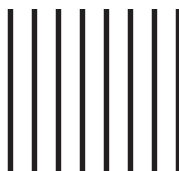


Official Newsletter
SouthEastern Michigan
Computer Organization, Inc.

DATA BUS



Volume 27

November 2002

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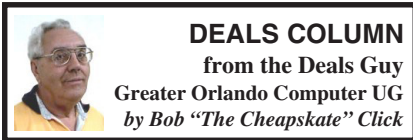
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SEMCO MEETINGS **Sunday,** **November 10, 2002**

Board Meeting	12:00pm
General Meeting	1:30pm
SIG-IBM Meeting	1:45pm
Social Period	3:15pm
IBM Novice Group	3:45pm
SIG-IBM Intermediate	3:45pm



Technology At Work

My wife and I worked as security for a trade show somewhat different than we have ever worked. The National Business Aviation and Aeronautics show. It was split between the Orange County Convention Center (trade show displays) and the Orlando Executive Airport, a smaller regional airport in Orlando, where about 150 business jets, some state of the art, some used, and other jets refurbished for business use, were on display. It's fun to see all the corporate type jets, but something that really caught my eye had nothing to do with the jets. It was a giant projection screen outside mounted up on 30-foot towers. It was 4 PM and I could see the movie on the screen as plain as day, even though the sun was shining on it.

I asked the technicians where the projection was coming from and it turns out it is an LED type screen made up of

10" x 10" modules, and the entire screen was 10' x 16'. It's easily repaired, if there is a problem, just by replacing the faulty module. I was impressed by this technology made by Saco that could be plainly seen in spite of the sun shining on it. It is valued at a million bucks, if you are interested, or you can rent it from Saco like these AV people did. Nice for the home movies, wouldn't you say!

NOTICE OF NOMINATIONS

Please take notice that under the Bylaws of the SouthEastern Michigan Computer Organization, Inc., nominations for officers

will be taken at the

December general meeting
to be held

Sunday, December 8, 2002
at 1:30 P.M. with the election
of officers to be held at the
January general meeting.

The following offices
will be open for nominations:

- 1) President
- 2) Vice President
- 3) Secretary
- 4) Treasurer
- 5) Such Members at Large of the Board of Directors, up to a maximum of two (2), as shall be determined by the Board prior to the December general meeting.

SRUG Fun Weekend

My wife and I traveled to Atlanta for the Southeastern Regional Users Group (SRUG) conference and had a great time. The organizers, Michael Rogers, Steven Morgan, and Rose Lynn put in a great deal of time, along with the many other volunteers, and it paid off with a successful event. Here are some interesting numbers. They had 68 attendees representing 24 user groups. Eleven user groups were Mac, thirteen were Win/DOS, and one was Linux. Of the registrants, 24 were Mac people and 44 were Win/DOS. Two also represented the Linux group. Pictures at <<http://www.gmac.org/srugc>>.

Atlanta PC UG and Gold Coast Macintosh UG (from south FL) each had nine registrants. The camaraderie was great, and even a short refreshment break was planned between the roundtables for a bit of chitchat. Lots of raffle prizes. It's already in the planning stages for next year, and I recommend it. It was not part of the event, but the Interop/Comdex show ran during the preceding week, and a few attended that show. All the meal events (starting Friday evening) had vendor sponsors, and even the refreshment breaks between the roundtables had a sponsor. Michael said they were proud to note they came out in the black, and with some seed money for next year. Way to go Mike! The Sunday luncheon, vendor fair, and prize drawings were kind of rushed though, because many attendees were from Florida and wanted to start the long drive home.

Many people made it a point to come over and talk to me, thanking me for all my work. Talk about getting the big head, I hope I stayed humble. It was an encouragement to keep the column going.

Still Good

All investors should know that the High Growth Stock investing solutions deal is still good for this month. If you go for the free 60-day trial, it is fully functional software along with the data download and the market analysis newsletters, and it's good for a full 60 days from the time it is registered. This is only for the serious investor, but that doesn't mean a novice can't learn, so try it. If you are in the mood to check it out, go to <<http://www.highgrowthstock.com/Order/Trial.asp?from=Click>> to order your free 60-day trial. If you choose to continue the subscription after the free 60 days, your one-year subscription will be extended to 14 months for the one-year price. Wow, 16 months total service for the price of only 12, what a deal. I'm just getting started with mine, but I'm excited.

