

SLCC JOURNAL

San Leandro Computer Club

July, 1990



Can a Frog Sell STs to Yankees?

This and Other Questions - not Answered Inside!

Micro World

If we measure a computer's success by the efficiency and abundance of its software then we must conclude that the Atari ST is a success. The continuing development of serious Atari ST/TT products such as Outline, Script, and Sketch makes the ST a viable graphic arts tool.

Microworld Features Innovative Multimedia Advancements
1514 University Ave., Berkeley

Line
Line
Line

Games, 25 Discount Desktop Publishing, Accounting, Animation, and Music.
It's no wonder that the leader in Atari technology is Microworld.

We at Microworld would like to thank you for your continuing support of the Atari line. We have many new software titles at 25-30% discount for you and quite a few older titles at as much as 75% off. Come in and see us, you won't be disappointed in the ST selection at Microworld the best ST center in the USA!

The Microworld Desktop Publishing Special

Mega 4 by itself for only \$1400!

Mega 4 and SM124 Monitor

30 Meg Hard Drive

Calamus, Pagestream, FleetStreet,
or Publisher ST, Your Choice

SLM804 Laser Printer

\$2895 wSoftware/\$2795 without

A complete typesetting center for
well under \$3000!

1514 University Ave., Berkeley

845-2000

Write Jack!

We all still need Atari to advertise! The ST/STE STACY and TT are great machines and terrific values when compared to the competition, if we can get people to compare. You can tell Atari to hire me, Bill Yerger, as marketing director, and I'll get the job done. In the meanwhile, check out these prices: **DO IT NOW!**

520 STFM only	\$349
with mono monitor	500
with color monitor	700
1040 STE IN STOCK!	595
4 meg upgrade	600
2.5 meg upgrade	400
JRI 4096/4meg board	125
Double sided drive	169
20 meg hard disk	440
30 meg hard disk	490
40 meg hard disk	540
50 meg hard disk	595
80 meg hard disk	795
10 Meg Floppy Drive	500
Kraft Track Ball (Great!)	89
Cordless Mouse	115
2400 Baud Modem	125
New Calamus Fonts (3)	23
New Pagestream Fonts(3)	30

Permission to reprint uncopyrighted articles in any non-commercial application is permitted without written authorization, provided proper credit is given to the SLCC and the author, or we'll come looking for you. Opinions expressed are those of the authors and editorial staff and not necessarily those of the SLCC, its officers or their family members and neighbors; and are certainly not shared by the users of other computers (they do have our sympathy, though, and a wish for speedy enlightenment).

Editor: DeWayne Stuart (887-3028)
(And Loving Every Minute Of It!)

Lackey: Jim Hood
Gofer and General Pain:
Keith Sammons



Many thanks to those who take the time and effort to contribute to this publication! If we haven't used your submittals in the past - KEEP TRYING. The thrill of eventual publication is worth the agony of a few rejections!

San Leandro Computer Club

P.O. Box 1506

San Leandro, CA 94577-0374

An independent, non-profit organization of Atari microcomputer users. Membership provides access to the club print and magnetic libraries, subscription to the **Journal** and participation in club activities. See membership application elsewhere in this issue for details on an opportunity you can't pass up.

Club Officers:

President	Keith Sammons	887-2008
Vice-President	Bob Woolley	865-1672
Treasurer	Jim Hood	534-2197
Secretary	Jim Moran	523-9265

Program Chairman:

Gen. & ST	Keith Sammons	887-2008
-----------	---------------	----------

Software Chairmen:

8-Bit	Bob Scholar	232-5330
16-Bit	Ken Hinton	339-8055

Print Librarian:

8 & 16-Bit	Einar Andrade	484-4484
------------	---------------	----------

Technical Advisers:

Mach. Lang.	Frank Daniel	471-8133
-------------	--------------	----------

Special Interest Groups:

Beginners ST	Jim Moran	523-9265
Telecomm. SIG	DeWayne Stuart	887-3028
Music SIG	Terry Abbot	562-4526
Business SIG	Ralf Herman (408)	257-7760
8-Bit Beginners	Glenn Fowler	530-7128

Disk Librarians:

8-Bit	Glenn Fowler	530-7128
16-Bit	Ken Hinton	339-8055

C O N T E N T S

July • 1990

FEATURES

Page

CONVERTING ANALOG TO DIGITAL4
Bob Woolley Works With His Game Machine

SOME NOTES FROM SIERRA ON-LINE6
Darryl May Reads His Mail

OUTLINE ART REVIEWED.....10
Philip Hanze Loves It

PAGESTREAM 2.0 — NOT YET12
Jim Hood Calls The Source

LASER OR LINO — DECIDE FOR YOURSELF.....12
Jim Hood Spares No Expense

DEPARTMENTS

MORAN'S MINUTE MINUTES.....9
Jim Hood ???

