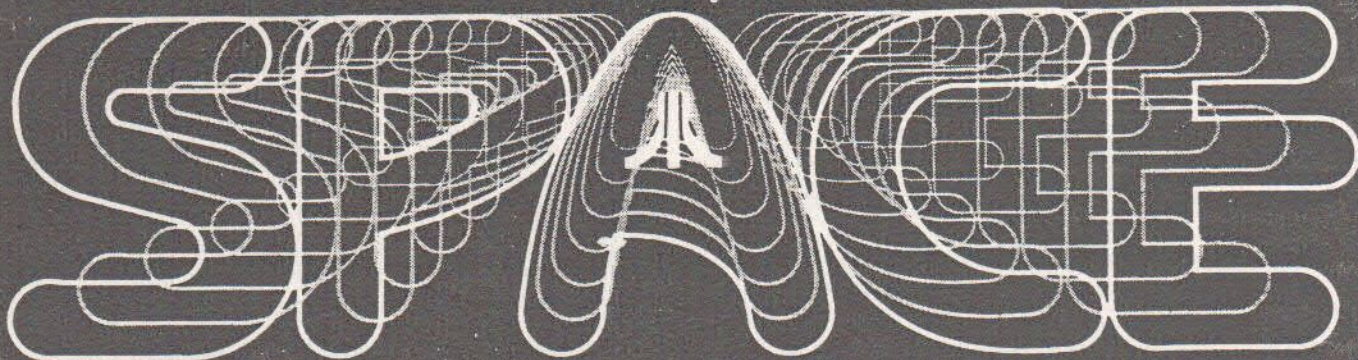# Saint Paul ATARI Computer Enthusiasts

SPACE

An independent computer user group

J U N E   1 9 8 6

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:

Plus all the regular columns

BYTES FROM THE PRES

HELP! HELP! HELP!

SPACE needs member written newsletter articles and reviews - WHAT do you do with your computer? WHAT do you like about ATARI? WHAT do you dislike? Do YOU WANT a ONE PAGE NEWSLETTER With thE NAMES oF tHe OFFICERS anD MEETING DATE???

How about the DOM? The Disk of the Month is about to be dropped - WHY? NO MEMBER SUMITTED PROGRAMS. If people DON'T SUBMIT PROGRAMS, where do we get them ?

Now that I have said that, here's what is being planned for the future -- In JUNE we will have Mel Rossing from Computer Outfitters to tell us how his unique business operates. You can buy new or used software there, and he does accept trade-ins of used software.

For JULY, ???? For AUG. or SEPT. Gordan Landsman of Wizard's Work will start a series on Word Processors or Spread Sheets. WHICH would you like to have first? Let's decide at this meeting, and that's what we will have first in Aug., and the second in Sept.

```
*** RAFFLE THIS MEETING ***
***----------------------***
***- THE CLUB'S TV SET -***
***----------------------***
***  1/$1.00, 3/$2.00   ***
```

Bruce Huag (a.k.a. THE PRES)

Da Dom (an epitaph)
by: Frank Haug

Welcome to another agonizing DOM article. This month I received the same amount of submissions as last month (i.e. zilch). I just don't know. How can you expect me to give you great programs if you don't submit even garbage!!! Now don't get me wrong; I don't want garbage, but I NEED yes NEED member submissions. If we don't get some member submissions soon, well... the DOM will die. It's up to you now. You decide if the title of this article is appropriate.

This month we will be selling a seperate disk for $4.00. This disk is a combination of some excellent graphic demo's from Germany by way of Jersey (thanx JACS).

Now on with the (lack of) Dom programs on the June 1986 Dom.

1.ATARIDEM - An interesting graphic demo of the old reliable.(that's the 800 for you XL/XE users)

2.ANADEMO - Two Animation demos of supurb caliber.

3.HEXPUZLE - Slide the HEX digits into their proper order (that's 1-9 then A-F)

4.SEADOG - Shoot the sub, uses paddle.

5.HOLLY.COM - 'HOLLY MEDEVIL' an interesting demo.

6.MIND.LST - Fix for MINDBSTR 1 of last month's games.

P.S. If nobody is going to enter the programing contest, let me know now and save me the agony, ok?

V.P. Notes
By Jim Schulz

This month we continue the memory upgrade topic with an article for upgrading a 130xe to 320k and one for 576k next month. I have not tried either of these upgrades. Use at your own risk. Memory upgrades seem to be a hot topic for 8 bit computers now that the 16 bit computers have memories of up to 1mb or more. Upgrade your 130xe and have as much memory as a 520st!

Topic two this month (seen in Antic Mag.) is the Basic revision C chip which is standard on 130xe and always promised for the 600xl and 800xl. Basic revision C fixes many of the problems of the revision B Basic and a simple 10 minute chip upgrade. B & C Computervision of Santa Clara, CA are selling the chips for $10.00 plus a minimum $5.00 shipping charge. This would be a great opportunity for a group order. Any volunteers??? To determine which Basic you have, type "PRINT PEEK(43234)". Revision A returns 162. Revision B returns 96. Revision C returns 234.

