SLCC Journal

SAN LEANDRO COMPUTER CLUB May, 1988

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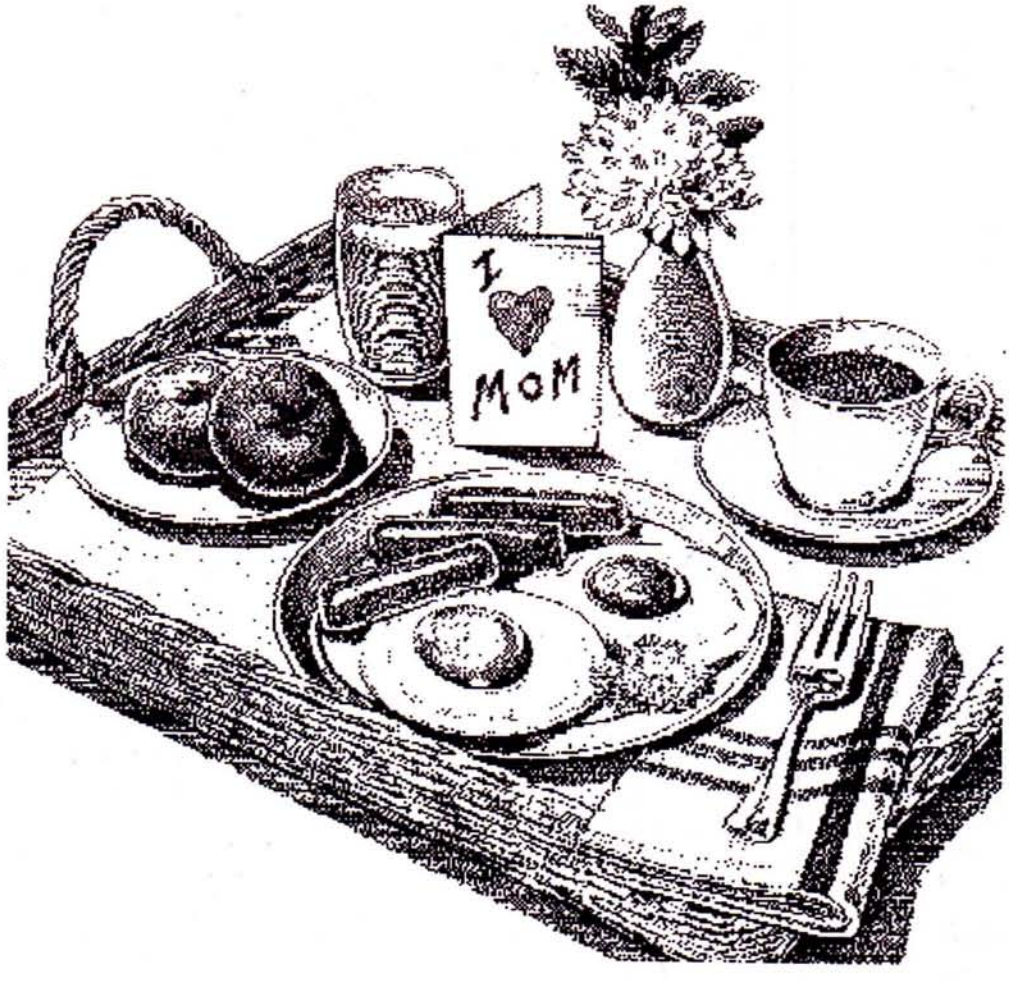

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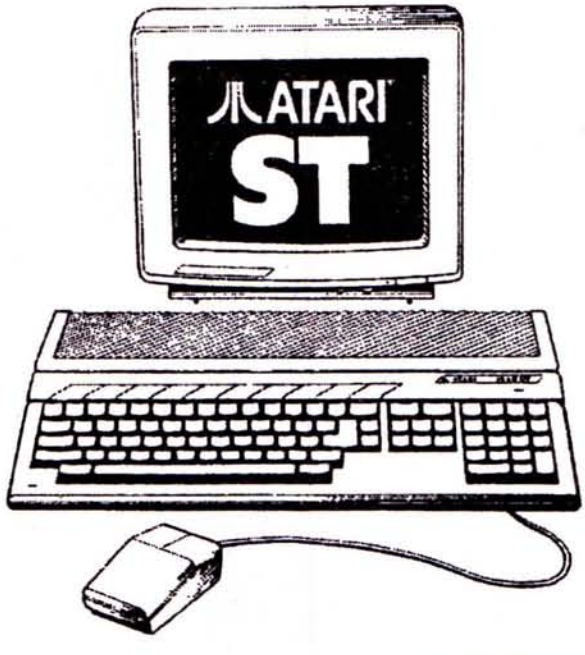

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SLCC JOURNAL

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Prowling Around the Faire

A Unique View of the WCCF

Written by: **Dave Lockwood**

Editors note:

Dave is a very talented programmer currently working on several projects, one of which would make a lot of folks happy, and that is a port of M.U.L.E. to the ST. He is also Sysop of the Meetpoint Station BBS (formerly the Abyss). This is an extremely entertaining board that Dave has worked hard on to make it stand out from the regular on-line services. Fans of C.J. Cherryh will feel right at home, others will find an unusual adventure waiting for them. Check it out at (415) 782-8246. Galactic Empire is online and much, much more.

I spent my Sunday at the West Coast Computer Faire...Had to go, it's the biggest local one right? Everyone's there right? Atari's gotta be there. It won't be all I.B.M., will it?

Well, I showed up Sunday morning bright and early at 10:30 a.m. No crowds, no mobs of screaming hackers waiting to get tickets. I just walked in, filled out the registration, paid my money, and downstairs into the dungeon I went. And what was my first sight when I walked in the door? There was "Big Blue" with 40 acres of space (mostly empty rug), six computers just waiting for some curious executive to fire 'em up, and six immaculately dressed salesmen (and women) looking for V.P.s with money burning holes in their pockets. You could hear the dialogue in your mind..."I'd like to see the PS/2 please", and the salesman replies, "Yes, but would the PS/2 like to see you?".