CALENDAR.....14
DeWayne Stuart Dreams Of Early Deadlines

APPLICATION14
If You've Got The Money, We've Got The Club

MESSAGE FROM THE PRESIDENT.....BACKCOVER
Keith Sammons

SEE YOU AT THE MAIN MEETING

July 3

Advertising Rates: Full page for 3 Issues \$100. Single issue prices are Full page \$50, Half page \$30, Quarter Page \$18, and Business Card size \$5.

OFFICIAL SLCC BBS

8/16--Key System (415) 352-5528
16--STU's Place (415) 782-4402,
(415) 887-2158,
(415) 785-5367

Pounding on the 8-Bits

Buy your own / Share what you know / 8 bits are plenty

by Bob Woolley

Hi! Everybody -- take a look in your Journal from last month, June 1990. Look in the 8-bit Software Chairman slot. See a name? Does this mean we don't have a Software Chairman? Nobody is spending their time getting a Disk - of - the - Month together? Nope. Not true. What it means is that some dummy (me) didn't put Bob Scholar in as DOM chairman, since Bob is certainly doing the job! Now, look in THIS month's Journal. Seeeee?? (you know, I write this before the Journal gets printed.... please, Lord, have it be there.....).

Hack of the Month

I'm sure you all remember the October, 1989 Journal. The one with the nifty A/D converter for your 8-bit? Well, I did another one this month. This one is a little nicer since it fits under the hood and is a LOT faster. Like 10K samples/sec. Or more (max. conversion time is 40us - 25K/sec!). I set it up as a ratiometric input, but have included an absolute version in the schematic for those who may want to measure voltage directly. It is always available for use thru the joystick ports and only requires the use of one POT input - the 'stick lines are not affected. Unlike the POT lines, which are very difficult to interface into the Real World, this A/D input works with a wide range of transducers. Try it, you'll like it!

You use this guy by writing to any \$D6xx address, which starts a conversion, and, after 40 uscc, you can read the result in \$D6xx. Simple, isn't it? No PORTA lines to set up. No waiting! I used one of the POT lines on the joystick connectors to provide a path to the outside world - just be sure to remove the resistors AND capacitors in the circuit since the converter does not like capacitors on its input. Just remove the input resistors to disconnect the POKEY chip from whichever pin you wish to use and wire it into the new board. You could, of course, use a separate line out of your case. Whatever.

I mounted the circuit on a board that plugs into the CPU socket in a 1200XL, which makes a nice, neat installation, but is not required. With this setup, you only need a couple of wires into the main board, the -\$D6xx line and the + and - analog inputs (you can use just the + input if you connect the - input to ground as I show in the schematic, otherwise you use them both). The mod will work on any Atari 8-bit in case you have an old 400 laying around, but those systems (400s and 800s) do not

have easy access to the necessary lines on the CPU board - try the OS ROM board, instead.

The real advantage of this type of A/D over the Atari POT inputs is its ability to read outputs from a wide variety of sources. The application I developed this for was involved with reading the output of a phototransistor that read off the end of the scale on the POT lines. With the ADC0841, I can just use the proper value of load resistor to adjust my full scale readings - something not possible using POT inputs. The 841 also produces a very accurate and linear digital output compared to the Atari.

The two main parts, the National ADC0841 and LM385 are somewhat hard to find in the normal hobbyist catalogs. I got mine from Digi-Key, a mail-order company that advertises in Radio-Electronics magazine. They seem to be a very prompt and efficient source, try them!