Finally, CES season has arrived and the news has already strarted to trickle out about the new developments. CES, the annual Consumer Electronics Show in Chicago, is going on as I write this. The first bit of the news is about the on again off agin magazine from Atari called the Atari Explorer. Lately, the only the time you see the magazine is when Atari releases a number of new products and feels like telling us about them. Well, that might all change real quick. Atari has hired some big names in the computer publishing business to take ove the magazine. The new editors are, get this, David Ahl and Elizabeth Staples. Sound familiar? David Ahl was the editor-in-chief and founder of the late Creative Computing magazine and Elizabeth Staples was the managing editor at the time of Creative Computing's demise. The current plan is go bimonthly immediately and go to a monthly format in 1987. Let's wish them good luck. If the Atari Explorer is going to succeed at all, these people have the best chance to make it possible. More CES news is forthcoming at this month's meeting.

Well, that's it for this month. Until the SPACE meeting, happy computing.

The Analog Disk of the Month
Dyanne Haug

Due to my recent takeover of this position, I didn't get an article in until now. I would greatly appreciate it if the following people would bring a current ANALOG to the meeting so that I can straighten out my records.

Brad Jones	Rich Mohrland
Susan Richter	Larry Vandenplas
Robert Perchman	

Anyone who hasn't bought a disk within the past two months or so should bring a current magazine with them. Thank you.

MAY MEETING MINUTES
by Bob Floyd

The last SPACE meeting was held Friday, April 9, 1986. In the president's report, Bruce Haug reported that ATARI has a new user group coordinator, Sandi Austin. She has sent her first mailing to all registered User Groups. Among the items she covered were that the XM301 modem has been a great success, "ATARI Planetarium" has been released and that "Teacher's Pet" is an excellent program for teachers to keep track of various aspects of teaching.

Here are a few other things Bruce did not have a chance to comment on because I handed him the mail too late: Sandi also said that a few "ATARIWRITER Plus" dictionary disks for the spelling checker went out with problems between the words "bloomers" and "bubbles". See your dealer if you have one of these disks. Another point she made was that everyone should pay careful attention to the "System Requirements" labeled on every piece of ATARI software. Examples of potential problems are that "Star Raiders II" will only work on a 130XE, and "Silent Butler" & "ATARI Planetarium" only work with a 1050 (or other 1.5 density) disk drive.

In "rumors", Jim Schulz, the vice president, reported that the XM801 ($220) dot matrix printer for the 8-bit computers was shown at Comdex. The 80 column cartridge was also shown. It will plug into the joystick port and includes its own parallel (printer) output port. 8-bit software shown included "Star Raiders II" ($19.95), "Super Boulder Dash", and "Racing Destruction Set". A 3.5" disk drive for the 8-bit line was also shown at Comdex.

Treasurer Bob Siede reported that there is $1250.28 in the treasury. He said that the MAST sig is in the black, too, with most of their monies tied up in inventory of 3.5" disks for the disk of the month.

Frank Haug, Disk of the Month (DOM) librarian demoed several programs from the DOM. He mentioned that we have received several public domain "Print Shop" libraries from JACS (Jersey ATARI Computer Society). These will be on sale at the next meeting.

Bob Rhode, newsletter editor, said that he will be out of town for the July newsletter. He would appreciate any help you can offer. (This is a one-time thing, not a commitment.)

In "Old Business", it was reported that the ribbon re-inker is doing fine. Those with reel-type or the large, long Epson cartridges can have your ribbons re-inked for $1.00. Be sure to put the ribbon in a baggie before turning it over to Larry Vanden Plas at the meeting.

The BBS was down at meeting time.

In "New Business", it was suggested that the club raffle off its old TV set and 400 computer and buy a second color monitor. After some discussion, there was a motion that was seconded and then carried. Arrangements are being made to do these things.

In "Offers & Deals", it was reported that LaBelles was selling an 80 column printer and a color monitor cheap. COMB

is selling a Qume compatible letter quality printer for $190. One of the members had purchased it and was satisfied with the printer. Since the meeting, I've noticed that Children's Palace is selling the 130XE for $120, which is $30 off prices locally. This may not be a bad way to gain access to "BASIC XE" (a very improved BASIC), upgraded "SynFile+", "PaperClip" and "ATARIWRITER Plus" enhancements and "Star Raiders II".

To Whom it may Concern

You may have noticed that in the past couple of months that we have been seeing some quality articles, and you may have been feeling pretty good about our club. Let me put a little cloud over your sun.

This club is being carried by a few dedicated people. Jim Schulz produces oodles of first rate copy every month, including extensive reviews. Bob Floyd always produces ample words of expert caliber, and Bruce Haug is setting a fine precedent as president.

Bob, Jim and Frank Haug spend hours each month scouring BBSs nationwide for the articles and DOMs we see. It's a day of celebration when a SPACE or MAST member writes an article or program.

