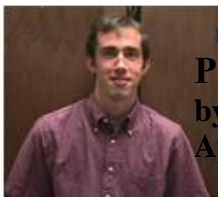# SPACE
NEWSLETTER for April, 2006

President's Corner
by Michael Current
April, 2006

Recently a Relax system from Synapse for the 8-bit Atari changed hands via an eBay auction. This was a biofeedback system. I remember some controversy on the comp.sys.atari.8bit newsgroup years ago over whether or not this was actually released. I also became interested in it several years ago when I spent a few months doing "real" biofeedback in a clinic setting. Wouldn't it be cool to be able to do some of the same thing myself, at home, with my Atari? So when I saw this recent eBay auction, I put in a bid. Around $5.00 was my first bid. The bidding went up. And up. I gave up around $45. It finally went for... about $110! Oh well, that would have been too rich for me right now for sure. At least we know they exist now!

What is your favorite web browser? Most people still use Internet Explorer, but the "tech-savvy" people among us tend to prefer the open-source Firefox from Mozilla. Me? I just (re) discovered Opera. You know what? This is a fairly cool piece of software! It does a number of things significantly differently, making Firefox seem not that far removed from IE. And I think Opera benefits from being the mature product of a small, dedicated group of commercial programmers, as opposed to the "many people in the kitchen" development of Firefox. I like it enough that I moved all my bookmarks and RSS feeds from Firefox to Opera, and I use Opera almost exclusively now. So if you're curious about the main alternative to the alternative, give Opera a try!

By the way, the choices are a little different and more varied on the Macintosh. Opera is there. Firefox is there, along with another Mac-only Mozilla variant called Camino. OmniWeb is still out there, having made the transition to Mac OS X from formerly being the top choice for NeXTSTEP. I remember web-browsing with OmniWeb when I was programming on NeXT's years ago. Microsoft gave up on Internet Explorer for Mac, bowing-out to Apple's Safari. Safari is Apple's variation on Konqueror, an open-source web browser and much more for UNIX operating systems.

SPACE home page counter update: as of 4/1/06, 10:15am: 5,166 page views since June 7, 2003.

Thanks, keep using that Atari, and come to your next SPACE meeting, Friday April 14, 2006.

Treasurer's Report
by Greg Leitner
For March, 2006

It was nice to see everyone again at the March SPACE meeting. Jackie and I had a great time in Florida last month. The weather was a little cooler than expected but that was better than being too warm.

We had seven members present at the March meeting and although there wasn't much to talk about in the Atari world, we still had a good meeting. Glen had another great dom and it seems that more members are buying them up lately as Glen almost ran out of stock on the January, February and March doms. This will really help the Club in the long run, and please keep those memberships up to date.

Here is the treasury breakdown for the month ended March 31, 2006:

Beginning balance for March 1, 2006:	816.73
Receipts for the February & March meetings: Doms	+39.00
Expenses for the March meeting: BBS	-10.00
Ending balance at March 31, 2006	845.73

As you can see we are still doing very well, but remember that I am still awaiting the second half 2005 room rental bill from the Falcon Heights Center. That will lower our bank balance by $150.00. Other than that though we are in pretty good shape this year.

I had a contact from a previous 8-bit owner who is trying to make some money on his old hardware and software. I suggested E-bay to him but he said things were going for hardly nothing there and he was hoping for something more. I told him the Club would not buy things, but if he ever wanted to put them up for one of our auctions he was welcome to do so. I also told him that because the current members of SPACE had so much 8-bit hardware and software already that he wouldn't make much money that way either. So I left it

up to him and he thanked me for my time, and I told him that if he ever wanted to dump his Atari stuff he could certainly donate it to the Club. He asked me if we were still meeting at the same place and I told him yes, and the times we meet. So there is a chance we could pick up some more stuff for a future auction.

That's about it for now. The High School Hockey Tournament is going on and the NCAA tournaments are in full swing. I will be very busy the next few weeks watching as much as my time will allow, and I suppose I will going to bed with bloodshot eyes the next few weeks. See you all in April.

Secretary's Report
By Nolan Friedland
For March, 2006

The March 2006 SPACE meeting began at 7:32 p.m.

Greg welcomed all those present and then asked for the Secretary's Report.

The Report was read in a little more detail than usual due to Greg's absence last month.

The SPACE Treasury is still doing very well. Only $20 was paid out for the BBS - This was for the previous two months. Also, $21 in DOMs was sold bringing SPACE's bank balance to $816.73. Greg noted that the room rental bill for the last half of 2005 has not yet been received.

Glen has put together an excellent DOM for SPACE this month. Side A includes software utilities in BASIC. One of these utilities is called "GUP" which is a graphic utility. There are also a few 3D utilities. Side B is full of demos such as Fuji, Splash, Swan and others. A version of the number puzzle game Sudoku is also included.

