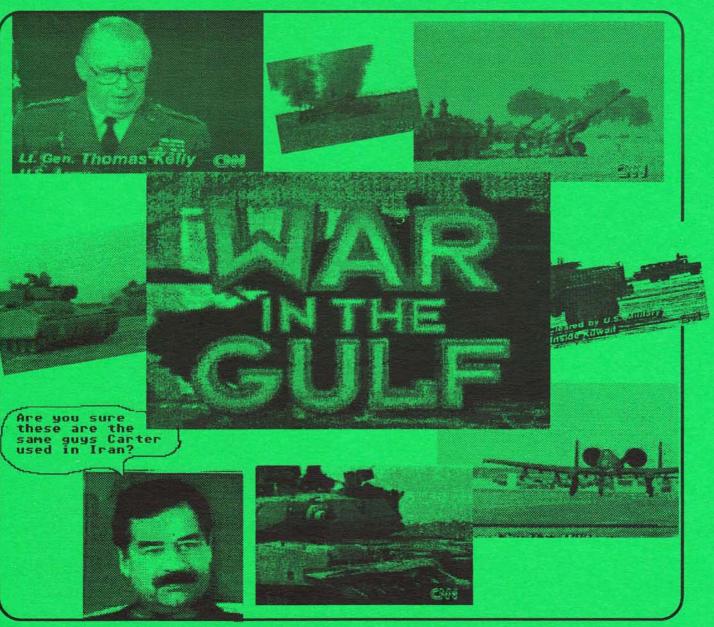
## SLCC OURNAL March, 1991

### San Leandro Computer Club



### Coming soon to a computer game store near you! Accept no substutites! Look for the genuine CNN symbol on every graphic!

# Atari's Main Representation in the Bay Area!

Calamus \$195 1040STE\$439 30%Wordperfect \$169 \$399 30 Meg HD \$140 Pagestream 40 Meg HD \$489 Drafix \$140 **BW Monitor \$158** off for DataManager \$56 \$795 STeFax **SLCC Members** Solitaire \$25 ChinonScan\$700 Hoyle'sGames \$25 MigraphScanner Scrabble \$27 &Touchup \$339 Captives \$45 Script \$56 Finest Hour \$45 WordWriter \$55 ZakMcCrack'n\$15 Publisher ST \$95 Portfolio Fool'sErrand \$35 Phasar 4 \$63 OutlineArt \$189 We have 2000 ST BEST ACC'NG \$259 \$289 **Products IN STOCK!** We have the Bring a friend Remember, you ONLY FAX & **ALWAYS** get the to buy an ST best service and SCAN machine and collect price at in the world!!!! a free game! MICROWORLD! MICROWORLD COMPUTERS 1514 UNIVERSITY AVE., BERKELEY 845-2000

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: De Wayne Stuart (887-3028) (This space for rent!) 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 Vice-President Treasurer Secretary	Keith Sammons Bob Woolley Jim Hood Jim Moran	887-2008 865-1672 534-2197 865-6122
Program	Chairman:	
		887-2008
	Chairmen:	7875 575244
8-Bit		232-5330
16-Bit	Ken Hinton	339-8055
8 & 16-Bit	ibrarian: Einar Andrade Al Advisers:	484-4484
Mach. Lang.	Frank Daniel	471-8133
Special Int	aract Groups	
- OT	erest Groups:	0/15 /100
Beginners ST	Jim Moran	865-6122
Beginners ST Telecomm. SIG	Jim Moran DeWayne Stuart	887-3028
Beginners ST Telecomm. SIG Music SIG	Jim Moran DeWayne Stuart Terry Abbot	887-3028 562-4526
Beginners ST Telecomm. SIG Music SIG Business SIG	Jim Moran DeWayne Stuart Terry Abbot Ralf Herman (408)	887-3028 562-4526 257-7760
Beginners ST Telecomm. SIG Music SIG Business SIG 8-Bit Beginners	Jim Moran DeWayne Stuart Terry Abbot Ralf Herman (408) Glenn Fowler	887-3028 562-4526 257-7760 530-7128
Beginners ST Telecomm. SIG Music SIG Business SIG	Jim Moran DeWayne Stuart Terry Abbot Ralf Herman (408) Glenn Fowler	887-3028 562-4526 257-7760
Beginners ST Telecomm. SIG Music SIG Business SIG 8-Bit Beginners Publishing SIG	Jim Moran DeWayne Stuart Terry Abbot Ralf Herman (408) Glenn Fowler Ray Thomas ibrarians:	887-3028 562-4526 257-7760 530-7128 791-9158
Beginners ST Telecomm. SIG Music SIG Business SIG 8-Bit Beginners Publishing SIG	Jim Moran DeWayne Stuart Terry Abbot Ralf Herman (408) Glenn Fowler Ray Thomas	887-3028 562-4526 257-7760 530-7128 791-9158

