extension of her first presentation. On the 18th, Chuck Hall will return after a long absence to answer questions, sell club disks and (with the help of Tom Brown) make an interesting and challenging proposal to the Beginners.

Neil Harris & Pat Warnshuis spend time in booth

NEWS AND REVIEWS

THE WRITER'S TOOL - VERSION 2.2

Clyde Pritchard

The Writer's Tool by Madison Micro and Optimized Systems Software is finally "A Professional Word Processing Program". If you read my original review of The Writer's Tool (**TWT**) a few months ago, you may recall that I had two major complaints about it; no printer driver utility, and no spelling checker. The lack of a printer driver utility was my primary complaint, because other spelling checkers are available for use with **TWT** files. I also lamented the fact that the utility for building text format default files was an external function rather than an intrinsic feature.

Well, Madison Micro (MM) and Optimized Systems Software (OSS) have almost out-done themselves this time. Not only did they add a printer driver utility and a spelling checker, they built them right into (well, almost) the word processor. You are able to switch from one function to another **without re-booting** your system! This includes the formerly external text format default file utility and a dictionary maintenance utility that goes with the spelling checker. They provided all this at no additional cost to existing registered users of **TWT**, and even shipped it without asking for a user request for upgrade. The upgrade included the new program master disk (even thought **TWT** is cartridge-based, it is partially disk-based), a master dictionary for the spelling checker, and a new copy of the manual (not just updates to the old one). This is excellent user support, and deserves the appreciation of all **TWT** users.

New and Enhanced Features

Other new or enhanced features include; move cursor to beginning of next line, delete block markers, delete a word, undelete up to five prior lines or words deleted, definition and insertion of up to ten 1-255 character phrases, toggle inverse characters, and printing of graphics within document (via link print). I thinks that's everything, let me know if you found something else.

Spelling Checker

As I said, the spelling checker is "built into" the word processor. This means that there is a menu option for loading it while you are in **TWT**, and then returning to **TWT** without re-booting the system. This requires that the master disk be in drive 1, so if you have a single drive system you will be doing some disk swaps. The master and user dictionaries are also read from drive 1, so a two drive system will work best. You must save your document before loading the spelling checker (there is a prompt to remind you just in case you forget).

The basic function of the spelling checker is to locate words in the document that are not in the dictionary, and identify them so you can correct them. As it locates these words, they are displayed on the screen so that you can get a head start on the corrections, or see that they are all correct, and merely not in the dictionary. This lets you skip the correction function, rather than going through it just to find that everything is OK. While the dictionary search is being done, counts of the total words read and total unique words are accumulated and displayed on the screen.

You have two options for correcting errors; you can have all "incorrect" words marked in inverse video and the document saved to a new file, or you can go through the file and make the corrections. When reviewing the file, several lines of text before the "incorrect" word are displayed so you can see it in context. The word is displayed in inverse video, and you can correct it, mark it (inverse), ignore it, or omit it. Ignoring a word means to skip the displayed occurrence, omitting a word means skipping all occurrences. The corrected document is written to a new file. You may have noted that I didn't mention anything about a list of possible correct spelling being displayed, or a function to do a dictionary look-up. This is because these features don't exist. I have decided that I don't mind this at all, because most of the time I am correcting typos rather than true spelling errors. Also, I can look things up in my Webster's Instant Word Guide or dictionary if I need too get a correct spelling.

As an aid in creation and maintenance of a user dictionary (or maybe an index), you can save an alphabetic list of the unique words in the document as a text file or in a compressed format (for dictionary use). You can also save a list of the words that were not found in the master or user dictionaries.

After you have finished proofing a document, you can do another one, or return to the word processor. The return is done in less than the blink of an eye.

Dictionary Management

The master dictionary supplied with **TWT** contains 20,000 words, however you will be sure to use many words that are not in that list. Therefore, you can create a "user dictionary" with

your own words to supplement the master dictionary.

The dictionary management function is loaded from disk just like the spelling checker. After it is loaded, you input the name of your user dictionary and the name of a file of words to be added or removed from the dictionary. The dictionary is read into memory and then it is renamed with an extention of ".000" as a backup. Next the list of words is added or removed and the new dictionary is written to disk. The list must not be larger than 1000 words, but the only limit on dictionary size is that two copies (old and new) must fit on a single disk.

Format and Display Customizer

This function is also loaded from disk like the spelling checker and dictionary manager. It was a separate BASIC program in version 2.0, so this is much nicer. It allows you to define a file with default print format commands and information about the display color, brightness and cursor flash rate. One of these files can be loaded automatically at boot time, and others can be loaded from the word processor whenever you like.