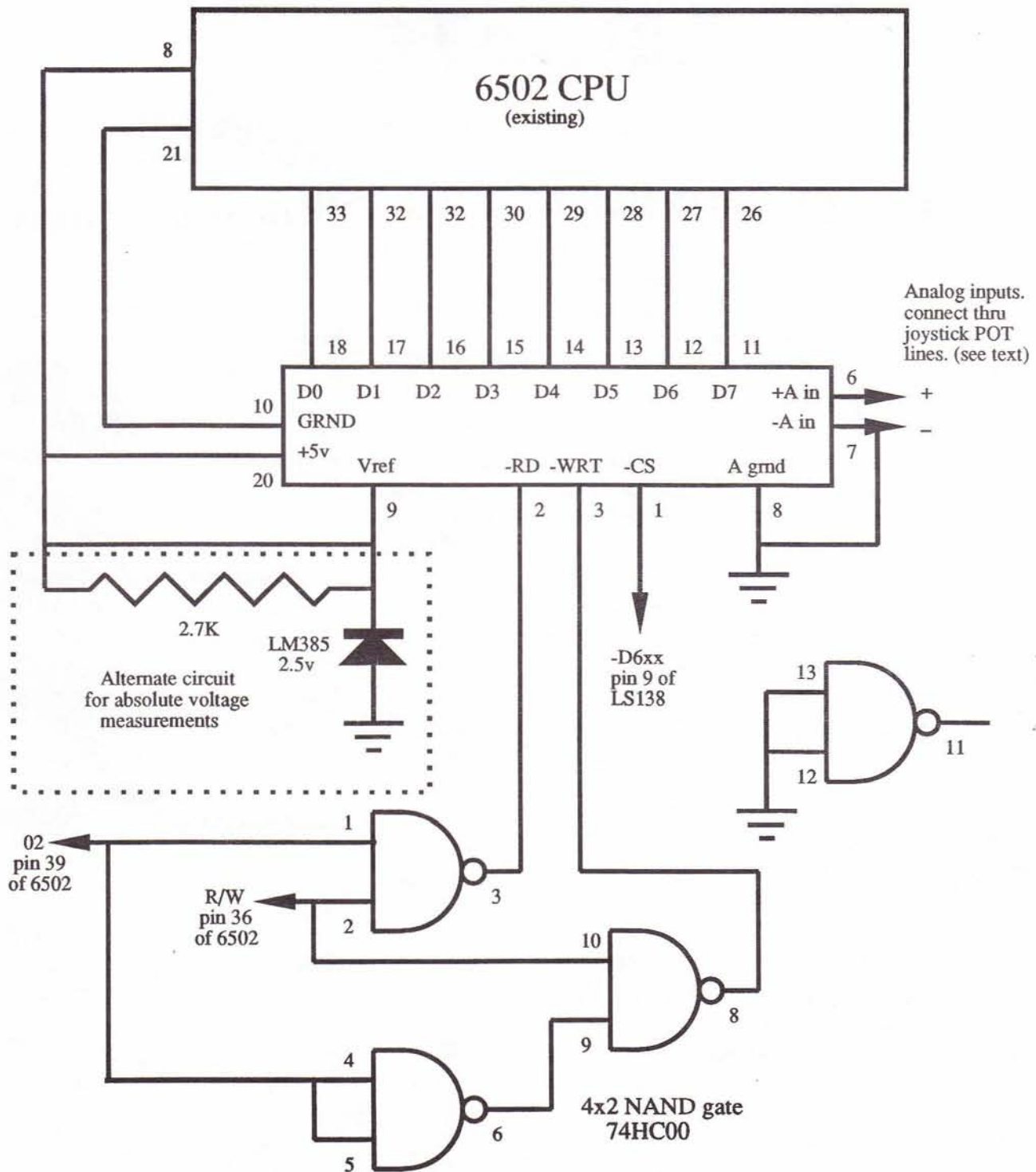
Play It Again?

Got another video fix for the old 1200XL... Zowie... What is that, number 3? 4? I promise - this one works pretty good. And, it's not too hard.

REMOVE	ADD
C115	wire
L15	wire
R184	wire
C118	wire
R179	47 ohm
C60	-
CR20	-
R187	-
R45	-
Q7	-
CR19	-
R185	-
R183	-
R182	-
Q18	-

Add a wire from the left pad of R45 (which you removed) to the left side of CR19 (also removed). Add a second wire from the right side of R179 to the CHROMA pin of the DIN connector (the pin that is empty).

That's it! Purrfect video!



Analog to Digital Converter
by Bob Woolley
SLCC Journal July 1990

UPDATE

by Darryl May

July 90

[1,455, 679, 410, 5]

1,455 is the number of phone books I delivered during the last couple weeks.

679 is the number of dollars I paid for an 800 in 1982.

410 is the number of dollars I paid for a TRAK disk drive back in 1983.

5 was the lowest value ATARI stock reached during the last month. I could have saved my money and bought over 200 shares of Atari stock now, darn.

LOTS OF NEWS FROM SIERRA THIS MONTH

If you are stuck in one of their games like "King's Quest" you can call 1 - 9 0 0 - 3 7 0 - 5 1 1 3 (1-900-370-KLUE outside California) for hints; 75 cents for the first minute and 50 cents for every additional minute.

Tours of Sierra facilities are available daily at 2:30pm. If you planning to

tour, call Liz Jacobs, Customer Service Manager at (209) 683-8989 to insure a tour. Sierra is located 12 miles south of the Yosemite National Park entrance on Highway 41 in Oakhurst.

SIERRA CONTESTS:

Can you name all of the products that Sierra produced between 1980 and April 1st, 1990? Type or print an alphabetized list of product titles, (games that start with "The" should be placed in with the T's), and include your address and telephone number. You and three other family members could spend a weekend in Coarsegold, have dinner with Ken and Roberta, and receive an "armload" of prizes to take home. Send your list to: Sierra Family Contest, Sierra On-Line; Box 1103; Oakhurst, CA 93644. Deadline October 1st, 1990.