### C O N T E N T S

### March • 1991

### FEATURES

Ρ	a	a	e
	~	$\mathbf{S}$	-

8 Bit Madness/DOM	.4	
Rantings and Rayvings	. 9	

### DEPARTMENTS

MORAN'S MINUTES13 More wild imaginings	
CALENDAR	
APPLICATION	
MESSAGE FROM THE PRESIDENTBACKCOVER Keith Sammons	

Front Cover by Jim Hood

### See You at the Main Meeting!

### March 5th

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.



### Pounding on the 8-Bits

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

#### March, 1991

#### by Bob Woolley

Well, this 80 column card is growing into quite a project! I have been playing around with synchronizing the 6545 with ANTIC, and it is working fairly well. You will get not only 80 columns (into a TTL style monitor), but also the hardware to affect the luminance on your normal Atari screens. Before you ask, you cannot run the 80 column screen out to your normal Atari monitor without major video circuitry modifications. I may work on that in the future, but don't count on it - composite monitors with sufficient bandwidth are very hard to find, anyway. So, on to the next step!

This month we can add the heart of the system, the 6545 display controller. As you can see in the schematic, there are only a handful of connections to the GTIA chip. Three GTIA lines lifted off of the main board do NOT connect to the GTIA chip now - pins 10, 16 and 28. Pin 28 is the oscillator input from your Atari that is replaced by the output of last month's clock generator. Pins 10 and 16 are unused GTIA pins that we need as connections to RESET and -\$D6 on the main board. Two wires will need to be added from pins 10 and 16 to pin 9 (-\$D6) on the 74LS138 and pin 36 (RESET) of ANTIC. At some point, the 4 luminance pins on the GTIA chip may be diverted also, so you may want to allow for that when you are wiring up the sockets. Wire up the circuits as shown as shown in the schematic and clip in a 470 ohm resistor between pin 4 of the 6545 (MA0) and pin 23 of the GTIA (LUM2).

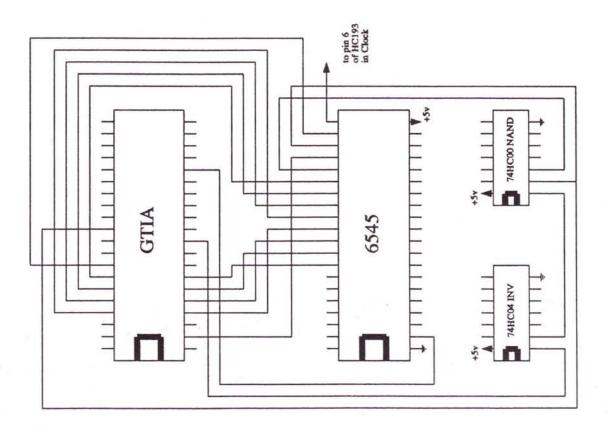
		Register		Read (R)	Bits		
	No.	Nam	e/Function	Write (W)	Bits	Range — Units	
	0 (0016)	Horizonta	Total	w	8	1 - 258 (0-FF16) CCLKs	
Horizontal	1(01 <sub>16</sub> )	Character	s/Row	w	8	1 - 256 (0-FF <sub>16</sub> ) CCLKs	
Format and Timing	2(0216)	HSYNC P	osition	w	8	1 - 256 (0-FF <sub>16</sub> ) CCLKs	
	3(0316)	HSYNC/	SYNC Width	w	4 + 4	1 - 16 (0-F <sub>16</sub> ) CCLKs	
	4(0415)	Vertical T	otal	w	7	1-128(0-7F <sub>16</sub> ) Character Row	
	5(0516)	VSYNC A	djust	w	5	1 - 32 (0-1F <sub>16</sub> ) Scan Lines	
Vertical	6(0616)	Character	Rows/Frame	w	7	1-128(0-7F <sub>16</sub> ) Character Row	
Format and Timing	7(0716)	VSYNC Position		w	7	1-128 (0-7F <sub>16</sub> ) Character Row	
	8(0816)	Mode Control		w	8	See Figure 5-7	
	9(0916)	Scan Lines/Row		w	5	1 - 32 (0-1F <sub>18</sub> ) Scan Lines	
	10(0A16)	Cursor Start Scan Line		w	7.	1 – 32 (0-1F <sub>18</sub> ) Scan Lines	
	11(OB <sub>16</sub> )	Cursor Stop Scan Line		w	5	1 - 32 (0-1F16) CCLKs	
	12:0C16)	(MSB)	Start Address	w	6	1 - 16 384/0000 4555	
	13(0D <sub>16</sub> )	(LSB)	(Top of Page)	w	8	1 - 16.384(0000-4FFF <sub>16</sub> )	
Primary	14(OE16)	(MSB)	Cursor	R/W	6	0 16 284/0000 4555	
Operating	15(OF16)	(LSB)	Position	RW	8	0 - 16.384(0000-4FFF <sub>16</sub> )	
Registers	16(1016)	(MSB)	Light Pen	R	6	0.15.004/0000 4555	
	17(1116)	(LSB)	Position	R	8	0 - 16.384 (0000-4FFF <sub>16</sub> )	
	18(1216)	(MSB)	Update	w	6	0 16 284 (0000 AFEE )	
	19(13 <sub>16</sub> )	(LSB)	Location	w	8	0 - 16.384 (0000-4FFF <sub>16</sub> )	
	31(1F16)	Increment Update				N/A	