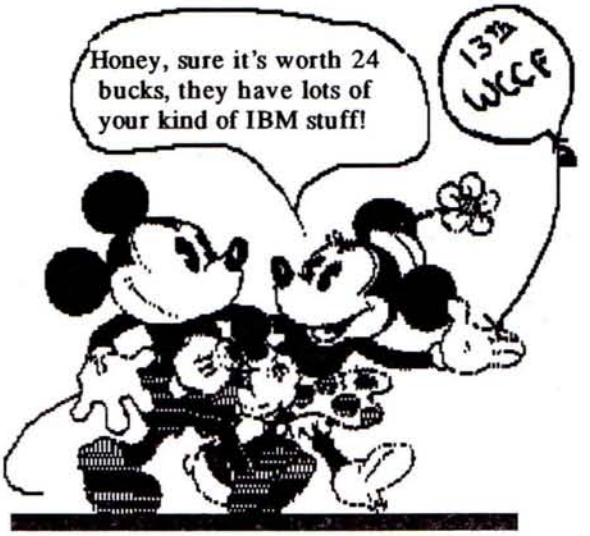
Past Big Blue, I could see miles of everyone that's someone in the P.C. Market...Then, I heard a shout...It was coming from the Word Perfect Booth?!?!? 200 exuberant computer junkies screaming at the top of their lungs, "Word Perfect!" they cried, and the salesmen (boys?) said, "I can't hear you!". The salesmen began to quiz the audience about the program, and every time someone would give the correct answer, he would throw a Word Perfect Pen to him like zoo keepers throwing fish to the hungry seals.

Disgusted, I left that mob scene, and headed for the back of the show, into "The High-tech Ghetto" of the Faire. Here was the "meat" of the show: the user groups, the dime-a-dozen disk sellers, the software supermarkets, and the coffee booth. Tucked into the corners, and squeezed into tight spaces, friendly people showed incredible graphics to T-shirt wearing, goggle eyed customers who really liked what they saw...There was the F.C.C. booth (empty) with bulletins, and flyers about all the nasty things they're plotting against the modemers...Maybe the F.C.C. represenatives had been lynched. Antic was there, pushing their Cyber System, and selling Catalog...uh, I mean magazine subscriptions.

Time for a break...I went to the back where an empty space held two ash trays right by the emergency fire exits, and seeing no signs, lit a cigarette. Other people saw me, looked both ways to see if anyone was looking, and lit-up themselves. We talked about computers (odd subject here), and I discovered a guy who was about to buy a MacIntosh for his small business. I told him about the 1040ST, and how for around $500 bucks , he could have "his MacIntosh", and have it running up to 20% faster to boot...Two Computers for the price of 1/2 a Mac !! He walked away a happy man...My good deed for the day. continuing my quest, I decided to check out the other side.

I tip-toed past the I.B.M. booth, and on to the other end. Here I found all the miscellaneous garb..uh peripherals for the I.B.M. world, as well as a jewelry cleaning booth, and a booth selling vibrators...And, at the far end was the Yuppies' Snack Bar. Heineken for $3.00 a bottle, coffee makers wearing tuxedos, salads with extra bean sprouts, and flowers at the tables...After this experience, I finally decided it was time to buy what I really didn't need, and go...I escaped with 35 disks, a new disk box, and a new-fangled mouse pad with a window. Riding BART home, I asked myself, "Was it all worth twelve bucks admission"....."Hell, yes, I'll be back next year"

END



Word Perfect is Looking Good

By: **Bob Rasmussen**

Editor's note

Bob Rasmussen has just taken over the post of Program Chairman and has started off with bringing us one of the best speakers in a long time. He has also given a lot of club members, including myself, some great deals on software purchases. Don't be bashful about showing him your appreciation for what he is doing for the club!

Those of you who didn't attend April's main meeting missed one of the best vendor presentations I've seen in a very long time. Word Perfect Corp. is to be commended not only for their dedication to a program that is one of the most important software developments for the Atari ST, but also for their employees' professionalism. Randy Blosil spent about twenty minutes setting up on the club's Mega ST while the meeting continued; he then proceeded to give the club a very complete overview of the powerful features of Word Perfect.

What I didn't know before the demonstration is that Word Perfect for the ST is so akin to its counterparts in the IBM and Apple worlds, that Randy was almost completely able to hide the fact that this was one of his very few experiences with an Atari ST. Although he was not too familiar using the mouse, every feature was called up in just a few seconds, as if he had used this computer all his life. The importance of this detail becomes apparent when one considers that there are more than a dozen excellent books published for this program in the IBM environment. I shouldn't have been surprised at the excellence of Randy's presentation, as ever since I first started working with his company's product, I've found that they have a customer-relations policy which has to be experienced to be believed. Every employee that I've dealt with has been both professional and extremely helpful.

In addition to his presentation, he also brought some gifts to the meeting. Everyone got a bag of M&Ms (which seems to be a tradition at all Word Perfect presentations!), two people won Word Perfect binders complete with calculators, and Pete Corona won a Word Perfect program package.

Although it probably is true that Word Perfect was released too soon and was very buggy, the attention that the company has given those who bought the first version has more than made up for any inconvenience suffered. I have received five updates since November; and their toll-free help line is not only extremely supportive and knowledgeable, but with over 200 people managing the phones, there is no waiting either!

Some of the disturbing rumors about Word Perfect's deserting the ST because of the piracy problems were dispelled at the meeting with an apology for their having been started.

We were also told that support of product development is not only continuing, but we can expect more product and support in the future. I feel that this is by far and away the most powerful word processor available for the ST. It's ease of use is extraordinary and yet it contains every feature a true power user may require. I believe that this company has taken a chance on the ST community and many other major software publishers may be looking at Word Perfect's success or failure before developing products for the ST. This could very well mean that support of this product seems not only to have been earned by the company, but also might well figure into future major products for the ST.

