Newsline

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ST. LOUIS AREA MARC Gathering & Swap Meet

Tuesday, August 11th 7:00 p.m.
Quality Inn Hotel, Collinsville Illinois
Illinois Route 157 & I-55/70

Special Guest
Dorothy Brumleve
Kid Programs

Other Invited speakers
Softlogik Corporation - Pagestream
Ron Robinson - Atari Advantage

Sponsored by Eastside Atari Computer Enthusiasts

Contact Dave Pintar
on the MARC Message Area FoReM Net
for information on swap meet tables

ACE St. Louis Members call 644-7168 and
I will relay your message and phone number
Terry Shoemaker

IN THIS ISSUE

REGULAR FEATURES

ACE-STL General Meeting

July 29th Wednesday 7:00p.m
August 26th Wednesday 7:00p.m
September 26th Saturday 1:30p.m
October 28th Wednesday 7:00p.m
November 25th Wed 7:00p.m
December 30th Wednesday 7:00p.m

Thornhill Library
(See Back Page for Map

ACE Desktop Publishing SIG
July 20th, Monday 7pm
Terry Shoemaker's house
644-7168
MIDI SIG
Greg Kopchak's House

ILLINOIS CLUB MEETINGS
EAUG GENERAL MEETING
June 2nd , Mon 7:00 PM
info 618-254-6077modem

STAR GENERAL MEETING
O'Fallon, IL Info (618)746-4710

1992 ACE CLUB OFFICERS

President:	Nick Barr
Vice President:	Greg Kopchak
Secretary:	Tom Zenthoeffer
Treasurer:	Wanda Schartman
Editor:	Terry Shoemaker
Book Library:	Volunteer needed!
8Bit Disk Lib:	Mike Huddle
ST Disk Lib:	Tom Zenthoeffer

SIG DIRECTORS

MIDI:	Greg Kopchak
DTP	Terry Shoemaker

Editor's Column
By Terry Shoemaker

Yes, finally an ACE Newsline. Where has my Newsline been you ask? I for one can take blame for the lack of a Newsline in May and June. I can blame everyone else for not submitting articles, I can blame everyone else for lack of help but the truth is, I have put the newsletter together before for many months without help and the above excuses don't hold water since I could have thrown something together during the last couple months.

The truth is, I have had trouble motivating myself. Call it burn-out, call it lack of time due to work and home life. The truth is, we usually make time for those things that are important to us. Maybe since I have been involved in Atari Computers and ACE St. Louis for so long I don't see many new things that seem exciting enough to pass on. Being on the Bulletin Boards and Genie I read many things and forget that not everyone has a modem or a Genie account and do not have many other sources for Atari news.

My lack of enthusiasm could be caused by a similar lack of interest found in many in our club. If so, I am asking for help. Let me know what interests you. Let me, and the other officers of ACE St. Louis know what will get you to attend meetings, buy club disks and participate in club functions. I want to be excited about my computer, I want to share enthusiasm with other users. I want to fight off those luring ads for a computer I know is not better then the one I have, but just happens to be the one "everyone else is buying". We have seen this with our kids and game machines. We knew the Lynx was better then Gameboy but it was tough convincing the kids of that. We know that our computer is better then the one everyone else has, but we have to keep reminding each other.

Please become an active member of your club. Volunteer to bring a computer, a program or information to the other members.

And I will try to be more regular with your ACE newsline.

I would also like to thank the Mid Florida Atari Computer Club. We will be exchanging Pagetream files of our newsletters and you will see numerous articles in this issue from their June issue.

P.S. I am considering driving my minivan to the Mist Fest. If anyone is interested in going, let me know.

The ACE St. Louis Newsline is a monthly publication of the *ACE St. Louis Atari User Group*. The club is in NO way affiliated with ATARI Corporation. The *ACE-STL User Group* is dedicated to making Atari Computers, Software and peripherals more productive and useful. ATARI and FUJI symbols are registered trademarks of the ATARI Corporation. All other trademarks, copyrights and service marks belong to the respective owners. Opinions expressed in this newsletter are not the opinions of the club, its officers, its members or its advertisers except where noted all opinions belong to the writer. Items from this newsletter may be used by other club newsletters or magazines unless otherwise noted, if proper credit is given to the author and the club. This Newsletter is produced using a 2 1/2 meg 520ST, Pagestreamand a HP Deskjet Plus Printer.

The Workbench

by John Waters, MFACC

In using my 800XL, I have recently run into some very unusual problems. As I haven't heard of these things happening before, I thought I would mention them here with the remedies that I have discovered.

If you have experienced a crackling noise on the screen of your monitor or TV, (I'm not sure about the TV, as I use a color monitor) and the colors are constantly changing, you may have a filter cap going bad in the Power Supply box. When you open up the box and the cap is going or has gone bad, a bad hum will be noticed and the screen will possibly go completely red. If not, shut down quickly and the screen will go black with no sound. This means that most likely it is probably one of the "DRAMS" that has gone to DRAM heaven.

If you find that when you first power up, you see the "Diagnostic Menu" on the screen and your keyboard has locked up, again most likely it will be that pesky "DRAM". It is probably that Pin #9 on one of the DRAMS is open or not making good contact. You will have to change them one at a time.

To help with your analysis, I have some suggestions:

1 - If it is necessary to change chip #U18, you must use a #74LS08, otherwise the unit will not work.

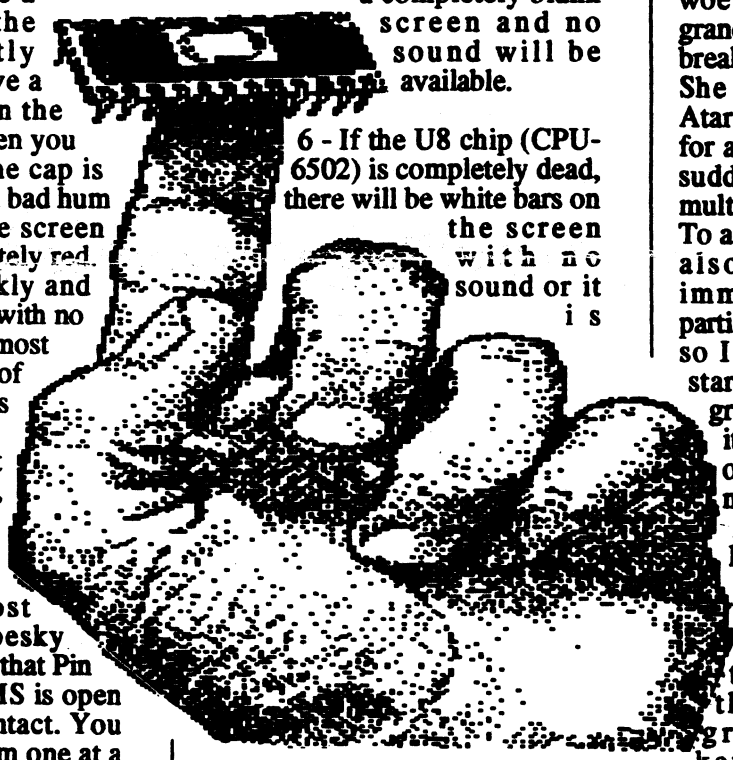
2 - A dead O.S. chip will give a yellow screen with no readings.