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

The final circuit (not shown) will set up four locations for us to use, the 6545 itself, the screen data RAM, the character data RAM, and, maybe, some sort of control register (more stuff I might add). Each section will be under the control of one of the address bits, A1-A4, and the -\$D6 select line. This places the 6545 at \$D602 and \$D603, the screen RAM at \$D604, the character RAM at \$D608, and the control reg at \$D610. If you use \$D606, you will access both the 6545 and screen RAM - using \$D60C will let you zero both screen and character RAM at the same time! In this month's circuit, we only show the 6545 chip select since we will only be working with it for the time being. If you are going to really do good stuff with this project, you will really need the specs for the 6545. I can't possibly write it all out here, but I will give you some basic idea about what's going on in the chip.

So, plug in what we got so far and power up. You will have a normal Atari screen on your monitor - if not, you goofed. Have someone check your wiring. Get out the old BasicXL cart and enter this program: 100 D6=54784 110 A65=D6+2:rem 6545 address reg 120 R65=A65+1:rem 6545 register select 130 READ A,D 140 IF A=255 THEN END 150 POKE A65,A 160 POKE R65,D 170 GOTO 130 180 END 200 DATA 0,113,1,80,2,1,3,56 210 DATA 4,28,5,1,6,18,7,1 220 DATA 8,136,9,8,10,97,11,8 230 DATA 12,00,13,00,14,00,15,00 240 DATA 255,255

When you run the program, the 6545 will be initialized to the same specs as your ANTIC display chip and you will see a number of blocks all over your screen. These blocks are just one of the 6545 address lines changing state as it runs your 80 column display - the nice thing is that it is exactly in sync with your Atari screen. This allows us to throw a four color mode up there (like GR.7) and plot the intensity of



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

each pixel with the 6545! (That would be a 160x160 screen in four colors with 16 shades of each color.)

What are we doing in the program? Take a look at the chart: these are the internal registers of the 6545. Instead of using CPU address lines to select a register like our Atari chips do, the 6545 has a register that you load with the address of the register you want to access. So, writing to A65 (at \$D602) in line 150 puts the address of the 6545 internal register that I want to select into the 6545. Writing to R65 (at \$D603) loads that register with data. To match the Atari, we set the 6545 to 113 total clock cycles per horizontal line, the vertical sync width to 3 clocks, the horizontal sync width to 8 clocks, the vertical total to 28 rows, 24 character rows per screen, 8 scan lines per row, and, non-interlaced, transparent addressing. \* You can't understand what I just wrote without the 6545 spec sheets, folks \*

If you were to investigate the timings of the 6545 at this point, you would discover that, although the 6545 is running at exactly the same rate as ANTIC, it does not start it's screen display at the same time - in other words, the two sync pulses do not overlap. Type in the following program:

100 D6=54784 110 A65 = D6 + 2120 R65 = A65 + 1130 POKE A65,5 140 INPUT A\$:rem I use BasicXL - no DIM A\$(1) 150 IF A\$="-" THEN GOSUB 1000 160 IF A\$="=" THEN GOSUB 1100 170 GOTO 140 1000 POKE R65,0  $1010 \text{ X} = 2/3.3 \times 6.7$ :rem waste time 1020 POKE R65,1 **1030 RETURN** 1100 POKE R65,2 1110 X=2/3.3\*6.7 1120 POKE R65,1 1130 RETURN

When you RUN this guy, enter either "-" or "=" to the prompt (UP or DOWN). What we are doing is changing the Vertical parameters for just a moment which "floats" the 6545 vertical sync relative to ANTIC's sync. This shoves the "data" on screen UP or DOWN depending on which key you press. We should be able to overlap the 6545 and ANTIC syncs using this technique. OK?

