

THE PRINTER

Chesapeake PC Users Group, Inc.



PRESIDENT'S CORNER

Spring is in the air...

Now that the weather is warming, and the days are getting longer, folks should be more comfortable making it to a meeting. And there are a lot of great meetings that will be taking place over the next few months, until our break.

April 9 - Microsoft's Digital Learning Curriculum: Presented by Fran Damratowski

Our very own Fran will be presenting an excellent (and free) way to learn about some of the latest computer technology topics from Microsoft. This is a great free program from Microsoft for interactive learning. The program can be used on-line or printed out for study. **Of note;** this meeting will take place in the Media Center of the Middle School.

On April 17, a group of us will venture to Easton and pay a special visit to the Mid-Shore Computer Users Group. The exact meeting topic is being discussed, so stay tuned.

May 14 – GPS

We will have a corporate representative from one of the major companies who sell GPS equipment. We will probably start this meeting outside in the parking lot of the school, and then move back inside. This is taking advantage of the longer days, and warmer weather. Kris Johnson will be the host for this meeting, and she will be providing more details as the time draws near.

June 4 – Hard Disc Drives - “Partitioning, Backing Up and Maintaining Your Hard Drive” presented by Dave Mauriello

This is one of the most popular topics for folks with questions. This should be a very interesting topic and a lot of information will be gained by attending this meeting.

September 10 – Linux! Linux! Linux! Presented by Karl Richmond

Karl Richmond will demonstrate the latest Linux system. There will be a raffle at this meeting for a refurbished computer fully equipped with the Linux operating system.

As you can see, there is a lot going on, and these are only the main topics. There will be many short presentations taking place at the meetings also.

Michael



GOOGLE GOODIES

Everyone knows Google as a search engine. Some of you know Google for its e-mail service. But did you know that Google has over forty different applications, all free, including some famous ones they have acquired?

Let's start with Google Search. Do you know how many seconds are in a year? How many teaspoons in a cup? The current value of the Japanese yen or the Canadian dollar? These are just a few of the things you will be able to do quickly.

From there, head over to Google Products page and explore some of the cool offerings there. We'll check out GOOG-411 and Google Maps and

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from the Secretary's Desk

Minutes of CHPCUG Board meeting on March 19, 2008

ATTENDEES: Mike Young, Mike Regimenti, Fran Damratowski, Karl Richmond, Kris Johnson, Craig Barlow, Sam Shephard

MEETING TOPICS:

April – “Microsoft’s Digital Learning Curriculum” by Fran Damratowski. This is a great free program from Microsoft for interactive learning. The program can be used on-line or printed out for study.

May – Jack Gilliam’s daughter will demonstrate GPS devices.

June – “Partitioning, Backing Up and Maintaining Your Hard Drive” presented by Dave Mauriello

September – Karl Richmond will demonstrate the latest Linux system. There will be a raffle at this meeting for a refurbished computer fully equipped with the Linux system.

SIGS:

Technology: Mike Regimenti will critique and demonstrate the latest Internet Browsers

CRSIG: Fran reports that the refurbishing center continues to produce computers and is close to 1700 refurbished and delivered computers. She is planning to have a Celebratory Party in June to coincide with the 300th anniversary of the founding of Annapolis.

Mid-Shore CUG – The Board is planning to attend the Mid-Shore’s meeting on April 17 and will encourage other CPCUG members to do likewise.

FINANCES:

Karl reported that the club is eligible for a non-profit rate on postage stamps and will file the paperwork necessary to obtain them. Karl will also file the paperwork necessary for obtaining Federal CFC funds again this year.

NEW BUSINESS:

Mike Young explained the Verizon Velocity fund raising program as well as the Food Lion program.

Meeting was adjourned at 8:30 p.m.

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Windows Vista SP1 Survival Guide

by

Serdar Yegulalp, Information Week, March 26, 2008

URL: <http://www.informationweek.com/story/showArticle.jhtml?articleID=205917537>

Here's how to get ready for Windows Vista Service Pack 1, due from Microsoft in March, with its much needed performance enhancements, security upgrades, and compatibility revisions.