3 - If the Basic chip has gone south, the screen will only show the "Diagnostic Menu" and not do anything else.

4 - If the U22 chip (pokey) is partially bad, the cursor will show, but no "Ready" prompt will come up and if it is completely bad, no color or sound will be in evidence.

5 - If the U23 chip (PIA) is bad, a completely blank screen and no sound will be available.

6 - If the U8 chip (CPU-6502) is completely dead, there will be white bars on the screen with no sound or it is possible the unit will be completely dead.



I had one other very unusual thing happen and for that I am completely perplexed. I have three 800XL's and they all work perfectly most of the time. However, one of them has a strange CPU chip. It is numbered 6520 and will not work with any other unit. I have swapped them around, but only one 6520 will work in this particular unit. If anyone can shed any light on this, please let me know, as I am most interested to find out why.

I am going to change the subject of my article here, to bring a very unusual situation to your attention. I'm sure that you're all familiar with what a computer virus is.

Well, my sad and strange tale of woe is this. Several weeks ago, my granddaughter, visiting us on college break was using one of my 800XL's. She was doing a term paper using Atari Writer +. She had been typing for about a half hour and the screen suddenly showed a full screen of a multi-colored checker board pattern. To add insult to injury, the keyboard also completely locked up. I immediately thought that this particular 800XL went "over the hill" so I set up another unit and she started completely over. Now, my granddaughter is no 'novice' when it comes to computers, so I ruled out any error that she might have made. After another frustrating 15 minutes or so the same thing happened. I wasn't about to give up (you guessed it) I put my third unit on line. This time the lapse of time was even shorter than the last and it did the same thing. I apologized to my granddaughter and to my keyboards and came to the realization that it was my Atari Writer +. I then loaded up a spare backup copy of the program and "Walla" everything was fine. My granddaughter was again quite happy and I am still puzzled as to what happened....anybody have any ideas?

Could it be that my first Atari Writer + disk was trying to play an April fools joke on my granddaughter? Well at any rate, she did get her paper done and hopefully will get very high grade.

FIND PRIME NUMBERS WITH YOUR ATARI 8-BIT

By S.G. Wallace

April 13, 1992

A TV program I saw recently on PBS was about the first electronic computer. A machine was developed in 1946 at the University of Pennsylvania called ENIAC, for Electronic Numerical Integrator And Computer. ENIAC used 18,000 vacuum tubes and could do several hundred multiplications per minute.

A demonstration of ENIAC by its designers was to determine if the integer [(2 to the 127th power)-1] was a prime number. That number held a previous significance in number theory history.

A prime number is an integer (whole number) other than 1, exactly divisible only by itself and 1. The first prime number is 2 and is a special case because it is the only EVEN prime. Any other even number is divisible by 2 and therefore is not a prime number. The second prime is 3, the third is 5, the fourth 7, and so on. Twenty five percent of the numbers between 1 and 100, 17% between 1 and 1,000, and 7% between 1 and 1,000,000 are prime numbers. Two primes that differ by 2, for example 5 and 7, 29 and 31, and 101 and 103 are called "twin primes". It is believed that every even number greater than 2 can be expressed as the sum of two primes.

Prime numbers were known to Pythagorean philosophers by 400 B.C. About 300 B.C., Euclid, a Greek mathematician, proved there are infinitely many prime numbers. He knew of the "fundamental theorem of arithmetic" which states that any positive integer greater than 1 either is a prime, or can be expressed as a product of primes that is unique except for the order in which the factors are listed.

Around 240 B.C., another Greek mathematician named Eratosthenes developed a method for finding prime numbers. His process has been dubbed "Eratosthenes' Sieve". Prime numbers may be sifted or "sieved" from a list of numbers from 2 through n. In order for the sieve to work, the first few prime numbers must be known and used as divisors. Eratosthenes' Sieve is easily applicable to modern computers, so a simple description follows.

The first prime numbers are 2 and 3. If n=15 for example, all numbers from 4 to 15 may be tested to determine if they are prime. First try to divide 4 by 2. The result is an exact integer (2), so 4 cannot be a prime number. In fact, no even number except 2 is a prime, so other even numbers may be discounted as primes. As a corolary, no odd number will be divisible by 2, so 2 need not be used as a divisor. The next number to test is 5, so divide 5 by 3. The result, 1.67, is not an integer, and no other prime numbers are smaller than 5, so 5 is a prime number. Similarly, test 7 by dividing by 3 and 5. The results are not integers, so 7 is a prime. The next number to test is 9. It is divisible by 3 and is therefore not a prime number. To finish our example, 11 and 13 are primes, but 15 is not. A parade of numbers may be likewise tested to find all primes in the list.

In large sequences of numbers, Eratosthenes found that sieving could be done using previously found primes from 2 to the largest prime number whose square is less than the number being tested. In other words, there is no need to test a number with a prime if the square of the prime is greater than the test number. If no lesser prime will divide exactly into the test number, then the test number is a prime number.

Attempts to find simple algebraic formulas, theorems, and methods for yielding prime numbers have been developed through the centuries. Some work; up to finite values of n.

A method for testing wheather a number is a prime was discovered by an Englishman named John Wilson about 1765. Wilson's theorem states that a number n is a prime if it divides exactly into the number [(n-1)!+1]. The exclamation mark is read "factorial". For example 4! = 4 X 3 X 2 X 1 = 24.

Suppose we wanted to know if 11 is a prime number. [(11-1)!+1] = [(10 X 9 X 8 X 7 X 6 X 5 X 4 X 3 X 2 X 1)+1] = [3,628,800+1] = 3,628,801.

Eleven divides exactly into that result (329,891), therefore 11 is a prime. The theorem is awkward for large values of n because the factorial soon becomes unwieldy.

In 1876, French mathematician Edouard Lucas proved that the 39 digit number 2 to the 127th power minus 1 was a prime. It is the largest prime to be found without the aid of a modern computer. Evidently, ENIAC verified Lucas' result.

In 1952 a computer at the University of California found that 2 to the 2,281st power minus 1 was a prime. At the University of Illinois in 1963, 2 to the 11,213th power minus one, a 3,376 digit number was found to be a prime. Then in 1971, a 6,002 digit prime number resulted expressed as 2 to the 19,937th power minus 1.