Do you want to be incorporated into "King's Quest V"? If so, construct a costume that would fit into the land of Davenry or of the surrounding countries, put it on, take a color picture, and send the resulting

photograph to: *King's Quest V* Contest; Sierra On-Line; Box 1103; Oakhurst, CA 93644. Deadline August 1st, 1990.

Here is a excerpt of the history of Sierra On-Line, Inc. by John Williams as told to Marti McKenna from the Sierra News Magazine; Spring 1990 issue.

OUR FIRST LAWSUIT

Somewhere around 1982, the company hit its first rough spot. We were like a five-year-old on our first day of school. It seemed that the fun was over ... now we had a lot to learn.

Around that time, we met our first bully. It was the big kid on the block, Atari. We made the mistake of selling a game that looked a whole lot like one of theirs (*ours was a truly original and fun game called Gobbler, theirs a virtually unknown game called "Pac" something or other*).

We were young and sort of foolish, and we thought we could take on this big company. Unfortunately, Atari had these lawyers (*about ten of them*) and we didn't. Atari sued us for trademark infringement,

counterfeiting, copyright violation and everything else they could think of.

Along with the "preliminary injunction" that the Atari lawyers sought, they also had gotten a judge to send Federal Marshals up to Sierra to confiscate our "counterfeiting machines" (*which meant any computer we had on the premises*). Not knowing we could go to jail for it, we hid the computers in the trunks of our cars. The loss of revenue associated with having our computer equipment confiscated was meant to cut off all our revenue. However, our heavy legal fees might well have done the job themselves.

When it went to court, it was an interesting situation. We were young, upstart hackers facing one of the finest pinstriped legal teams in the nation. When I look back at the time, I realize that we didn't eventually "win" the Atari case, we (*computer hackers*) were just such a new phenomenon that we literally confused both our opposing counsel and the courts into submission.

Rather than go into the case and the various arguments, this piece of the trial proceedings, where an Atari Lawyer tries to get Ken to

produce the initial design documents on our game, just about says it all...

ATARI LAWYER (to Ken): Isn't it a fact that typically the programmer who designs these games at least produces a flow chart and then writes out the source code manually prior to punching it in?

KEN: No.

ATARI LAWYER (trying to be sarcastic): You mean they simply sit down at the keyboard and write the program???

KEN: My programmers are too lazy to make any sort of a flow chart. In most cases, they don't even know where they're going when they start a program. They just try to get a routine working then put in a background, and from that they usually move toward some game.

Exchanges like this, along with the fact that our programmers couldn't even find their source code or other initial programming code (*they didn't even label their disks and there was no such thing as a "hard disk" then*), combined into a favorable verdict. The judge declared that there wasn't enough evidence around for Atari to make any sort of claim to anything. I think he was hope-

lessly confused by it all...

If Atari had won this legal battle, the whole company would likely have been lost to them, and the company known as Sierra wouldn't exist today. Instead, the action makes a great story, and resulted in one the biggest collector's items in the lore of the company — it's a baseball-style 3/4 length sleeved tee-shirt with the simple inscription "On-Line: 1, Atari: 0".

Eventually, of course, Ken voluntarily overturned the Atari vs. On-Line Systems verdict, acknowledging that Atari did in fact have an "intellectual copyright" to the design of this computer game. It was the first legal decision over whether one computer company could "own" a computer design, (*at least if they could own a screen that had a little guy in a maze munching dots with things chasing him*), and it could have served as a legal precedent in the numerous "look and feel" lawsuits currently running around the industry.

Instead, it is virtually ignored by the legal community — which is probably just as well.

ATY Computer

(415) 482-3775

3727 13th Ave., Oakland CA 94610

(East of HWY580, between E38th St. and Excelsior Ave.)

We are the ST Specialist, and are proud to provide the friendliest services and honest sales at the lowest prices!

SyQuest 44MB removable hard drive sale

New Product

We have been building and selling the SyQuest 44MB removable drive for three months, and we have received many good responses from the users. The SyQuest drive is very versatile and fast, you can use it as a hard drive or to backup one.

Anyone who wants to get a hard drive or a tape backup should consider buying the SyQuest drive.

For a limited time only, we are making the SyQuest drive more affordable. The price for complete unit is reduced to \$829, and cartridges are \$90 each. You can also build it yourselves and save even more. We truly believe that we, ATY Computer, have done something good for the Atari users, and we ask for your continuous support. Thank You

hardware :

3-bottons trackball, MouseStick, Ultra high res. mouse, Best mouse, Cordless mouse, Supercharger 1 MB, 1024 x 768 high res color board for Mega's, PC-Speed Mega Bridge for installing PC-Speed in Mega's without soldering, multi-sync switch box

software :

Blue Angels, Cartoon Capers, Iron Lord, The Toyottes, Time Soldier, Treasure Trap, Viking Child, Skidz, Sim City, Sir Fred, Klax, Cyberball, Stalker, Hammerfist, Dragon Lair, Dragon Breath, Image Cat, MVG, Sherman M4, Harmony, Gemini Wing, Jumping Jackson, Ivanhoe, Gold of The Americas, Tracker ST, KCS V3.0, Gravity, Heavy Metal, Highway Patrols, Kid Gloves, K Seka 68000 Assembler, Cloud Kingdom, Cleanup by ICD, FM Melody Maker, Diamond Back II

Hours: M-F 3:30-7p.m., Sat, Sun 12-5p.m.