In conclusion, I would like to thank Word Perfect Corp. and Randy Blosil for taking the time and expense to demonstrate their excellent product to the S.L.C.C., and I wish them all success.

END

Looking for the Right Stuff?

80 Columns on the 8-Bit

This is it. The BIG time. The leading edge of computing technology - an 80 column word processor running on an IBM PC monochrome monitor. I am writing this on just such a system, on an Atari 8-bit, of course. Major hack? nawww.... First, the word processor.

No big secret for the program - it is AtariWriter Plus 80. From Atari! A pre-release copy was made available to the Club at the West Coast Computer Faire, so I got a chance to play around with it. The 80 column version of AtariWriter Plus works exactly the same as the 40 column version, except for the display, of course. I loaded old AtariWriter and AtariWriter Plus files into the Plus 80 with no problems. There are 11690 bytes FREE in the 64K version and 15000+ bytes in the three banks of the 128K version, just like the original Plus. Cursor movement is very fast as is scrolling through the document. It is difficult to believe that all this text is being sent through the E: handler, it is so quick. While text is being inserted, the line being edited will word-wrap to an inserted, empty line. This makes kind of a mess on the screen, but eventually, the screen will be reformatted when you reach the end of the page. This is a little different than the normal editing found on an Atari, but it is not difficult to get used to. The Preview option still works as it did and you get a much better view of the printed page using 80 columns. Very trick to see double column printing in Print Preview all on the screen at once. I have never felt left out because my word processor is not 80 columns, but using AWP80 for any length of time may alter my perception of what I may want and what I feel I need. At my speed, I can type for 15 minutes before I fill up one screen of text and it is much easier to review what you just typed if you don't have to scroll back through your document.

Great, right? So, where do you get one? Well,,,,, it has been said that it is 'in production'. This is either less than 'two weeks', or more than 'two weeks'.... but it IS better than 'final test'.

Now, of course, you need some hardware to run this 80 column stuff. An XEP80 from your local Atari dealer (or mail order, if you wish) and some kind of monitor. If you read my article in the December Journal, you might remember that the XEP80 uses all of the display field of the monitor and the two cheap composite monitors that I had tried did not give a very satisfactory display. I was using a high quality video unit from a NorthStar Horizon that worked very well, but would be very difficult for the average user to find (not to mention, expensive). I should be able to find the perfect monitor at the West Coast Computer Faire, right? Wrong..... Not only were there no inexpensive composite monitors that would work well on the XEP80, there were no composite monochrome monitors at all! Everything was IBM TTL. I even consulted DONDRA over at the Spectrum HoloByte display (oh, what I do for my Atari....). No luck. Seven zillion lines of resolution, built in swivel base, non-glare screens - the works. Good prices, too! But every one was TTL, IBM. Wellll.....

Never being one to shy away from a little soldering, I decided to investigate the possibility of adapting the XEP80 to an IBM monochrome monitor. The IBM TTL monitors have a separate input for the sync and video signals, whereas the XEP80 generates a composite signal containing all three components. I figured that a little circuit to strip the Horizontal and Vertical sync from the Video couldn't be that hard, but it turns out that the XEP80 has all the signals you need inside the box! The whole project didn't amount to anything more than soldering one end of a 10" piece of four conductor ribbon cable onto the XEP80 board and connecting a 9 pin joystick socket to the other end. I tried the XEP80 on a standard IBM monochrome monitor and it worked fine! I also tried it on an OEM TTL monitor made for an IBM PC (an AMDEK 310A) and that also worked well - after a little pot tweaking on the Vertical sync and Horizontal position adjustments. The XEP80 uses a higher Horizontal frequency than the IBM PC, so some OEM monitors may require adjustment, but not so much that you need to re-adjust it between a PC and your Atari. The display field on the TTL units does not overscan the face of the tube so there is no adjustment required for that problem. Also, the linearity is very good on these guys, so all the characters look great! The major disadvantage to a TTL monitor is the absence of audio on them, although I prefer a separate audio amplifier anyway.

Con't. on next page

There are a million IBM TTL monitors out there at good prices. Why not use them?

[Enough babbling, I waannnt one! How do I do the mod, dummy??]

* The wiring required is: (from the bottom of the XEP80 board)

* Pin 1 and 2 of 9 pin socket to pin 7 of U6.

* Pin 7 of 9 pin socket to the pad 1/4 inch to the left of pin 8 of U6. (This pad is the same distance to the LEFT of pin 8 as pin 7 is to the RIGHT of pin 8.)

* Pin 8 of 9 pin socket to pin 9 of U6.

* Pin 9 of 9 pin socket to pin 10 of U6.

I ran the flat cable out where the power switch is mounted. The bottom cover will clamp the cable between the board and the bottom cover at this point and provide some strain relief. I would imagine that you could use a much longer cable, but at some point you will begin to lose character resolution.

Now, you can take advantage of any good deals you might see on a quality IBM monitor. I saw many different TTL units for less than $100 at the WCCF. Most of them looked like much better devices than any composite monitor I have seen and they are everywhere. If you are reasonably adept at soldering, or know someone who is, think about using one of these TTL monitors on your XEP80. The normal composite output is not affected by the modification at all. Now, if I can hack an IBM keyboard onto this thing.....