Continued on following page

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Nineteen seventy eight saw a 6,533 digit prime number, and a 13,395 digit prime was discovered a year later. As of 1992, a prime number has been found with more than a quarter of a million digits!

An Atari 8-bit computer will not even approach numbers as large as previously mentioned. However, a simple Basic program can be used to implement Eratosthene's Sieve. This interesting method has been used for benchmark testing to compare computer speeds.

The illustrative program listed below may be typed into any 8-bit Atari with Basic. The REM statements do not have to be typed. For machines with other than 48K of memory, change the number in the DIM PRIME(5000) statement in line 600 as required. You may use four Basic commands in an immediate mode line to check for free memory with various dimensioned values for PRIME. Load the program. At the READY prompt, type:

TRAP 40000:CLR:DIM PRIME(your number):? FRE(0) <RETURN>

The number returned by Basic will approach zero as the dimensioned value is increased. An error 2 message will be returned if PRIME is too large. When you find a number for PRIME that utilizes nearly all your Atari's memory, plug it into DIM PRIME() in line 600.

With minor modification, the program will run on other types of computers. It ran on a PC with 640K of RAM. Its PRIME variable was dimensioned to 14750.

The program may be stopped by pressing the BREAK key or allowed to run until the computer's memory is exhausted. A "STOPPED AT LINE #" message will be displayed in either case. All prime numbers found by the computer may be printed to screen or printer by typing in immediate mode either GOTO SCREEN, or GOTO PAGE. If some memory remains unused, typing GOTO 180 will cause processing to continue.

```
100 REM  PRIMEFND.BAS 4/11/92 SGW
110 REM
120 REM ************************
130 REM *     PRIME FIND     *
140 REM * Eratosthene's Sieve *
150 REM ************************
160 REM
170 GOSUB 600
180 FOR TRY=1 TO COUNT
190 REM
200 REM * Check For Exact Division *
210 REM
220 IF TESTNUM/PRIME(TRY)=INT(TESTNUM/
PRIME(TRY)) THEN POP :GOTO 390
230 REM
240 REM * Check Divisor Size *
250 REM
260 IF PRIME(TRY)*PRIME(TRY)>TESTNUM THEN POP :GOTO
330
270 NEXT TRY
280 REM
290 REM ************************
300 REM * Yep, It's A Prime! *
310 REM ************************
320 REM
330 COUNT=COUNT+1:PRIME(COUNT)=TESTNUM:?
PRIME(COUNT);", ";
340 REM
350 REM ************************
360 REM * Nope, Try Another *
370 REM ************************
380 REM
390 TESTNUM=TESTNUM+2:GOTO 180
400 REM
410 REM ***************
420 REM * Memory Dump *
430 REM ***************
440 REM
450 REM * Screen *
460 REM
470 FOR TRY=0 TO COUNT
480 ? PRIME(TRY);", ";:NEXT TRY:STOP
490 REM
500 REM * Page *
510 REM
520 CLOSE #1:OPEN #1,8,0,"P:"
530 FOR TRY=0 TO COUNT
540 ? #1;PRIME(TRY);", ";:NEXT TRY:CLOSE #1:STOP
550 REM
560 REM ***************
570 REM * Initialize *
580 REM ***************
590 REM
600 TRAP 640:SCREEN=470:PAGE=520:DIM P
RIME(5000)
610 GRAPHICS 0:? :? "     PRIME NUMBER GENERATOR     ":? :?
620 ? "The first two prime numbers are 2":? :? "and 3. Other prime
   numbers found":? :? "are:":? :?
630 PRIME(0)=2:PRIME(1)=3:TESTNUM=5:COUNT=1:RETURN
640 TRAP 640:CLOSE #1:STOP
```

CAROLYN'S CORNER

By Carolyn Hoglin, Orlando FL.

If you do much word processing at all, there will be many times when you need to delete, move, or somehow deal with only a portion of your text at a time. Fortunately for those of us using AtariWriter Plus, the program provides a method of dealing with text blocks that is both powerful and easy to implement.

Suppose you decide that you have been too long-winded and now want to delete a paragraph or two from your document. Here's how to do it: Place the cursor over the first letter of the text to be deleted and press [OPTION-B]. The words "BEGINNING MARKED" will appear in the message window. Then place the cursor on the last character of this block of text. Now press [OPTION-DELETE], and the designated text is history.

If you should accidentally delete something you really didn't want to, not to worry. Just press [OPTION-X], and the text will reappear as if by magic. In fact, that is exactly the procedure for moving a block of text from one place to another. First you delete it, then cursor to the new position and press [OPTION-X].

If you want to duplicate a portion of text, rather than to delete or move it, you press [OPTION-B] at the beginning of the block and [OPTION-E] at the end. This time the words in the message window say, "BLOCK DEFINED." Now when you press [OPTION-X] at the desired spot, a copy of the text block will appear as above, but the original text will not be deleted. Incidentally, this text will remain in the text buffer until it is replaced by new text, so it is possible to make as many copies as you want just by pressing [OPTION-X] for each copy. It is even possible to save (or abandon) the current document, load another one, and "paste" this buffered text into the new document.

In fact, if you are using a 130XE (or an expanded 800XL), and the documents you're dealing with are 15K or smaller, you can load another document into the second (or third) bank of memory and cut and paste between them as desired. Just press [START-B] to go to the next bank. Then press [OPTION-L]. You will be prompted for the "FILE TO MERGE." Pressing [START-B] will cycle from bank 1 to 2 to 3 and back to 1. Each time you change banks, you will find the cursor is right where you left it, which is very convenient.

Remember that word "merge" when dealing with more than one file at a time. If you SAVE your file from the Main Menu, all three banks will be saved in consecutive order as one file. If you have loaded additional files as a temporary step in order to refer to them or copy text, etc., and do not wish them to be part of the original document in their entirety, then you must delete the extraneous text. This is easily done by pressing [SELECT-T] to go to the top of the bank, then pressing [SELECT-DELETE] to delete to the end of the bank. Text deleted in this manner will NOT be saved in the buffer, so be sure you really want to delete it. Any prior text that IS in the buffer will not be disturbed and can still be pasted where desired.

Sometimes, when you have two or more files in memory, you want to save each of them individually. Again, no problem. Just place the cursor at the top of the block to be saved and press [OPTION-B]. Now press [SELECT-B] to go to the bottom of the bank (or cursor to the desired spot) and press [OPTION-S]. You will be prompted for "FILE TO SAVE". Repeat this procedure for any additional file.