As of tonight's meeting there are a total of 11 paid up members.

In BBS News, the website hit statistics are as follows: BBS Website - 3,208; Telnet BBS Listing - 3,271; Dialup BBS Listing - 1,545. Due to the BlackBox's power supply failing, the backup BBS has been put online. A replacement power supply will be looked into. All meeting audio except last month's has been uploaded. Reorganization of the audio files is almost complete. The previously mentioned "Bloopers" CD project is in the works.

No new postings have been made to the SPACE Forum in the last month. The Forum currently has 27 users after deleting several bogus accounts.

In Old Business, Lance briefly mentioned that Michael Current's Tron game is still trying to be converted to the Atari 7800. Greg reported that someone called him wanting to sell their Atari 8-bit items for inclusion in a future SPACE auction.

And in New Business, Greg announced that the January and February issues of IMAGE were available for SPACE members to pick up. There was also a mention of a computer show in Blaine, but the exact date was not known. Lance reported that he received an email stating that there were still 8 100Mhz upgrades left for the Falcon available from a company in France called Kazubatek.

Meeting adjourned at 7:55 p.m.

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BBS Corner
By Nolan Friedland
For April, 2006

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If anyone has any comments, suggestions, ideas, or submissions for the BBS Corner column or the SPACE BBS web site, you may email them to me, Nolan Friedland, at the address shown on the back of this newsletter under the "CLUB OFFICIALS" section.

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A-T-A-R-I
Answers, Tips And Relevant Information
by: Paul V. Alhart
1991.6

Multitasking on the 8-bit Atari?
        or
Questions that keep me awake at night.

Have you ever wondered about some of these things. Like, why would someone put a door in a building and then put a sign on it that read "This door must remain CLOSED at ALL TIMES"? "Why are images in a mirror reversed left to right, but not top to bottom"? or "Why can't MY computer do two things at the same time"? Well these and other such questions have troubled me for some time. Here is another that has really been bothering me.

I increased the memory in my Atari to 256K. The basic computer accounts for 64K of that, leaving 192K of extra memory to be used via bank switching. I normally boot up with two single density RAMdisks.

Each RAMdisk consumes 90K so that is 180K for both. A quick check shows 12K left over. "What good is this extra 12K"? It's not enough for another RAMdisk. "How do I know if it even works"?

Recently, in hopes of getting a better night's sleep, I went on a quest for answers to some of these puzzling questions. I'm still trying to find out about the door and the mirror, but I did solve the extra 12K problem. At the same time I was able to get my Atari to kind of do two things at once.

Actually your 8-bit Atari is doing a lot more at one time than you may realize. Sixty times a second it checks the joystick ports, updates the color registers, updates the screen display, and a whole lot more. All the while it appears to be doing nothing more than waiting for you to press the next key. It accomplishes all these things through the use of interrupt routines. A bunch of short machine language programs that are a part of your Atari's operating system. Although only one thing is really being done at any one time, they are done so fast that it appears as if they all are happening at once.

Knowing all this and little else, I decided to try and write a program I had been kicking around in my head for some time. A calculator program. No, not just another calculator program, but one written in Assembly language, that resided in this extra 12K of memory, and could be called as an interrupt routine. That way I would always have a calculator handy even if I was running a BASIC program, writing a program in PILOT, or just working from DOS.

It turned out to be quite a learning experience. My first problem was to figure out which 12K of the extra 192K was free to use. Then how to get the code to boot itself into the extra 12K of RAM. Having written only one program in Assembly before this left me with lots of book work and experimentation to get it all to come together. But what I ended up with surprised even me.

MagiCalc XL.
Pressing a "Hot Key" combination instantly stops the current operation dead in its tracks and transfers control to MagiCalc. The four function calculator displays entries and results in Decimal, Hex, and Binary all on the same line so conversion between numbering systems is unnecessary by the user. Entries can be Decimal or Hex and mixed operations are supported such as (1234 * $ABCD). PEEKs & Double PEEKs are also supported. Upon exiting MagiCalc the computer will resume what it was doing before you accessed MagiCalc.

OK, so its not true multitasking. It is really two programs resident in RAM at the same time. Similar to a desk accessory on a ST. It fooled my wife though. Also some of page 6 had to be used for the calling routine so it won't be 100% compatible with all programs or cartridges. But if I ever need a calculator or just a number conversion while programing in BASIC, Turbo BASIC, Pilot, DOS, etc.

MagiCalc is just a key stroke away. Although written for a RAMBO 256K XL, MagiCalc XL will also work on any 256K or greater 8-bit Atari that uses the XE bank switching scheme.(Switch address $D301). It will run on a stock 130XE as well. It can't be used with a RAMdisk on the 130XE however as the RAMdisk uses all of the 130s extended memory.

