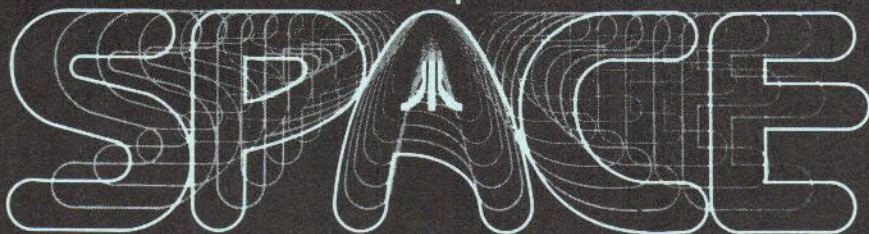


MAY • 1989

Saint Paul ATARI Computer Enthusiasts



An independent computer user group

SPACE Meeting Friday, May 12th at 7:30pm

MAST Meeting Friday, May 19th at 7:30pm

At the Falcon Heights Community Center  
2077 Larpenteur Avenue West

MAST+ Programmers Meeting  
**Tuesday**, May 23rd at 7:30pm

At First Minnesota Bank Building - second floor  
Lexington and Larpenteur, in back of building



Minnesota  
Atari ST



## News from the Pres By Jim Schulz

Well, May has finally arrived and with the end of school and summer just about upon us, don't forget to include MAST in your plans this summer. This month, first up, an editorial, then last month, this month, the future and finally miscellaneous notes.

It's been a while since I spoke out about anything, but a number of things have happened over the last month that deserve discussion in general.

This month's topic is user groups and volunteerism. Lately, there has been a ground swell among both MAST and SPACE that those who volunteer for jobs or officers give 100% of their time to the user groups. If something is needed or asked for, it should be done immediately. No questions asked.

I think a couple of points need to be made. One, we are all human. All of those who volunteer, officers and otherwise, always try to put our best foot forward. We try our best to do the best for the club. At times, we fail, but everyone fails. Two, there is more to life than MAST or SPACE. Most of the officers of both groups have jobs or are going to school. In addition, we have family commitments as well. If something doesn't get done right away, there is usually a good reason. Like I said, we all try our best with the time that we have available. Finally, all of us are overworked.

I don't want this to conclude as another pitch for volunteers, but here goes.... As the group expands, more people are needed to help. I, personally, hate to take the attitude that if you want something done, then you have volunteered to do it. This attitude gets no suggestions and brings forth only a one-sided officer-run club.

A number of new members have come on board since the first of the year and they have questions, comments, and needs to be addressed. We have the people interested and a need for a MIDI group, but we need a person to run with the idea and get it started. I have a number of small projects in different states to add benefits for current members and to add or encourage new members to join MAST, but I need help to continue and carry these forward.

MAST is more than Jim Schulz, Dave Meile, Allan Frink, Steve Pauley and a few others.

MAST is everyone who joins, shows up at meetings, uses the BBS, reads the newsletter and more. I try my best with the time that I have available. Lately, work has been taking a lot of my time with many days over 12 hours, as well as many 60 to 80 hour weeks. In addition, it looks like my health is also going to need some attention as well. Dave, MAST's VP and newsletter editor, recently had a death in his future family and this past week was spent in Canada because of this.

This month's newsletter will be late because of this. Allan, SPACE/MAST's treasurer, has a little son to take care of as well as a new baby on the way any day now. Steve, MAST's BBS sysop, has been busy with family projects as well as adjusting his schedule for a self-run business. And I know from personal experience that SPACE is in similar circumstances. My final comment is that we all try our best!!! We need your help!!! ...time to get off my soap box.....

Last month, we had another super meeting. In addition to all of the DOMs, news and rumors, and more, Dave gave a MIDI demo in the side room which was very well received. Also we had demos of some of the latest software from Cory Johnson from Wizard's Works and Steve Murphy. Thanks to all for your help.

This month, if you thought the past meetings were good, you got to come to this one. We will be showing a two hour video in the side room of highlights from the World of Atari show in California. A number of new products were introduced here so this could be quite interesting. As I write this, the video has been ordered and has not arrived yet.

Also, we will have the complete rundown of everything shown and announced at both the World of Atari show in California and the recent Atari Show in Michigan as well. I will also have some digitized pictures as well. Find out the latest on ST emulators, ST accelerators, ST monitors, as well as the latest software for utilities, applications, and games.

Finally, we are going to finally after two years (is it that long???) debut the complete collection of ST News disks from Europe. If you want to see the unique ways that the ST is used over in Europe, this is the place to see and read about it. The latest issue defies the laws of scrolling text that it always has to go horizontally. How about

diagonally, or in sine waves or intertwined as two worms might be??? Only ST News would try this???