After a little more than a year in the wild, it's high time for Windows Vista to receive the service pack it deserves. While Service Pack 1 won't change the way Windows Vista looks or feels, for the most part, it will improve many things about the way it runs, based on both Microsoft's internal testing and the feedback of tens of thousands of users.



Keep an eye out in case the process stalls out or fails.

SP1 has been both heavily anticipated and badly needed. While the gold release of Vista was for the most part solid enough to use as a production system, there were still many frustrating rough edges.

In the light of these problems, one of the most commonly repeated canards about using Vista was, "I'll just wait until SP1 comes out." Well, SP1 is now

almost out. A release candidate, which is the version we tested, was made available towards the end of last year. More recently, Microsoft officially released SP1 to manufacturing in February to TechNet and MSDN customers. The actual, wide public release to users at large is expected sometime in March.

What's in the box?

Vista Service Pack 1 is a cumulative collection of all the fixes -- performance enhancements, security updates, and compatibility revisions -- published or created for Vista since its release. As with an artist's greatest-hits collection, some of it is "previously released material" -- but that absolutely doesn't mean you shouldn't apply SP1. Otherwise you won't get the full benefit of all the changes made.

Keep in mind that SP1 will be *large* -- quite necessarily so. The standalone installer for SP1 will weigh in at anywhere from 450 Mbytes (for the five-language edition) to 550 Mbytes (the all-language edition), and you'll need at least 5 Gbytes of temporary space on your system to perform the install. Most PCs capable of running Vista right now should not have a problem sparing that much room, but if you do, then a cleanup -- or maybe even a new hard drive, if it's already time for one -- is in order. (Note that there are ways to ameliorate both the storage and download requirements; see "Express" on page 3 for details.)

Here's a quick rundown of the types of fixes and changes that SP1 contains:

- **Security fixes and enhancements.** The final release of SP1 will contain all of the security hotfixes released for Vista since it went gold, and a number of under-the-hood behavioral changes to security, such as im-

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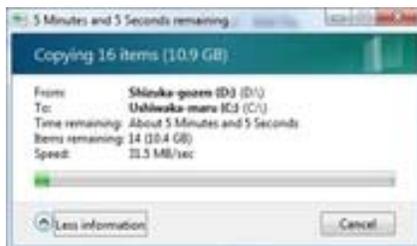
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Vista SP1 - cont'd

provements to the random number generator used in Vista's cryptography APIs, or ways to manage the BitLocker on-disk encryption system. Many of these are things people won't notice directly but which can be leveraged by applications in the future.

- **Performance and behavioral issues.**

One good example of this sort of thing: almost everyone who ran the gold release of Vista complained about slow file-copying operations, especially when copying files across networks. (I ran into this problem myself.) Microsoft did issue an interim hotfix for the problem, but it'll be included in SP1 along with a slew of other performance enhancements.



SP1 fixes a problem with slow copying of large files.

- Other fixes in this department include eliminating wait times at logon and delays when resuming from hibernation. Another major source of complaints from users was Vista's behavior on some notebook computers, especially external display, battery life, and suspend/resume issues.

- Finally, a fix is supposed to be made available that resolves a problem involving a tradeoff between network speed and reliable, glitch-free multimedia playback (as described by Mark Russinovich), although a) it doesn't seem to be available in the current release-candidate builds, and b) from the wording of Microsoft's document that describes this fix, it sounds like it's something that needs to be enabled manually via a Registry entry. (Not everyone experienced this problem, which is probably why it's something that would need to be turned on by hand.)

- **New stuff.** In other words, new features which might not be obvious at first glance, such as support for the exFAT file system (to be used in removable flash storage) or Direct3D 10.1 (which again isn't used very much right now). Also included is support for a few extremely new hardware standards, such as newer Secure Digital (SD) memory card controllers that use Direct Memory Access for faster data transfers.

If you want to see the full manifest of changes, Microsoft has them all in a collection of Word documents. The documents named "Notable Changes in Windows Vista Service Pack 1 Release Candidate" (the name may change when SP1 is officially "baked") and "Overview of Windows Vista Service Pack 1" are the ones you want to look at. (There is another overview in the Windows Vista Technical Library on TechNet .)