Printer Drivers

This is what I wanted to see the most, and here it is. Now I can use the special features of my printer without embedding long control code sequences in my text. This includes automated double-column printing, rather than having to manually roll back the paper to print column two.

The printer data file editor is loaded from disk and allows you to define line spacing, up to five fonts, up to seven font modifiers (i.e. italics, boldface, underlining, super- and sub-scripts, etc.), and set-up a character translation table. It took me a little longer to get things to work with this utility than it did with the AtariWriter Printer Driver Construction Set (reviewed elsewhere in this issue), but everything is great now. I'm really not sure what the problem was, except maybe trying to set it up late at night.

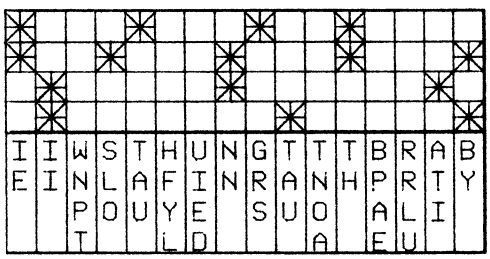
Basic documentation is provided for the normal user, and an assembler source listing is provided for the hacker types. Several pre-defined printer driver files are provided with **TWT**, including the "generic" one that I had been using up to now. I created my custom file by using the "generic" one as a starting point.

Summary

The Writer's Tool is finally complete. I really can't think of too many things that I would like to see added, other than an undelete block feature, a previous word cursor command, a global search-replace function and a file rename function. If you have some ideas let me know, and we can send a letter to OSS and let them know. If you missed my review of the complete package, let me know and I'll get you a copy.

PUZZLE TIME
Chuck Hall

A few months ago I created and placed a couple of puzzles in the newsletter. They were fairly well received so I thought I would try it again. I also bought an Atari 1020 Printer/Plotter at the show, so I have been playing around with it. I found that it was much easier (and more fun) to create the puzzles on it than to use a word processor. The first puzzle is one of my favorite types. You simply take the letters at the bottom of each column and place them in the squares above where the belong. When completed it will reveal a quotation, saying, or whatever. These can be a bit tought but don't throw in the "towel". (that might be a clue, but only if you attend meetings regular.)



PRINTER DRIVER'S FOR ATARIWRITER
Clyde Pritchard

When AtariWriter was released, many of us with non-Atari printers were disappointed that it didn't have a utility program to build custom printer drivers. A short time later, Atari released a set of printer drivers for AtariWriter through the Atari Program Exchange (APX). These were a set of pre-defined printer drivers for several of the "popular" dot-matrix printers on the market, but there were still some of us with other dot-matrix or letter quality printers who were still left without a printer driver.

For those of you who aren't sure what a printer driver is, it is a facility that allows a piece of software, i.e. a word processor to use the special features of any printer that a user may have, rather than just one (or a few) particular printer. The user defines the printer control codes via a utility program (or a built-in feature of the word processor) program. The utility program then creates a table of values that can be used by the word processing program when a document is printed. A printer driver may be loaded when the word processor is booted, or there may be a feature within the word processing program to load or change the printer driver. AtariWriter's printer driver is made into a DOS AUTORUN.SYS file and loaded at boot time.

Anyway, now there is a printer driver utility program available for AtariWriter. It is called the Printer Driver Construction Set (PDCS). It was written by John Hinkley and is available through ANTIC Magazine's APX Classics for $19.95. ANTIC APX Classics are available directly from ANTIC, and at some retail outlets.

PDCS (and most other APX Classics) comes on a single disk, with the program on one side and the documentation on the other side. The documentation side contains an autoboot BASIC program to display the documentation to the screen or printer. The documentation for **PDCS** is fairly well-written and complete. I was able to create a printer driver for my C.Itoh StarWriter F-10 daisywheel printer with very few problems.

The **PDCS** itself is an autoboot BASIC program. It calls for a 48K 800, 800XL or 130XE. I ran it on my 800, so I can't vouch for the XL/XE compatibility. **PDCS** lets you load an existing printer driver and make modifications to it, or create a new printer driver. The existing printer driver must be loaded from its' AUTORUN.SYS file. **PDCS** allows you to define a printer initialization command; define up to three fonts, i.e. 10 CPI, 12 CPI and 17 CPI; define the control codes for underlining text; define the control codes for expanded, enhanced or **boldface** print; define the control codes for $^{super-}$ and $_{sub-}$ scripts; and an end of page command. After you have defined everything you need, it will write the new printer driver to disk as an AUTORUN.SYS file.