We will demo some new software as well, time permitting, including Hot Wire from Codehead, the new version of Neodesk with user definable icons ala Mac, and a rather addicting game called Tower Toppler. Is this enough for a May evening in Twin Cities????

Now, what's coming in the month's to come..... We haven't finalized months yet, but don't forget MAST this summer!!!! Coming this summer is another round of MIDIMaze, another way to use those MIDI ports, our second annual member appreciation night with specials as well as a number of door prizes as well, a swap meet to rid your shelves of old ST hardware and software as well as get some good deals as well, and more..... Summer is not the time to forget about MAST and this summer, you don't want to miss a meeting!!!!

Also, don't forget the MAST+ meeting the Tuesday following the MAST meeting this month with the Dale, Chuck, John, Dave and Todd as well. Yes, it's Tuesday again.... I guess it's time for the poodle club meeting. I am always amazed each month at the number of new people who stop in and check this meeting out. This meeting always has something new. Also, if you have any questions about programming the ST, the best of the Twin Cities ST programmers are here with the answers. And stay around afterward for pizza as well. You don't have to be a programmer to enjoy the MAST+ meeting.

Other stuff.... Well, I again got another shipment of 400 disks in for this month. Our price has now gone down so yours will, too. Starting this month, the new price for double-sided disks is \$0.80 each. If you want disks, come early. If you want to pick up disks at the MAST+ meeting, give me a call or leave me a message on the MAST BBS. These disks sell fast. I also have over-the-top disk labels for \$2.00 per 100 as well. ....

A number of projects are in the works. Starting this month, all of the popular ST magazines will be available for checkout. MAST is now subscribing to all available ST magazines and they will be available on a one month checkout to MAST members only. Please bring your cards for verification. Most ST magazines are available from



January on.... We also need a volunteer to help manage this project in the future. (Yes, that nasty word again...) .....

Also, check the MAST BBS weekly for the latest news from the world of Atari from ST Reports, STZMAG, and ZMAG. As well as the TMI, the ST Magazine Index. This month, we also have digitized pictures from the STZMAG of the World of Atari show as well as Comdex. And if you can't get time for this on the BBS, check out the ST Magazine disks in the MAST DOM library. Response to this project has been slim to none. The price of the disks is \$2.00 for one, \$3.00 for two, and \$4.00 for three. That's right for \$4.00, you can get just about 1 megabyte of ST and Atari news and three blank disks when you are done. Not a bad deal. Take advantage of a good deal before it disappears.....

A new MAST BBS is in our future.... Steve Pauley is busy trying to bring up a new and improved version of the BBS software. I haven't checked in the last few days, but expect something real good real soon.....

Well, that's about it for May. As well as the newsletter coming out a little late, I am also late with these as well. The envelope has looked and found something for this month. First off, he found a strange new utility called HotWire from the Codehead people, makers of G-PLUS and Multidesk. This time, they have added hot keys to your desktop. Have you ever wanted to run that favorite program, but didn't want click through folders to get to it???

Well no more, how about Shift-F to run Flash, Shift-J to run JShell, or Shift-T to run Tetris??? Well, it is now possible. The envelope still hasn't mastered this program yet, but it does perform as advertised!!!! Secondly, the envelope decided to take a chance on a game, sight unseen after two good reviews. The game is Tower Toppler. The graphics are great, even though the game is a little hard to explain. In general, the object of the game is to get to the top of the tower, but there are obstacles in the way as well. This game is very addicting as well. The envelope wants me to finish this so that he can play the game. Wait, the envelope is a he??? Oh, well, check out this game. It is well worth a look. So the envelope closes fast this month and it is again time to go. I hope to see you all this month for another exciting musical MAST meeting and MAST+ meeting.

## Minutes of the SPACE Meeting by Larry Vanden Plas

1. The meeting was called to order April 14th at 7:30 by President Greg Howell.

2. Greg reported that the SPACE treasury had about \$150 plus the earnings from last month's disk sales, \$149. This resulted in a balance of about \$300 at the start of the meeting.

3. Greg reported that Atari had suffered a \$97 million 4th quarter loss on their retail stores. Greg said he would be available for beginning users or anyone with questions after the formal part of the meeting.

4. During the discussion of the BBS, it was mentioned that one of the capabilities of Express Pro was the option to not read system news if the user had read it previously. Express Pro also can remember user parameters. The membership agreed that these capabilities should be available.

5. Offers & Deals - COMB has 800XL's for \$99, wait for the half price sale. They also have Juki 6000's with parallel interface for \$99.