MagiCalc XL only uses a little over 1K of this extra RAM, but now I know that the extra RAM works and at least one thing it is good for.

Its time for me to head off to bed now. If only I could figure out the door and mirror questions. And "What if I had two different programs in that extra RAM at the same time"? "How about three programs, or four, or five, or......"?

ps.

Due to a strike called by my local union last week, I am presently unemployed. Therefore I have decided to offer MagiCalc XL as ShareWare in hopes of making millions of dollars and keeping my creditors at bay. Look for MagiCalc XL to appear on a future AIM 8-bit DOM.

If you can't wait, you may order the program and documentation disk directly from me for $6.00. For $10.00 I will also include my complete and heavily commented MAC65 source code that you can study, modify, or use to create your own Extended RAM programs.

Paul V Alhart
524 North Zee St.
Lompoc, Ca. 93436

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From: Michael Current [hunmanik@earthlink.net]
Sent: Monday, March 13, 2006 11:16 AM
Subject: 8BIT>Dis6502 2.1 released

--8BIT>Dis6502 2.1 released
--From: Slor
--Date: Wed, 01 Mar 2006 08:18:02 -0800

Version 2.1 has been released:
- Build issue corrected.
- Support for disassembly of CAS files.
- Drag and drop from Windows Explorer

James
http://www.slornet.com

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From: Michael Current [hunmanik@earthlink.net]
Sent: Monday, March 13, 2006 11:17 AM
Subject: 8BIT>Video Board XE

--Date: Sun, 05 Mar 2006 15:20:40 -0800

Electron has announced, that his work on new Atari invention: Video Board XE is to be finished soon. The idea is based on the GTIA replacement with a new chip. As a result we've got:

- GTIA compatibility - only old PMG and so called GTIA modes don't work.

- Sprite blitter with it's own 512 KB of RAM. It generates sprites with sizes from 1x1 to 256x256 points in the resolution of 320x192, each sprite in 256 colors. Number of

sprites is limited only with blitter effectiveness, at least it will be 30 pieces with 32x32 size and 256 colors per frame.

- Programmable priorities for sprites and background. Simple sprite collision detection.

- Programmable x and y sprite positions with 1 hi-res pixel presision.

- Two programmable 256 color palettes - one for the playfield and one for sprites. The palette colors are chosen from the 65536 colors (Hi-Color RGB).

- Playfield colors map in 8x8 and 4x4 pixels resolution, for each such block a 1 of 32 color-sets may be chosen (all playfield colors are changed), it is also possible to scroll color map vertically/horizontally with 1 pixel precision.

- Ability to mix hi-res and color modes with appropriate definitions in the map of colors..

- RGB output for monitor/TV.

We may see as far: photo of the board in the compy and an example of the desplay screen. A discussion on the subject may be found in Polish AtariArea forum, or on English AtariAge forum. The cost of the parts is about 200-250 PLN (50-60).

URL:
http://www.atari8.info/dodajkomentarz.php?news=315&lang=en

[This news item courtesy of Atari.org - http://www.atari.org]

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From: Michael Current [hunmanik@earthlink.net]
Sent: Monday, March 13, 2006 11:12 AM
Subject: "Disk" 4.0 released

--From: Preston Crow
--Date: Mon, 27 Feb 2006 18:40:28 -0500

http://www.crowcastle.net/preston/atari/

"Disk" version 4.0

It started as a simple sector editor, but I've added all sorts of features to it along the way. Slower code was re-written in assembly. Features were added.

The 4.0 release includes bug fixes and some new features.

I would very much appreciate any feedback.

And I'm hoping to add double density support at some point in the future, once I obtain a drive that supports it.

--PC

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From: Michael Current [hunmanik@earthlink.net]
Sent: Monday, March 13, 2006 11:14 AM
Subject: EMU>XSC v2.0 released

--Date: Wed, 01 Mar 2006 08:15:37 -0800

XSC v2.0, a musicplayer for Mac OS X that plays music from Atari ST and Amiga.

New in version 2.0 is support for SNDH v2 (including recent maxYMiser and Musicmon files) and a complete rewrite of the code (moved from Java to Objective-C).

URL: http://xsc.atari.org/

[This news item courtesy of Atari.org - http://www.atari.org]

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From: Michael Current [hunmanik@earthlink.net]
Sent: Monday, March 13, 2006 11:24 AM
Subject: Hacker Gains Root Access to Mac OS X in 30 Minutes

The following article appeared in:
Volume 8, Issue 10   Atari Online News, Etc.   March 10, 2006

        Hacker Gains Root Access to Mac OS X in 30 Minutes

It took a hacker less than 30 minutes to gain root-level access to Mac OS X, according to a report from ZDNet. The hacker who penetrated the system called the Mac "easy pickings."