The only section that I had trouble with was the super- and sub- script definitions. It worked the first time, but these definitions also tie into the double-column printing feature of AtariWriter; and that is where I had the problem. When I defined my super- and sub- scripts so that they did a less than one-half line feed, the double-column printing feature went crazy and wouldn't work. All I have to do is have one printer driver for use with super- and sub-scripts, and another for double-column printing, so this really isn't a problem. If I need both features in one document, I just have super- and sub- scripts that use a one-half line feed, rather than a one quarter line feed.

PDCS also comes with the following pre-defined printer drivers; Brother HR 25, Epson FX-80, MX-80, MX-80 GrafTrax, MX-80FT3, FX-80DBL, Gemini 10X, ProWriter, Seiko SHA(?), Transtar, Atari 1020, 1027, and a couple called "blank" and "text".

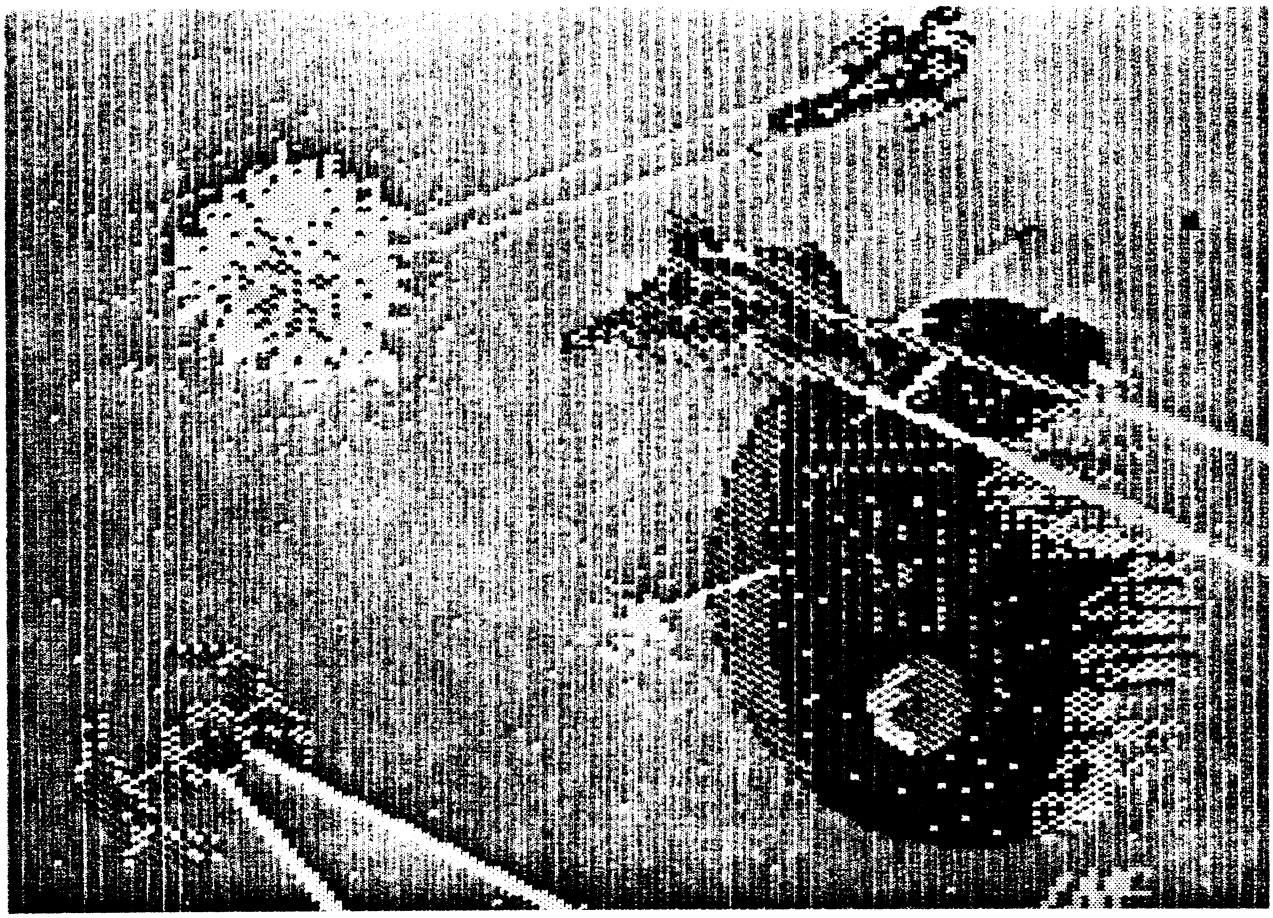
All in all, **PDCS** is a well-written program that does what is says it will do. I am glad to finally have a printer driver for my printer, and if I get another less than "popular" printer, I can build a printer driver for it too. If you use AtariWriter and don't already have a printer driver, you will love this program.