6. Newsletter - Members were happy to get the newsletter the day before the meeting. They did not mind the intermix of 8-bit and ST articles at the newsletter's current size.

Z mag will publish a section that they will pay us to include in our newsletter. It will be camera ready, but will cost us 25 cents more per copy to accomplish.

Greg reported SPACE was looking at combining with other newsletters in the State.

7. Current Notes is available at reduced rates for SPACE/MAST members because we are a registered user group. Information to subscribe at the reduced rate is found next to the inside back cover.

8. Service Questions - Noisy disk drives can be quieted by lubricating the arm that the read/write head rides on.

Radio Shack's cleaner/Degreaser is useful on cables and ports that are having connection and transmission problems.

One member is looking for help with a CTS modem that hangs up as he tries to dial out.

### Wizard's Work

#### Authorized ATARI Sales and Service

**1040 ST™**  
System Specials  
Monochrome System  
**\$799.00**  
RGB Color System  
**\$999.00**

**Desktop Publishing System**  
Mega ST4 with SM124 Monochrome Monitor  
Megafile 30 Hard Disk Drive  
SLM804 Laser Printer  
UltraScript PostScript Emulator  
Timeworks Desktop Publisher  
**\$3995.00**

SPACE and MAST members receive 25% off suggested retail on all software  
Bring in your membership card for discount!

Wizard's Work  
County Road 9 & Highway 169  
Plymouth, Minnesota 55441  
(612) 559-4690

Monday-Thursday 11:00-7:00 · Friday & Saturday 11:00-5:00



If you are taking a disk drive to PEC for head alignment be sure you bring a system with DOS, because they do not have Atari systems.

There was a discussion about buying a alignment disk for \$40. Joe Danko will look into further.

Jim Scheib reinks ribbons as well as being paper librarian. For faster service people can turn them in SPACE and pick them up at MAST.

9. NO Frills has a program that converts Print Shop art for use on Hi-Tech express.

10. The May Analog has a Super command program with part two coming next month.

11. It is OK to copy and distribute DOS XE, but the manual cost \$10.

12. Joe offered to demo Super DOS.

Joe reported that our disk library has about 99% of what is out there.

13. The meeting concluded with demo's of the DOM.

## Last Nite by Dave Cole

Well, I have certainly learned a thing or two for the past month. Never ever connect a 1050 transformer with an Indus GT! Well anyway, there are some of you out there who program and/or who want to start programming. Here are some tips which may help:

POKE 54018,52 - this command turns the cassette recorder ON. A value of 60 turns it off.

POKE 730,1 (XL - XE only). This makes the cursor move at 100 mph (just about) .

POKE 65,0 - Remember that blasted "BLEEP" noise when you use the disk or cassette? Well, this gets rid of that extra noise that drives you up the wall.

PRINT PEEK(53770) - Returns a random number between 0 and 255.

POKE 53774,64 and POKE 16,64 - turns the BREAK key off.

POKE 580,1 - press the RESET key after POKEing this and you can cold-boot (turn computer on/off type) without moving the switch.

POKE 622,255 (XL - XE) - type GR.0 after this, smooth scrolling graphics for now on. This DOESN'T work for Turbo-BASIC.

POKE 87,0 - use this like so: GR. 17: POKE 87,0. This forces the machine to believe that it is in GR.0 - this isn't perfect, but the text is bigger. You can also use GR. 18

PRINT PEEK(53279) - make a cheap BASIC program with FOR-NEXT statements and you can use the START, SELECT, and OPTION keys.

PRINT PEEK(732) - This is for the HELP key (XL - XE). You MUST reset this location to 255 to use it again.

POKE 202,1 - to be mean, put this into a BASIC program. This clears the memory!!!

POKE 755,4 - this turns the characters upside-down. A value of 2 makes them upright again. Some values turn off the INVERSE.

POKE 1913,80 - This disables the verify when reading/writing operations for a disk. A value of 87 turns it ON. With DOS 2.5 or 2.5+, if you want to have no verify, type this in before going to DOS and then copying DOS to a disk. Voila! No more verify. This also speeds up the computer.

POKE 731,0 (XL - XE) this enables the blasted key-click. A value of 255 turns it OFF.

POKE 77,n - n=128 or higher. This puts the ATTRACT mode in - so the computer doesn't burn colors into the TV or MONITOR pixels. When this mode pops in on ASTEROIDS, then the game automatically ends. Pitiful, isn't it?

If you have the ULTRA-FIX translator, use it and use the BOOT CARTRIDGE function (START + OPTION). Then plug in SPACE INVADERS. This makes the UFO sound like a UFO and not a broken wristwatch when the alarm goes off.