By Bob Woolley SLCC

Got an XF551? Ever wonder how to enable the high speed SIO data transfer.? Here is how I patched SpartaDos 3.2D

```
0110 ;XF551 HIGH SPEED PATCH
0120 ;FOR SPARTADOS 3.2D ONLY
0130 ;BOB WOOLLEY 4/18/88
0140 ;[75126,3446]
0150 ;
0160     *= $E4D0
0170     JSR $E6A7
0180 ;
0190     *= $E4DC
0200     JSR $E6C2
0210 ;
0220     *= $E697
0230 ;CMD INDEXES - DRIVE 1->8
0240 ;USDOUBLER IS $0A,$0A
0250 ;XF551 IS $28,$10
0260     .BYTE $28,$0A,$28,$28
0270     .BYTE $28,$28,$28,$28
0280 ;
0290 ;DATA INDEXES - DRIVE 1->8
0300     .BYTE $10,$0A,$28,$28
0310     .BYTE $28,$28,$28,$28
0320 ;
0330 ;CMD FRAME PATCH AT $E4D0
0340     LDY $0301   ;CHECK FOR XF551
0350     LDA $E69E,Y ;DRIVE PRESENT.
0360     CMP #$10
0370     BNE NML
0380     LDA $0302   ;TURN ON HIGH
0390     ORA #$80    ;CMD BIT FOR
0400     STA $023B   ;XF551 ONLY
0410 NML LDA $E696,Y ;SET SIO RATE
0420     STA $D204   ;FROM CMD LIST.
0430     JMP $E51E   ;SEND CMD FRAME.
0440 ;
0450 ;DATA FRAME PATCH AT $E4DC
0460     LDY $0301   ;CHECK FOR XF551
0470     LDA $E69E,Y ;VALUE OF $10.
0480     CMP #$10
0490     BNE EXI
0500     PHA
0510     LDA $0302   ;FORMAT CMDS NOT
0520     CMP #$23    ;ALLOWED HISPD.
0530     PLA
0540     BCS EXI     ;USE HIGH SPEED.
0550     LDA #$28    ;USE LOW SPEED.
0560 EXI STA $D204
0570     JMP $E509   ;DO DATA FRAME.
0580 ;
0590     *= $E6E2
0600     RTS         ;KILL INIT
0610     .END
```

Part 3 of a three part article by Steve Everman, contributing programmer for Antic magazine.

Part 3
Bit Mapping

Low Resolution Bit Mapping

As those of you who have worked with GFA BASIC or BASIC on older eight bit machines know, the Basic that came with our ST's can be pretty slow. It isn't that the machine isn't working it's tail off at light speed, it's just that it's doing so much more. First of all there is TOS, and GEM between our program and the CPU, then on top of that BASIC is keeping track of all of the windows, the scroll bars, the drop down menus, and trying to run you're basic program all at once. And because of this our animation suffers. Low resolution is even worse, because twice as much data has to be moved around. But for some applications this information is still useful, and if you ever move on to a compiled language such as PASCAL, or "C", then it will be priceless. Type in the following in Low Resolution Basic, save it, then run it:

```
100 '---BUTTERFLY TO LOW RESOLUTION SCREEN MEMORY --------
110 FULLW 2:CLEARW 2
120
SCREEN.MEMORY=PEEK(1102)*65536+ABS(PEEK(1104))
130 SCREEN.POS=SCREEN.MEMORY+27432
140 FOR X=0 TO 84
145 LINES.UP=LINES.UP+320
150 RESTORE WING:GOSUB DISPLAY
180 FOR D=0 TO 290:NEXT
190 NEXT:END
200 DISPLAY:'*****
210                                     FOR Y=0 TO 13
220 READ CO.PLANE1,CO.PLANE2,CO.PLANE3,CO.PLANE4
230
POKESCREEN.POS+Y*160-LINES.UP,CO.PLANE1
240                                     POKE
SCREEN.POS+2+Y*160-LINES.UP,CO.PLANE2
242                                     POKE
SCREEN.POS+4+Y*160-LINES.UP,CO.PLANE3
244                                     POKE
SCREEN.POS+6+Y*160-LINES.UP,CO.PLANE4
250                                     NEXT:RETURN
260 WING:
270                                     DATA 640,640,640,640
280 DATA 640,640,15032,640
300 DATA 256,14648,17732,256
310 DATA 256,32124,33666,14648
320 DATA 12568,20452,33026,19812
330                                     DATA 4368,28652,33026,26924
340                                     DATA 256,32124,33666,6448
350                                     DATA 256,14648,18372,896
360                                     DATA 1344,256,15288,16376
```

(continued on next page)

Just What the Doctor Ordered.....

Speed Up Your XF551

By
Bob Woolley SLCC

The XF551 is a great little drive for any 8-bit Atari user. It can format a disk in four different sizes - 92K, 133K, 184K, and 360K. You need a DOS that can talk the right language to use the higher densities, but a number of available programs are available to do that for you. I use SpartaDOS on my XF551 and it does very well for me, except for one feature of the drive that none of the current DOS programs can handle - high speed data transfer over the SIO buss. An ICD USDoubler modified 1050 has the ability to transfer data at about 3.5 times the normal rate. The XF551 can also increase the data transfer rate to about twice the 19.2KB of a standard SIO device, but you need special code to make it run. At some future date, ICD will distribute a new version of SpartaDOS that will allow high speed XF551 operation, but, in the meantime, you can use this Basic program to patch a copy of your SpartaDOS 3.2D disk and use the feature now. The ICD UltraSpeed will still work on your ICD drives and the XF551 will run twice as fast as normal!

In order to make room for the new code, I had to delete the existing code that automatically configures the DOS to your particular drive configuration. Under normal SpartaDOS, each drive is tested for the ability to run UltraSpeed SIO and the result is saved in memory. For example, if you have a normal 1050 connected as drive 1, then the list would show a parameter of $28 for D1:. If D2: were an ICD modified USDoubler drive, the entry for drive 2 would be $0A. These values tell the DOS that D1: is to be run at normal speed and D2: at UltraSpeed. This table is generated each time you boot your system and will accurately reflect the hardware you have connected to your computer. I don't change my drive configuration that often and I bet you don't either, so I overlaid the auto-configure code with the XF551 patch. When you run XF32D.BAS, you will be asked for your drive configuration one drive at a time. The disk in D1: will then have the X32D.DOS file patched with the new code and a static configuration table. This means that the disk created on that occaision will only be valid for one configuration. If you do happen to change what types or the addresses of your disk drives, you will have to re-run XF32D.BAS or you may hang your computer during SIO. Those of you with MIOs - this only applies to the PHYSICAL settings of the address switches in the drives. Don't worry about changing the LOGICAL configuration of your systems.