There are two more options involving a block of text. You may alphabetize a list by pressing [OPTION-B] at the beginning and [OPTION-A] at the end. (If the list is lengthy, this will take some time, so be patient.) If you want to count the number of words in a block, press the now-familiar [OPTION-B] at the beginning and [OPTION-W] at the end. (To count the number of words in the whole bank, press [OPTION-W] from any spot without marking a beginning.)

Whenever you define a block of text, whatever the reason, the text will appear in inverse video until the action is completed. If you are dealing with sentences from within paragraphs, be sure to include the spaces after the final period in the block to be defined. In the same manner, you should include the [RETURN] on the line below a paragraph to be moved so that it will separate that paragraph from subsequent text in the new position.

Practice making use of these text block features. You'll find the commands easy to memorize, and your writing will improve with this type of editing.

STraight FAX!
Version 1.03

Joppa Software Development announces the release of:

Send/Receive FAX Software for the Atari ST/TT Computers Manufacturer's Suggested List Price $89.95

STraight FAX! is the first Atari ST/TT FAX Communications software package that supports industry standard send/receive Class 2 FAX Modems. Version 1.03of the STraight FAX! adds many new features, corrects problems and allows a greater level of compatibility with other programs.

Joppa Software Development also has available to registered STraight FAX!owners the complete FONT GDOS package from Atari Corporation. The three disk FONT GDOS package comes complete with an Installation program, the FONT GDOS program, three Desk Accessory/Control Panel Module utilities for customizing the FONT GDOS setup, bit mapped screen and printer fonts in various point sizes in the Swiss and Dutch type styles, printer drivers for several popular printers and documentation for installation and use.

The FONT GDOS package may be ordered direct from Joppa Software Development for $10 (US), shipping inside the US and Canada included. For a limited time registered STraight FAX! owners may also receive the STraight FAX! version1.03 update with the FONT GDOS package, by sending the STraight FAX! master disk to Joppa Software Development at no additional cost.

The STraight FAX! version 1.03 update may also be ordered separately by registered STraight FAX! owners by sending in the master disk along with $2(US). Outside the US and Canada, please call for pricing.

Version 1.03 Enhancements

Atari Clipboard Support

The STraight FAX! now supports the Atari Clipboard standard for Cut/Paste of graphics and text to a Clipboard. Information placed on the Clipboard may be used by other Clipboard "aware" applications and the STraight FAX! will use information placed into the Clipboard by other applications or itself.

A new menu title "Edit" adds the following commands for View Windows:

Cut ^X Copy the clip area to the clipboard and erase it. Copy ^C Copy the clip area to the clipboard.
Paste ^V Paste the clipboard to the clip area. Clear Del Erase the clip area.

Graphics from a View Window are placed into the Clipboard in standard image(.IMG) file format. Graphics may be copied and pasted between View Windows in the STraight FAX! program or other applications.

Text from the Cover Page message is placed into the Clipboard as a standard ASCII text file. Text may be copied and pasted into the Cover Page message with other applications (i.e. desk accessory text editors).

Environment Variables

The STraight FAX! will look for an environment variable "ST FAX=" to find its home path. Many desktop replacement programs allow the user to specify environment variables as well as some shareware utility programs. The use of the ST FAX environment variable will allow some menu launcher programs that do not properly execute programs to allow the STraight FAX! to determine where its home directory is located.

View Windows

Many new features have been added to enhance the Viewing of FAX, Image or DEGAS files.

1) The View Window Command Menu may now also be displayed (centered over the mouse position) by clicking the right mouse button while the mouse is over a View Window that is the top GEM window.

2) The View Window Command Menu has a new command: Invert Clip Area which will invert the color of all pixels within the clip area outline.

3) The Convert Menu now has a new command: Cycle Windows (Alternate-N), which will bring the bottom most View Window to the top or if the top most View Window is not the top GEM window, this command will bring the top most View Window to the top. This feature allows easy paging through multiple page FAX files.

STraight FAX!
Continued

4) The image in the View Window may now also be positioned with the keys:

Clr Home - Move to the top left edge of the image in the View Window.

Control Clr Home - Move to the bottom right edge of the image in the View Window.

5) The STraight FAX! will now allow Viewing and Converting of Monochrome Image Files that have extended headers (i.e. greater than the standard header size of 16 bytes). Images files with extended headers are produced by some European software packages.

6) The Close Window command may be issued with the Alternate-Y key combination. This will cause the top View Window to be closed.

7) The Flip Graphic command allows the graphic displayed in the View Window to be flipped upside down (this may be useful when viewing a received FAX page that was sent upside down).

Auto Scan Merge

The STraight FAX! now includes the capability of merging the left and right sides of a page that were scanned using one of the supported hand scanners,Dr. Bobware's ScanLite desk accessory, and a scanning tray such as The Tray from The Lyra Group.

The user scans the left and right sides of the page, using the scanning tray to align the vertical starting point as accurately as possible. The left and right scans will each be placed into separate View Windows. From the left scan's View Window, the Merge Scans command is then selected from the View Window Command Menu.

The merge process will take a few seconds depending on the speed of the computer, the height of the scans and how accurately the two scans were vertically aligned. The scans should be no more than one inch out of alignment, or else the merge will be unsatisfactory.

If sufficient RAM and a View Window are available, the merged scans will appear in a new View Window, otherwise the File Selector will be displayed prompting for a FAX file to save the merged scans.

If the merged scans are unsatisfactory, one side of the scan may have been scanned too slow or too fast. If this occurs, the user may re-scan one of the sides of the page and perform the merge again.

Cover Page

The STraight FAX! will look for a default Cover Page Parameters file named:STFAX.COV located in the STraight FAX! home directory and load it into the Cover Page parameter entry fields.

Intelligent Parameter Passing

In addition to accepting Image (.IMG), DEGAS (.PI3), DEGAS Elite (.PC3), ASCII Text (.TXT), FAX (.J01 to .J99) and File List (.FLT) files as command line parameters, the STraight FAX! will now also accept Preference (.INF), Phone List (.PLT) and Cover Page Parameter (.COV) Files.

This allows the user to override the default files that will normally be loaded (i.e. the default phone list file is STFAX.PLT located in the STraight FAX! home directory or path as defined above.) The user may specify an alternate Cover Page Parameters file, Phone List file or Preference File that will be loaded at startup.

Many Desktop replacement programs allow multiple file parameters to be passed to an application. From the original GEM Desktop or the new Desktop (on TOS2.00 or greater), only one parameter may be passed at a time to an application. STraight FAX! supports the capability in Atari's (forthcoming)Multi TOS that allows several files at a time to be dragged to a program as parameters. The STraight FAX! will sort out all parameters with the extensions listed above and perform the appropriate action.

ASCII Text File Conversion

The time for ASCII Text file and Cover Page to FAX file conversion has been reduced. This process will also benefit when a Blitter chip is available in the computer and enabled. Some screen acceleration programs may also improve the performance of this process.