This club's in trouble. We use a lot of outside material, but produce very little. I suspect that the success of MAST is due almost entirely to the tireless efforts of Jim Schulz; would that SPACE had an equally selfless member of its own.

from A Concerned Member

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

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.

That is where we left you hanging last month. Now we give you the answer, and the rest of the article.

You don't see what is wrong with that? Recall the recommended method of changing extended memory banks: (1) Read Port B, (2) mask out the current bank select state [using AND# in assembly language, usually], (3) include the new bank selection [probably using ORA], and (4) store the new selection back into Port B. Look at step 1 again: READ PORT B!?!

The problem gets especially acute if you are changing banks during an interrupt service routine (including a Vertical Blank one). If the carrier detect interrupt occurs while the IRQs are disabled, it is "held off" until they are reenabled. But if Port B is read from in the meantime, then the hardware "forgets" what caused the interrupt.

Now we will admit that the situation necessary to achieve that glitch seems an unlikely one to happen, yet it happens quite handily all the time with BASIC XE, a 1030, and some varieties of AMODEM. Don't care about that? Well, then, how about you 400 or 800 owners who have a 1030? Did you ever call up on your modem, listen, hear the other modem answer yours (i.e., hear the carrier tone), and yet have your program sit there twiddling its thumbs? My guesstimate is that this scenario should happen to you about once every 50 to 80 times you try to make such a connection. Why? Because, in the 400 and 800, Port B is connected to joysticks 3 and 4; the operating system reads those joysticks (to copy their values into the shadow registers) DURING EVERY VERTICAL BLANK! If your carrier connection occurs sometime between the beginning of the VBI routine and the time the joysticks are read, say goodbye to the Service Request interrupt!!!

Whew! Long winded, right? If there is no fix, why discuss this? Ah, come now, did you really think we'd do that to you? The fix we adopted with BASIC XE seems a good one: never READ from Port B. Writing or storing to it does no harm -- only reading does. Well, not quite never. When your program first starts running, read Port B once and save its value in some memory location (often called a "shadow" location -- used extensively in Atari's OS). Then, when you need to change the bank selection, read the shadow location, perform your bit manipulations, and write to BOTH Port B and the shadow location. If your shadow can be in zero page (not recommended with BASIC programs, due to the shortage of zero page), then you are increasing the size of the set-memory-bank routine by

only one byte. (Oh, yes, the fix on a 400 or 800 is to put the OS in CRITIC mode while waiting for the connection. See a mapping book about location $42.)

The 130XE/320K upgrade
by Scott Peterson.

After both reading and building both the 800/288K upgrade (D.G.Byrd), and the 800XL/256K upgrade (C.Buchholz), I decided that there also had to be a way to upgrade the 130XE. There is, and thanks to the "Freddie" chip (C061991) this modification is much easier to do than either of the other upgrades.

Note: This upgrade is completely compatible with the 576k upgrade coming next month, so if you want to do half of the work now go right ahead and perform this mod.

To do the upgrade you will need a soldering iron, a de-soldering tool, and some fine wire. See the parts list for the chips needed.

First, remove both the case and the metal shield to get down to the mother-board. Then remove the eight ram-chips U26 thru U33 (MT4264). They are the row closest to the TV RF module.

Next, bend up pin 1 on Z2 thru Z9 so that they point straight up and do not contact the PC board or sockets. Now install Z2 thru Z9 in the place of U26 thru U33. These are the 256K ram-chips. You can solder them to the mother board, or use sockets.

Now take a piece of wire approx 12 in. long and run a jumper from pin one on each of the 256K ram-chips to the next. After you do this the wire will be connected to pin 1 on Z2 thru Z9 and you should have about 6 inches left over.

Next, desolder and remove U23 (CD14795), and replace it with a 40 pin socket. Bend up pins 15 and 16 on U23 and insert it in the socket you just installed. Take Z1 (74LS158) and bend up all the pins on it except pins 8 and 16. Put this "piggy-back" on top of U20 (HD14050) and solder pins 8 and 16 of Z1 to pins 8 and 16 on U20. Now solder a short jumper from pin 15 on Z1 to pin 8 of Z1.

Now, find chip CD21697 (40 pin), find its pin 21. Just to the lower right of pin 21 is a solder pad on the PC board (see diagram 1 for exact location). Solder a wire to the pad and run it to pin 1 on Z1.

Next solder a wire to pin 15 (one of the two you bent out) of U23 and connect the other end to pin 2 on Z1. Solder a wire to pin 16 on U23 and connect the other end to pin 3 on Z1.

Take R1 (33 ohm) and trim the leads to about 1/4 in. Take the wire you connected to pin one on the 256K ram-chips and solder it to one end of R1. Solder the other end of R1 to pin 4 on Z1. Re-assemble the RF shield and case and you are finished.