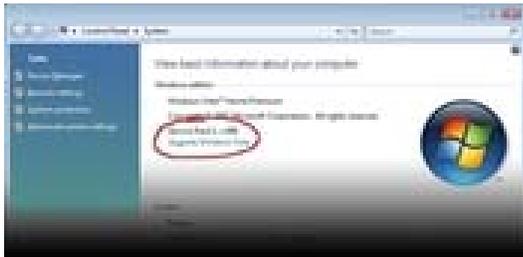
So what's not in SP1? For one, Microsoft has stated there will not be any major changes to the user experience. What you saw in Vista gold will be almost exactly the same as what you see in SP1, as far as the UI goes. Another thing that Microsoft has tried to keep to a minimum is the amount of things that would change application compatibility: if it ran in Vista gold, it ought to run in Vista SP1 as well.

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Vista SP1 - cont'd

In these next few sections I'm going to talk about how to obtain and apply Vista SP1 in a way that best complements your organization or your work habits. There's more than one way to do it, and a certain degree of planning ahead is required to make sure things go off smoothly.

Step 1: Strategize



An upgraded Vista system will show “Service Pack 1” in the System window.

There are roughly seven basic ways Service Pack 1 can be installed, with some slight overlap between some of the methods.

1. **Express.** The express SP1 installation -- which will be performed through Windows Update once SP1 goes live -- requires a good deal less temporary storage, but requires that you have a decently fat network pipe to download the 60 Mbytes or so of updates required to make this work. Most people who are not technically savvy will probably want to elect for the express update, since it requires the least amount of work on their part. (If they have a guru handy, though, they may want to have them perform one of the other update methods.)
2. **Stand-alone.** The stand-alone installer comes as a single executable file -- the SP1 release candidate weighed in at 436 Mbytes --

which can be burned to disc and deployed on machines that don't have network connectivity or aren't reliably connected to a network. If you have even as few as three machines that need to be patched, this is generally worth the trouble to pick up and deploy locally. This variety of SP1 can also be pushed out to machines in a local network, which means a LAN administrator can download one copy and deploy it automatically across a domain. It's also handy to have the stand-alone executable burned to a CD somewhere if you need to re-patch a machine later that isn't on a fast network.

3. **Integrated DVD.** This one's for those who want to make a clean sweep of things. Those with Volume Licensing, MSDN, or other such subscription plans will be able to snag an .ISO of the Windows Vista installation media with Service Pack 1 preinstalled on it and use that to either deploy entirely new Vista systems or wipe an existing system and deploy a clean Vista SP1 install on it.

These next four methods are meant mainly for environments where you're managing a great many desktops at once:

1. **Windows Server Update Services.** WSUS 3.0 can be configured to automatically deliver Vista SP1 to existing Vista machines throughout an organization. Distributing SP1 through WSUS is meant to be as painless as possible -- make sure WSUS can receive Vista service packs once they're released, then synchronize WSUS and point the SP1 package at the appropriate target machines or groups. Note that WSUS downloads the entire SP1 package with all of its attendant storage needs, so bear this in mind when you are planning updates.

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Vista SP1 - cont'd

Note that unlike other Windows service packs, it's not possible to apply Vista SP1 to an offline Windows Vista image, due to changes in the way the service pack is packaged. The Winbeta.org site has outlined an undocumented method to do this (not attempted by me), but it's rather complicated and requires a fair amount of legwork, and of course there's no guarantee it'll succeed.

Finally, Microsoft's Deployment Guide for Vista SP1 (currently updated for the release candidate of SP1) goes into detail about all the above methods, and provides links to additional tools and guides that ought to come in handy during a roll-out.

Step 2: Back Up and Clean Up

You're probably as sick of hearing this mantra as everyone else is, but here it is one more time: *Back up anything of consequence before you install SP1.* "Anything of consequence" means, mainly, user data -- anything you created yourself, or anything you downloaded from someplace that may be difficult to reacquire.



Image for Windows creates backups of a live system partition.

Another possible way to phrase this mantra: Back up anything of consequence *that's on your system drive* before you install SP1. I make this distinction because anything not on the system drive is that much less likely to be affected if SP1 doesn't install correctly.