Authorized Atari Business Computer Center

MORAN'S MINUTES

General Meeting Minutes
5, 1990

Moran is holed up somewhere,
so I'm doing his minutes.

The meeting was called to order
by President Sammons with all Of-
ficers present.

I spent an enormous effort
getting ballots prepared for our

June election, but since all officers were
running unopposed, the members
decided to reelect them by voice
vote.

Officers were and are:

President	—	Sammons
V. Pres.	—	Woolley
Treasurer	—	Hood
Secretary	—	Moran.

Keith Sammons convinced
almost everyone except Moran that
the club should buy a Moniterm
monitor. So we did.

Regretfully Submitted -
Jim Hood



Is he in there? Resident of Clarkston, MI. claims to have spotted Jim Moran.

OUTLINE ART

[Bill Yerger, of MicroWorld, loaned me a copy of *Outline Art* around the middle of May so that I could review it. It is designed for use with *Calamus* and has a very similar interface. I still had not learned to use it by the end of May*, but since it looked so good, I decided to buy it. That also took the pressure off me as far as writing a review.

I tried to talk Jim Ahrens into reviewing it, since he uses and likes both it and *Calamus*, but didn't have any luck, so when I read the following review, I realized that it filled the bill ...Jim Hood]

CALAMUS OUTLINE ART

edited from a review
by Philip Hanze
in *Keeping PACE*

Pittsburgh Atari Computer En-
thusiasts

The long wait is over!*Calamus Outline* is NOW available!

I have had *Calamus Outline* for about two weeks and LOVE it! It is GREAT! First, let me describe exactly what it is. *Calamus Outline* is a vector drawing program. You say, "A what?!?" Alright, let me explain

*My difficulties learning the *Calamus/Outline Art* interface should not be taken as a bad reflection on those programs.

After all, I am the guy who spent a whole day thinking he had crapped out the File Allocation Table on his hard disk only to eventually realize that he had not connected the hard drive to the computer.

And who just lost half of this month's *Journal* in a four bomb save and is therefore now retyping this article.

And who finished retyping another two page article and then lost IT! I doubt you'll see that one here this month.

a few things. A vector is an object that can be described mathematically by a specific equation whereas a raster graphic (ex. *D.E.G.A.S.* pictures) is represented pixel by pixel. A pixel is a dot that makes up raster graphics. A raster graphic becomes blocky when it is expanded, but a vector graphic looks just as clean as it did when it was its original size. A vector graphic is resolution independent, while a raster graphic is resolution dependent.

Calamus Outline is set to compete against Adobe *Illustrator* and Aldus *Freehand*. It can sure stand its ground. There are still some things that can't be done in *Outline* that can be done in the other two, but there are many things that *Outline* can do that the other two can't.

Outline allows one to use all the fonts that are used with *Calamus*. One can also go in and change text to a control path. "MELT" is an example of what can be done. Also by doing this, one can put graduated fills inside characters.

The program also allows text to be manipulated in many, many other ways. One can rotate text. Put text in a circle.

MELT

Put text on a control path. Italicize text to any angle. Slant text to any angle. Have the text fill go from a certain percentage to a certain percentage. There are many, many more things that can be done with text.

There is also a function called grid. By function, many were



special a control using this one can do things that never before possible. It allows one to lay out a path for other objects to follow. Very powerful tool of this awesome program.

Probably one of the most powerful parts of this program is the calculator. The calculator can do a wide variety of things

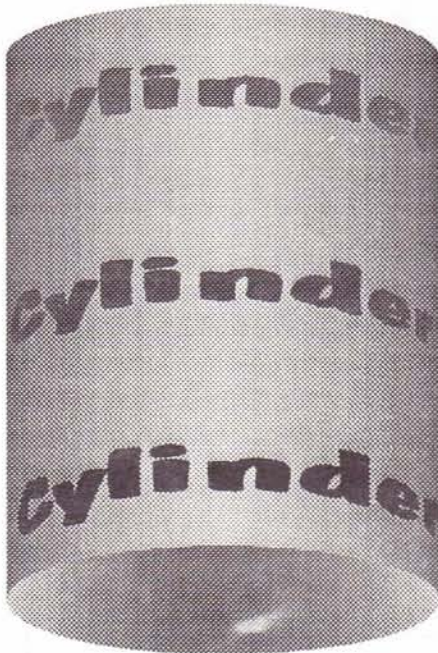
from reducing to enlarging to rotating to putting things in the shape of a cone or a cylinder. It also has room for one to add their own formulas.