Next month, we throw in the screen memory. Then, it really gets interesting!



The ABACUS/SLCC January 19 seminar on TEXTPRO was a gratifying success. Twelve attended, representing 3 clubs. Craig Glassner and David Merrihue Made excellent presentations, and everyone stayed overtime. We even had one drop-in (a Lucky Stores Co. programmer) who obviously enjoyed the session, even though he is not an Atarian.

Like last month's column, this one is being printed on my Star gemini-10X (dot matrix) using DAISY-DOT III. I've learned a few things since then, and I hope you will be as impressed with DD3 as I am!

Time for disk-talk!-

This D.O.M. consists of four sides (2 disks),- A,B, ¢ C,D. These were also the major resources at the January 19 ABACU3/SLCC seminar.

Sides C and D have 12 DOCs for TEXTPRO ver. 4.56. and 2 README files which can be ignored.

Files on sides A and B are:-TPX.COM (TP v. 4.56) and other files including HELP (13<sup>+</sup>) CONFIG. files MACROS (27<sup>+</sup>) Fonts (12) DOC5 (see below) TPOIK.REF ~(see below) SPLCHK.BIN spell checker and DICTION.1 MYDO5 ver. 4.5 MENU2MY.DOS ~(see below) Disk DOCumentation AUTODOC reader

TEXTPRO ver. 4.0x was featured on our 5/89 D.O.M. with DOCs from ver. 1.1 and 1.2.

TEXTPRO 4.56 does best on an XL/XE, but it also works on an 800. To run TPX.COM from this disk; restart it without BASIC and Load from DO5.

A better way is to copy it to another disk and rename it AUTORUM.SYS. TEXTPRO will disable BASIC at startup.

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

If you use TEXTPRO; you could get by, for awhile, without printing all the DOCs. You'll do better to hardcopy them right away. I printed: READF.ME (Intro.- on side B) TPDOC.TOC (T. Of Contents -B) The 12 DOCs on sides C ¢ D Appendices on side B, listed as DOCs 13 - 15 DD3MAC.DOC - side B

One of TP's big features is its on-line HELP files. They are indexed in TPHELP.00. TPHELP.12 explains use of these files. TPHELP and TP DOC 12 are summaries of commands.

It's support of Macros is another of TP's big features. DOC sections 3 and 4 contain an excellent discussion of Macros; with a number of examples.

The Disk Menu makes many utilities available without leaving TP. It will perform DOS functions; view and load files; sort directories; and select a default drive. With MYDOS or Sparta DOS it can make sub directories. See DOCs 6 & 10 for details.

TP has an ATASCII mode. Toggle it and Text mode with the ATARI (FUJI) key. Use it to edit M/L files.

See DOC #5 for additional features of TP; and specific instructions for listing disk directories to produce a catalog; and segmenting large files. Note that TP and Daisy Dot are highly compatible.

Print <u>IPOIK,REF</u> for a single page "Quick Reference" of TP commands. DOC 7 explains printing with TP, and using printer Controls. The page will be about 5" x 7" (Condensed type- at 17 CPI); 7.2 x 7 with 12 CPI (Elite); and 8.6 x 7 in Pica (18 CPI).

<u>SPELCHK.BIN</u> is a Personal Spelling Checker which works with TP. DICTION.1 is the initial form of its data file. Copy both to another disk. Use the "ADD FILE" or "PROOF DOCUMENT" options to build your own dictionary. Other features are self explanatory.

MENU2MY,DOS is an updated version of the loading menu MENUMY,DOS, from our 4/90 ¢ 5/90 disks. It now loads BINary files! Don't use it to load TP it will not run properly unless BASIC has been removed!!

### SLCC DISK - Vol. 8, No.4 April 1990

This disk features MYDOS ver.4.5 by C. Marslett & Robert Puff! It's very similar to ATARI DOS, but it supports subdirectories, which could be better with a Hard Disk, RAMdisk, etc.