The security breach took place on February 22 after a Swedish devotee of the Mac set up a Mac Mini as a server and invited all takers to try to compromise the system's security to gain root-level control. Once a hacker has gained root access to a computer system, the attacker can install applications, delete files and folders, and use the computer for any nefarious purpose.

The competition was over in a matter of hours after a hacker, who asked to be identified only as "Gwerdna," gained access to the server in question and defaced the Web site with a message that read, "This sucks. Six hours later this poor little Mac was owned and this page got defaced."

Gwerdna told ZDNet that it took him a mere 30 minutes or less to gain root control of the Mac. "It probably took about 20 or 30 minutes to get root on the box," Gwerdna said. "Initially, I tried looking around the box for certain misconfigurations and other obvious things but then I decided to use some unpublished exploits - of which there are a lot for the Mac OS X."

Although Gwerdna said that the Mac Mini could have been protected more effectively, he also said that, even had the machine been configured for better security, it would not have

stopped him because the vulnerability he exploited has yet to be published and Apple has not released a patch for it.

The winner of the hacking contest went on to say that there is a limitation on what hackers can do with unknown and unpublished vulnerabilities because there are countermeasures that systems administrators can employ to tighten security - even for unpublished software flaws.

Although Gwerdna said that Mac OS X contains unpatched vulnerabilities that would permit a hacker to infiltrate Apple's operating system, he said that the relatively small number of Macs in use - in contrast to the vast number of PCs running Windows - is the reason more hackers do not try to exploit them.

"Mac OS X is easy pickings for bug finders," he told ZDNet. "That said, it doesn't have the market share to really interest most serious bug finders."

News of this contest comes on the heels of Macs being hit by two viruses and a critical security flaw. Security experts called the Leap and Inqtana viruses relatively harmless because of their limited scope, but rated the security flaw in Apple's Safari Web browser as critical.

Discovered by Michael Lehn, a graduate student and research assistant at the University of Ulm in southern Germany, the Safari vulnerability could have allowed attackers to disable a Mac computer after tricking the user into accessing a phony Internet site that contained malicious code.

Up until the point that Apple patched the flaw, the Safari browser's default configuration was set to open and run compressed files automatically. Attackers could exploit the flaw when Mac users downloaded files in which malicious software had been disguised to appear as safe.

Apple issued a security update last Wednesday to fix 20 Mac OS X vulnerabilities, including the Web-browser problem and a similar flaw in Apple's Mail client. The update also patched iChat, Apple's instant-messaging application, which now relies on an Apple technology called "download validation" to warn users of unknown or unsafe file types during transfers.

"The lesson here is that if we look at Mac OS X and compare it to, say, Windows XP, we find that, in terms of the number of vulnerabilities, they are actually quite comparable," said Vincent Weafer, senior director at Symantec Security Response.

What might surprise many is that both Apple's Mac OS X and Microsoft's Windows have roughly the same type of vulnerabilities in a similar volume, said Weafer.

But he did say that direct comparisons are not possible because both companies report vulnerabilities and security updates differently - and Apple ships more applications with Mac OS X than Microsoft does with Windows.

Weafer also said that hackers are not capitalizing on vulnerabilities in Mac OS X to the same degree they are trying to exploit flaws in Windows.

Weafer estimated that there are between 100,000 to 200,000 Windows viruses compared to 200 or so Mac viruses.

According to Weafer, the number of Mac vulnerabilities discovered and the possibility they will be exploited will gradually rise as a direct result of an increased interest in Mac OS X. Weafer urged Mac users to make sure they have installed antiviurs and antispyware applications and are updating them regularly.

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From: Michael Current [hunmanik@earthlink.net]
Sent: Monday, March 13, 2006 11:15 AM
Subject: ST>SNDH music archive milestone release

--Date: Wed, 01 Mar 2006 08:16:22 -0800

For the first time in four years, the SNDH music archive has been upgraded.

It's more than an upgrade, in fact it's a remake from scratch. With 2246 SNDH-files with a total of 4783 tunes you have litterary several days of non-stop chipmusic playing in front of you!

SNDH is a header/container format for Atari ST chipmusic used in games, demos and so on. In this archive chances are very good that you'll find your favourite Atari ST chipmusic. Players exist for many platforms, including Atari ST itself.

URL: http://sndh.atari.org/

[This news item courtesy of Atari.org - http://www.atari.org]

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Watch Old Atari & ColecoVision TV Commercials!

Heres a couple sites where you can watch old tv commercials for video games! It brought back a lot of memories,especially the commercials for PitFall,Ms. Pac Man and Chopper Command!

http://www.theoldcomputer.com/Libar...rts_summary.htm

http://www.retrojunk.com

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