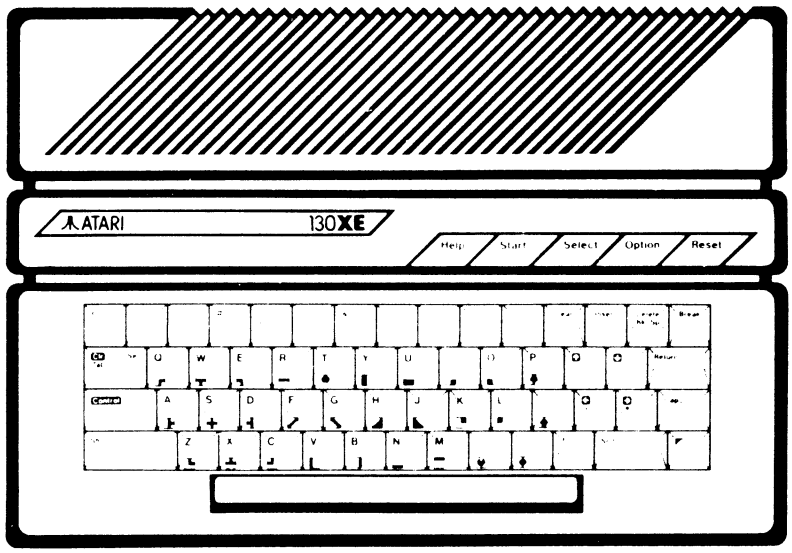
EDITOR'S NOTE
Clyde Pritchard

I would like acknowledge the fine work done by Tom Brown on the pictures you see in this issue.

Tom took several picture at the CEE show, and then made several copies for us to send to Neil Harris. He also screened the ones in the newsletter.

We all send a big thank you to Tom for all this contribution Thanks TOM.





Now here at CompuSOURCE

ATARI® 130XE™

PERSONAL COMPUTER

- More memory
- More power
- More flexibility

Dealers for

- Atari
- Commodore
- Columbia
- Sanyo
- Percom
- Indus
- Hayes
- MSD
- Amdek
- Zenith
- Juki
- Panasonic
- Gemini
- Legend
- & Mannesman-Tally

Plus furniture from Gusdorf & O'Sullivan

CompuSOURCE

(206) 254-5849

I-205 Commerce Center
at Mill Plain East Exit
Vancouver, Washington

Our commitment begins before the sale!

LETTER WIZARD
Jim Link

Letter Wizard from **Datasoft, Inc.**
List price: $69.95 (with **Spell Wizard**)

This program is more expensive than most Atari-based word processing programs currently available. One of the reasons is the spelling checker that comes with it. This is a valuable feature that works well (though it requires a lot of disk swapping if you only have one drive), but analyzing it would take a separate review. (Editor's Note: Spell Wizard was reviewed several months ago, and was judged to be quite usable. Also, you should be able to get **LW** without **SW**, which will cut the price to under $40.00.)

LW comes with most of the features people who use word processors have come to expect, plus some advanced features only expected on expensive, professional quality programs. After booting up you have more than 23,000 bytes free (with 48K RAM); that's enough for about eleven pages of text.

If you've used AtariWriter or some other word processor for the Atari, you'll pick up very quickly the page formatting commands and how to move your cursor around the screen.

Here are some features I found interesting: Most word processing programs provide headers and footers, allowing you to insert a chapter title or some other description along with a page number either at the top or bottom of each page. **LW** allows you to distinguish between right- and left-hand pages, so you could make the header on a left-hand page flush left and that on a right-hand page flush right, if you wish, or even have the book title on the left and chapter title on the right.

Other nice features are temporary margins, allowing you either to indent blocks of text or to go outside the established margins, and then go back to "normal" without having to specify again what that normal is. If you work with lists or tables of statistics you'll appreciate a command which indicates that a given number of lines cannot be broken in the middle. If they won't fit without breaking, the whole block will be moved to the next page. This makes it easier to read lists and tables. **LW** also has a database merge capability. The information to be inserted into your letter file must follow the order in your database, but it is possible to skip over unused database entries.

LW allows you to change the background color and intensity of the characters. You can also set the line length to either 40 or 38 characters.

LW has a very well-thought-out instruction manual with lots of useful examples, including screen representations which you can actually read! No beginner should have any trouble figuring out how to use this program, and advanced users will find it useful, too. The manual ends with a very useful index. I was always able to find out how to do something by checking the page location in the index. There are a great many programs on the market that come without this necessary feature.