The disk has 8 auxiliary, and 3 DOC files. The DOCs are quite long. You should read MAIN.DOC, (at least) OR print out a copy.

The MYDOS files are:-

MAIN.DOC	VTOCFIX.DOC	RAMBOOT.M65
RAMBOOT.AUT	RAMBOOT3.M65	RAMBOOT3.AUT
ATR232.AUT	ATR232HD.AUT	ATARI850.AUT
VTOCFIX.COM	TECH.DOC	

MENUMY,DOS is the BASIC loading menu on this disk. It's adapted from MENUPLUS, which has appeared on many SLCC disks. It will not load BINary files under MYDOS. (As noted above, MENU2MY.DOS is the "debugged" version which loads BINary files.)

AUTODOC.RDB displays the disk DOC. automatically on boot-up.

READER.BAS is slow, but it reads or reads\*prints from any size file.

<u>IXTSPLIT.BAS</u> splits any text file into shorter ones. By Frank P. Walters; from COMPUTE! magazine, Issue #86 (7/1987).

<u>WORMSORM.BAS</u> by John Gunther is a game from ANTIC magazine, Dec. 1983. Keep the worm eating and growing as long as possible!

<u>SLSWITCH.BAS</u> is based on a game by Todd Heimarck- see COMPUTE! magazine; March 1986, Issue #70. I have made an SLCC version which includes some major revisions and a set of instructions.

Boot the back without BASIC, for a 'Mini-Menu'; which loads Binary files only!!

### ATY Computer (415) 482-3775 3727 13th Ave., Oakland CA 94610

(Between E38th St. and Excelsior Ave. above HWY580)

TT's and Mega STe are coming soon. You know they are in short supply. Please call us to put yourselves on our first- come-first-get-it waiting list.	Complete Desktop Publishing System: Mega4, Megafile30, monochrome monitor, Laser printer and Calamus for only \$2,900
	Other hardware: Atari 520S <sup>-</sup> , FM, 1040STFM, 1040STE, Mega2 & 4, Stacy 1 & 4, 3.5" & 5.25" disk drives, sound digitizer, video digitizers,
Also check out our latest price reduction on ST software and hardware.	Spectre GCR, 1meg SIMM's, JRI memory upgrade board, 4096 color board, new stereo color monitor.

### Some Great Stuffs For Your MATARI

14" 800X600 multi-sync monitor with switch box \$489 85MB, 28ms with ICD host adapter, hard drive \$649 SyQuest 44MB removable hard drive \$775 Z-Keys interface with 101-key IBM keyboard \$139 AdSpeed 16 mhz accelerator \$269 AT-Speed, IBM 286 AT emulator, EGA & VGA ... \$369 AT-Once, IBM 286 AT emulator \$349 SuperCharge 1MB, IBM XT emulator \$440 Migraph hand scanner with Touch Up \$359 85MB bare hard drives: 5.25" \$399, 3.5" \$459 2400/4800 Baud Modem/Fax \$159 3.5" double sided replacement drive \$85

Hours: M-F 3:30-7p.m., Sat 12-5p.m. Authorized Atari Business Computer Center

### **RANTINGS AND RAYVINGS**

By Ray Thomas

#### **DTP SIG MEETING**

What meeting? The DTP SIG meeting scheduled for February 21 didn't happen. There were only two of us there, and one of those owned the meeting site.

I just don't understand why people will go to the trouble to tell someone they're interested in such a SIG, then when it is created, ignore it.

We went to the trouble to have a regular user of Calamus come over to show us how to use it and give us an idea of what it can accomplish vs. PageStream and other programs and we had the best turnout we've ever had-four people.

I know we've got more than four people who would like to have access to a DTP SIG. Twelve of them spoke up at the meeting where this one was created. So I'm not giving up.

In addition to giving them hell at the regular meeting, I'm also going to see to it that a listing is put in MicroTimes to let non-SLCC Atari desktop publishers know we've got a SIG.

Maybe we can build a SIG through new members-I don't know. But I'm going to do it some way. I've personally gotten several thousand dollars' worth of help by my membership in this club in general, and in the DTP SIG in particular. I know others are in the same position and could use some help from time to time.



So why not make yourselves known and come to meetings? Then you'd have someone to call when your computer does something strange to you-and you'd be amazed at the things you can learn at the meetings. There's always someone who is willing to answer your questions.

There aren't too many things that can go wrong with an Atari computer that have not gone wrong before-and someone knows what to do about it. This is **networking** at its best. Why not take advantage of it?