What's the best way to do this? Aside from Vista's native backup tools, there's the Windows Easy Transfer application, which can serve as a sort of backup tool for your personal data. Run it and you can save not only your documents but also application settings to a repository somewhere -- typically a non-system hard drive. Once Vista's been reinstalled and patched with SP1, you can reinstall any missing apps and run Easy Transfer again to restore everything. I've used this technique a few times myself, although you do need to be judicious about what you choose to back up and restore with it: I have all my music on a separate physical drive, for instance, so there was no need to back that up and waste 100 Gbytes of space.

If the disk you're backing up to is big enough, you can make a full disk image -- again, either with Vista itself (only if you're running Ultimate, though) or with a third-party tool. My app of choice in this regard for a while has been *Image for DOS*. Don't let the name fool you: it backs up and restores partitions for any operating system, and even comes in a Windows-native version that can also back up open files. The most recent version of Image for DOS/Windows can also perform differential whole-disk backups.

Other people swear by the *Acronis True Image* suite of utilities (also available in a 30-day trial version). I should also mention another favorite of mine, albeit in a slightly different vein: *Mozy*, an online backup service that offers 2 Gbytes for free and unlimited storage for \$4.95 a month.

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If you're already in the habit of making backups, take the extra step to make sure the most recent backups you've created can be properly restored, too.

This would also be a good time to remove everything that does not absolutely have to be there. Do a quick audit of your installed applications and see if there's anything that can afford to be removed. The less you have cluttering any given system, the better; this includes things like performing temporary directory cleanups.

One final point to consider is how to deal with hardware drivers -- whether or not to update them to their most recent iterations before applying SP1. Some people think it's best to patch with SP1 first, and then update any device drivers; that way, if they update a given device driver and that creates a problem, the source of the problem (the driver vs. the service pack itself) will be more immediately evident, and they can roll back to the earlier iteration of the device driver as an interim measure. I prefer to update drivers ahead of time if needed, shake down a bit, and then patch, but only because I've had a degree of experience with how these things behave and am not as easily thrown by something acting weird.

For corporate installations where there may be user data that needs to be preserved, there are a couple of approaches if you're not already performing such backups. One native solution is to run a scripted backup job before the patch process, using the command-line WBADMIN tool (available only in the Vista Business, Enterprise, and Ultimate SKUs). This can be used to back up user data to a separate hard drive or a network share; said data can then be restored after the update if needed.

Step 3: Patch

This is the slow and boring part, and depending on how you do it, it'll typically mean that your system will be offline for an hour or more. (Get caught up on all those books you keep meaning to read!)



The “Do not turn off your computer” message is absolutely not for show.

If you're patching a notebook, plug it into a wall outlet and make sure it has uninterrupted power. Desktop machines should ideally get the same treatment -- i.e., an uninterruptible power supply -- if you can afford it, even outside of this scenario. I live in an area with extremely unpredictable and dirty power, and I don't have anything computer-related that *isn't* plugged into a UPS.

Once you launch the SP1 installer, the whole process is essentially automatic. You'll confirm a couple of dialog boxes, and then the system will unpack everything, apply the changes, and then reboot several times. During these reboots you'll see a splash screen that says “Applying update X of Y”, along with the spinning-circle cursor that indicates something's happening. As long as the drive activ-

ity light is on and the cursor is still active, it's still working, so don't touch anything.

The only time you should think about pulling the plug is if the system hangs entirely or crashes. If it does, restart the system and see if it's able to pick up where it left off. A hard hang may be a symptom of an underlying problem that ought to be addressed before you attempt to apply the service pack. Were I in the driver's seat, I'd attempt to complete the patch process, but I'd be wary after that point and would keep my backups close at hand just in case.

Step 4: Verify

After the reboot cycle finishes and you're allowed to log back on conventionally, take the time to make sure that your applications and the system as a whole behave normally.

I usually give a patched system about a week of regular use to shake down any possible problems or changes in behavior. An individual application might suddenly cease to respond or start behaving erratically, although in my own testing (limited to three systems), common programs like Office, Firefox, and so forth all behaved exactly as before. If things run, but not *well*, take a gander at my article on boosting Vista performance to see if you've overlooked something that might be sapping your system, SP1 aside.