PARTS LIST

Quantity	Part Id	Description
1	Z1	74LS158 (2 to 1 Multiplexer)
8	Z2-Z9	41256 dynamic RAM (150ns)
1	R1	33 ohm 1/4 watt resistor
1		40 pin socket
8		16 pin sockets (optional)

The next page is a quick overview of the bit table and numbers to be used in location 54017 (PORTB). I have finished modifying a ramdisk handler for the extra ram. It uses a ram based OS so basic XE or XL can't be used. At present the best deal for this mod. is to use MYDOS 4.0, which supports a very large single density ramdisk. With basic XE you can use a 1500 sector ramdisk and without it you can have about 2000 sectors.

This upgrade has been tested on a BBS and has run for days on end without memory loss or error. If you need help or more information feel free to call the Peanut Gallery (408)-384-3906 (24HR, 300/1200 Baud). Leave mail to the Sysop(thats me). Good luck and let me know if you write a better handler.

Memory Control Register 54017 ($D301)

Bit 7 6 5 4 3 2 1 0

    D a b C c d B R

D=0 enable diagnostic ROM.
B=0 enable BASIC ROM.
R=1 enable OS ROM.
C=0 enable extended RAM.
abcd= memory control bits.

```
Bank # Control #
--------------------
Bank 0 -------->131!
Bank 1 -------->135!
Bank 2 -------->139!
Bank 3 -------->143!
Bank 4 -------->163! Basic= off
Bank 5 -------->167! OS = on
Bank 6 -------->171! ENH = on
Bank 7 -------->175!
Bank 8 -------->195!
Bank 9 -------->199!
Bank 10 ------->203!
Bank 11 ------->207!
Bank 12 ------->227!<--\
Bank 13 ------->231!    \
Bank 14 ------->235!    / 130XE Banks
Bank 15 ------->239!<--/
--------------------
```

Diagram #1:
25-24-23-22-21
C021697
16-17-18-19-20
X <-- solder here.
Also, ICD has a RAMdisk handler available on their BBS (815-968-2229) that will support this upgrade.

If you are using MYDOS 3.016 and wish to use Basic XE and a ram-disk at the same time, boot DOS and poke 5275,163 and 5324,16. Go to DOS and write the new DOS. This will keep the two from "bumping" into each other. A similar poke can be done to DOS 2.5. It is poke 4838,163. The handler I have will set up 192K of the extra ram as 2 SD ramdisks or 1 DD ramdisk.

If you are a hot-shot programmer (I'm not) I think a print spooler that uses part of this ram would also be very nice. This mod is easy to do and perfect for running a BBS. One note, on compuserve there is a mod by Rich Andrews which should not be confused with this one, his uses 33 new chips and mine uses 9 new chips. Have fun.

                    Scott Peterson

Words From The Co-Chair
by Bob Floyd

Again, I don't really have much to say this month. I am counting on Jim Schulz to come through as usual with the latest news either at the meeting or in this newsletter. I will try to cover the less "newsy" subjects.

Club ST: It appears that MAST may get a 1040ST in the near future. This is mainly due to the incredible job Jim Schulz has been doing with the disk of the month. I don't think you can get public domain disks as good as the ones Jim prepares anywhere in the country (or out of the country, for that matter). For those of you from other clubs who read the SPACE (MAST sig) newsletter, the DOM's are available for mail order. Just send a note to Jim (c/o the address on the newsletter) for a listing of disks (there are about 30). Price is $7.00 each for a full 360K disk of programs, drivers, etc.

Raffle: The raffle made only a few dollars at the last meeting. I think we need some more active soliciting of tickets for this to work. Jim and I just don't have time during the meeting to do this. Maybe we can get a volunteer in the future.

Time Bandit: This really is the "must have" game for the ST. It is mostly an arcade game of great variety with a few elements from adventure games. Go get it!

Newsletter Articles: It still appears that "ST-Writer" files are the best form to submit newsletter articles. The easiest way to handle this is to upload the file(s) to Dave Hutchinson's BBS. There is a separate section there devoted to SPACE/MAST newsletter file uploads. Use X-Modem for file transfer. The phone number is (612)-777-6376 between 6:00pm and 7:00am. You might visit to see what else Dave has on hand. (Thanks Dave for providing this service.)

AMIGA Woes: The AMIGA appears to be in trouble, at least if you believe two recent articles in Infoworld. The articles claim most of the original designers have left the company and that Commodore is not supporting the machine properly. Who knows what will happen?

User Group Woes: There seems to be a rash of ATARI user group "cash flow" problems going around. I have heard of these troubles with ACE, MACE and TAIG. Let's keep supporting our club as we have in the past. It takes volunteers and a small commitment to keep the club running properly. Perhaps the best thing you can do as a non-officer is to write a newsletter article. There are many other one-time volunteer jobs that come up from time to time, too. So, let's help out!

News from the Co-Chair
By Jim Schulz

Well, that time of the month has come for another MAST meeting full of news, rumors, and disks of the month. This month's rumors will most likely center around the CES show taking place as I write this. I expect that we will hear a lot of good news about the ST and new software becoming available.