#### ATARI DTP MAGAZINE

Finally-someone has come up with a magazine for Atari desktop publishers where we can read about what others are doing with the software we're using or can use.

I recently subscribed to a magazine called: Radical Type, which is published in Canada. It was originally produced just for Atari deaktop publishers, but later, it began offering information for Amiga desktop publishers, too.

I've already learned many things from this magazine, stream 2.1 is now out for the read about it.

Amiga and that it will be out very soon for us.

If the things it will do for the Amigaites is an indication, there isn't a more powerful DTP program anywhere-for a price less than \$1,000 for any machine. The upgrade will cost \$75, including the new manual. If you've already got the latest manual-the one they were selling for \$25, it won't even be that much.

The magazine includes many tutorials, lots of tips and tricks, product reviews and the latest information on not only the familiar software, but on new offerings, as well.

A recent issue had a personal interview with the man who wrote PageStream.

The most recent issue I have: the November/December 1990 issue, has articles on "Fixes and Features, Page-Stream 2.1," "Creating Art for Publishing, with Touchup and Deluxe Paint," reviews of several new clip art offerings and many new postscript fonts we'll be able to use once the Atari upgrade of **PageStream** is out. They also are offering five PD discs for \$5 each or \$4.50 if you order 2 or more. Three are font discs and the other two offer some pretty good bit- mapped graphics in IMG format.

It is published six times a year with subscriptions selling for \$15.95 from RADICAL TYPE, P. O. Box 107-SLC, Lazo, BC, VOR 2K0, Canada. including the fact that Page- Please tell them where you



Jim Hood

On January 12 we made a tour of the MacWorld Expo in San Francisco. This has become the Bay Area's premier computer show in terms of attendance and floor space.

It is also the place to see what bandwagon manufacturers are hopping on.

One of them apparently is the thermal wax-transfer color printer.

This type of printer has been around for several years. The Okimate 10 was probably the first to achieve popularity with its relatively low price.

As you may recall, it used a thin ribbon having successive sections coated with cyan, magenta, yellow (and black?) wax. Each color moved into position over the paper and was melted onto it, where required, by a matrix of hot pins set in a moving print head; very similar in operation to a normal dot matrix printer. It had so-so resolution, and the problem common to most printers that move a column of impacting pins across successive rows of paper; uneven pressure applied by the individual pins causes graphics to have a striated appearance.

Most other thermal waxtransfer printers adopted a "ribbon" having the same width as the page with each color section being the length of the page. By melting the required dots of wax across an entire line, one line at a time, using a laser or some such method, the striation problem is largely overcome, just as it is when a graphic is done on a dot matrix printer using a single pin.

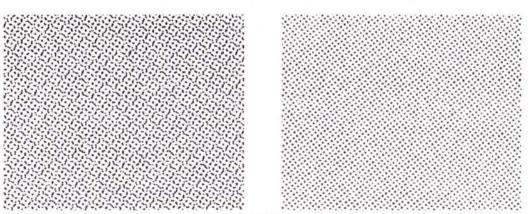
Colors produced by thermal wax-transfer printers are exceptionally bright and even. Solid colors are limited to the basic cyan, magenta, yellow and black plus red, green and blue which are made with solid applications of two of the basic colors. For instance, overlaying solid cyan and magenta produces blue.

Black can be either a separate color or a solid overlay of the three primary colors. All other colors and tones are effected by dithering various halftone patterns.

Printers using page width wax ribbons have been relatively expensive and initially their resolution was around 200 dots per inch.

300 dpi is now the standard resolution for this type of printer and most have either geniune Adobe PostScript or a PostScript emulator.

QMS brought out the first 300 dpi color PostScript printer a few years ago. It cost close to \$20,000.



**Enlarged Color halftone patterns.** On the left is the pattern made by a QMS ColorScript 100, using Adobe PostScript. On the right is the pattern made by a Tektronix Phaser using a PostScript emulator.

At the MacWorld Expo, many of  $x 8.9^{\circ}$  on  $8\frac{1}{2}^{\circ} \times 11^{\circ}$  paper and the current printers were listing around \$8000.

Winners Circle, in Berkeley, recently advertised their "new PostScript compatible color printers" starting at \$4995. A Tektronix printer was shown in the ad. Tektronix uses a PostScript emulator in their printers.