In Donkey Kong Jr., pause the game and type (shift key along with the characters B O O G A). Then continue. Type "K" to become immune, "I" to become un-immune to the

baddies, and "S" to switch screens.

In Missile Command, certain letters with or without the CTRL key will skip rounds. "C" lets you skip to LEVEL 5. These are some tips on programming and a few tidbits on games.

Oh yeah, POKE 756,204 (XL - XE) turns the international character set ON. A value of 224 turns it back to regular ATASCII. On ANY Atari, a value of 226, in GRAPHICS 1 or 2, 17 or 18 lets you use ATASCII characters! On a 400 or 800, using POKE 756,204 will produce a very WEIRD display. That's kind of nice if you want to make weird games or programs.

On GHOSTBUSTERS, when it asks for your name, type in "GOO". The account # is 11111111. You'll get lots of money to waste.

On Miner 2049er, type "213 782 6861". Then press SHIFT - n where "n" is the number of the round (1-10 only)

Well, I don't want to use TOO much space for this generally moderately short article so see you at the next meeting.

## Saint Paul Atari Computer Enthusiasts SPACE 8bit DOM news for May, 1989.

This month the Disk of the Month has two sides. Side A is all BASIC games, the majority of which have come over from West Germany.

You will notice that I have jammed some DOM info into the directory on each side. I had to use a sector editor as I have not had time to work up a program that does it yet. I also have not seen any old programs to do this. Most of the disks I have seen with this trick use reverse video data but I used normal characters so that it could be printed easily.

* >SPACE_DOM<	000
* >05_89__A<	000
* DOS	SYS 037
* DUP	SYS 002
* AUTORUN	SYS 002
* MENU	039
* MSSNX	BAS 119
* SUPER9	BAS 044
* JACKPOT	BAS 072

\* CHANGE BAS 021  
 \* MANIAC BAS 048  
 \* MEMTRAIN BAS 016  
 \* CAVE BAS 056  
 \* DFNDR BAS 071  
 \* GHOST BAS 085  
 \* LGTCYC BAS 049  
 \* SPACE DOC 002

#### MSSNX.BAS

MISSION X requires a joystick. Steer you helicopter through the caves and LOOK OUT. The 'copter naturally sinks and to rise you have to press the fire button. Touch anything and you're history.

#### SUPER9.BAS

SUPER CIPHER encodes a message with a key that you select. JACKPOT.BAS JACKPOT requires a joystick to manipulate a 7 by 7 matrix of letters. each row of letters is a seven letter window of the alphabet. Move the pointer to a row with the vertical joystick control and then the sideways control will shift the letters the number of positions shown in the box. This number changes randomly. The object is to line up the rows of letters so that the middle column spells JACKPOT from top to bottom. Each move decreases your possible winnings.

#### CHANGE.BAS

CHANGE is a little exercise program to help one learn to make change when handling money.

#### MANIAC.BAS

MANIAC MAZE is a multiscreen maze that must be negotiated using a joystick. Each screen has an object that must be touched. The cursor may have to be moved through several screens to get to the object on any given screen. Also, you are working against the clock.

#### MEMTRAIN.BAS

MEMORY TRAINING PROGRAM is an exercise in trying to remember a series of digits. You can select the length of the series and the duration of display for each digit.

#### CAVE.BAS

Guide your pod through the caves. If you touch most walls and objects you are destroyed. Some of the objects are fuel and you can move through some walls and objects while holding down the fire button on your joystick. Move the stick down to fire your retro rocket for up and down movement. Move the stick sideways to steer laterally.

#### DFNDR.BAS

DEFENDING WORLD is sort of a third world MISSILE COMMAND. Use your joystick to steer a cursor at the top of the screen to aim your laser weapon to hit descending missiles.

#### GHOST.BAS

JUMPING GHOST is controlled with a joystick. Press fire to make him jump over the red mines. If he touches one he gets zapped. The ghost moves up the maze by entering elevators that work automatically.

#### LGTCYC.BAS

LIGHTCYCLES is one of the dueling line games but has several options such as a choice of a human or computer opponent and a choice of resolution.

#### SIDE B:

SPACE\_DOM< 000

\* >05\_89\_\_\_B< 000

DOS SYS 037

DUP SYS 040

README 004

CDUP DOC 063

CDUP COM 040

CDUP 032

CDUP1 041

CDUP2 053

CDUP3 047

CDUP4 019

CDUPDAT 033

CDUPSUB 039

CDUPBAT 008

CDUPERR 017

FINCAL1 OBJ 139

FCMOD OBJ 001

FINCAL DOC 022

#### CDUP.COM

Chicksoft Disk Utility is a replacement disk utility package to use instead of the normal DUP.SYS. It is a "command line" type of utility and works with DOS2.5. I have not tried it with DOS 2.0. When it loads all you get is ">1" for a prompt. You can read the DOC file but if you key in "HELP" you get a nice screen full of command information. Also included is a complete set of source code files. I have not studied them close enough to determine which assembler/compiler was used but it should be possible to easily modify CDUP.