A couple of the things have already started to leak out. One of these is the new editors of the Atari Explorer magazine. Read my 8 bit news article to find out more about this.

Probably the most interesting piece of CES news is that Commodore has decided not to show the Amiga at all at CES. From early reports, it sounds like the Amiga is hard to find anywhere at CES. It seems the bad Amiga news that Bob reported is now starting to show up in public. Expect to hear more about this at the MAST meeting.

ST-wise, it sounds like the Atari booth is bigger than last year and again packed with software developers showing their wares. The only thing different, though, at this computer show is the ST is also at a lot of non-Atari sponsored booths. This means more that more people are agreeing these days that the ST is the computer to buy. More ST news to come.

It looks like we will soon have another ST magazine to add to our mailboxes. Compute! has decided that the ST is the computer of the day and is going to publish a bimonthly ST-oriented magazine for $12.95 per issue which includes a disk with all the programs. The magazine will only be sold in a disk-magazine package. My only hope is that they clean up their act soon. The amount of ST related material has been slim at best in their recent issues, and in magazine format they are going to have to do more than print chapters out of books they have published. The most important point for the magazine's success is to include OSS's Bill Wilkinson in their plans. His expertise in the ST and OSS Pascal will help make this magazine shine. Good Luck.

Now for a hot rumor that happens to be fact. Atari is test marketing a new monitor in California. This monitor includes - get this - a double-sided disk drive ala Mac. Atari's idea is that with a 1040 you will get a 2-drive system in only 2 pieces, thus using less desktop space. Whether we will ever see this new monitor in Minnesota remains to be seen.

The following is what I will call the GEM tip of the month. This another of the many undocumented GEM tricks that are yet to surface. If you find any, drop me a note in the mail and I will include your tip next month. The following is not my writing or description. I could not write that clearly. [Take his word for it - and mine -ed.]

Imagine you have two windows open on the desktop, one for drive A and the other for drive B. If, say, the window for drive A is the active window, but you want to copy a file from window B to window A, you don't have to click on window B 40 times for things to happen. Simply hold down the right mouse button while you position the pointer over the file in the inactive window. Now, keeping the right mouse button down,

click on the left mouse button and drag the icon to the active window. Release both buttons and the file will be copied without the active window being changed! Similarly, you can run a program in an inactive window using a right, down, left, double-click.

Next let me tell you what my hot software programs of the month are. Drum roll please... The winners this month are: Rogue by Epyx and Cards by Michtron. I will not write a full review of these this month but both of programs/games are very well done and a nice additions to your software library.

Rogue is a D&D maze, shoot'em game with wands, potions, gold, scrolls, and a whole lot more. This program is a little hard to explain but it is a conversion of the mainframe game which has been played on UNIX systems for years. If time permits, maybe I can demo this at meeting. [Readers of SCIENTIFIC AMERICAN will remember when this program was featured in Computer Recreations -ed.]

Cards is a collection of five card games in a GEM interface setting. The games include solitaire, cribbage, poker squares, blackjack, and canfield. All of the games are very well done and if you like card games, this is a must buy. As for last month's picks, Time Bandits is just as good as it was advertised. I heartily recommend that you purchase this shoot'em up adventure/pacman game. There is something in this game for everyone and it really never grows old. There is also a very interesting two player option.

As for CAD-3D, I am still waiting. I stand by my recommendation and hope it will show up before the meeting.

Finally, two local dealers are offering MAST memberships free or at a reduced price with the purchase of an ST. Wizard's Work will give you a free one year's membership to MAST and Mindtools will give you the same membership but at a reduced price. Remember this when you tell your friend to buy their ST. An ST and a MAST membership - a perfect combination. Others who are interested in joining this deal can talk to Bob, Bruce or me at the next meeting.

Finally (I said that once already), MAST is starting an official Atari developers sig (i.e. those who spent $300 for the developers' kit). If this is you, please bring some identifying papers so that you can be registered. The best papers would be the envelope and mailing for the last devloper mailing or the label from developers' kit box. Please see me for more information.

Well, that is it for this month. Come to the June MAST meeting for more of the hostest news, rumors, software demos, and public domain software. Need I say more??? No.

Some Tips on the ST
by John DeMar

Original article accompanied "ST-Talk" version 1.1, by John
DeMar, distributed by Quantum Microsystems, Inc.
Reprinted by permission of author and QMI.

Volume I, Part 2

6) Printing the Screen

You'll need an "Epson compatible" printer and a healthy
printer ribbon for this one. If you ever want to grab a
graphic copy of your screen display, press <Alternate> and
<Help> at the same time. Make sure your printer can handle it
or the ST will go to sleep for a couple of minutes. Also, if
the image will not fit on your printer, use the Printer Config
Desk Accessory and choose 960 for the pixels/line. Save the
DeskTop to make it permanent.