Interestingly, genuine Adobe PostScript is noted for not having as effective halftoning patterns as some of the emulators. (See previous page.) Their default angles for the rows of dots making color halftones produce distinctive traipse down to have your patterns which can be annoyingly apparent to the naked eye. Similar patterns are produced in regular magazine color halftones, but because of the much finer dot patterns they are normally unnoticed by that naked eye.

Some PostScript emulating printers have adopted custom dithering patterns for their halftones to minimize objectionable patterning. Adobe PostScript dither patterns can also be customized, so it is a matter that the hardware manufacturer, or software producer can correct. That is one reason that PageStream allows the user to control halftone frequency and angle.

Another shortcoming of the original QMS printer and possibly some other brands is the limited printing area on a page.

I have had prints made at the Linex service center in Campbell, California. They advise that their QMS ColorScript 100 has an image area of 8.1"

a 10.6" x 14.9" image area on 11" x 17" paper.

Winner's Circle will also print images for you on their Tektronix Phaser. I recently printed a test file there and found my image area cut off at both ends, giving a size similar to the QMS printer. I didn't have time to determine if that is the normal image area or if it was a quirk of my file.

Images can be printed on special paper or on clear acetate for use with overhead projectors.

Be forewarned before you porno collection printed in brilliant color that each sheet is going to cost you several dollars. If you have a really large collection of pictures to print. you might be able to bargain on prices, since the per image cost of paper and ribbon is around 50¢ to 75¢.

Dye stability is reputedly poor, so don't expect to hang your masterpiece in a bright sunlighted room and have it to give to your grandchildren. I am currently exposing a test section of a print in a window and it looks fine after a week.

If you have an extra \$5000 or \$10,000 that you might want to invest in a thermal wax-transfer printer, the February, 1991 issue of Macworld reviews nine of them along with four ink-jets and two dye sublimation printers.

Dye sublimation? Yes, this is yet another up and coming technology for printing colorimages. Since it's up and coming, the prices are still up.

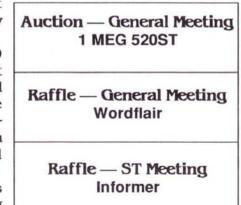
Around \$20,000 by the time you get all the pieces and haggle with your neighborhood printer dealer. Each image costs about \$5.00.

About the price of an equivalent color photograph. And about the same quality, even to the paper base material and coated dye containing layers.

In dye sublimation printers. each primary color can be printed in a range of shades, just like the dyes in your color photographs, so you don't lose resolution by having to dither colors.

Macworld also mentions two other printers. One is an 1800 dpi color ink jet printer from Iris Graphics which costs about \$50,000. But the per page cost is only about 46¢.

The other is a high speed, dry-silver based color imaging recorder from Information Storage. It only costs \$10,500 and is said to produce photographic quality prints on silver based paper in 30 seconds for about \$1.50 each.



### **Portfolio** Note

I got a call from someone wanting to transfer data between a Portfolio and MEGA. His two computers were connected through their serial ports, but no data was getting across.

The connecting cable was wired according to the diagram on page 18 of the *Portfolio Serial Interface Owners Manual* which was the problem since that diagram is wrong.

Corrected information was put up on Compu-Serve some time ago.

The accompanying diagram should be correct, in case you're about to wire up a cable.

Probably the easiest way to go is to buy a null modem cable designed to connect an IBM PC/XT to an IBM PC/AT because ST and MEGA computers use an XT type connector and Portfolios uses an AT type.

For my own cable, I wired an Atari joystick cable/connector to a DB25-S connector.

Incidentally, while checking cables and so forth, we had three Portfolios, two serial interfaces and three cables being handed back and forth. Since all those Portfolios look very similar, mine ended up with one of the other people long enough for him to pull the batteries out and start to pack it away.

So maybe it's a good thing that my machine locks up often enough that I normally save my files to both the A: and C: drives. That's all that kept them from being gone for good. Which would have been bad.

Jim Hood

#### FOR SALE

#### ATARI 20MB Supra Drive.

For Sale - \$300 - OBO

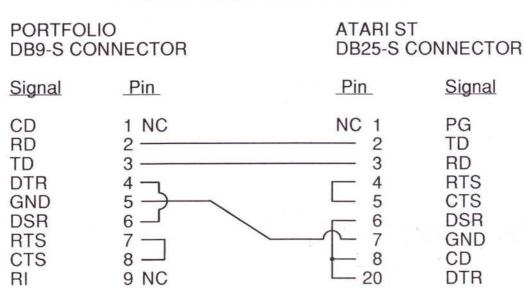
Call Clay @ 415-528-4352

### '81 Dodge Colt

Engine run out of oil by Dumb Stepdaughter. Otherwise GOOD.