I did not put a lot of error trapping in this program (like none), so make sure the disk in D1: is one that you want modified when you run. This program **must** be run using SpartaDOS since I POINT directly into the X32D.DOS file. If you do not have version 3.2D of SpartaDOS, this program is of no value to you, don't bother using it. Once the DOS has been altered, the changes will reproduce in each succeeding generation. For those of us who can't keep it together, this change can be identified by the copyright line after booting up - this mod will read SpartaDOS 3.2x, instead of 3.2d.

When you use the new DOS on an XF551, all DD/DS formats will specify the fast skew format. This only has an effect on DD/DS, not ED or SD. Unfortunately, you cannot get reliable transfer using the UltraSpeed sector skew of SpartaDOS, so don't expect that to work. This means that there really is no high speed skew format for the SD and ED mode, but someone could build a custom sequence using SpartaDOS. If they do, maybe they will spread it around. At any rate, the DD/DS format runs just fine. Try it, you'll like it!

```
100 Rem *** XF32D.BAS ***
110 Rem BY BOB WOOLLEY [75126,3446]
120 Rem 4/18/88
130 Rem CONVERTS SPARTADOS 3.2D TO
140 Rem RUN XF551 SIO AT HIGH SPEED.
150 Dim S$(1),V(16)
160 Rem 3.2D **ONLY**.
170 Print ""    **This is a Clear Screen Character **
180 Position 4,2
```

Patch SpartaDOS 3.2D to Allow High Speed SIO on Your XF551 With This Short BASIC Program!

(Low Resolution Bit Mapping continued)

```
370     DATA 6448,256,26572,16376
380     DATA 256,256,32764,15736
390     DATA 256,256,15736,256
400     DATA 0,0,0,0,0,0,0,0
```

The colors are a bit nicer, and the butterfly is twice as wide, but it doesn't flap it's wings. We could have gone ahead, and had it flap as it moved, but there would have been twice as much data, and since it's just a demo I thought I would keep it short.

Most of the program should be self-explanatory, after our previous discussion. Except, now we are using four COLOR PLANES to give us 16 colors. So, the first four words in screen memory use our first 16 pixels on the screen. Again, if we didn't change the resolution we would run out of data before we hit the bottom of the screen. So we make the pixels twice as wide as medium resolution, or four times as big as high resolution. Do you remember in medium resolution, how we made the pixels twice as tall so that we stayed within our 32K limit. Well, that was because we used two bits for each pixel. Now we're using 4 bits for each pixel, so again we double the size of the pixel. Except this time we widen it. And that's why our butterfly is twice as wide now.

One small final note before we end. You might have been wondering why the butterfly flew out over the top of the OUTPUT window. Well, that's a good question. The window was drawn into screen memory by BASIC in the first place. So, if we redraw that portion of screen memory with our butterfly, the electron gun just goes ahead and does what's it's told copying screen memory onto the screen. Fine you say, but why then when I use the command GOTOXY 0,0 doesn't the cursor move up out side the OUTPUT window. Well, that is simply because Basic is a buffer between you and the machine, and it is translating it before it sends it on.

I hope you are able to use this information. It was hard gotten, over the years, from books that were always just slightly beyond my understanding. So enjoy, and keep studying.

END

News Bits and Commentary

Editors Note:
Due to popular demand (someone actually mentioned at the last meeting that they liked this feature) I'm trying another month of this news stuff, let me know if you'd like to see it as a regular feature.

Out to Pasture: Rumors have been flying thick and fast about David Small's departure from Data Pacific. I've not been able to get to final truth of this important item, but I'll not let that keep me from telling you what I've been hearing. He will continue to support the Magic Sac, (the only MacIntosh clone in existence). Hopefully this is true, because we learned at the WCCF (West Coast Computer Faire) that the next version would support Hypercard and Adobe Illustrator. This would really lend credibility to an already super product. David's wife was near delivery of a child at Faire time, and that was the reason given for him not being there. He had said he wanted to retire from Data Pacific, so we'll have to wait and see how things sort out.

Greener Pastures: What's taking so long on the ST version of Jet? Well it seems that Sublogic's only two ST programmers have left for more money at "better" companies. Also in the grass is greener category, Gary Yost is now incorporated and the former Marketing Director for Antic.

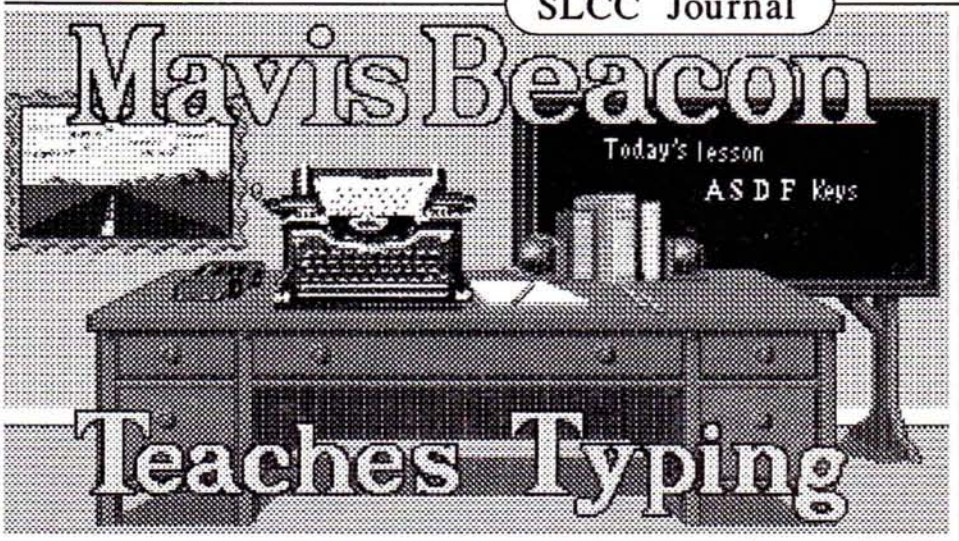
New GEM Desktop: A new product is hitting the market place that replaces the standard desktop that cleans up all the garbage that they forgot to put in the can. The list of features are too numerous to mention here (I'll do a review when I get it). Some of the improvements include: Up to seven windows open at once...All icons editable...GEM "rubberbox" can move in any direction, not just lower right...File copying into a buffer the size of free memory...Much, Much more disk information...Cold and Warm starts from the keyboard without losing your memory (I don't know about you, but I seem to be losing my memory more and more as the days go by)...All this and at least three times more of technical stuff my mind does not quite yet grasp for a mere suggested retail of $24.95! Look for NeoDesk.