Serial Ports

The STraight FAX! will operate with the freeware Serial Fix Version 1.00program/CPX from Medical Designs Software to correct problems with the Modem Port 1 in the RTS/CTS Flow Control mode.

The STraight FAX! will also now utilize increased Serial Port buffers for enhanced serial port operation for sending and

STraight FAX!
Conclusion

receiving data from the FAX Modem. Serial Port buffer size programs such as the AUX INIT program that is packaged with Gribnif Software's STalker 3 terminal program package can enhance serial port efficiency and increase reliability when used with Floppy Disk based systems.

FAX Modem Compatibility

The STraight FAX! has been updated to function with Class 2 FAX Modems that are based on chipsets/firmware from the following companies:

Rockwell International Sierra Semiconductor Exar Corporation

These include FAX Modems manufactured by companies such as Supra Corporation(FAX Modem Plus, V.32 and V.32bis), Zoom Telephonics (FX9624), Best DataProducts, Inc. (Smart One), GVC Technologies (Fax Modem 9696) and Image Communications (Twin Com 24/96 and 14.4DF).

Support for additional vendors FAX Modem products is under evaluation,including support for Class 1 FAX Modems.

In addition, the STraight FAX! now uses a more robust algorithm to establish communication with the FAX Modem. Previously the user may have been presented with an alert box asking to check the modem connection and to toggle the modem power in some situations (usually after a transfer with errors).

The STraight FAX! will now properly restore the FAX Modem to its reset state after exiting the program in all situations.

Misc User Interface Enhancements

1) The arrow boxes in sliders will be inverted when the left mouse button is pressed to scroll the slider.

2) The mouse cursor will change shape as follows to indicate actions and modes of operation:

a) The mouse cursor will change to an "X" when it is located outside an active dialog box.

b) When sizing the clip area in a View Window, the mouse cursor will change to a double arrow shape that points in the directions in which the clip area may be sized (i.e. up/down, left-right, or diagonal).

3) Expanded Online Help is now available.

4) During immediate or scheduled FAX transfers, the conversion status messages will appear in the Send FAX Status dialog box.

5) The Schedule Date or Time may now be entered numerically from the keyboard as well as by using the mouse to click on the up/down arrows.

6) Dialog boxes may be repositioned on screen as follows, by hold the Control and Alternate Keys down, and dragging the dialog box background. The new position will be saved in the preferences file for later use.

What You See Is What You FAX

STraight FAX! is bundled with special printer drivers for the following applications that allow "print to disk" of document pages to FAX files that are ready to send by the STraight FAX! program:

PageStream 2.1/2.2 (SoftLogik) PageStream 1.8x (SoftLogik) Calamus S/SL (ISD) Calamus 1.09/1.09n (ISD) FSM GDOS/FONT GDOS (Atari) Including any GDOS/FSM GDOS/FONT GDOS compatible application.

An updated driver for PageStream 1.8x is included in the STraight FAX! version1.03 release that corrects a minor problem when attempting to print a page to a FAX file on a system with limited memory.

The STraight FAX! Pagetream 2.1 printer driver has been tested with the recently released Pagestream 2.2 and has found to be compatible, with out the need for any changes.

New printer drivers for other applications are currently under evaluation.

Joppa Software Development

MIST Atari Fest IV

Dan Ward

MIST Atari Fest IVSaturday, July 25, 199210:00 am to 5:00 pmCastleway Conference Center6385 Castleplace DriveIndianapolis, IndianaAdmission - $3.00

All systems are go for MIST Atari Fest IV in Indianapolis on July 25th, 1992!Vendor response has been fantastic and more may yet attend.

The following list represents ALL CONFIRMED vendors who will be attending MIST Atari Fest IV.

Bob Brodie (Atari Corp.)
Branch Always Software (GEMulator)
Clear Thinking (EdHak)
Codehead Technologies (Calligrapher, Warp 9, TEC)
D.A. Brumleve (Kid Progs)
Electronic Spinster Graphics (clip art)
ICD (power peripherals)
INAGM (Atari sales and service)
Mars Merchandising (Atari ET, Lynx, 8-bit software)
Maxwell CPU (Silhouette and a BRAND NEW product)
Megatype (fonts)
Missionware Software (Flash II)
MP Graphics Systems (consulting)
MS Designs (fonts and clip art)
Rising Star (software)
Wiz Works (Mug Shot, Image Cat, MVG)
User Groups:
ASCII
Cintari
CUSTUG
LCACEMIST

Atari Fest IV promises to be another success, with some new, special twists to make your visit to Indianapolis more fun, enjoyable, and profitable.

The first 250 individuals through the doors will receive a free 3.5" Maxell SSDD diskette containing text, data, and picture files promoting the Atari community in central Indiana. A special priced "MIST User Group Membership" will be offered to all individuals. Lynx and MIDI Tournaments will be offered with prizes to the top players. Several styles of "unique" limited edition T-shirts will be for sale (there's one we really think you'll like). And as usual, a spectacular assortment of raffle prizes will be given away throughout the day.

MIST has also contracted with the Quality Inn Castleton Suites toprovide single and double rooms at a reduced rate ($55 a night) for the those attending the show. They can be reached at (317) 841-9700. Make sure to mention MIST Atari Fest IV to get the special rate.

July 5, 1992 (construction on several major interstates have closed several exit/ entrance ramps)

Directions to MIST Atari Fest IV From St. Louis, Missouri:

I-70 East to I-465 North
I-465 North to I-465 East
I-465 East to the Castleton/82nd Street Exit (Exit 35 - Allisonville Road)
South on Allisonville Road to 82nd Street
East on 82nd Street to Knue Road
South on Knue Road to Castleplace Drive
East on Castleplace Drive to the Castleway Conference Center

Desktop Publishing SIG
BY Terry Shoemaker

As usual, one area that we are seeing new products for the Atari ST computers is Desktop Publishing. Softlogik recently released an upgrade to Pagestream, now at version 2.2. The upgrade has been released in file format and can be downloaded from Genie, Softlogiks BBS here in St. Louis or is available on Flash BBS. If you do not own a modem you can purchase the upgrade from Softlogik for $25. I do recommend getting the upgrade.

Pagestream 2.2 is faster in text display speed. On a TT in medium resolution it can display 16 colors and with addition hardware such as Crazy Dots or the ISAAC graphic card it can disply 256 colors.

At the same time Softlogik reduced the number of boxes in the toolbox, additional functions have been added. Practically every function in the tool box has a second function when the shift key is used. The box icon can draw square boxes or rectangles, the Arc icon can draw either part of the arc, the magnifier can increase or reduce the view. Text objects can now be justified. This may cause some strange results in documents created under previous versions. Screen redraws can be speeded up even more by choosing draft mode under Set Greeking command. This will make the text display shown as bitmaps but will not affect printer output.

