Saint Paul ATARI Computer Enthusiasts

SPACE

An independent computer user group

MAY 1986   **MAY 1986**

This month's meetings:
SPACE   FRIDAY, MAY 9, 7:30 PM
MAST-SIG   FRIDAY, MAY 16, 7:30 PM
At the Falcon Heights Community Center
2077 Larpenteur Ave. W.

IN THIS ISSUE:

ST. PAUL ATARI COMPUTER ENTHUSIASTS
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NOTE: I'm sorry the cover is so hard to read this month... but look at it this way: I saved $16 in printing, $17 in postage, and 1 1/2 pages of good reviews, an overall net savings of approximately 30% - which goes back to the club. - Bob

BYTES FROM THE PRES

Well, how was the Swap Meet? The door prize IDEA was mine; maybe we could do this twice a year? This meeting we are all going to be surprised, as the final arrangements have not been made for a guest speaker. I sure wish more people would indicate what they would like us to do at meetings. I did get a phone call this month, but not in time to get it in the newsletter.

Last month we had quite a discussion on word processors. I know I let it drag out for quite a while, but I get questions like this all the time. I now know other people have the same answers as I have. The main question to ask yourself when buying a program is:

What do I want the program to do for me, and how often will I use this program? In the case of a word processor, which we discussed at the last meeting, it makes a difference! Do you write a letter once a week or do you write 10 letters a day? Do you write a school 25 page report once a year or once a month? Almost all word processors will do the above. They are called "word processors", aren't they?

The next question is cost. How much do you want to pay? Do you really need all the whisles and bells to write a one-page letter per month?

SEE YOU THE 9th of MAY
THE PRES

From the desk of the D.O.M.
Frank Haug

Well, if you weren't at the last meeting, or if you left early, then you didn't hear the announcement. The DOM is holding a programing contest. In the months that follow we will be accepting USER-WRITTEN programs. The programs will fall under one of two catagories: Games or Utilities. To clarify this: a graphic screen designer would be a utility, or anything of that or a similar nature. If you don't know what a game is, well... An unbiased group of judges will score the entries. The top so many in each catagory will recieve a prize (undetermined at this time). Look in the folowing months' DOM sections for more details. This is an effort to produce more and better software for SPACE to trade with. So let's have a contest... that means more than four entries (I don't mean five either).

And now... (drum-roll please) the programs on the May DOM.
    1.BARSPLOT - A Bar chart maker/saver/displayer - I'm trying to add a printer dump to it as well
    2.DESIGNS - Make a variety of user defined geometric figures
    3.IQTEST - The old peg game, on the atari - remove as many pegs as you can
    4.GOTCHA - Gather all the money ($) and avoid the gobbler.
    5.RECALL - Repeat the pattern of colors
    6.TANKDUEL - A two-player joystick tank game

As always, we will bring past DOM's for sale as well as MAST DOM's.
DON'T FORGET THE CONTEST!!!!!!!!!!!!!

Ribbon Reinker
by Larry Vanden Plas

The ribbon reinker is ready to serve you if you use spool to spool or long rectangular Epson (MX,FX) or compatible ribbons. Place the ribbon(s) in a plastic bag marked with your name, phone number and printer. Note if you are in a hurry and I will do what I can to hurry it back to you. The cost is only $1 per ribbon for members. Non-members may have their ribbons reinked for $1.50. Prepay when you turn in the ribbons. If you have an interest in having other types of ribbons reinked, please let me know because the reinker can be modified.

APRIL SPACE MEETING MINUTES
by Larry Vanden Plas

The last SPACE meeting was held Friday, April 11, 1986.

In "News/Rumors," President Bruce Haug reported that news from the computer shows in England and Germany had been downloaded from Compuserve and were posted outside the meeting room. The 1040ST is now in town at User Friendly and expected at other stores soon.

Vice President Jim Schulz reported that a 3.5" disk drive prototype for the 130XE had been shown. A box for the the 130XE which provides 80 columns and a parallel printer port was also shown. Atari will not be providing a hard disk for the 8-bit, but Supra plans to. The long-promised 80 column will come in a box which plugs into the serial port, not in a cartridge. MS-DOS and CP/M emulators are coming for the ST late this year.