Her mail was violated: A federal suit was filed in the Southern District of Indiana Court alleging that a BBS called the Professional's Choice and its sysop, Bob Predaina, failed to properly safeguard her private electronic mail. Linda Thompson seeks $112,000 in damages. The suit alleges that others were allowed to view the contents in a private message portion of the BBS, and previously deleted private messages were restored so that others could read them. According to the complaint the sysop also made statements damaging to her reputation. Sysops be warned. The **Faire was...fair:** The highlight of the WCCF was watching Shawn Foggle demo the new Publishing Partner Professional. It puts other DP programs to shame. It comes with a 60,000 word spell checker. It is now possible to flow text around graphics that can be manipulated in 3-D type rotation. PPP will now import GEM and compressed formats. Word processor files can be imported with out losing format information. And again, the list goes on and on. If you have PP, you'll love PPP. So what did I come away from the Faire with?...A box of Sony blanks for eight bucks. What I wanted was this neat Stereo simulator for the ST from Megatronics (amplifier, two speakers and the processor for around 50 bucks---new improved version is on the way).

Best rumor of the show: Never did see it, but the word was there was an IBM card that allowed for ST emulation, finally some decent software for big blue.

Get you hand out of my deep pocket: Neil Harris seemed to have mixed feelings about Intel's buying into Micron (discussed in last month's JOURNAL). On the one hand it would mean fewer chips available for other users like Atari, but on the other hand a bigger pocket for Atari to dig into for a settlement of their suit against Micron. Neil indicated that he hoped that ST production would be up by the Fall resulting in big U.S. promotion. He felt that it would take only a month to get production started here after a plant is obtained. For now, they will continue to play to their "hot" European market, while the chips are few in numbers.

END



"A couple of jets streak across the sky leaving words you will type in their wake,,,"

Review by :
Bob Rasmussen

Program by:
The Software Toolworks

To begin, this is one of the best all-around typing programs I have ever encountered. The colorfully boxed package is sturdy and includes a history of typewriting in booklet form (inside the front cover), which I found to be not only very informative, but also very interesting. There are two disks included in the package. Disk 1 is the main program of Mavis Beacon Teaches Typing and Disk 2 is a program for writing resumes.

The first disk walks you through formatting and installing the "save disk" that will keep track of all your lessons and progress. It starts by getting your name, skill level, and whether you are over or under 14. From there, it also asks what time limit you want with each session. I chose 15 minutes for my teenagers and 30 minutes for myself. When the time limit is reached, the program tells you how long you have been practicing and questions you whether to quit for now or continue uninterrupted.

There are four different learning centers in which you work -- the chalkboard, the classroom, the workshop, and the arcade. Each is different and works you at a different pace.

The chalkboard explains your weaknesses and strengths, then suggests a lesson to work with and questions if you want that one or another. After you decide, the screen then changes to the new workshop with a dialogue box explaining what the lesson does. Once you have read it, you can begin the lesson by typing the first letter. There is a graph on the left to keep track of how close to completion of the lesson you are getting, another to keep track of your speed, and a third to track your accuracy. On the right of the screen is a clock to watch your time and a metronome to help you establish a rhythm to increase your accuracy.

Once you have completed the lesson, which by the way doesn't consist of just random letters or even words, but also jokes, quotes, lessons from history, etc... a dialogue box appears that tells your speed in words per minute, your accuracy percentage, and your adjusted words per minute.

Mavis then switches back to the chalkboard and diagnoses your typing skills, suggesting either another lesson in the workshop, a new lesson in the classroom or a race in the arcade. Now here is where the fun really begins. It does take another disk access at this point to play the game, however it is worth the wait. Once it is loaded, you will see another dialogue box explaining what the game is working on. A couple of jets then streak across the sky leaving words you will type in their wake. This is where you just let your fingers fly, as you have a little red car to your right always trying to pass you, so type as quickly and accurately as you can so you only see the red car in your rear-view mirror.

This program is really much better than any credit a review can give it. Anyone can either learn to type from the beginning or improve whatever skills they already have.

Now that I have raved about all the good things about this ideal typing tutor, let's discuss some of the bugs. I find it very frustrating to try to check my adjusted w/p/m speed only to have the program crash on me each & every time. I have yet to be able to successfully use Disk 2 to write my resume. I know all I have to do is return both disks to Software Toolworks to receive my replacements, as they have completed their bug fixes, but it is annoying to have these little quirks in this program. I have also noticed some screen glitches that don't seem to affect the program, but are again just very annoying.

Some of the particular features I find very helpful are that the style of teaching can be changed, the keyboard can be changed between QWERTY and Dvorak, and typewriting style can be changed between word processing (which has word wrap) and typewriter (which requires carriage returns), I think teachers should certainly consider this as an alternate way to teach typing or at least as an enhancement to a regular classroom. Overall, I believe this is the best typing teacher ever developed, and it would be a fine addition to anyone's library of educational as well as game software.