Some of the best improvements are the new modules which have been added. Pagestream now has a CVG module, yes you can now use calamus graphics with Pagestream. You may want to go out and purchase Outline Art to produce your graphics file. Other modules are an import for Arabesque, Calamus Text import for Calamus or PKS Write, That's Write import module, and an import module for Calligrapher. The Gem module now supports Gem3 mode.

This is only a few of the changes so if you have Pagestream 2.1 be sure to get this file. If you have an earlier version contact Softlogik for information on an upgrade.

Calamus SL is now available also but as I have said before, If you have a 1 meg machine save your money, use it for an upgrade first. Although SL is suppose to run on a 1 meg machine you won't be able to do as much with it as you can with 1.09n.

There are also many new products being release for graphics and DTP in the high end of the market. Since my computer funds do not reach that high I cannot tell you a lot about them. For programs with demo versions I will get copies of the demo to show at futre DTP Sig meetings.

Speaking of DTP Sig meetings, the last one was held at Wally McDuffey's work, those who attended got to see how an Atari ST is used by a professional printer. Unfortunately only Wally and Tom attended. Thank you anyway Wally.

The next DTP Sig meeting will be back at my house on Monday July 20th, 7:00 p.m. If you would like to join Wally, Tom and I (and maybe Joe Sapienza) call 644-7168 and I can call you back with directions.

CONVERT A BASIC NINTENDO CONTROLLER TO THE ATARI ST

Nintendo Goes Atari ST
Bill Yung [W.YUNG1]

PLEASE REMEMBER! You are responsible for any damage or liability when you make any modifications or upgrades to your equipment. Also keep in mind that opening your computer may void your guarantee. If you are unsure of your ability to take on a hardware project, find someone who isn't.

Along with Nintendo users abandoning the 8-bit scene, hardware accessories for the dying NES have become readily available at a very low cost. This being the case, I decided to attempt to extend the life of NES equipment by converting it to a form usable with the thriving Atari computers. The first conversion was the NES Advantage, which is a first rate pseudo-arcade type joystick. This conversion has previously been printed in GEnie Lamp #341, among other places. Unfortunately, only a small percentage of the vast NES user base have access to this fine mechanism; however, nearly all NES users DO have a pair of the standard NES controllers (Model # NES-004). Some people love them, some people hate them and still others claim chronic injury from extended use of them. No matter your feelings about the basic Nintendo controllers,chances are you probably have a pair. Therefore, I felt there may be some interest in dragging these old war-horses out of the crypt, dusting them off and putting them to use. A use much more powerful than they've ever known...gaming on the Atari.

The conversion is very straightforward as it requires no active electronics. You'll be needing a length of cable with at least 6conductors and a standard db-9 connector. These items can be obtained from your local Radio Shack or most other electronic supply houses. I used #278-775 nine conductor computer cable. It fits snugly in the NESstrain relief and has the extra conductors you may need should you want to later use the cable on a mouse or other device with active electronics. The downside of Radio Shack parts for older 520ST owners is they only carry db-9's with ears that will not fit in an ST with mouse/joystick ports on the side. Those of you with this type of compute rwill have to find another source for your parts. Best Electronics is a good source should you choose to use a replacement mouse cable. This is a good alternative albeit not the cheapest one. For your reference, the part number for the Radio Shack db-9 connector is #276-1428 for crimp on style and #276-1538 for solder type. It is possible to use the crimp on type without buying the special crimping tool. It is not possible,however, to use the solder type connector without soldering. The final item needed to complete the task is a hood for the connector. Three choices are available from Radio Shack: #276-1508 metal, #276-1539plastic or #276-1513 metalized plastic. Of the three, the plastic is the least expensive and serves its purpose well.

Now, onto the hacking. The diagram included is very helpful if not essential to completing the conversion correctly. For anyone without access to the diagram, I will describe the process in full here.

First of all, disassemble the unit by removing the six Phillips screws from the bottom of the case. Clip the original cable off near the connection to the p.c. board and discard. While doing so, note the routing of the cable through the strain relief pegs. All solder connections will be made directly to the 4021 CMOS chip (The only chip).Let's establish which pin is which on the chip and connector. When viewing the chip from the top, pin 1 is to the immediate left of the notch while pin 16 is immediately to the right. When looking into the 9pin female plug, pin one is top right, pin five is top left, pin six is bottom right and pin nine is bottom left.

The following chart details the connections between the db-9 and the4021 chip:

DB-9	4021
1	4
2	5
3	6
4	7
5	n/c
6	1 & 15
7	n/c
8	8
9	n/c

As I promised, it is very simple. The only point I would like to mention about the connections concerns pin six of the db-9. This is the fire button line. If you desire both the A and B button to act as fire buttons you must connect db-9 pin six to both pin 1 and 15 of the 4021chip.

To complete the conversion, first install the hood on the db-9. Next the cable should be routed around the strain relieving peg and out the hole. The two halves of the case can now be joined and you may test your new toy.

I found the unit highly responsive and quickly forgot which controller I was using because of its natural feel. The job will typically be completed in about twenty minutes. One final tip: Leave the cable long since the controller is small and handheld. Three feet should be plenty. There should be no trouble adding an extension later if you find a need for it.

As usual this IS prayerware so don't let me catch you ripping me off!

Seeya next time,
Bill Yung
4/28/92

SOFTWARE FOR CHILDREN

by Bob Smith

It is not that often that education products for children are announced and even less often that upgrades are made available. D. A. Brumleve, recognized as one of the foremost leaders in this area, has just announced two upgrades for two of their very popular educational programs for children. The following Press Releases are interesting and informative and should be considered in that vain. We would be interested in hearing from any of our members who have used these products.

PRESS RELEASES

1 - D. A. Brumleve is very pleased to announce a major upgrade to:
Kidpublisher Professional A Desktop Publishing Program for Young Writers

For ages 5-11

Kidpublisher Professional is a desktop publishing program for children. Most children use the program to write and illustrate stories and reports, but it can be used to print any kind of document requiring both text and graphics (posters, personal letters, etc.). It includes a WYSIWYG word processor and drawing screen. Printouts have a picture on the top half of the page with 7 lines (32 columns) of text at the bottom. Four font styles are built into the program, and a teacher or parent may design an additional font using any DEGAS-compatible drawing program.

The previous version (6.2) worked quite well, so this upgrade (6.4) involves added features rather than bug fixes, though we have also worked on memory conservation and other improvements which will be invisible to the user. The new features include the following:

Kidpublisher Professional now contains a built-in coded font set. The child types a message in a normal font and then can convert the text to code by simply selecting the coded font set from the FONT dialog. A decoder card is included in the package. The code used is self-decoding: a child who receives a message written in the coded font set can type that message into his own computer and then load the coded font set to _read_ the deciphered message as well! Kids really enjoy this feature.