Disk Librarian Frank Haug reported that Fujiswan on the DOM will not load with Basic (load DOS without Basic). It will have to be loaded from DOS using the L. Binary Load option. Bioplot on the DOM plots on the screen and the 1020 is optional. GWIZ, a print utility for Koala graphics, by John Novotny is available for only $4.

The Secretary's report as printed in the newsletter was accepted.

Treasurer Bob Siede reported that we have $1239.31, the best in a long time. MAST is in the black in less than 2 months including the meeting hall.

Bruce reported that he had gotten a good report back on reinked ribbons. Larry Vanden Plas reported that he will try to be ready to reink Epson LX-80 ribbons by next month and try others as requested. (See reinker article.)

Jim Siede reminded members to bring materials back at the next meeting. In order to circulate library materials members should keep them only one month.

The BBS is up and running. However, the SPACE logo is not on it yet. The logo is to change every other month with TAIG. There is not a lot of traffic on the BBS. The Atari Barn West has a 10 MB Hard Disk, a good BBS to try.

Newsletter articles are needed. Remember to have them in no later than two Mondays before the meeting date. An article by Chris Tiggman is coming in the next issue.

Under offers and deals, LaBelle's still had some Amdek color monitors for $99. East Saint Paul and Burnsville had good supplies. COMB was offering the TOWA, a QUME compatible 18 cps daisy wheel for $190.

Under questions and answers, a potential Atari owner said he had a 200 page document to prepare. Could the 130XE do the job? Would the 40 column screen be a problem when he was preparing tables? Gordy from Wizard's Work explained that both PaperClip and AtariWriter Plus offered an 80 column scrolling screen and he had done a number of tables with a 40 col screen once he put his mind to it. Files may be linked for printing if on a single disc. Double sided, double density (DSDD) disc drives and 10 MB hard discs are available for the 130XE. It is good to break such documents down into 35 to 40 page chapters. A chapter would be easy to fit on a single disc.

Larry Vanden Plas asked about a program that would allow an Atari and printer to act like a typewriter. Programs are available that allow them to act like a memory typewriter, one line at a time. A member will bring the programs next meeting.

A member was looking for programs to use the 256K in his upgraded Atari. Three programs are on the BBS under QXL.

Under problems, Gordy mentioned that that quality of replacement parts for the old equipment (e.g. 810 chips) was variable. He cautioned members not to throw the old equipment away -- it can be a source of parts. A member mentioned that only the ROM on the 810 is special, the rest of the chips are standard.

John Novotny had a problem with a modem program, another member met with himm to resolve.

The meeting ended with a door prize drawing, each paid up membership card received one chance. Prizes were furnished by B&D home Computer, Mindtools, User Friendly and Wizard's Work.

QUARTER MEG. XL REBOOT FIX

After doing my quarter meg. memory upgrade, I noticed that I had to wait several seconds (10-15) when I powered the 800XL down before turning the power back on in order to get a good clean reboot. This was too long, and I vowed to find a way to rid my computer of this problem.

I talked with some people that I know who are very familiar with memory chips and they could not offer any conclusive answers. The best we could come up with is that the new breed of Drams must hold their charge longer and therein lies the crux of the biscuit.

It seems with the XL/XE computers, that Atari gave us a true reset switch. This means that everytime the reset key is pressed, the computer stops whatever it was doing and jumps to the memory address pointed to by the contents of ROM address $3FFC and $3FFD hex. The OS software must now decide if this is a power-up (cold-start) or a reset button (warm-start). It does this by looking at the signature bytes in ram at address $33D-$33F. If they are not $5C,$93 and $25 respectively than it assumes power-up and does a cold-start which re-initializes the system. If these bytes are correct it does a warm-start and doesn't mess up the program or whatever is in memory, which is good sometimes.

With the help of Jim Schulz, our Vice President, I discovered that somebody had come up with a patch to the OS ROM that fixes this problem. Ted Burgers' fix involves 'stealing' the reset vector at $3FFC and $3FFD and checking the keyboard secondary buffer. This is a byte at $2F2 where the keyboard handler keeps the last key pressed to see if it should start auto repeating on the next key stroke. He uses 'shift esc reset' as his cold-start method. If the byte at $2F2 is $5C (shift esc) then he trashes the byte at $33D and lets the interupt continue on its merry way. The OS then will see $33D is not $5C and will do a cold-start. Simple, but effective.