Objects can be stacked on top of each other. Each object is on a different level. There are functions to take an object to the back or to the

front. Through the use of these layered levels, I was able to do a radial graduated fill, something that cannot be directly done by the program. [I wasn't able to do it, so you'll have to read the original article to see how it looks...JH] The

program allows fill in all directions, except in a radial direction. I know; What is a radial fill? It is where a fill goes from one percentage to another percentage out in a circular motion.

Please notice all of the examples accompanying this article. They were all generated



using *Calamus Outline*. These are only the tip of the iceberg. Many more things are possible. The main limit in this program is your imagination and ingenuity.

FORELL

The manual is done extremely well. ISD really has done a great job on this manual. They explain each

Symphony No.9 (The Choral Symphony)
Ludwig von Beethoven

The New York Philharmonic Orchestra

function and give examples of many of the functions. They even included a section full of tutorials. Unfortunately though, the tutorials really could have used some more instructions on how they did something. They have a few problems in the tutorials too. For one, they ask you to make a 750mm line. The program will not allow you to do that. What is meant is 75mm. So, when you go through the tutorial, many of the sizes are off by a factor of 10. But this is only a minor complaint for such a great program. They also include on the disk many examples of what can be done.

Another complaint is there is no way to print your graphic from inside the program.¹ It would sure be nice to print it and preview how it looks on paper.

One of the few features it lacks is the ability to import a raster graphic and place it as a template to

draw a vector graphic like it. If they were to add this feature, I would hope they would also add an autotrace function.

This program is extremely powerful! To do a review that this program deserves would take too much room for this publication and too much time from this author. To sum up what I believe about this program, I have two words. BUY IT!!!

PLACING TEXT ALONG A PRE-DEFINED CONTROL PATH

¹[Printing is done either through *Calamus* or a PostScript printer. If a PostScript printer or *UltraScript* is used, a file can be saved to disk, converted to PostScript format, then printed; or it can be converted to Encapsulated PostScript format, imported into *PageStream* and printed. That is what we did here. ...Jim Hood]

9 TWO PAGE FILL

by Jim Hood

PageStream 2.0 Isn't Shipping Yet

There were reports that Soft-Logik Publishing Corp. had released *PageStream, Version 2.0*.

I called them on June 26 to see if these reports were true. They weren't.

In his June *Rumor City* column in *ST Informer*, Nevin Shalit said that 2.0 will first be released for the Amiga then the ST.

Keeping PACE reprinted an *ST-Report* article that said *Page-*

Stream, Version 2.0 is fully integrated with Agfa Compu-graphic's hinted outline fonts, as well as Adobe Type 1, unhinted, IBM format fonts.

It displays these fonts on the screen as well printing them to the usual mix of printers.

Version 2.0 also draws polygons with Bezier cubic curves as well as the usual straight lines.

Tags can be loaded and saved separate from a document.

Documents can be saved in a template format for use with future material of a similar design.

PageStream 2.0 will allow beginning and ending angles of arcs to be specified to 1/100 de-

gree increments.

Font sizes can be set in 1/100 point increments and objects can be sized and positioned to the same 1/100 point.

Maximum page size has been increased and objects can be positioned to allow bleeding off the page. Your printer may have something to say about that, however.

Current *PageStream* owners can upgrade to 2.0 for \$75 when the program is released. It will list for \$299.95.

Soft-Logik also announced that they will be distributing the Image Club series of clip art and PostScript fonts for the Amiga and Atari markets in North America and Australia.