7) A Cheap Monitor Stand

Out of despair, I looked around for something to lift my
monitor up a few inches. I grabbed a letter tray (one of those
stackable, plastic in/out baskets) and flipped it upside down.
The monitor sits nicely on it and the cables hide in the
opening of the tray! Most stationary stores sell them for
three to five dollars or so. I have three trays now for my
drives and two monitors.

8) Upgrading to One Meg of RAM

Who would ever believe that we would be complaining about
having ONLY 512K of RAM! With TOS in ROM (available for $25
now), the 520ST is more enjoyable than any other personal
computer. But One Meg gives you lots room for nice things like
large desk accessories and a big RAM Disk or two. Now the bad
news... If you are not extremely comfortable with electronics
and soldering, DO NOT attempt the upgrade yourself! Although I
have an electronics degree and ten years experience with
soldering, only two out of the five I've upgraded so far have
worked the first time. The others required careful debugging
using an oscilloscope, along with a knowledge of microprocessor
systems. My suggestion is to wait for a plug-in board and pay
the difference. If you can't wait, have someone install the
RAM who has done it successfully before.

By the way, I've been more successful soldering to the
BACK of the PC board instead of directly on top of the old RAM
chips. The RF shield on the back of the board acts as a
heat-sink for the RAM if the cardboard is cut away and no wires
touch the metal. Remember to bend back the leads 180 degrees
to mirror the pinout of the chips!

9) Using Folders

When you find yourself staring at a screen full of files
and looking all around for a certain file, you're ready for
folders. Folders are actually sub-directories to keep
associated files together, just as you would keep related
things together in a file cabinet. Select "New Folder" from
the File Menu on the DeskTop. Give it a general name that
describes its intended purpose (you cannot rename a folder
later on!). Just click twice on the folder and you will see
what's inside of it. When copying files into a folder, make
sure you have enough space on the disk and do not go according
to the number of bytes shown at the top of the window; this
refers only to the folder, not the whole disk. Click the disk
icon once and use the "Show Info" selection from the File Menu
to check the free space on the disk.

10) Backing-Up your Protected Software

The best solution to this problem is not to purchase
software that is protected! If you have a protected program
and need a back-up copy, it is your right to protect yourself.
First, ask the company to sell you a back-up copy without a
manual at a reduced price. If they laugh at you, laugh at them
by not purchasing any more of their products and by suggesting
the same to your friends. Fortunately (and unfortunately),
there are copier programs to copy just about anything on the
ST. Please use these for your own personal back-ups only.
Respect the rights of those publishers who are respecting your
rights by NOT protecting their software. We're all looking
forward to a long and prosperous life for the ST. A computer
without software makes a great doorstop (commodoorstop?)!

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

MAST NEWS

MAST will be getting a 520ST of it's own. The money taken
in on the DOM sales is going to buy MAST a 520 ST. Keep up the
good work ! Buy more disks and MAST will buy more equipment to
help run an efficient and better organized meeting.

This month we will RAFFLE off another program, chances are
$1.00 or 3 for $2.00. The money from the raffle goes towards
new equipment! Tell your friends about MAST! Our meeting hall
is AIR CONDITIONED; spend a cool evening with us JUNE 20th.

There is a interesting article in June BYTE mag, "The
Atari 520st Upgrade". See me at the meeting if you are
interested.

Bruce Haug, SPACE Pres.

Disk of the Month - June
By Jim Schulz

Last month we had nine disks of the month. Hmmm... how many this month??? I hope no more for my sake. This is another great month for public domain software. I haven't got the final results in for this month's disk, but here are some of the goodies for this month.

FDI - No, this is not a new division of the government, but a full featured disk file index program that allows up to 1000 files for a single sided disk. It even allows for a comment field for each disk and each file on each disk. Very nicely done. I am using this program to reorganize my own personal disk library. If your disk library needs organizing, this is the program that will do it for you. My current plan, is to use this program to provide a data base and documentation for information on all past DOMs. If all goes well, this might be available by July.

Screen Saver - It didn't take long, did it? At the last meeting we talked about a commercially available screen saving program. Well, here is one for free. Yes, free!!! This program is a desk accessory which when selected will make your screen go black and bring it back every once in a while to tell you it is on, as the XLs do.

TinyStuff - What???? Yes, Tiny Stuff. You will probably never guess, but this program squeezes DEGAS and NEO files and - get this - reads the squeezed files in its own slideshow program. It will also unsqueeze the files into DEGAS or NEO format. This is the program to use for your picture file disk to get maximum pictures and slideshow too.

Puzzle - Really descriptive, huh?? This is a quality jigsaw puzzle program for monochrome monitors, with music, too. A must for all monochrome users, this is well worth the price of the DOM.

Life - Not the board game, the computer game. Steve Pauley has outdone himself by speeding up the generation cycles and adding a scratchpad load feature. The last version was good; this one is even better.