THE FIX:

You will need access to an EPROM burner and a 27128 EPROM to make this fix.

There are about 30 bytes of $00 in the OS rom at address $24A0. This area was reserved for jump vectors, but was never needed. The XL/XE OS does a rom checksum during power-up. He changed that routine to always pass the check.

The changes.....

EPROM ADDRS	OLD	NEW	
3FFC	AA	A8	POWER UP RESET VECTOR
3FFD	C2	E4	POWER UP RESET VECTOR
3F90	38	18	DEFEAT THE ROM CHECK

24A8	00	AD
24A9	00	F2
24AA	00	02
24AB	00	C9
24AC	00	5C
24AD	00	D0
24AE	00	05
24AF	00	A9
24B0	00	00
24B1	00	8D
24B2	00	3D
24B3	00	03
24B4	00	4C
24B5	00	AA
24B6	00	C2

The program.....

```
      LDA $2F2       load the last key buffer
      CMP #$5C       check it for 'shift esc'
      BNE EXIT       branch if it isn't
      LDA #$00       load a zero
      STA $033D      trash the signature
EXIT  JMP RESET      continue with the system reset vector
```

Once in a while, if your system is 'locked up' it may take two attempts to get a cold-start. The first attempt gets the system working, then the second actually does the cold-start.

The fix works good and now I never have to power-down for a reboot.

Thanks Ted Burger, wherever you are.

Chris Tiggemann
612-462-4435

Announcement:

LR Data's STatus BBS is now open. All MAST/SPACE/STAG members are welcome to use it. The BBS is open according to the following schedule:

M-T 6:00 P.M. - 7:00 A.M.
Fri 6:00 P.M. - 9:00 A.M.
Sat 7:00 P.M. - 7:00 A.M. Monday

You will find sections on the 16 bit Atari line, as well as info on the MichTron BBS system. Also, there is a computerized ordering section. You can reach the STatus BBS during the above hours at (612) 777-6376.

Bill Wilkinson's Tech Notes

As many of you know, I write a monthly column for COMPUTE! magazine. In recent months, COMPUTE! has been forced to limit my articles to one or two pages (maximum) per month. As a consequence, I have not been able to put in some of the hard technical goodies which I used to. Since many of the topics which I enjoy covering seem to have too limited a readership for the magazines, I have decided to put these "Tech Notes" up on CompuServe. I hope that I will be able to contribute one of these nasties at least once a month, but don't panic if a couple of months passes between appearances.

I will not promise where these notes will lead me. I may write about 8-bit topics, 16-bit topics, or I may just give my personal comments. This will be the real (unedited) me talking, so you may find me much more opinionated than my COMPUTE! columns would have led you to believe I am. I will not say any generally nasty things about other software companies (I don't want to get sued), but I may put in pointed remarks about things I don't like. Take me or leave me.

Anyway, the point of all this is that not only can you have fun reading this stuff, but you can also publish it in any user group newsletter, put it on any bulletin board, or send me hate mail. I will NOT guarantee ANY responses, though. I am working too many hours as it is, and these Tech Notes are a labor of love... simply because I am tired of seeing inadequate and even wrong information being published in both user group newsletters AND in national magazines. Read and (I hope) enjoy.

p.s: But PLEASE give OSS credit when you reprint! Thanks.

DANGERS OF $D301
by: Bill Wilkinson, OSS
Part One

There is a real problem when it comes to using Port B for some applications: it conflicts with the use of 1030 and XM301 modems!! The problem is a subtle one, and it caused us at OSS many headaches with BASIC XE before we finally found it.

History: Way back when the original Atari designers were designing the serial interface ("SIO"), they included two lines which had no immediate use, but which seemed like good ideas at the time. If you are lucky enough to have a schematic of the 800 or a description of the pins (wires) in the serial cable, they are designated "Proceed" and "Interrupt." To minimize confusion, we will rename that second line "Service Request" (an alternate name we have seen in at least one Atari document) instead.