Sounds pretty good so far, doesn't it? There are, unfortunately, a few drawbacks, too (aren't there always?). One that I consider significant, is that there is no on-screen print preview capability. The only way to see how your file will look in print is to print it. Period. If you work with word processors a lot, or intend to, this might not be a serious drawback. After all, you can get used to anything, if you work with it enough. But for the occasional user it is really helpful to check line endings and page breaks before committing your job to the line printer. For example, **LW** justifies its left and right margins by default and I always forget this. (Justified margins are like this newsletter.) While newsletters may use justified margins, you won't usually want to with letters you write. If there were a preview mode, I would be able to spot this and most other problems before starting to print.

Also, only four different printer types are completely supported by **LW**: Epson MX-80, Atari 825, Atari 1020/1025/1027, and NEC 8023. There is no "other" mode that would allow you to format for a different printer. My Star SG-10 worked with most **LW** commands when I used the Epson mode. Other printers may work similarly in this or other printer modes. It is only the special features such as italic, condensed, or expanded type that might not work here. Standard type should work with all printers, and it is possible to pass through printer commands to access all the features of your printer (refer to your printer manual), but that is usually a lot of trouble if you like to use different typestyles.

If I had no other word processing programs to compare **LW** with I would be happy with it. It is a good program, giving the user almost all the flexibility needed. But before you buy it be sure your printer will work to your satisfaction with it and be sure the lack of a preview mode isn't a serious drawback to you.

FIELD OF FIRE

Lloyd Suiter

Have you ever wondered what it must be like in command of a group of men in combat? Well if you have SSI has done it again, and the program is called Fields of Fire.

This is the second war simulation game that I have purchased from SSI and the quality of their gaming keeps getting better and better.

Fields of Fire is a game about infantry in combat. You are the commander of Easy Company in the 1st Infantry Division. It's you job to lead E Co. to victory in battle, not just any battles but the real, true to life battles that the real Easy company had to go through during World War II.

The game features 8 different scenarios, each with its own tactical situation and each taken from a battle encounter by the 1st Division in WWII. You may play each situation separately (or new, or average war gamers) or you may play a whole campaign (advanced only).

The quality of the work of SSI is a standard for other companies to follow. The detail of the manual, the knowledge of the programmers, and the playability of the game make it a hard program to beat for the war game lover.

Field of Fire works in phases. The first phase is a Observation phase. This phase is a pause phase that lets you look over the board and you plan your course of action. You have three additional phases, the Fire phase, the Movement phase, and the Assault phase.

You also have three different levels of difficulty. In the higher levels more enemy troops oppose your forces and if you are pinned down or suppressed it takes you longer to get back under control.

This game really incorporates small unit tactics. The use of cover and fire and movement are keys to being able to have some success in combat.

In addition to knowing small unit tactics you also need to know your men and how they might handle under the stress of battle. The men you have command over are in charge of rifle teams, machine gun crews, bazooka teams, mortar crews, tanks, anti-tank guns, engineers and a headquarters unit. Battle can and does make men act in very strange ways. So you need to know your men and SSI give each leader from LT. down to private a personality (remember your the company commander and you have a personality of your own). Some of the personalities you have to work with read like this- Sarge: "sarge" was there at Kasserine where some say, he personally walked up to a German Panzer and threw a grenade into its hatch. He seems the type born to be a soldier and his combat prowess is unequaled. (Not a bad guy to have on your side) Or PFC Bigham: again and again he has shown his determination if the face of sometimes unsurmountable odds, A brave leader who is an inspiration to the members of his rifle fire team. Then there are guys like Cpl. Parker: A quite guy who always seems to find hidden caches of booze left behind by the fleeting enemy. (Who do you want covering your back side?) All in all there are thirty two different leaders with different personalities that you have control over.

When you are at Omaha Beach or at the city of Aachen clearing out the Germans house by house, or at the Ardennes forest during the battle of the bulge, it pays to know your people and their capabilities.

Overall I find this game excellent but as with all games there are a few minor changes that could make the game a little better. Due to the memory allocations the playing field and players are all character graphics. It would be nice to see a war game use something other than character graphics. The second and largest complaint I have is that all the situations are either one or two hours long in playing time and then after all that work if you successfully complete your mission all you get is a little message at the bottom of the screen. Come on guys, give me a break. That was a lot of hard work. I want a little reward for all the stress I was under. What's wrong with a little music at the end, or the flag waving, or some kind of promotion, fireworks, a letter from my mom, anything to let me know I did well.