#### FINCAL1

FINANCIAL CALCULATIONS 1.0 is a menu driven series of routines to calculate loan and savings values. Even though the last item on each menu has a bug and does not work I thought the program to be useful as is until a fix is released. It allows printing of results to a printer or a disk file.

**Article deadline for the JUNE issue of the SPACE/Mast Newsletter is 24 May 1989. The JUNE issue will be mailed out on 29 May 1989.**

## MAST Disks of the Month

### By Jim Schulz

Well, it's MAST disk time again. By popular request, I will run down last month's lineup of MAST DOMs, followed by some MAST disk news, and finally into what's in store for the month of May. So here goes....

For the month of April, we had four normal DOMS, five special disks, and three ST magazine disks.

- #372 - MAST DOM #1 (April's Utilities Disk #1)
- #373 - MAST DOM #2 (April's Utilities Disk #2)
- #374 - MAST DOM #3 (April's Applications Disk)
- #375 - MAST DOM #4 (April's Games Disk)
- #376 - Opus V2.0 (The best of the public domain spreadsheet, now better)
- #377 - Sticker V3.0 (A monochrome disk labeling program with icons)
- #378 - Zoltar (A galaxian-type game with full game editing features)
- #379 - Animated Demos (A demo about a fish, a bee, and a fishbowl)
- #380 - ANALOG Disk #25 (Programs from ST-Log Issue #30)
- #1 - ST Reports from the month of April
- #2 - ST MAGs from the month of April
- #3 - The Magazine Index and ZMAGs from the month of April

So that's a wrapup of last month, last month was probably one of the best selection of utilities, applications and games for months with most of the programs finding a permanent spot on my hard drive. Also, the Opus spreadsheet program for public domain is the best around and the Sticker program will be used with the ST News disk starting this month. And for galaxian-type game, Zoltar can't be beat. If you don't like the current game, make your own up. And finally for a rather strange demo, check out the story of the fish and the bee. All in all, a very good month.....

Now the news..... **Doc Disks....** These are still on the list and are coming soon. I have done some work on making the scanning easier, but the scanning is yet to come. **ST News Disks....** At the urging of our VP and the right opportunity to start the promotion, the ST News disks will all be available for sale at the next MAST meeting. Prices are

\$2.00 each at the meeting. If you can't make the meeting, they are \$3.00 each. This is also the price which we will be selling them for through the magazines in the months to come. The ST News disks are innovators. If something is new in graphics or music, you are likely to see and hear it here first. Each disk comes with a picture for both color and monochrome, a musical selection, a scrolling message, as well as ST news from Europe, program reviews, tutorials and more. We just received the latest ST News disks in the last few weeks so we now have a complete collection. I believe that we have over 20 disks in the collection so try one out this month, and pick up the rest in the months to come. These are truly unique and for this price, you can't go wrong!!!! **Prices....** All MAST disks are again \$6.00. All updates are \$2.00 each with the original disk. ST News disks, doc disks and ST magazine disks are \$2.00. **Back orders....** If there is anything which the members can string me up on its sending out back ordered disks. All backordered disks are all done waiting to be shipped. These will be in the mail by Friday of this week, the day of the SPACE meeting. **ST Magazine disks....** These were written up in my MAST news article so I won't repeat too much again. The first month these sold **good. Last month, the sales were poor.** Please note that you get quite a bit for very little. I have had requests for months for ST news and information on disk from people who just didn't have time to look for and download the information to keep up to date. For \$2.00 for one disk, \$3.00 for two and \$4.00 for three. You pay all of \$1.00 for the latest in ST news when you factor out the disk price. I will post some of the information from these disks at the next meeting. Take a look and judge for yourself. You get quite a bit of news for a little price.

Now, we'll take a quick look at this month's current selection of programs. Starting out, let's look at this month's **updates**. First, we have the "final" version of the ST Xformer 8 bit emulator. This version now runs at 50% to 60% of a 130XE and includes a number of features. This is supposedly the last update with the shareware version including a number of additional features as well. This program was just posted tonight so I haven't even had a chance to download it or look at it. Second, a new version of the Opus spreadsheet program is due out any day now. This version is suppose to include support for reading and possibly writing Lotus .WKS files. Finally, some new documentation has appeared for the recently

released ST Writer V3.0. If it is different from the last update, it will be available as a free update this month.