Again, if you have a circuit diagram of one of the 8-bit machines, you will find that these lines are connected to the IRQA1 and IRQB1 pins of the PIA (Peripheral Interface Adapter, a 6820 or 6520), respectively. The use of these pins is programmable, but the most common mode of operation is to set them up so that a change of state on the incoming signal (e.g., from a nominal +5 to +0 volts) will cause an interrupt (IRQ) to the CPU. The idea of those original designers was elegant: one could build a peripheral which would go off and do its thing (even if it took a while) and then tell the computer it needed more service by flipping the state of the Service Request line. Imagine how easy it would be to design a printer spooler for a printer interface which worked that way! Perhaps the Proceed line could even be used in a multi-computer hook-up.

In practice, no Atari peripheral ever used either of these lines -- until the 1030 arrived on the scene (and the XM301 is basically a redesign of the 1030). That direct connect modem uses the Service Request line for an important purpose: carrier detect. That is, this line monitors whether a connection between the 1030 and the remote system has been established (and, once established, whether the connection is dropped). Neat idea! With other modems, connected via an 850 interface, the computer must continuously request a status of the modem.

Bad idea! Here's why: Once the connection is established (the carrier is detected), the Service Request line changes state, and the PIA issues an IRQ (interrupt request). The 1030 handler is hooked into CIO's interrupt routine and receives control. So it clears the interrupt and sets up to recognize when the connection is dropped instead. Sounds good so far? Yeah, but how do you think the program must clear the interrupt? By reading (i.e., PEEKing or LDAing) Port B, location $D301!!! No Atari manual discusses this, by the way. An obscure comment in the original Atari OS listing -- and the fact that we had worked with 6820's six or seven years ago -- gave us one of those "blinding flash" insights into the problem.

Words From The Chair
by Bob Floyd

There isn't much new for me to report this month. So, I'll keep it brief and include a mini-review of "PrintMaster" separately. I'll be demo'ing PrintMaster at the meeting.

New Secretary: Thank you Scott Hutchinson for volunteering to take minutes and write them up for the newsletter.

Newsletter Articles: So far, it looks like the best way to handle MAST articles is to write them using "ST Writer" and then upload them directly to Bob Rhode (the editor). Just call him up and work out the details. It is best to keep the number of control codes to a minimum and transfer the file in its original form (don't "print" to disk). If you don't have a modem, then give me a disk with your article on it and I will upload it to Bob.

Attendance: We had a good turnout at the last meeting with 38 present. We also have a membership base of at least 25 individuals or families. We are trying to get this number clarified in our SPACE database.

Oklahoman: Kevin Heinrichs of Weatherford, Oklahoma has joined MAST. He is another 3M'er that saw my MAST article in the 3M computer club newsletter.

*** MAST ***

After evaluating the cost of producing the Mast DOM, the board members of SPACE have determined that we must increase the cost of the disk. This will be necessary in order to maintain the high quality and the quantity of programs that are on the disk. The price increase is due to Comp-U-Serve and other BBS time used to get most of the programs.

The new price of the DOM will be $7.00. Back issues of past DOM's will be available for $5.00 at the May meeting only. Even at this price the cost per program is less then the cost of a postage stamp.

The money earned from DOM sales will go toward the purchase of an Atari ST computer for the club.

THE PRES.

April Meeting Minutes
by Scott Hutchinson

The last MAST meeting was held Friday, April 18 with Bob Floyd and Jim Schulz acting as co-chairs. There were approximately 30 in attendance including several who signed on board as new SPACE-MAST members.

Exciting news was everywhere! From the Hanover show in England came word of new 20 Meg and 60 Meg hard disk drives from Atari. Also, we heard rumors of $600 laser printers, Side Click (naturally a Borland Sidekick clone), First Word+, G Ram Disk and G Protect. From the West Coast Computer Fair comes word of a Mac Emulator Cartridge, a two-user flight simulator, Micro RTX (a multitasking operating system), Tom Hudson's CAD 3D which should be in by May, a (choke) Apple II emulator, an improved ST Basic and Unix System V!

Discussions by Jim Schulz included the CPM Emulator shown in Germany, the MS DOS IBM emulator expected in fall for about $300, the Supra 20 Meg hard disk claimed to be 3 times as fast as Atari's, a blitter chip on a piggyback board (look out Amiga), and (just for me) Paperclip Elite including spelling checker and graphics from Batteries included.