END

Ted Lawson, our 16 bit disk librarian, has uncovered the birthdate for the Barbarian:

(type in exactly)
"04-08-59"
. . . this will make you immortal.

```
190 Print "This program will convert the DOS "
200 Print "file on a SpartaDOS 3.2d disk to run"
210 Print "an XF551 at high speed on the SIO  "
220 Print "buss. It will ONLY run using 3.2d!  "
230 Print "Put the copy of 3.2d that you want  "
240 Print "to modify in D1: and follow the     "
250 Print "prompts.  (RETURN) "
260 Input S$
270 Open #2,12,0,"D1:X32D.DOS"
280 Point #2,(3*128)+14,0
290 Put #2,120
300 Restore 680
310 Point #2,(7*128)+99,0
320  For X=1 To 3
330  Read A
340  Put #2,A
350  Next X
360 Restore 690
370 Point #2,(7*128)+111,0
380  For X=1 To 3
390  Read A
400  Put #2,A
410  Next X
420  For X=1 To 8
430  Print "" **This is a Clear Screen Character **
440  Position 0,8
450  Print "       Drive ";X;" is:"
460  Print "        810/1050 ========>A"
470  Print "        USDoubler 1050 ===>B"
480  Print "        XF551 ===========>C"
490  Print "          Reply A, B or C "
500  Input S$
510  If S$="A" Then V(X)=40:V(X+8)=40
520  If S$="B" Then V(X)=10:V(X+8)=10
530  If S$="C" Then V(X)=40:V(X+8)=16
540  Next X
550 Point #2,(11*128)+42,0
560  For X=1 To 16
570  Put #2,V(X)
580  Next X
590 Restore 700
600  For X=1 To 54
610  Read A
620  Put #2,A
630  Next X
640 Point #2,(11*128)+117,0
650 Put #2,96
660 Close #2
665 Print "    ALL DONE! "
670 End
680 Data 32,167,230
690 Data 32,194,230
700 Data 172,1,3,185,158,230,201,16
710 Data 208,8,173,2,3,9,128,141
720 Data 59,2,185,150,230,141,4,210
730 Data 76,30,229,172,1,3,185,158
740 Data 230,201,16,208,11,72,173,2
750 Data 3,201,35,104,176,2,169,40
760 Data 141,4,210,76,9,229
```

Hacking the XF551

I had a great time at the West Coast Computer Faire. There were so many little goodies to buy or drool over that some of them drew out the old piece of plastic with no conscious effort on my part. Like the 3.5 inch drives over at the JDR Microdevices booth. Here were some Mitsubishi MF353B drives that were already mounted in a 5 1/4 sized frame and had the standard 5 1/4 signal and power connectors. For $99! They looked as if you could just unplug the 5 1/4 and plug in the 3.5.... and you can. The cables in the XF551 are a little bit short, but there are absolutely no changes to be made to use the MF353B. The activity light functions exactly the way it should, the drive formats at 360K with no problems and the power supply seems to handle the new drive without getting hot. Piece of cake! I don't think it is worthwhile for everyone with an XF551 to replace their mechanisms with an MF353B, but for those who like the durability of these little MicroFloppies, this is the way to go.

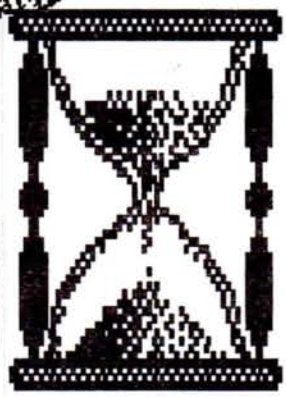
The 3.5 drives are actually 720K devices, 80 tracks, double-density, double-sided. Even though you can send it the correct configuration, the XF551 will not format the disks at 720K because the program ROM in the drive does not allow for it. If someone could alter the ROM to permit 720K operation, you could run the drive at 720K - everything you need is there. Speaking of the configuration bytes, the XF551 uses the same definitions as the ICD USDoubler drives (which use the Percom format). For the time being, 360K seems like a LOT of storage. Maybe, six months from now, 720K will look worth the effort.

The one feature on the Xf551 that has yet to be utilized is the high speed SIO. On an ICD drive, the SIO runs at high speed any time the feature is present. If the computer starts a command at 19,200 baud, then the drive answers at 19,200. If the command arrives at 55,000 baud (or so...), then the drive drives the SIO at 55,000 baud. Works fine on the ICD USDoubler drives. The XF551, on the other hand, sends all commands at 19,200 baud. The key to high speed data transfer is the high order bit of the command. If the command has the high order bit set, then the data phase of the I/O takes place at 38,400 baud. If not, then the data rolls out at 19,200. There is a BASIC program is this issue that patches the SIO code in SpartaDOS 3.2D so that the XF551 can run at high speed. Basically, each command has to be sent at normal speed with the high order bit set. The data is then sent at high speed. On a D/D format command, setting the high order bit tells the XF551 to format the sectors with a high speed sector sequence (offset of 9) instead of the normal sequence (offset of 15).

REW

Minutes

From April Meeting



General Meeting

The April 5th, 1988 meeting was called to order at 8:00 PM by President Barton. Roll Call: All officers present.

A newly developed membership questionnaire was passed out to those present with a request that they be filled out and returned before the end of the meeting. This questionnaire will enable the Officers to better plan future meetings.

Plans for the upcoming West Coast Computer Faire were reviewed. The President stated that Data Pacific would be there to show the Magic-Sac and the new Transformer that allows Macintosh software to be read directly. It is expected that Timeworks will supply a copy of their new Desktop Publishing program.

Atari has supplied one Mega ST2 and one 130 XE system for use at the show. This is considerably less than what has been supplied in past years and will necessitate the club using their two ST systems and one of the XE systems.

Following an extended Question and Answer period on shows and general topics the 8 bit software chairmen demonstrated the March and April disks of the month. The March Floppy contains contains in part a multi tasking and Max Headroom demos, a maze game and CAD XE. The April Floppy contains Alternate Reality Utilities, a math game, Easy Scan picture demo and more.