Children who use both our Kidpainter and Kidpublisher Professional have asked us time and time again to add the MIRROR option to Kidpublisher, so we have. The drawing portion of the program will now automatically create mirror-images (horizontal, vertical, or both) as the child draws with the FREEHAND, LINE, BOX, and CIRCLE drawing tools. Children can use Kidpublisher Professional to print a title page without graphics. The title and author's and illustrator's names are automatically centered, and the title itself is underlined.

Teachers have asked for a date on the title page, and we've added this facility. The date is derived from the system clock and presented to the child for editing as part of the TITLE option sequence of dialogs. Using the included Installation Program, parents and teachers can choose whether or not to allow each of these new features. If the TITLE option is permitted, parents and teachers can choose whether the date will be presented in European (5 March 1992) or US (March 5, 1992) format. The package contains a red disk, a 28-page parent/teacher manual, a one-sheet children's manual, extra labels, and a decoder card.

These enhancements make Kidpublisher Professional more powerful and more stimulating than ever before. Registered users may upgrade their copies for just US$5 (plus $1 shipping). The list price for the new version is US$40.

This upgrade will be ready to ship on or before March 15. An announcement is on its way to registered users. We do accept MasterCard and VISA; please include your expiration date. Personal checks in US$ should include $3 for postage. D.A. Brumleve P.O. Box 4195 Urbana, IL 61801-8820 USA VOICE: 217 337 1937 FAX: 217 367 9084 GEnie: D.A.BRUMLEVE CIS: 71451,1141 Delphi:

Continued on following page

Continued from previous page

DABRUMLEVE [Please note that version 6.4 is available in the Englishlanguage only. The current Dutch, Icelandic, and German versions are 6.3.]

2 - D.A. Brumleve is pleased to announce a _new_ program:
Multiplay Math Exploration, Discovery and Practice for ages 5-11 Multiplay is designed to help children commit basic addition and multiplication equations to memory and to offer opportunities for the discovery of math patterns. Among the multitude of basic math drill programs, Multiplay is unique in the freedom of choice extended to both the child users and their parents or teachers, in its open-endedness, and in the opportunity for creative thinking and expression. The program consists of a Main Screen and three play screens: the Pattern Screen, the Puzzle Screen, and the Make Puzzle Screen.

Each screen's primary component is a grid. The x and y axes form the elements in an equation and the grid square at which they converge is the solution to the problem, the "answer square". The parent or teacher can choose whether the grid deals with the elements 0-9, 0-19, or 0-29 (limited to 0-19 on a 520ST). There is also a choice of whether the program will offer multiplication or addition or both.

On the Pattern Screen, the child clicks on a square and sees the full equation, answer and all. The answers remain highlighted (until the child turns them off), so the child can go clicking about the grid, guessing at each answer before it is shown -- and using neighboring answers as an aid to the guess.

The patterns involved in the concepts of multiplication and addition and the relationships between neighboring and analogous equations can thus be discovered and internalized. A TEST option facilitates the play of various games and helps children keep track of their progress; the test option can also be used to assist children in the discovery of patterns.

The Puzzle Screen offers a game for one or two players. Children can play the built-in puzzles or the ones they have made themselves on the Make Puzzle Screen. Players take turns clicking on squares and then typing the answer to the problem displayed. The score is the sum of the player's correct answers.

Thus, children who choose to tackle 29 x 29 -- and do so successfully -- will have a much higher score than if they had chosen easier problems. Each successful answer causes the computer to fill in all the puzzle squares which have the same color as the answer square. As the squares are filled with color, a picture is revealed.

The Make Puzzle Screen allows the child to make and save his own puzzles. Puzzle design is a challenging undertaking in and of itself. An separate editor program allows parents and teachers (and older children) to delete unwanted puzzles. Multiplay, like all commercial kidprgs, is accompanied by an installation program which allows the parent or teacher to configure the child's disk to suit his/her needs and interests.

The adult can pick and choose the options which will be available to the child and rerun the installation program to add options as the child's skills increase. This grow-as-you-grow approach allows Multiplay to appeal to children throughout a wide age range. In fact, Multiplay appeals to beginners and math wizards alike!

The Multiplay package contains two green single-sided disks, a 28-page manual, a one-sheet children's manual, and extra labels for your child's copies. The recommended retail price is US$40. The program will be available on or before March 15, 1992. We do accept MasterCard and VISA; please include your expiration date. Personal checks in US$ should include $3 for postage.

D.A. Brumleve
P.O. Box 4195
Urbana, IL 61801-8820 USA
VOICE: 217 337 1937
FAX: 217 367 9084
GEnie: D.A.BRUMLEVE
CIS: 71451,1141
Delphi: DABRUMLEVE

TOS 3.06 & AJAX

by Clemens Chin

I'm the type of person who always wants the latest and greatest when it comes to hardware. When I heard that Atari had upgraded the TT030's TOS, floppy controller and floppy drives, I wanted it! However, no one seemed to have it. I was promised it would appear "next week" for several weeks by one dealer and got fed up. This was when I decided to give Best Electronics another try (they didn't have it yet on my first attempt). They had it!

I had it shipped blue label and received it the following Tuesday (since I placed my order on a Friday night). The UPS delivery man was looking at me quite bizarrely due to the permanently affixed smile on my face.

I tore apart the box that it came in to get at TOS 3.06, AJAX and high density drive. Then I proceeded with taking apart my computer. Having done these sorts of upgrades many times and examined the TT's mother board before, I knew exactly what had to be done: remove the old TOS, drive controller and drive and stick in the new ones. One extra step is to change one of the DIP switch positions.

Everything was finished in about 20 minutes and naturally, the first thing I did from there was boot up the system to make sure everything was working right. The system booted up and I was greeted by the new TOS with Atari's Fuji in all its glory and a new memory test. When the desktop came up I immediately tried to format a disk in high density. Everything was working beautifully, now I wanted to try some software with the new AJAX controller and HD drive. Magic Shadow came to mind. I MSA'ed a disk then tried to un-MSA it and the system returned an error to me! I tried again and again and it yielded the same result everytime.

After further testing, I realized that while the drive read and wrote in 360K, 720K and HD, it would only format in HD. I thought perhaps I had done something wrong in the installation. Back tracking proved I didn't. I called Best Electronics they told me that my problem may be a product of RF noise. I did a number of things to eliminate as much possible noise as I could, still didn't work. Then I thought that maybe it was due to the drive controller board that is part of my tower case. I disconnected the controller and connected it directly to the TT mother board, I found the problem!