Not to be outdone, Bob Floyd announced news of the level 2 update to 4X Forth, Version 1.1 of ST Talk, the "improved" version of Express which seems to fix most of the problems the manufacturer claimed didn't exist, news from Hippo including improvements to their "C" and announcing their hardware/software video digitizer package.

The "disk of the month" included four disks this month with programs too many to mention in detail. Included on disk #1 were 1st Word printer drivers, applications and command files for H&D Base and Forth DOT.TOS. Disk #2 contained utilities, edit files, an MS DOS shell program and a good copy program. Disk #3 had miscellaneous programs, including ongoing discussions of the noise problem with some machines when using the new ROMS. Disk #4 had Tiny Basic, plus a whole slew of games including Othello, Cribbage, Trek the Dragon and more!

The folks from User Friendly came over with a real 1040ST, a very nice package.

In closing, there was a highly detailed treasurer's report which informed us that "we are in the black - probably."

Old business included the anouncement that ten people were needed to economically get Analog programs on disk.

Yours Truly would like to see us add another 30 members to MAST, so bring a friend to the May meeting!

News from the co-chair
By Jim Schulz

In this column, I hope to provide those little news bits that happen and provide information that is better communicated in textual form than at a hectic meeting of the MAST group.

To start out, expect another load of new ST news in the next few weeks as the postmordum of this week's Spring COMDEX software show in Atlanta is reported. Already announced is the first demo of the multitasking UNIX-like shell, Micro RTX, expect this to ship in the next two months. This product will shut the mouths of the Amiga public about the superiority of multitasking capability of the Amiga. Also expect to see ship dates announced for the ST version of Star Raiders and Millipede. These two programs were demo'd by Atari at user group meetings in California. Star Raiders was supposedly a sight to be seen yet hard to describe. Another program which will get a lot of press will be CAD-3D from Tom Hudson, the author of DEGAS. Yes, a full 3-D CAD system for the incredibly low list price of $49.95. This program is shipping in mid-May so we might have it available for demoing at our May meeting.

Switching gears, if you own a copy of Sundog, you might want to see if you get a hold of later version if you own version 3.00. In versions after 3.00, they have added Pacman arcade games in the fast food stores as well as the slot machines. Something to look for if you are a Sundog or Pacman. If you are a gamer, Sundog is one game that you must own for your ST game collection.

More news is now starting to leak out about the now-infamous Atari TT Computer. The computer, code-named the Amy, was recently written up in the newspaper called EE Times. Here are some of the highlights:
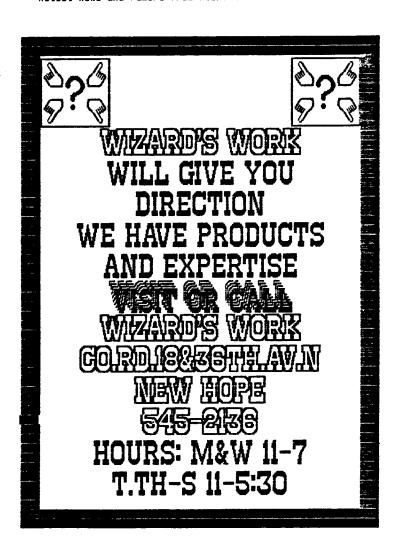
The system is now set to make its official announcement in June, probably at CES. The system specifications now include a 1024 x 1024 monochrome resolution with a 68020 microprocessor for a cost from $1800 to $2500. Color versions of the TT will follow a couple months later because of an internal lack of suitable color graphics software. The 68020 microprocessor is currently the leader in the microprocessor race but others still in the running are the Western Electric WE32000 and the National 32000. The National 32000 is supposedly a dark horse in the chip race because of poor results in the initial benchmark tests. Atari is currently pitting the 68020 suppliers against AT&T to get the best deal for processors and memory. Expect to see more about Amy in months to come.

Finally, I will give you picks for the programs to look for in the coming month. There are two programs, this month, that are woth recognizing. They are "CAD-3D" and "Time Bandits".

CAD-3D, the new program from Tom Hudson, is one of those few programs for the ST that have to seen to believed. If the quality of this program is anything like DEGAS, Tom Hudson will have another hit on his hands.