Piano Music Maker - Just one last teaser, this piano music maker program uses the GEM interface and allows for getting and storing of music files and setting a number of other options. If you like Music Studio and can't afford it, then this program is for you. I already have five music files and I am sure more will come. This is sure to become the standard public domain music maker program.

Well, that's it for starters. I already have a checker program in pascal and the source for Mike's ramdisk as well. This month I plan on including my complete set of DEGAS fonts and the squeeze and unsqueeze programs. As well as these programs, I am going to start including request programs which people have been asking about from the past pre-MAST days. If you have something that you would like, let me know. Also starting this month I will summarize the previous month's disks for those who could not make the meeting. So here goes!!!

MAST May Disk #1 - This is a disk of Music Studio files and utility programs. The music files on this disk include the Beer Barrel Polka and Star Wars. The utility programs include a new 410K enhanced density format program, a bulk disk eraser, a new version and source for the calendar desk accessory, a command line desk accessory, a sizeable fast ramdisk program, a programmable printer setup program, memory test, mouse pointer design editor in ST BASIC, 2 print programs from OSS Pascal, a 33k print spooler and a full featured programmable calculator for monochrome monitors. Something for everyone.

MAST May Disk #2 - This is a disk of application programs and general ST information. The application programs include Tiny Basic, an 8-bit Atariwriter file converter, a Son of Crabs program, a new First Word Epson driver, Neochrome 0.6, a sprint editor for Neo and Degas files and a Neo slide show program. The information files include a preview of Tom Hudson's CAD-3D, instructions for a detachable keyboard, detailed information on the ST disk structure and everything you want to know about ramdisks.

MAST May Disk #3 - This is a disk of demo programs and games. The demos include a 5 minute 3D cad demo and 2 Mandelbrot programs. The games include blackjack, Catch the Mad Bomber in ST Basic, a Madlib story creation program, a Life program from MAST's Steve Pauley, a new version of Score 4, ST Battleship, Sundog help files and a 3-D 2 player Flying demo from TAIB's Ralph Russel.

MAST May Disk #4 - This is a disk of Communication programs, Gem interface articles and OSS Pascal tutorial files. The communication programs include a UNIX termcap for the VT52 emulator and an XMODEM communication program with source. The GEM interface articles are the latest Antic Gem tutorials from Compuserve. The OSS Pascal tutorials include a binary file utility, a dump file utility, hidden GEM subroutines, a fractal Mountain demo, a full featured GEM Rally Race program and a GEM interface demo.

Microemacs, TVX and LISP were described last month.

Bradley's Forth - Yes, the mystery disk!!! This is a full featured implementation of Forth with an Emacs editor for program editing. Files include multitasking, Xmodem file transfer, printer control, MIDI interface, Line A graphics, a single-step debugger and VDI and AES interfaces, and that is just for starters. This is a must for all current and future Forth programmers.

As of last month we have 21 (count 'em) disks after only four months. For information on any of the past disks, see me at the next meeting.

For those who did't know, MAST has a disk of the month, for which we charge $7.00, which is packed full of public domain software for the ST. All programs are checked by me and documented in a READ.ME file in each directory so you are sure to something that works. Please note the new price of $7.00 per disk.

For those who cannot make the meeting and still would like 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

If all goes well this month I will start the MAST picture library with DEGAS, NEO, and AMIGA pictures. I hope to have at least one disk of each for the meeting. If you are wondering why Amiga, the excellent Picswitch program on April's DOM allows for conversion of Amiga pictures as well as setting the color so you can decide which colors look best. I am still undecided, but I am leaning toward using the Tinystuff program for compression of the picture files since it allows for maximum pictures and slideshow, too.

That's it for this month. Remember that I am always interested in user submissions. I know that there are some great programmers around town just waiting to show off their work. So for now, I will see you at the next MAST meeting with at least four new full disks of the best public domain software to be found from the last month.

Software Reviews
by Jim Schulz

Clock Card by Soft Logik Corp.

Yes, the clock cartridge is out. Well, what does it do?? It automatically keeps the clock in the ST up to date. Does it work?? Sure, to a point.

Let's start at the beginning. The clock cartridge is a cartridge that goes in hole on the left hand side of your ST. The cartridge works with the cooperation of a desk accessory which pulls the time out of the clock at boot time and allows you to set the time on the clock. The cartridge includes a five year battery and is sealed permanently.

Now the big question: does it work??

Yes, it does work. But... I have run into some problems with the clock cartridge after having used it for about three weeks now.

First of all, my clock seems to lose time. It has lost about three minutes from the time it was originally set. It only lost three minutes total. Seems strange... I would think if it started losing time, it would continue to lose time. The instructions say that you can expect to lose 30 seconds on the clock if a file is not accessed after the system is booted but not three minutes. This, I find a nuisance but not a no-buy bug as long as I know that it exists.

The other problem is a little more distressing. If you try and run their desk accessory after you have done any application, the system will crash with two or three bombs. This is a problem. You can not use their desk accessory as a clock. I have added the digital clock desk accessory to my disk so that I can see the time.