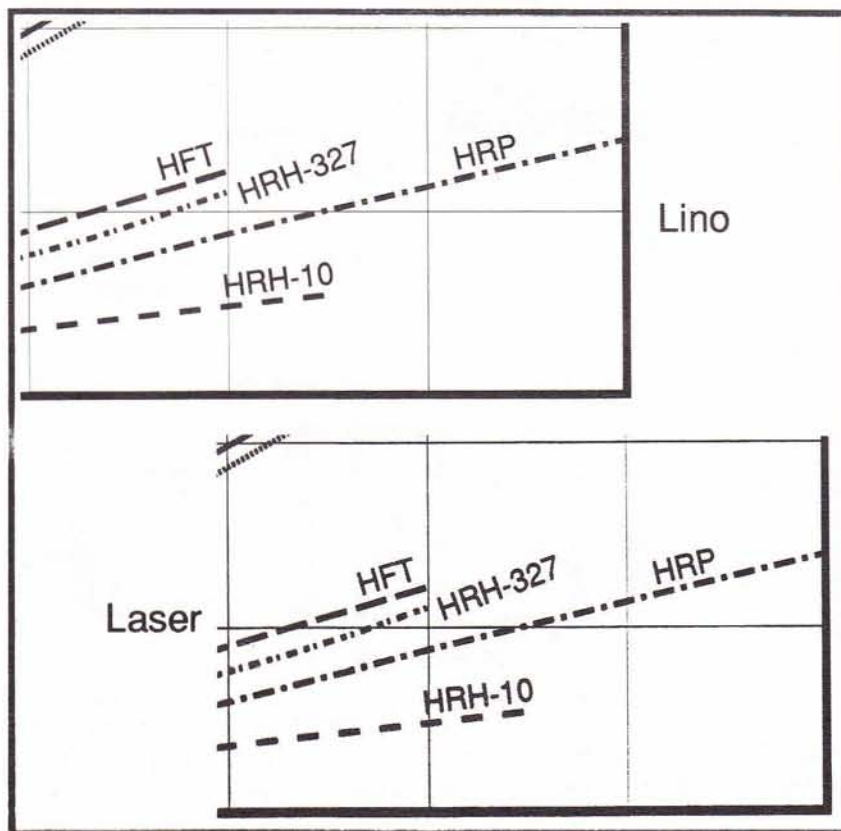
NOW THAT YOU HAVE A LASER PRINTER...

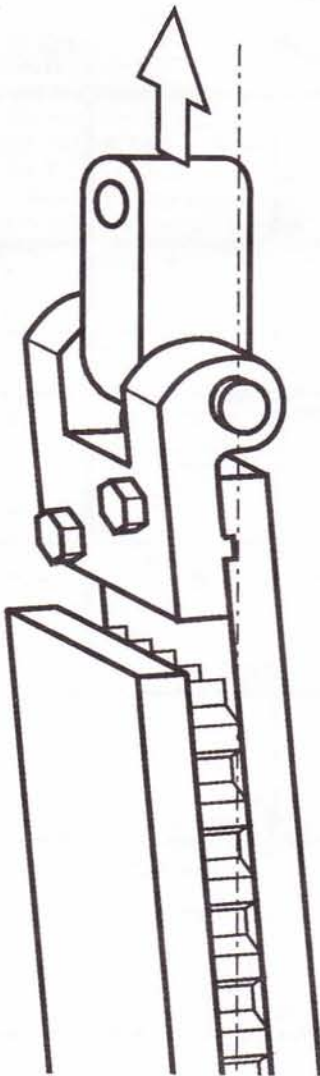
I have recently been getting some of my work printed on a Linotronic photo laser at 1270 dots per inch. These sample illustrations will give you an idea of whether you might want to try it.

The improvement with Lino output should be more noticeable when printing on glossy paper than it will be with the uncoated paper that we use for the newsletter.

Linotronic printers use either photo paper or film; so film negatives can be made directly, which saves a step in the printing process.

Prices vary with quantity and complexity, but figure on paying \$5 to \$10 per sheet.

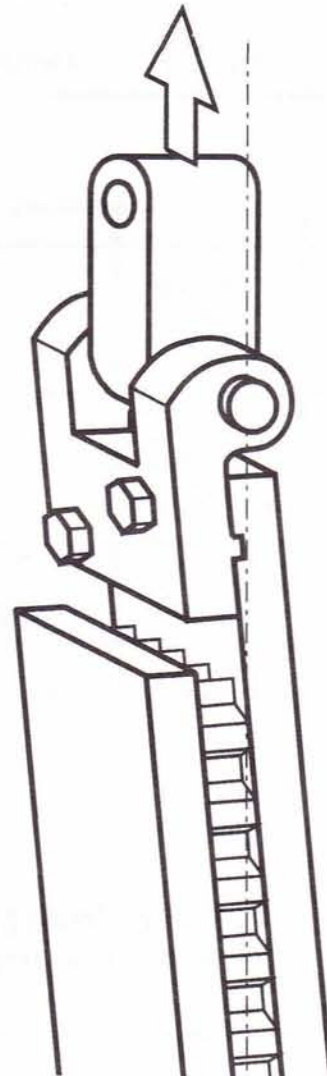




On-time delivery has steadily improved since early 1989. A new computer tracking system implemented at that time provided the detailed information needed to track work in process and deliveries for each plant. This allowed managers to identify the bottlenecks in the manufacturing processes. With input from the employees in the specific work stations, many problems have been analyzed and solved and we are currently shipping at over a 90% on-time rate.



300 dpi Laser print



On-time delivery has steadily improved since early 1989. A new computer tracking system implemented at that time provided the detailed information needed to track work in process and deliveries for each plant. This allowed managers to identify the bottlenecks in the manufacturing processes. With input from the employees in the specific work stations, many problems have been analyzed and solved and we are currently shipping at over a 90% on-time rate.