The other program is Time Bandits from Michtron. This program is now shipping after many delays. This program, best described as a multi-level arcade adventure game, is another of those programs that have to be seen to believed. The authors of this program were supposedly having so much fun writing this program that they did not want to stop. From my understanding the only limiting factor for the program development was memory. I have not seen this program but, rumors say that this could be the first 512K game for the ST. People who have seen this game who don't own STs have decided to buy an ST after seeing this game; it sounds that good. Whether it lives up to its press remains to be seen, but if I can get a hold of a copy of it by the meeting it will be demo'd for all to judge.

Well, that is it for this month. See you at the SPACE meeting and of course the MAST meeting for more of the hotest news and rumors from Atariland.

Disk of the Month - May
By Jim Schulz

The big question again this month is how can I top the four disks from last month??? This month so far the public domain software is in really short supply, but the quality of the software seems to be very good. Programs already slated for this month's disk(s) of the month include:

Neochrome Version 0.6 - this claims to be the last update before the official release within the next month(??). It does not seem to be too different than 0.5.

A Mandelbrot program that uses the GEM interface and allows for storing and getting of the files generated. Many more options I have yet to explore.

A new print spooler program that can be variable in size up to 32K. This is not a desk accessary.

A new non-desk accessary ramdisk which works between resolution changes if loaded at boot time. This is also a variable size ramdisk and variable drive ramdisk program which can also be run as a .TTP program after boot time.

New OSS Pascal files which include a compare program, a dump program, and a window demo program.

If this hasn't already caught your interest, I have left the best two programs for last:

A 3-D flight simulation program with two windows and two joysticks. You can fly your plane and track down the plane in the opposite window. This, written by a Twin Cities programmer whose name I don't remember, is a preview of a forthcoming game.

A brand new multi-featured LIFE program written by our very own Steve Pauley: this program has to be seen to be believed.

This is the start of another great disk of the month. More will be added in the next two weeks, so you can expect at least two packed disks full of public domain software from the last month. If this not is enough, I have collected a nice collection of special disks for this month. These disks include the following:

Microemacs - yes, the Microemacs editor enchanced to include the most often used functions on the ST function keys and numeric keypad. I am editing this file on the program right now. [And I am editing his editing on Paperclip... -ed.] This is a very nice editor.

TVX - If one editor is not enough, here is a second editor(s). This is a very full-featured editor which includes a number of editors on the same disk. As well as the editor itself, there is an editor to emulate the UNIX vi editor and the Microemacs. Nice documentation files help you understand the editors to the fullest. A second disk will be offered with the source code for the hacker at heart.

LISP - This is XLISP, the public domain LISP interpreter. Along with the documentation and source code, there are a number of program files to take LISP though its paces as you learn the language. Get LISP and find out what is at the foundation of your ST LOGO.

????? - This one will remain a secret until the meeting. I have sent away for a very nice, quality program that should blow your socks off when you realize this is in public domain. You will just have to wait until the meeting to find out what it is.

In addition to all of these disks, if time permits, we will have a number of squeezed DEGAS and NEO picture disks. There should be something for everyone in this month's MAST disks.

For those who didn't know, MAST has a disk of the month, which we sell for $7.00, which is packed full of public domain software for the ST. All software programs are checked by me and documented in a READ.ME file in each directory, so you are sure you get something that works. So far we have a library of twelve disks after three months, with more to come. For information on any of the past disks, see me at the next meeting.

For those who cannot make the meeting and still would like to get the DOM, I will mail them to you within one week of the meeting for the standard $7.00 plus $0.50 for postage and handling for each disk. My address is:
3264 Welcome Avenue North
Crystal, MN, 55422

As reported last month, I am getting reports of some bad disks each month. I make up to seventy disks for each meeting so a couple of bad disks can be expected, but not accepted. I am looking for a better copy program, able to handle this load of disk copying.

If you get a bad disk, please bring it to the next meeting for a replacement.

Well, that's it for this month. I will see you at the next MAST meeting with at least two full disks of the best public domain software to be found during the past month.

MichTron's BBS program
David Hutchinson

MichTron's BBS system is one of a class of BBS programs that is often seen on personal computers. Included with the BBS is the ability to set up sixteen different Special Interest Groups (SIG's). These SIG's are functionally identical to each other, but when one is in a specific SIG, one can only see files and messages within that specific SIG. With this type of arrangement, it is almost like having sixteen different BBS's available to you without having to use sixteen different telephone lines and personal computers.