A hard crash of any kind -- a BSOD -- should be taken very seriously. BSODs in Vista are almost always due to a problematic kernel-level driver -- most commonly, a video driver. They have become mercifully quite rare: in my entire time using Vista (a year and change at this point), I've tallied maybe two such crashes, both due to video drivers that needed updating.

If things are consistently unstable, you can uninstall SP1 and see if that changes anything; there may be something that simply isn't playing nice with SP1 yet (or vice versa).

One of the reasons I recommended imaging the whole system (if possible) as a backup solution is because restoring a whole system image is often a lot less complicated and potentially thorny, if slower, than removing SP1 manually. If you want to remove SP1, look for the uninstall option in Control Panel -- Programs and Features -- View Installed Updates.

Note: If you plan to install the production release of SP1 on a system that had a beta or release candidate of SP1 installed, you must remove the old version of SP1 first.

This story originally appeared March 4, 2008



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GOOGLE GOODIES - cont'd

see how to use these apps to locate pizza and gas (not necessarily in that order).

Then, take a quick look at Blogger, Google Page Creator and Google Reader. Google also makes a calendar, a suite of apps that include a spreadsheet, word processor, and presentation package. Google also makes a notebook, which is a quick way to grab and store notes as you browse the Internet. They also own Picassa (an image editor and photo album program) and YouTube, the video-sharing site.

We will explore some of these Google Goodies at a future Tech SIG meeting.

Printer Server

by

Jim Geiser, President
SW Indiana PC Users Group

During the stay-at-home days of late January and early February, Larry Goss wrote in an email that he wanted to get his computers on a network where they could all use the same printer. That gave me the idea of doing the same thing. I already had my three computers on a network - or I thought I did. Maybe more on that in another article.

I have my laptop with windows XP, my "old desktop" with Windows 98SE, and my favorite, my real old IBM with Ubuntu Linux. The first thing I did was ask "Mister Master Shopper", Larry, if he knew of any bargains out there for a router that would work with all three and a printer. This was a 3-way email conversation, and Pim volunteered that what we both needed was a print server, and that he had Googled for one and hit on the ideal for us - a Linksys PSUS4.

LINKSYS[®]
A Division of Cisco Systems, Inc.



For those of you who are like I was and think that a "server" is a computer that handles networks of other computers, let me correct your thinking. According to Wikipedia, a print server is:

"A dedicated device that connects one or more printers to a LAN. It typically has a single LAN connector, such as an RJ-45 socket, and one or more physical ports, e.g. serial, parallel or USB (Universal Serial Bus) to provide connections to printers. In essence this dedicated device provides printing protocol conversion from what was sent by

client computers to what will be accepted by the printer. Dedicated print server devices may support a variety of printing protocols including LPD/LPR over TCP/IP, NetWare,

NetBIOS/NetBEUI over NBF, TCP Port 9100 or RAW printer protocol over TCP/IP, DLC or IPX/SPX. Dedicated server appliances do not provide spooling or print queue services, since they typically have very little memory. In other words it is a 'smart switch.'"

I ordered the server from Tiger Direct.com and it was supposed to come in two days. When it came I was amazed how big the box was. Figuring they used a standard size box for everything, I opened it to find an apparatus that had wires coming out of everywhere of this black box with a fan on top. The very clear and legible label said "Super power unit."

After a quick call to Tiger Direct, I found that someone had put two labels on the box the part was in, one for the server and one for the power unit, so that when it was put in stock the person scanned the wrong label, put it in the wrong bin and the next person just grabbed one of the boxes and sent it to me. Tiger Direct emailed me a return label and I sent it back. This time it took a week to get the correct part - I guess they waited to see if I DID get the wrong part.

My on line purchase adventure did not end that easy. The shipment was shipped from Naperville,IL on Monday February 11th and was scheduled for delivery on the 12th. You remember what happened that day - rain, ice, snow, more rain, and more ice. UPS sent me delivery trackers for the package three times and all three times it was delayed "for circumstances beyond their control." The fourth day, Friday, at 9:45 pm the poor driver showed up with the package.