Anyway thanks for another great game. Next month I will be comparing Field of Fire with Gulfstrike by MMG. This game is just like the other side of the coin with you controlling not just one company but Battalions, Regiments, Brigades, and Divisions. That should keep me busy.

HITCHHIKER'S GUIDE
Steve Billings

Actually I was hoping to have completed this new Infocom adventure game before I reviewed it, but it is taking longer than I had expected to finish. Judging by the point total I am approaching the end, but there remain a couple of tough little puzzles that I haven't had time to try and fumble my way through yet.

As I am sure most adventure game followers know, this game was kind of a departure by Infocom from their usual adventure. The plot of the story is loosely based on the series of books written by Douglas Adams, starting with the book titled The Hitchhiker's Guide To The Galaxy. Douglas Adams also came up with the idea of creating an adventure from the stories. Fortunately Infocom jumped at the idea.

The books are a third person view of the life and times of a character named Arthur Dent, who is accidentally just about the last Earthperson to survive after the Earth is destroyed by big green men in spaceships intent on improving the galactic freeway system.

The stories are Science Farce (rather than fiction) and the humor is fresh if a tad bit too silly at times. Anyway, in the adventure game we drop down from the birds eye viewpoint of the book and become the personality of Arthur Dent. Arthur is easy to identify with, self conscious, unsophisticated, but sincere. Just like you and me. As Arthur you must try and deal with some strange environments, unsociable people and robots, and some mind boggling situations including changing into other characters.

Reading the books before hand is not essential, and may at times mislead you, but will somewhat prepare you for the strange sense of humor employed by the author. The style of humor transfers well from the book to the game.

This Infocom game contains the same state of the art parser (it knows a bunch of words) as previous Infocom adventures, but differs conceptually in some interesting ways. For one thing, previous games have involved a great deal of exploring. There were many rooms with puzzles to solve to get into even more rooms until a final destination and or goal is achieved. Hitchhiker on the other hand mainly takes place in a small spaceship that is quickly explored. From then on the puzzles tend to be finding out what the puzzles are and more of a mental exploration than gung-ho exploring. At times little progress is apparent even though you think you made a major breakthrough.

The game can be exasperating at times, it is possible to get stuck real bad and have no idea what you missed or what to do next. The game does lie to you! Just when you think you are stuck and it's time to try doing something desperate just to end the game and go to bed, the game says it was only kidding and that you really won't die after all.

HA HA...

The game is humorous without trying too hard. Douglas Adams, the author of the books, had control over the plot of the game so the same whimsical sense of humor carries over well and the game varies just enough from the books so that it does not seem like you are treading on used ground. The one thing that I did kind of miss was the opportunity to react with the other characters. Except for the short times that you become the other characters there is little to no chance to get to know them. I particularly wanted to react with Marvin the Paranoid Robot, he was one of my favorite characters in the book. He was always depressed because humans kept having him do menial tasks when he had a brain the size of a planet. Unfortunately, until the end of the adventure you can't get him to respond to your inquiries and do not get an opportunity to enjoy his truly depressing personality.

I don't think I would recommend this particular Infocom game to a beginner; the plot is a little too convoluted and difficult. It is an excellent change of pace for the more experienced adventurer tired of the standard fare. Hopefully Infocom will continue the Hitchhiker story, or find other equally interesting stories to fill in the gaps between their more traditional plots.

Well I confess that I did get the Infocom hint book. I hate to have to cheat to finish up a game, but there is supposed to be another Infocom game due out soon. So you see I have to get this one finished up, so that I can get started on it. I will try not to look at too many clues though. If you believe all that, you won't have much trouble with Hitchhiker.

BOUNTY BOB TRIVIA
Clyde Pritchard

Bounty Bob Strikes Back from **Big Five Software** by Bill Hogue and Curtis Mikolyski was reviewed in this newsletter a few months ago by Larry Brigman, and demo'ed at the meeting by myself. At the time I had only made it to level 6 or 7 of 25, but someone at the meeting mentioned that they were up to level 12. I make it to level 12 a lot now, but have made it through only once.

Anyway, the person who told me they were on level 12 also said that they had been playing with the **Secret Code** function on the option menu. They gave me a couple of the numbers that caused "neat" things to happen. Since then I have tried out a few of them myself, and here are the results. Some of the codes cause a visible change in the game, but the others just display a message.

5 - "You really didn't think that would do anything did you?"

6 - "Take back 1 Kadam to honor the Hebrew God whose cartridge this is!"

40 - High score board is filled with "Y YOHAN 100"

69 - "Geez! We know where your mind is!"

100 - "Barber Ned says that will be twenty dollars please!" (This also causes Bounty Bob to lose his hat.)