\$200 OBO.

Call Keith 415-887-2008



### Portfolio Serial Cable for Atari ST

# MORAN'S MINUTES

General Meeting Minutes February 5, 1991

Our voluptuous President in charge of Vice, Mr. Robert Woolley called the meeting to order at the fashionably late hour of 8:15 PM. with the introduction of several visitors and new members. Roll call of Officers showed all important Officers (Hood & Moran) were in attendance and one significantly less important one showed up a bit late. (the lock on his cage was stuck)

One of the first items before the membership was to purchase a set of 160 public domain disks from COAST, our sister user group that has now officially disbanded. A motion was duly made and seconded to purchase said disks for \$40. Motion carried.

Joe Castro was appointed 16 Bit software chairman and librarian. Happily I can assure you his arm was only bruised not broken when he was convinced to do this important and highly paid job.

This months 8 Bit FLOPPY consists of TEXTPRO and associate files on both sides of the disk.

Considerable discussion was held on how members are notified that it is time to renew their membership and if the system can be improved. After much input from all sides the President referred the matter to the Executive Board for discussion and resolution.

ATARI's Bill Rehbock updated the membership on the latest things Atari. The MEGA STE is in full production and is awaiting final FCC papers, best guess has the machine on sale about second week of March. Right now the best deal is the 1040 STE which lists for \$499 and can be bought on sale for as little as \$450. ATARI is attempting to rework their dealer network to try and improve it. They will have some machines, mostly low and middle range available through dealer distributors. Bill gave the club a full set of ATARI DEMO disks and said the new control panel was available and would be up on GENIE in about 3 weeks. Bill also discussed selling a new TT to the club.

After considerable discussion on whether to purchase a TT machine or not, the matter was held over 'till next month's meeting so more information could be obtained on total costs of the system and club need for the machine.

To close the meeting our repugnant raffle was once again jammed down the members throats and with that the meeting was adjourned.

Jim Moran - Secretary

\*\*\*FOR SALE\*\*\*

As Pkg Only

1040ST SF314 SC1224 MEGAFILE 30 & Much More!

Call Keith (415)887-2008

\*\*\*\*\*\*

\*\*\*FOR SALE\*\*\* Hayes 1200 baud Smartmodem. The Real Thing! \$75 Call Jim Moran 865-6122

\*\*\*FOR SALE\*\*\*

1500 Sq feet of STUFF! Stuart Electronics is MOVING! Should be the weekend of March 16th and 17th, call DeWayne, 887-3028 for information! There will be old and new model computers, Hard disks, stereo equipment, generators, STs, Heaps of electronic goodies! 4 businesses will be selling stuff here, in the building and in the parking lots! I need money for a down payment! DRS 2299 American Ave. Hayward, CA Call 887-3028

# **March 1991**

SLCC CALENDAR OF EVENTS

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						2
3	Ą	Main Meeting 8:00 P.M. San Leandro Library	6	7	8	9
10	ST Meeting 8:00 P.M. San Leandro Library	12	13	14	15	16
17	18	Journal Deadline	20	2] Publishing Sig 7:30 P.M.	22	23
24	25	26	27 ST Beginner's Sig 7:30 P.M.	28	29	30
31	Special phone	Interest G numbers o	roup (SIG) are in the 1	leaders c able of C	nd their ontents.	

### 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 Software Interests:	(s)	nce De: Word Proc	sktop Pub essing	lishing 🗖 Educa	□Games tional □N	□ Scientific ⁄Iusic □ Art
Some inter in new usc	esting ways I u Iges for home,	se my comp work and p	outer:(Clu lay)	b membe	ers are inter	ested



### FROM THE PREZ-

It is auction time again! This time it is the club's 1meg 520ST w/flipper switch for color or b/w monitor. Don't miss this opportunity of a lifetime!

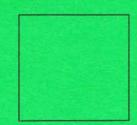
Our speaker this month shall be Lauren and/or John of GOLDLEAF PUBLISHING demonstrating WordFlair II. This will occur, at Bob Woolley's insistance, at the March 5 General Meeting.

The club has donated \$100.00 to the "Friends of the San Leandro Public Library".

There have been some further negotiations regarding the club's purchase of a TT - so, for those members who wish to express their opinions on this subject, please bring yourself and your opinions to the General Meeting.

Thanx, KK

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





General Meeting: March 5th, 1991