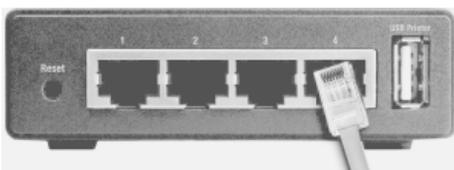
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Printer Server - cont'd

On Saturday I did the unthinkable, I sat down and read all the instructions first. The eight sided pamphlet sounded pretty easy. I did not know that there was a 55 page instruction brochure on the CD along with the idiots card I had read.

Incidentally, this is a wired server, not wireless. I hooked it up to my router (and for Jim Derk's information - it DID come WITH cables). One instruction was that it should not be any further away from the router than 328 feet (100 meters), but the cable was about 2 meters long! After it powered up and I opened the CD the wizard took me through all the steps and I thought to myself "that was too easy." It was!

For some stupid reason I took it at its word that it was all installed on the lap top. I missed one little box on the second last page "Print a test page." If I had done that I would not have been so smug and gone on to the next computer. That was where I found out that nothing was working as it said in the wizard. Now would be a good time to see if there was some other stuff on the CD, like the 55 page instruction booklet. It did not help. Nowhere in all the instructions did it say why there were 4 places to plug in cables plus a USB plug.



I unplugged all three computers from the router and plugged them into the server, along with the cable from the server to the router. Then I did the wizard over. This time I tried to print the test page and NOTHING HAPPENED. Opening the printer folder I saw the page sitting there in queue. About this time I gave up and went to bed. Day one was over.

Next day I did not get to do much since we had the SWIPCUG meeting followed by the fire

department awards banquet. Mark Soper had told me how to get the IP numbers for my computer, so I thought maybe I had collected enough information to try again before bed. I dug out Mark's book "*PC Help Desk in a Book*" and read the chapter about servers. He suggested using the wizard in Windows XP to install it.

I did it and this time took my time. When I got to the last page there was that dreaded "Print Test Page" again. I did and nothing happened. Eva was sitting near me and I used some sort of expletive and said this thing just won't work. All of a sudden, the printer turned on and printed the test page!! I went to bed with a BIG head. Day two was over.

Next morning, I tried to find about three test pages that never did print and were no longer listed as in the queue. Did not find them. I figured they were dumped when I turned off and restarted the computer. I tried next to get the W98 to do the same thing as the XP, but the wizard there was not as helpful so I skipped it and went to the Ubuntu. The Linksys wizard would not even work there. I figured that this might happen so I had picked up a book at the library before the SWIPCUG meeting on Sunday. It was very helpful and after one try I had the thing working. Not only was it working, but I now had all the bells and whistles that I did not have when the computer was running direct with a generic driver. In the process of doing the Ubuntu installation I noticed an item about something about a temporary folder. Looking in there I found all my test pages from this effort and some previous attempts that went haywire.

So now I am up and running on two out of the three computers. I plan on working on the W98 machine and if I can not get it to work I might just hook my Dell printer to it since the Dell cartridges are so darn expensive. Problem there might be a driver for W98 version. Life is full of experiences- some good and some not so good!

The Next Regular Meeting will be at
The Severn River Middle School

Wednesday
April 9th, 2008

Meeting will be held in the large meeting room.
It starts at 7:00 P.M. with club business
and a short discussion period.

Fran Damratowski
presents
**Microsoft's Digital
Learning
Curriculum**

How to Find: Severn River Middle School

SRMS is close to the Arnold, MD campus of the Anne Arundel Community College. From Annapolis and parts south, take Rte 2 (Ritchie Highway) north about 3 miles from the intersection of Rt. 50, **turn right on College Parkway**. At the first light, turn left on Peninsula Farm Road. (Of course, if you are coming from points North, you would turn left on to College Parkway) about a half-mile down the road the large SRMS school building, set back off a large two level parking lot, will be visible on your right. Park here and go to the main entrance. Signs will be posted to direct you to the **Large Group Room** where we will be meeting.

**How to find: The Technology SIG, A ChPCUG
Special Interest Group****

The meetings are held at the SRMS in the Library.



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FIRST CLASS

INSIDE THIS VERY ISSUE!

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... and a teeny tiny bit more!

Note: The date above your name on the mailing label is the expiration date of your membership. Contact the Membership Chairman (page 2, column 2) to update.

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