666 - "How dare you input that number into this game!"

782 - "Ha Ha!"

818 - "Try Harder."

6861 - "You actually tried that?"

Not very many out of 65,535 possible codes, is it? Well, that's where you come in. If you have some more of these figured out, let me know so we can keep a list of them.

Also, I would like to know which levels after level 8 will give a "secret clue" to skip levels. I really don't want to know what the clue is (unless I get desperate), but I was a little upset when I got though level 12 and then onto 14 and still didn't get a new clue. For those of you who haven't played, or haven't made it very far; you are given a clue to skip from level 1 to 4 after you make it through level 4. Then, after making it through level 8 you get a clue for skipping from level 5 to 8. So when I made it through level 12, I expected to get a new clue, but it didn't appear. I really didn't want to know how to get to level 12, but I would have taken anything.

Anyway, I hope this has been interesting to some of you, and hope to hear about your experiences with Bounty Bob.

P.A.C. really a popular exhibit!!

600XL MEMORY UPGRADE
Allan Coker

The upgrade kit supplied by FIRSTware of Oregon City, is a very well designed and easy to install kit. The artwork of the circuit board is first class. You really don't need instructions because printed on the board is all that you need to know. The instruction supplied are very clear and in areas where there might be questions sketches are supplied.

It took me 45 minutes to completely install this kit, that is including time for the soldering iron to heat up and some time to help my father on his Model "A". You only need to remove four chips and make three solder connections. I spent more time taking the computer apart and back together than installing the upgrade kit.

The only problem that I had was in getting the kit. I sent them the order on March 15, their invoice is marked March 25, and I finally received it May 25. This even exceeded their amount of time stated in their advertisments. They did not answer their phone and because of this I was going to start fraud charges against them. So this is the only "Buyer Beware" of this product.

The cost of the 48K kit is $49.95, 64K $79.95 plus $5.00 for shipping. With the price of the 800XL dropping down to the $80 range, this makes one think twice about the upgrade of a 600XL.
The address is: FIRSTware, P.O. Box 543, Oregon City, OR. 97045. Phone 503-656-5543

Puzzle Answers
Chuck Hall

Puzzle 1: Its fun to play in the sun but I would rather be playing ATARI.

Puzzle 2: computer; translator; basic; disk drive; Jackintosh; monitor; explorer; atascii; joystick.

MICRO CARE INC.

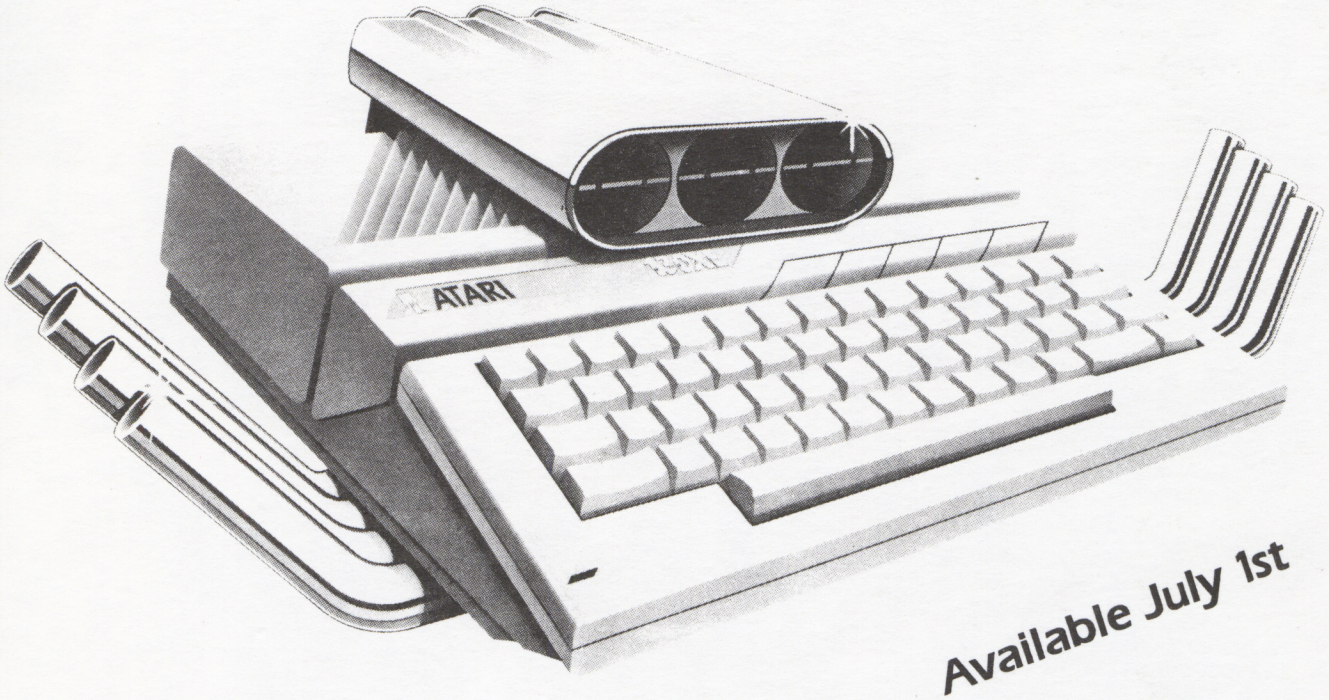
2203 North East Oregon St.
Portland, Oregon 97232
(503) 230 0770