Other goodies this month include a new version of the HeadStart program for autobooting programs at startup, a new version of the Colorburst program which support 3200 colors in low resolution and 800 colors in medium, a new version of the classic Yahtzee program, a rather well done train game using the STOS program called Bullet Train, where the object is to choose the right tracks to get the train to its destination, a new adventure construction set program with a sample adventure that let's you create your own Infocom-like adventures at home, a color separator program using STOS which will allow you to separate the individual colors out of both DEGAS and Neochrome pictures, two new demos which were big hits at the World of Atari show last month of the Atari Fuji symbol and a chain, and finally an Atari Statistics program, you asked for it so for the May disk of the month, it will be here!!!! Also don't forget this month's ANALOG disk as well!!!!

Well, this is just a sample of what's in store for this month. This is what I was able to find just by starting to look at what I have to work with for this month. Lots more is coming in every day so expect one of the best DOMs around this month. Check out the MAST BBS the week of the meeting of the latest update on this month's DOMs. A number of these programs will also be demoed at the meeting as well. If you can't make the meeting and would still like to get ahold of the DOM or would like to get ahold of the DOC disk, my new address is

5900 65th Avenue North #204  
Brooklyn Park, MN 55429

That's it for May. You asked for more information and you get it. Keep the comments coming. If you would like to see something, I will do my best to find out what is out there. I hope to see you all at this month's MAST meeting and on the MAST BBS.

## ST News Compiled By Jim Schulz

This past month, on April 22nd and April 23rd, the World of Atari show was held in Anaheim, California. A number of new products and announcements were made at

this show. For complete reports on this show, check out the ST Reports and ST ZMAGS on the MAST BBS and on the disk this month. Also, MAST has ordered a video being sold by ST Report. We will hopefully be showing this 2 hour video at the next meeting. The following is the comments of Darlah Pine, Chief ST Sysop for Genie. These are her comments after the first day of the show. These comments are reprinted from the Genie BBS message base.

Here are some show tidbits that I have gathered from Sandy. I am not sure on spelling re: names so please don't take me to task. Time has been limited for Sandy thus this is all we have.

Attendance seems to be at 7,000 for the 1st day of attendance.

Atari Booth was REAL cramped. It is a corner booth thus access was to say very interesting.

JRI is selling their genlock. They also are selling a color board with a 1200 pallet (68 on screen at the same time). Price unknown. They are selling their accelerator board for \$100

In Sandy's opinion, if you have a Mega and a reason for GENlock, it looks very good. They demo'd Genlock at the concert last night.

Sam Tramiel showed STACY but when he tried to turn it on, he found out the batteries were dead. He said availability will be in July. He said August or September for the TT.

Though Sandy did not get a real close look to STACY, she said it appeared to be wider than her Sharp portable. It had the same exterior color but keyboard is light creme or grey. Sam appeared surprised when he found out the batteries were dead when demoing. The LCD screen seemed to be more tv shape than the Sharp screen, but as Sandy stated, that was her impresion from a distance. If Sandy remembered right, the LCD screen in it now is not the finished version.

Atari will be selling the HOTZ Box with an Atari label on it.

The concert last night had Mike Pender from the Moody Blues MC'ing the show and starring Jake Flader from the fusion group MAZE performing two songs from his solo album he is working on. Marc Ritter and Greg Whelchel from the POINTER SISTER's band

did a short demo of how midi is used to lay down tracks.

The show emphasized "ATARI and the MIDI commitment.". The score from the movie Colors went GOLD and Atari was presented with the GOLD record. The OSCAR winning BEST original score for the movie "Maligo Beanfield" was scored on an Atari. There is a movie out called "Simpatico" (Sandy was not sure of spelling) that was scored in his livingroom using the Atari. The music is in the easy listening Category. Sandy's comment, "not bad." It is supposed to be on the charts now. The author is James Lee Stanley and he performed two of the tracks at the concert. Jimmy Hotz gave a HOTZ box demo with the help of Mick Fleetwood from Fleetwood Mac. They asked for 2 volunteer drummers from the audience who never touched a keyboard. In Sandy's opinion, the HOTZ demo was interesting, but it did not explain the box or how it works at all. It is a device for people that hear the music in their head, but can't play an instrument. A clip from the movie "Colors" was shown while two guys who did the score, talked about doing it.

GBS was showing their GCR. Sandy Small stated that they have a tremendous amount of pre-orders in the mail already. Her gesture made one think that they already had 3 to 4 inches of stacked preorders. It looks like this is one popular item. The booth was set up with speakers along side a real Mac. We presume they were comparing the two.