SETUP
Setting up the BBS is a rather difficult procedure, and the documentation does not ease the pain much. To

complete the installation, anywhere from the required 5 files to a maximum of about 75 files must be created and defined using the supplied BBS installation program "INSTALL.TOS".

The type of files that must be created in order for the BBS to run at a minimal level include an opening message file, a daily message file, a user log file, and a message base file. Optionally, header files may be written for the [M]ail and [F]ile transfer sections of each SIG. Contained within these 32 files will be messages that will be displayed as soon as the MAIL or FILE TRANSFER options are chosen from the master menu for each SIG. Also, you may set up [N]ews and [I]nfo for SIG files for each of the sixteen SIG's. Again, if you choose to set these up, you will have to create and edit 32 different text files. One nice thing that MichTron has provided the SysOp with is a complete copy of the user's manual on the BBS disk. Permission is granted for the use of these instructions with your BBS system. You can install these instructions in such a way that inexperienced users can read them at the touch of a key while online for the first time.

OPERATION

Operation of the BBS is relatively simple; if you have a hard disk you must simply double-click on "BBS.PRG", and the bulletin board will run. If you own a one-megabyte or four-megabyte Atari, you must first establish a ramdisk (for upload/download/messages), and then load the ramdisk with files before executing the BBS program. It usually takes about 5 minutes to boot, load the ramdisk, and execute the BBS program. The operation procedure for 512K ST's with two disk drives is the same as for the one megabyte ST's, except that you need not load the ramdisk before executing the BBS program.

When using MichTron's BBS program with a "stock" 520 ST system, trouble arises. When the system is fully set up, only approximately 45K of storage space remains on the BBS disk (which, by the way, usually stays in drive A during program usage), so messages and programs soon fill the disk. When this happens, it is time to re-evaluate your cash-flow situation, and decide whether to buy another floppy disk drive, wait for hard disks to become widely available, or consider a ram upgrade.

CONCLUSION

The MichTron BBS system is a very well thought out system, and relatively bug free. Extreme care has been taken to insure that system crashes will never occur. Setup can be an excruciating experience, but when it is over you have a nice BBS system that can be relied on. If you are interested in tring this system from a user's point of view, read the announcement of the STatus BBS elsewhere in this issue.

RAFFLE
Mast is going to raffle a program each month. The profit from this raffle will go towards the pruchase of computer equipment used by Mast. The program to be raffled off this month is "PRINT MASTER" (see review in this month's newsletter). The cost of a chance to win is $1.00 or 3 for $2.00. If this does not produce money for the group then it will be the first and last raffle.

THE PRES.

A mini-review of PrintMaster
by Bob Floyd
I don't really have time for a full review of this newly released "Print Shop" clone for the ST. So, here's how "PrintMaster" differs from "Print Shop". I'll assume most everyone is familiar with "Print Shop".
1. All of the categories such as banners, greeting cards, etc. are included, plus weekly and monthly calenders.
2. There is more resolution (both on the screen and printout) to the graphics, fonts and borders.
3. You are allowed to choose 2 (instead of only 1) graphics on signs or 4 on greeting cards. This requires a bit more planning to make it look good.
4. There is a "print preview" capability on your screen so you can decide whether to send your work to the printer. However, this is quite slow, considering we are using a 16/32 bit cpu.
5. Printing speed (when combined with the ever-present "print preview") is quite slow, but still faster than on the 130XE. Greeting cards with 4 graphics are the slowest.
6. You can mix text fonts. Lower case letters can also be used.
7. You can print out mirror images. This is handy for heat transfer ribbons for making customized T-shirts.
8. Ants, feet, cars and Xmas make the borders more interesting.
9. The graphics editor is much more versatile than "Print Shop" with cut & paste, reverse, flip etc. The mouse is used, but not in the usual manner (see #11).
10. There are 8 fonts, 11 borders and 122 (11 are backgrounds) graphics on the program disk. The program supports most graphics printers. Call me if you need to know about a particular printer.
11. The mouse can be used for menu choices (arrow keys also work). However, there is no mouse pointer. Instead, the cursor bar moves when the mouse is moved.
12. There is a library disk now available to add even more fonts, borders and graphics. List price is $40 for "PrintMaster" and about $25 for the library disk. I'd recommend this program highly, even with the speed problem. I'll demo it with my printer at the May meeting.