Well, now do I buy this new fangled gadget for my ST even with its problems?? I will say if you really want to timestamp files and always want to make sure you have the correct time and date, yes. I have a use for this and have found it an almost indispensible piece of hardware addition for my ST.

But Jim what about those problems you mentioned?? I am willing to accept these limitations for the benefit of the clock cartridge. But I am not going to leave it there. I am going to write them with my problems and see if I get any responses. I hope to give you an update next month. I really like this product and it will probably fill my cartridge slot until something better comes along.

King's Quest II by Sierra On-Line

Are you an adventure gamer, arcade gamer, gamer or even ST user in general? If so, I sure hope you own this for your ST. King's Quest II is an adventure game with a difference. Animation. Yes, animation.

So what so special?? First of all, you are character on the screen that walks when you move the joystick or use the keyboard. Big deal. How would you like to swimming in the ocean and watch fish jump up and down in the water around you as you swim?? Yes, they do. Still, big deal. Well, in your

travels you run into a cave and a mad witch, and if you are lucky you might hear that famous cave theme. No, not the Flintstones. But yes, Batman. And what would Batman's theme be without the Batmobile? Yes, you see the Batmobile heading into the cave. There are also other little stories. Would you believe Grandma's house and Red Riding Hood?? And what would these be without, yes, the wolf? But don't get the idea this is game for kids. This adventure is a lot more. This game has depth - Literally. The trees in the forest can be walked in front of and behind. Need I say any more?? This program is well done.

Now the important question: do I buy it?? With no reservations, I say yes, yes, yes!!! If you are going to buy any games for the ST, this ranks in my personal top two on an equal basis with the excellant game Sundog. This game is for the whole family, not just the adventure gamer. This is next step in graphics adventures and I can't wait for more. Sierra On-Line has just released Black Cauldron for the ST based on the Walt Disney movie. If it is anything like King's Quest II, it is sure to be a hit. I don't have it yet but I am waiting. This game truly takes advantage of the ST's graphics to best extent. Buy it. Yes!!!

Print Master by Unison World, Inc.

If you have been waiting for Print Shop, wait no longer. It is here and better besides. Print Master is the latest in the Print Shop clone race, the first available for the ST. If you don't know what Print Shop or Print Master are, these programs allow you create your own custom cards, signs, banners, etc. from borders, fonts, graphic icons or pictures. They also allow you to create your own graphic icons with a graphics editor. Print Shop is the granddaddy of these type of programs which started the whole print design craze. Print Master takes Print Shop and goes one step further. Some of the nice features of Print Master include print preview (see what it looks like before you print it), saving of designs for further editing (no longer do you have to start over each time you design that sign), multiple icons per design, calendars both monthly and weekly, and significant for the future, the print drivers are separate tasks allowing for updates of drivers and new drivers for non-supported printers. Also graphics icons can be designed in three colors - white, black, and gray adding for some interesting effects graphically.

Now the question of the hour, yes. If you liked Print Shop on the other computers and were waiting for the ST version, buy Print Master. The way this program is designed, future expansion for more borders, fonts, and print drivers is not limited like Print Shop. The first graphics library is already out with 140 new graphic icons with a second disk due out any day now. This is another good buy if you have a graphics printer and a good use for the many print design which can be generated. Just make sure you have a lot of ribbons handy, though. You sure will use them.

Followups from last month

Last month I reviewed a very good program called Disk Librarian from Extended Software. Well, the program has a few bugs. So I wrote Extended Software with my list of bugs and one month later I recieved an update with the bugs fixed and a thank you note for spotting the bugs. Let's hope other software companies are as responsive as this. I will keep you informed.

Short Notes

First, a communication program called Mi-Term was reviewed by Analog in the last few months as the first communications program with a GEM interface. It has also recieved a very good review from Analog. Well, I would like to put an advisory on this program. I seen this program and admit that I have not used it. Those who have say it is not as easy to use as originally advertised. This is not to say that it a bad program, but run this program and look at the manual before you decide that this is the best communication program to buy. It works as advertised but requires some set-up that is not always as straight forward as it might seem. On one BBS that I get on at least five people who bought this program now have it sitting in the box because it is just too much work and too complicated. You have been told.

Second, at a previous meeting all Hippo Software was panned as bad software and a bad buy. Well, Hippo must be listening because new versions of all of their software is now being released with printed documentation and no copy protection. See, sometimes it pays to complain. They do listen.

It should also be noted that all Hippo Software was panned as bad. Since that time I have seen one very good program from Hippo. This is Hippo Backgammon. This is a very nice done backgammon game which uses the GEM interface. I am not a backgammon player but if you are this program should definitely be looked at. It is very well done.

Well, that's it for reviews this month. If I find time, next month we will read about Checkminder, the long announced and finally available program from Haba and Pawn, the next generation in text adventure games. Until next month, happy ST computing.

Bradley's Bromide
If computers get too powerful, we can organize them into a committee. That will do them in.

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