Avantgarde was displaying PC-DITTO II at the show. No advanced orders are being taken at this time but it looked impressive.

Sam emphasized that Atari is BACK in the US market. He explained that the chip problem was the reason they left but they are BACK to stay.

ICD was showing their tape backup system. This girl is getting one. <DAR>

Ultrascript is being shown. Sandy stated that the postscript output was impressive but she needed to check if it was a 9 pin or 24 pin. The demo was done on a NEC P5200. <-- Anyone know anything about this printer??? Sandy is going to check what dot printers they support.

Gribnif was showing their latest NEODESK which displayed icons much like the MAC. If you are a ICON person, this version seems like a must.

Seymour/Radix is showing a hard drive backup that goes to your VCR and uses standard VCR tapes. The price is \$249.95. It backs up to 360 megs at 8 megs a minute. It uses standard RCA cables.

Happy Computers is debuting a new product called Quick\*Verter. Quick\*Verter must be used with drives with a thru port or with an internal drive. It is touted as being a fast and reliable conversion of Macintosh disks, to and from Magic Sac, Spectre and GEM format. It also provides access to high density drives using high density drives. Shipment begins in May and list price will be \$179.95

CODEHEAD was selling all their products with two different varieties of T- SHIRTS. Hey Codehead.....can we buy them too??? :-)

MIGRAPH was showing their hand scanner but not much information on this one as this is on Sandy's MUST see today. More later on this subject. :-)

Sierra-Online is there showing videos of sections of their games.

Wuztech is showing their monitor for all 3 resolutions.

Megamax is there.....

In the Atari booth is GEnie of course and Deskset, Megafile 44 (removeable HD), Calamus.

Astra systems, Westco Electronics debuted their Storage System One (SSI) 21.4 Bernoulli system (Ataris' is 44megs).

Michtron was showing the MicroDeal line and was selling Tailspin rather quickly. Tailspin gives you the ability to create graphic adventures with using sound files from ST-Replay. They were also showing their full line.

Reeve Software is showing Diamond OS though Sandy did not get a chance to really look at it.

Beckemeyer Development is at the show. Sandy did not get a chance to view what they had to offer.

Denny Hayes has a FAX Modem. It works as modem and fax reciever that runs at 1200 baud. It could replace your 1200 baud modem. If remembered right, this is a port over from the IBM world.

Timeworks had a booth but did not show up.

The cost of food was rather high. Rather typical at these shows though.

Frank Cohen was at the show. A new game is slated for the upload area soon here on GEnie.

Atari is having a dealer meeting today. Not sure what that was/is about.

GEnie was getting a great deal of interest even though access was tough. My hands off to Sandy for an excellent 1st time solo job.

That is it for now. Be sure to join the conference for more news. See the door for times etc.

## Build Your Own Hard Drive for Under \$200! (Part 3) by Jim Johnson

**At last we are going to finish this serial article! Hopefully by the time you are done reading this, you will have your hard drive up and running. The first thing we have to do this month is assemble the components you shopped so hard for last month.**

Start with installing the power supply and fan inside the case, if they are not already installed. Next slide the drive into place. If your drive and case are setup for the typical 5 1/4 form factor, it should only require a few screws to secure it. You may have to drill a couple holes in the mounting rails to line up with the screw holes on the drive. Don't tighten the screws too tight. You only want to keep the drive from vibrating inside the case. If there is room between the mounting rails and the drive, consider putting felt or rubber washers between the rails and the drive. The drive needs expansion room as it warms up.

You can often install the controller on top of the drive. If not, put it anywhere it can fit inside the case. There are two important things to keep in mind. First, make SURE the controller is not shorting itself against anything. Use standoffs to provide the needed separation. Second, position the controller so your cables will reach the needed distance. The controller doesn't have to be bolted down, but its always best to do so. Last, if this is an ST drive, install the host



with the same rules of thumb as the controller. Make sure there will be adequate air flow through the case and around all the components.

Now we plug it all together. First, plug the power connectors into the drive, controller, and host if this is for an ST. The connector from the power supply is female, and the connectors on the components are male, with four pins. Look on the circuit boards of the components. The power connector often has a "P1" written next to it. You may need a 'Y' adapter between the power supply and the components.

Now look on the drive for a spot where your 20 pin edge connector will fit. Plug it in. There should be a spot for your 34 pin edge connector right next to it. Plug this in too. There should be a corresponding 34 pin edge connector on the controller. Plug in the other end of the 34 pin cable there. Some pre-built 34 pin drive cables have three connectors, with one clamped to the cable in the middle. It really does not matter which two connectors of the three you use.