- FULL SERVICE COMPANY
- SPECIALIZE IN IBM'S, APPLE'S, COMPATIBLES, AND OTHER MICROCOMPUTERS
- HARD AND FLOPPY DISK DRIVE REPAIRS
- SPECIAL RATES FOR SERVICE CONTRACTS

NOW FULLY AUTHORIZED ATARI SERVICE & SUPPORT

COMPLETE ATARI DIAGNOSTICS

BASIC XE™ Gives Your Atari 130XE™ All The Performance It Should Have Had In The First Place



Available July 1st

In the home computer races, the Atari 130XE stands out as a price leader. But using underpowered Atari BASIC™ on this otherwise fine machine is like racing in the Indy 500 with half your cylinders missing.

So don't get left at the starting line with only half an "engine." Change to the performance leader **now!** Buy BASIC XE from OSS, the **only** programming language designed especially for the Atari 130XE.

Just look at what you get for one low sticker price:

BEST MILEAGE: With over 60,000 **more** bytes for your programs, BASIC XE lets you use all the memory you paid for.*

MORE HORSEPOWER: Run Atari BASIC programs 2 to 6 times faster.* Even with its incredible power, BASIC XE is compatible with Atari BASIC.

BETTER HANDLING: With auto line numbering, renumbering, program cross referencing, English error messages, and more.

CLASSIC DESIGN: Show off the sleek **structured** style of your own programs when you use BASIC XE statements like PROCEDURE, IF...ELSE, and WHILE...ENDWHILE.

FREE ACCESSORIES: Get over $100 worth of Atari BASIC options FREE when you buy BASIC XE: complete Player/Missile Graphics support, string arrays, DOS access, SORT commands, readable listings...over 50 extras at no additional charge.

- If you're ready to step up to real performance...YOU need BASIC XE now!
- If you haven't written your first BASIC program...YOU need BASIC XE now!
- If you're already a real pro in BASIC...YOU need BASIC XE now!
- **BASIC XE may well be the best buy any Atari owner ever made.**

OSS™

*Want to know more? Call or write for free brochure or ask your local dealer.

Atari 130XE™ and Atari BASIC™ are U.S. registered trademarks of Atari Corporation.

Optimized Systems Software, Inc.
1221B Kentwood Avenue, San Jose, California 95129 (408) 446-3099

PAC CALENDAR OF EVENTS

JUNE

TUE 06/18 - Beginner SIG Meeting
WED 06/19 - Board Meeting
WED 06/19 - Business SIG Meeting
FRI 06/21 - SWAG Meeting
TUE 06/25 - PACE Meeting
WED 06/26 - Assembler SIG Meeting
THU 06/27 - ST SIG Meeting

JULY

MON 07/01 - PAC General Meeting
TUE 07/09 - Beginner SIG Meeting
WED 07/10 - Assembler SIG Meeting
THU 07/11 - ST SIG Meeting
FRI 07/12 - Articles due for N/L
SAT 07/13 - Newsletter Production
MON 07/15 - Final Layout
TUE 07/16 - Beginner SIG Meeting
WED 07/17 - Newsletter to Printer
FRI 07/19 - SWAG Meeting
TUE 07/23 - Mail Newsletter
WED 07/24 - Board Meeting
WED 07/24 - Business SIG Meeting
THU 07/25 - ST SIG Meeting
TUE 07/30 - PACE SIG Meeting

AUG

MON 08/05 - PAC General Meeting
THU 08/08 - Newsletter SIG Meeting
FRI 08/09 - Articles due for N/L

PORTLAND ATARI CLUB
P.O. BOX 1692
BEAVERTON, OR 97005

BULK RATE
U.S. POSTAGE PAID
BEAVERTON, OREGON
PERMIT NO. 242