1270 dpi Linotronic print

July 1990

SLCC CALENDAR OF EVENTS

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3 Main Meeting 8:00 P.M. San Leandro Library	4	5	6	7
8	9 ST Meeting 8:00 P.M. San Leandro Library	10	11	12	13	14
15	16 Midi Sig 8 PM	17	18 Journal Deadline	19	20	21
22	23	24	25 ST Beginner's Sig 7:30 P.M.	26	27	28
29	30	31				

Special Interest Group (SIG) leaders and their phone numbers are in the Table of Contents.

Membership Application for the San Leandro Computer Club

Yes! I would like to receive 12 months of the SLCC JOURNAL along with other membership benefits, including software discounts, training, technical assistance and much, much more - all for the low, low price of \$20.00 (or \$40.00 if I am outside the US or Canada).

Name: _____ Date: _____

Address: _____
(Street) (City) (State) (ZIP)

Home Phone: _____ (Optional) **Membership No.**

Computer(s) _____

Software Interests: ☐ Home Finance ☐ Desktop Publishing ☐ Games ☐ Scientific
☐ Business ☐ Word Processing ☐ Educational ☐ Music ☐ Art

Some interesting ways I use my computer: (Club members are interested in new usages for home, work and play) _____

We Specialize in Computers!

Don't go to a plumber for brain surgery, and don't go to an electronics supermarket for computers."



ATARI
COMPUTER
Power Without the Price™

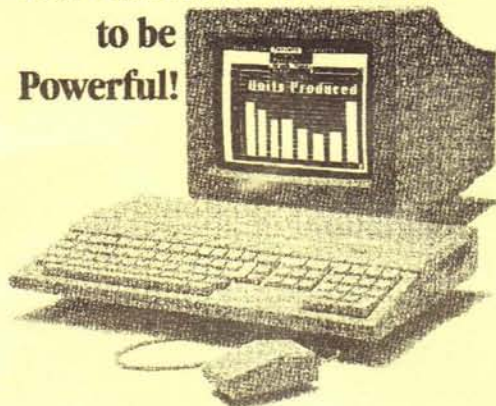
PORTFOLIO

"Palmtop" DOS compatible

\$399

IN STOCK!

**You Don't Have to be Rich
to be
Powerful!**



MEGA ST 2 CPU \$1199.95 MEGA ST 4 CPU \$1449.95
MEGA ST 2 MONOCHROME .. \$1349.95 MEGA ST 2 COLOR \$1549.95
MEGA ST 4 MONOCHROME .. \$1599.95 MEGA ST 4 COLOR \$2029.95
520fm Monochrome \$499.95 520 STfm CPU \$349.95 520 STfm Color 699.95

MEGA ST2 CPU WITH THIS COUPON **\$1100.00**

SM124 MONOCHROME MONITOR \$159.95
SC1224 COLOR MONITOR \$359.95

ONE YEAR WARRANTY INCLUDED AT NO EXTRA COST!!!

WHILE QUANTITIES LAST

**All Atari Software
30% off for club members!!**
» With this ad «
Expires 7-31-1990

FEATURING Top Rated Service

- Friendly, Knowledgeable Staff
- Full Time Tech Support
- In-House Authorized Repairs
- Free Public Domain Software
- Free Training

PRODUCT Selection

- Top-Rated Major Brand Computers and Printers
- CD • Tape Backup
- Laptop Computers • Modems
- Large Selection of Software and Accessories
- Color Desk Top Publishing

The Bay Area Atari Headquarters!!!



WINNERS CIRCLE SYSTEMS

2618 Telegraph Ave. Berkeley CA 94704 (415)845-4814

FROM THE PREZ

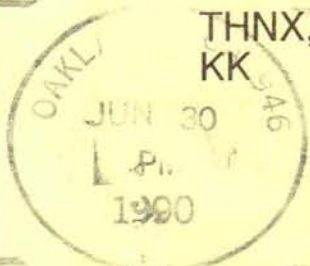
The Monterm monitor is on the way! Perhaps it will be here for the ST Meeting [that's *two weeks...ed.*] at which Jim Pheifer of California Dreams will be our guest speaker extolling the virtues of *LDW Power*. I will definitely purchase a few raffle tickets for this one.

We have been offered space for the San Jose "World of Atari" on August 4, 5 so there will be a call for volunteers to work the booth. At this time, Atari will not be participating due to short notice.

Just answered the door - AT LAST! - It was UPS with SLCC's new PC Supercharger. It will be at the General Meeting - come see. Any volunteers for an official review?

I know I speak for the club in offering condolences to Jim Moran, whose wife passed away recently.

THNX,
KK



San Leandro Computer Club
P.O.Box 1506
San Leandro, Ca. 94577-0374



373

9/30/90

General Meeting
July 3rd, 1990