Now look at the 20 pin connector(s) on the controller next to the 34 pin edge connector. They will have the letter 'J' followed by a number on the circuit board next to it or them. Many controllers can handle two or more drives. The set of pins you want are the ones with the LOWEST 'J' number of the various sets of 20 pins. Now look closely at the pins again. There should be the number '1' on the circuit board next to one of the pins. Your 20 conductor cable should have a red wire on only one side. This wire signifies pin 1. When you plug into the controller, make sure the red wire is on the same end of the 20 pins as the '1' on the printed circuit board. The edge connectors usually have a means of preventing you from plugging them in upside down, but the pin arrays don't. You won't harm anything if a cable is upside down, but your drive won't work either. If you made your own ribbon cables, there is usually some kind of mark on the connector that lines up with the red wire. Take care that you do not put the connector on the ribbon cable upside down.

The cable that goes between your controller and the host is just like the 2 X 10 pin array above, but has a 2 x 25 array for a total of 50 pins. Look on the controller and the host printed circuit boards for pin 1 and make sure the red wire is plugged in at that end of the array. If you are using a MIO, you can't see

which pin is number one without opening the case. However, the MIO manual will tell you that pin 1 is towards the back of the MIO case, away from the computer.

The last cable you should connect, if it isn't already connected is the AC power cable; but don't plug your drive into the wall outlet yet.

Your drive and controller will likely have several jumpers. A jumper is simply a little plug that shorts two wires together, thus acting like a switch. A SCSI interface is similar to a telephone party line. Everybody's phone on the line rings, and you tell when the call is yours by the ringing pattern. Jumpers are used to tell the controller which spot on this party line it is occupying. We will assume that the drive you are building is either your first or only SCSI device. You want your drive to be addressed as unit zero (ID 0). On the controller you should see several sets of two pins sticking up that are labeled 0 through 7; or 01,02,04,08,10,10,40,80. In either case, choose the lowest labeled pair, and put the jumper on that. Most new controllers are already set-up with an ID 0; and a couple older controllers that can only control one drive are factory set to ID 0 with no jumpers.

It will be rare that you will have to do anything with the jumpers on the drive interface board, so leave it alone unless you have problems trying to format the drive. Many controllers can handle more than one physical drive, and provide for 'Logical Unit Number's (LUN) in addition to the the SCSI ID. LUNs range from 0 to 3, although most drives are preset to LUN 0. The ID is combined with the LUN to determine the specific device to communicate with. Your drive will be addressed as '0,0'.

Now look on the controller board for a jumper that has three wires with '2' and '5', or '256' and '512' on the outer wires. This jumper determines whether to format with 256 byte sectors or 512 byte sectors. If you have an 800XL or 130XE, set the jumper for 256 bytes by connecting the center wire with the 256 side. If you have a ST, set the jumper for 512 bytes by connecting the center wire with the 512 side.

Look on the controller board for a termination resistor pack. It looks like an integrated circuit chip, but typically has a light colored case rather than black, and is in a chip socket rather than soldered directly to the board. It may say something like '220-

440R' (the 'R' stands for resistor) on its face. If you can't find it, and you do find an empty chip socket, you will have to buy one and install it. Because SCSI is like a party line, the system has to have some way of knowing where the ends of the line are located. Your host is at one end, and has a resistor pack. There can only be one more resistor pack on the line, and it has to be at the other end. Since this drive is likely your only SCSI device, it has to have a resistor pack.

Put the cover on your hard drive case, plug it into the wall, and turn it on. It should start up with a soft whine as it settles into a speed of 3600 RPM. The cooling fan should be moving a gentle stream of air through the cabinet.

Open up the manual that came with your MIO or ST Host Adapter. You will find complete instructions for using the supplied low level hard drive formatting software and building a disk directory. Read them over carefully and go to it.

If you have problems, check all your connections first, especially making sure that a cable isn't plugged in upside down. While it is unlikely that your drive is set for anything other than a LUN 0, it is possible, and you may have to play with the jumpers; but remember where you started. Recheck your controller's manual to make sure its jumpers are set correctly and that you are using the correct 20 pin connector. If you run into problems, it may be worth while to make a long distance call to ICD during business hours. They do their best to help customers over the phone, and it will help if you stuck to a controller/drive combination listed in your host's manual. Depending on where you bought your components, the retailer(s) may be able to give some assistance also.

I am optimistic that few readers will experience a problem. In a little while you will have your hard drive ready to save and retrieve files with many times the speed of your floppy drive, and many times the capacity!

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