Bob Rasmussen was introduced as the club's new program director, Bob in turn introduced tonights guest speaker, Randy Blosil, a representative from WORD PERFECT Corporation, the makers of the hottest word processor in today's software market. Randy covered some of the history of WORD PERFECT and then proceeded to give one of the best and most informative demonstrations that we have had in a long time. At the end of his demo Randy answered the many questions that this new to Atari program has developed.

Following this great demo, Randy donated a copy of the WORD PERFECT program to the club; this was raffled off and Peter Corona was the lucky winner of this great gift. Peter will write an article for the Journal about the program. (If he can figure out how to take it out of the shrink wrap)

Being no further business the meeting was adjourned at 10:20 PM.

Respectfully submitted - Jim Moran - Secretary

END

SL CC
Golden Gate Computer Show
at the Oakland Coliseum
Saturday, May 21 and Sunday, May 22
Special Atari Section
8 and 16 Bit

Did You Ever Ask Yourself?

What the Heck Is Sector Skew and High Speed SIO and All That Techie Stuff?

By
Bob Woolley SLCC

There are a number of schemes out there to speed up the transfer of data from the disk drive to the computer. The absolute best is the RAMDISK. This technique does not need to get data from the disk drive at all, it only needs to look in memory for the data. Another modification is a parallel interface to the drive. By sending the data 8 bits at a time instead of 1 bit at a time, you can load data very rapidly. At the present time, only the ramdisks are available and they have some serious operating problems. They work, but are difficult to use on many types of programs. The most common and useful enhancement is the high speed SIO modification from ICD and others.

This type of upgrade allows the SIO hardware to function in the same manner as a normal machine, but at a much higher rate - almost three times faster. When a byte of data needs to be transferred, the controller loads it into a special register. From the register, a clock sends the data out over the interface 1 bit at a time. Every clock tick boots out another bit, eight clicks, eight bits. By increasing the clock frequency, you decrease the time it takes for the 8 bits to be transferred and this is essentially what these upgrades do. If that was all you did to your computer, though, you would be somewhat disappointed - the data would take just as long as before to load into your computer. The reason for this is the sector skew of the disk. It has to be modified to take advantage of the higher SIO clock speeds.

Think about a Merry-Go-Round that has 18 wooden horses arranged around the outside. You are standing at the edge of the Wheel as it slowly spins on its axis. On each horse sits a child with a number pinned to his shirt that you can read as he approaches your position. These numbers run from 1 to 18 and it is your job to remove the children from their horses as they pass by you. You must take them off in number order and carry them to the edge of the grass where you can put them down, OK? Here comes number 1! No problem. You lift him off his seat, walk over to the grass and place him gently on the ground. Easy. As you go back for the next kid, you realize that while you were handling number 1, number 2 has gone past your position. Now you have to wait for a whole revolution for number 2 to come back. Hmmmm. It should be obvious to you that if you can get back for the next child in less than one revolution of the disk, that changing the arrangement of the little fellows will allow you to get them all off more quickly. Let's arrange the kids so that they sit 1, 3, 5, 7, 9, 11, 13, 15, 17, 2, 4, 6, 8, 10, 12, 14, 16, 18. Now, if you can grab the proper child and deposit him safely on the turf before the wheel has moved one-half the way around, you won't have to wait hardly at all for the next number. You should be able to remove all the numbers in only 9 revolutions instead of 18, like the old sequence. Of course, if you can't get to the next number in less than half a revolution, it will take you even longer with this format than with a sequential one like you had!

This is the basis for reading the sectors on the diskette faster than normal. You need to increase the speed at which you transfer the data to the computer AND you need to change the order in which they are written on the drive. Just by increasing the speed at which you can put the little monsters away does not get the job done any faster, does it? The XF551, for example, therefore has two ways to arrange the sectors (a SECTOR is just a place to put a block of data) on the disk - Normal and High Speed. Once the data is committed to resisde on a certain "horse" during FORMAT time, all the drive can do is to alter what is in the sector, not where it goes on the 'Wheel'. With the ICD upgrade, you can actually program your own sector sequence on a USDoubler 1050 and customize your disks for your personal application.

Between the two changes then, you arrive at a useful and reliable method to load (or store - it works both ways) data much faster than the original system. Just be aware of the fact that the high speed sector skew can actually slow down your system if you are not reading it on a modified drive.

REW

Thanks, ICD
We Needed That!

April showers bring may flowers.... and SLCC brings the best in Atari to the Main Meeting. Be there!

SLCC JOURNAL

P.O. BOX 1506, SAN LEANDRO, CA 94577-0374

TO

Next Meeting:

May 3, 1988 • 8 pm
San Leandro Community Library
300 Estudillo Ave

FIRST CLASS MAIL

MAY 1988

SLCC Calendar of Events

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3 MAIN MEETING 8PM San Leandro Public Library	4	5	6	7
8	9 ST SIG 8PM San Leandro Public Library	10	11 EXECUTIVE BOARD MEETING	12	13	14
15	16	17 BEGINNER'S 7:30 MUSIC 7:30 TELECOM 8:00	18 ST SOFTWARE SIG 8 PM EDUCATION SIG 7 PM	19	20	21 JOURNAL DEADLINE THIS IS NOT A MISTAKE!!
22	23	24 PASCAL SIG 7 PM BUSINESS SIG 8 PM	25 ST BEGINNER'S SIG 7:30 PM	26	27	28
29	30	31				

Now That It's Plugged In,..

The SLCC has a Beginners SIG for those who own Atari 8-bit or ST computers and consider themselves a novice or beginner. We discuss Basic, DOS, operations, system set-up, keyboard functions, and other introductory material. SIG meetings are held on the third Tuesday of each month at 7:30 PM (8-bit) or the fourth Wednsday at 7:30 (ST). Call the appropriate SIG Leader for information and directions. See you there....

SIG (special interest group) leaders and their phone numbers are located on the Table of contents page at the front of the Journal. Please call them for more details or directions.