Some Tips on the ST
by John DeMar

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Volume I, Part 1

Since last June, I've given my ST quite a work out. At the beginning, it seemed as if I was demonstrating it more than I was using it! Packing it up for a users' group meeting, bringing it to a store that was too anxious to wait for their first shipment, showing it to all sorts of curious people dropping by at my home. Even the regional sales rep had never seen the 520ST before he looked at mine...

Over the past few months, I've gathered many facts and learned a few tricks that I'd like to pass on. As always, this information is best communicated through Compuserve and the growing network of ST-specific bulletin boards. You're welcome to give a copy to a friend who isn't fortunate enough to own a modem (yet!). Hopefully, I'll compile another list like this in the future. Please forward to me any comments and tips of your own.

Our BBS number is 315-457-7216 or drop a letter in the mail to QMI, PO Box 179, Liverpool, NY 13088. Enjoy!

1) Saving the GEM DeskTop
I always see an ST booted at a store and can't believe how messy they keep their DeskTop. I shouldn't be too critical -- the top of my own desk is pretty hard to find! The "Option" Menu on the GEM DeskTop has a choice called "Save DeskTop". It creates the file called "DESKTOP.INF" which remembers what your DeskTop looks like (icon and window positions, screen resolution, etc). The next time you turn on your computer, the DeskTop display will look just as you left it. For instance, I have my disk icons placed at the bottom left of the screen and the trash can at the bottom right. I resize and move my windows so that they are centered vertically next to each other (text viewing). I go to the Options Menu and Save the DeskTop. Next time I boot, everything looks familiar and comfortable to me!

2) Renaming the Icons
I've found it more appealing to have the disk icons named "Top Disk" and "Bottom Disk", corresponding to the position of my disk drives. Point to a disk icon and click the button to make it dark (selected). Go to the Options Menu and select "Install Disk Drive". Type the new name in the drive name field and click the Install button. Voila! Your icon is renamed. If you save the DeskTop, the name

will be there permanently. You can rename the trash icon by loading the DESKTOP.INF file into a text editor and renaming it where it is shown in its special format. If you do this with ST-Writer, make sure the top and left margins are set to zero, then print to disk (do not use Save since ST-Writer uses a different format).

3) Installing an Application Document-Type
This sounds complicated but it's really a useful feature. For instance, you probably name all of your ST-Writer files with a file extention ".DOC". Normally, you would load ST-Writer then load the document file. Here's how to do it in one step! On the DeskTop, click once on the application program name (or icon) to make it black (selected). Go to the Option Menu and choose "Install Application". In the field called Document Type, enter the three characters for the file type associated with the application (DOC, for the case of ST-Writer). Then, save the DeskTop to make this a permanent choice. From now on, all you need to do is click twice on any document file (".DOC" on the name) and ST-Writer will load automatically and the document file will load into ST-Writer, waiting in the edit mode! Make sure ST-Writer is on the same disk as your document files or this will not work.

4) The Infamous <ESC> Key
The Escape comes in handy for a couple of things. When you remove a disk from a drive and replace it with another, the DeskTop still shows the directory for the old disk. I spent the first two months closing the window and re-opening it to see the directory of the new disk. Not so! Simply press the <ESC> key and the directory will appear for the new disk! Also, the Escape key is used to erase text fields in GEM Dialog Windows. For instance, you're entering the date in the Control Panel -- just hit <ESC> and the old date will erase and the cursor will go to the begining of the field.

5) The Case of the Dead Mouse
I've heard of missing mice and a sick mouse or two. But there's no such thing as a dead mouse! The ST keyboard allows you to move the cursor around without using the little critter. Hold <Alternate> and the cursor arrow keys to move the pointer in steps and use the <Alternate> and <Shift> keys together with the cursor keys for fine movement. The <Alternate> key with the <Insert> key acts like the left mouse button and the <Alternate> key with the <ClrHome> key acts like the right mouse button. It makes a lot of sense once you think about it!

The second part of this article will be printed in next month's newsletter -ed.