I needed to connect my drives to this board because it allows the connection of two floppies to my tower case. So, I decided to give System Solutions (the people I bought the tower case from) a call. This was the first time they'd heard about the problem. Great. We stayed on the phone trying to talk out the problem and he pointed out that the board didn't make all the connections of the ribbon cable that connects the drive. We agreed that it may be a good idea that I try to connect the ones that aren't there to see if that would alleviate the problem. He suggested Pin 2. Five minutes after hanging up with him I had the system working in perfect harmony.

It took me almost a week and a half to figure out the problem and about 5 minutes and about 2.5" of wire wrap to fix it...

Well, at least everything is working now and I'm a happy camper. TOS 3.06 is nice, AJAX and the HD drive are now working great.

Some things to remember if you are planning to upgrade:

1. If only certain programs don't recognize your 1.44 floppy, try running a program set the correct seek rate, some systems seem to have problems detecting it correctly. SETSEEK.PRG from Codehead does this well. Set it at 3 for standard 360K or 720K disks and 6 for 1.44 megs.

2. In some cases, it is required that you flip the ribbon cable that connects the drive. Otherwise, try to keep the ribbon cable as flat and neat as possible.

3. On Mega STes and TTs, remember to flick switch 7 on the DIP switches. Leave the others alone. This will let you format in high density from the desktop.

4. From what Best Electronics told me, some users are experiencing problems due to RF noise. Try your best to insulate the drives and its ribbon cable from the power supply and the power cables. (If you have an internal hard drive, don't forget its power cables.)

* One possible way to reduce noise, is by removing the screw in the middle of the underside of the power supply (Mega STes and TTs only) and covering it up hole with electrical tape. This screw supposedly causes the power supply ground to goto the floppy, by removing it, you remove noise.

5. If you've got a Lighthouse tower case, the multi-board needs to have Pin 2 connected in where the drive ribbon cable is connected. A bit of wire wrap works like a dream.

(Editor's note: This is reprinted from ST Report #8.18.)

A.C.E. St. Louis Calender
July 1992

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
5	6 **EAUG MEETING**	7	8	9	10	11
12	13	14	15	16	17	18
19	20 **DTP Sig 7 p.m. Shoemakers**	21	22	23	24	25
26	27	28	29 **ACE General Membership Meeting Thornhill Library**	30	31	

August 1992

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	5	6	7	8
9	10	11MARC **Gathering & Swap Meet Collinsville, IL Rt 157 & I-70**	12	13	14	15

Minutes
May 27, 1992 ACE Meeting.
Tom Zenthoefer

At the meeting, Greg Kopchak, told us about a new system that Kodak will be making available a new system that will digitize your pictures and place them on a CD ROM disk with resolution up to 3200 by 2000.

Dorothy Brumleve, programmer of educational children's programs, is going on vacation this summer and is planning on passing through the St. Louis area. She has indicated that she will be willing to attend a multi-group meeting in the area and doing a demonstration of her programs. A swap meet is being planned in conjunction with her visit.

St. Louis City Library is putting their card catalog on a computer accessible with a modem. Another thing coming available is the computerization of old newspaper articles. This will allow you to input your search parameters and then for $0.25 per page get the text of the articles.

Gail Ward demoed VisiCalc on the 8-bit. She showed a spreadsheet that she and her husband used to use in regards to estimating car values. Remarks were made about the similarity of VisiCalc and newer Spreadsheets. I then showed the Atari Portfolio that I bought last month at CompUSA for $199.

Greg then showed his Virtual Bookmaker Demo titled "The Man in the Middle is Dead". This story, with pictures, is about a family picture from his wife's family that was taken two years after one of the men had died.

Greg then showed three MOD file players. MOD files are music files created using small pieces of digitized sound to create music files. The players he showed included PAULA.ACC, JUKEBOX.PRG and CDPLAYER.PRG. None of the players work on my 4meg 520 with TOS 2.06.

We are still looking for someone to take over the book and magazine library. Starting immediately, let me know prior to a meeting if you want any of the books or magazines in the library and I will bring those items to the meeting. If you want to take over the Library, let me know and we can make arrangements to get the materials to you. We need a new librarian no later than the November meeting.

A.C.E. SAINT LOUIS USER GROUP
MEMBERSHIP APPLICATION

The Atari Computer Enthusiasts of St. Louis is a not for profit organization dedicated to improving the knowledge of Atari computer owners. We are looking for others with the same interest. The dues structure covers expenses incurred for the monthly newsline and other club benefits. Dues are prorated beginning in January starting at $25 on January 1st and dropping by $2 for each month. Renew Now for $13.00

Name:_____

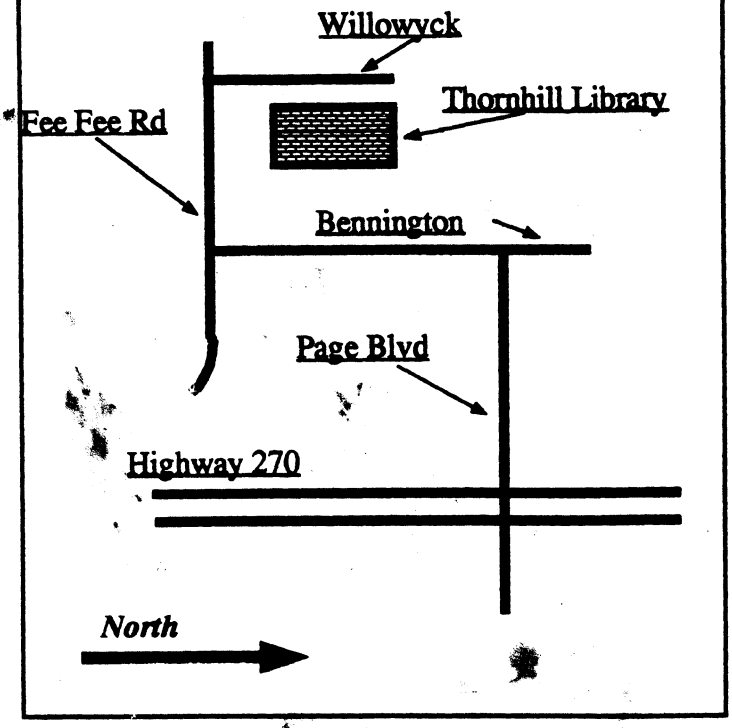
Address:_____

City:_____ State:_____ ZIP:_____

Telephone :( ) - -

Mail to: ACE St. Louis - P.O. Box 3508,
St. Louis, MO 63143

Meeting Map



From:
ACE STL
PO Box 3508
St. Louis, MO 63143

TO:

Joseph Ranaud
1905 Yaqui Drive
Florissant, MO 63031