The Centuriansoft package (SoftClan e-cryptor & Steganos 3 Security Suite bundled together for just \$39.96 including S&H) is still good, and all the information is still posted on my Web site <<http://www.dealsguy.com>>. I thought they would put together another package, but perhaps next month. <<http://www.centuriansoft.com>>.

How About Some Animated GIFs, If You Do Them Yourself!

Do you find yourself wanting to create an animated gif for some purpose? Take a look at Barbarosa GIF Animator 3.2. Taken from their Web site: "Babarosa GIF Animator provides the fast and easy way to create compact gif animations for the web. Animations can be quickly assembled from imported images (13 formats). You can also design animation directly in the program using vector graphics, image, and text edit tools.

Palette optimization, data compression, and colors reduction give you a possibility to obtain small size GIFs.”

There is more about it on their Web site, as well as some ratings. Until the end of the year you can get it for just \$29.95, regularly \$39.95, at <http://www.liatro.com/download/download.php>. My thanks to Clarke Birde of Alamo PC Organization for bringing this one to my attention.

How About a Freebie From Executive Software!

I imagine all user groups received this announcement from Colleen Toumayan about the release of Diskeeper Lite, their manual defragmentation companion to its highly popular automatic defragmenter, Diskeeper 7.0. The following is part of their description:

“The new version of Diskeeper Lite can be run on all Windows® operating systems from Windows 98 on up. The new version of Diskeeper Lite was built with the same advanced defragmentation technology as Diskeeper 7.0. As a result, it’s far faster than any manual ‘built-in’ defragmenter. However, it has no networking capabilities or scheduling features.

“John Kimmich, Diskeeper Product Manager, said: ‘while the old Diskeeper Lite educated people about fragmentation, the re-release educates people about the limitations of manual defragmenters. It’s a good introduction to the power of full-version Diskeeper, because, truthfully, automatic defrag is the only way to go, especially for enterprise users.’

“Diskeeper Lite freeware is available for immediate download at www.execsoft.com. Phone numbers are (800) 829-6468 and (818) 771-1600.

A variety of system management tools, trialware, and free utilities are available also.”

A Free Office Suite For Cheapies

Look what you get for all your hard-earned money <G>. It offers a word processor, a spreadsheet, a presentation tool, an HTML editor, a drawing tool, and a mathematics equation editor. This one is called OpenOffice, and they don’t even care how many PCs you put it on. I doubt it’s quite as full featured as the other popular office suites that you pay good money for, but at least using OpenOffice will not have anybody looking inside your PC to see if it shouldn’t be running there.

You can download this freebie at http://www.openoffice.org/dev_docs/source/download.html. I have not looked at this suite, but what do you have to lose, and you won’t have to ask for your money back! OpenOffice will run on Windows, Linux, and Solaris, and I just noticed there is also an alpha/developer version for the Mac OS X. There is information there on the development of OpenOffice, which is an outgrowth of Star Office.

That’s it for this month. Meet me here again next month if your editor permits. This column is written to make user group members aware of special offers I have found or arranged, and my comments should not be interpreted to encourage, or discourage, the purchase of products, no matter how enthused I might sound. Bob (The Cheapskate) Click Bobclick@mindspring.com. Visit my Web site at <http://www.dealsguy.com> for past columns. Also, I keep adding interesting articles (taken from user group newsletters) to my “Articles of Interest” page for viewing or downloading.

Challenging MP3 Files With A White-Noise Spectrum

By Jerry Haberkost and
Gordon Waverly
PCUsers Group of
South Jersey

Discovered recently that GoldWave, that superb audio editor shareware <goldwave.com> includes an audio spectrum analyzer facility. An audio spectrum analyzer is something neither of us could ever afford for our home labs. Like kids with a new toy, we had to find something that put it to use and test its mettle.

The MP3 file compression format intrigues us because it achieves such great compression ratios with essentially no loss in apparent audio playback quality. It struck us that the spectrum analyzer could tell us some things about the MP3 algorithm.

We decided to use a computer-generated, white-noise signal as the challenging audio energy recorded in a WAV file. We then converted this WAV file to 32 individual MP3 files using GoldWave software. Comparing each of these converted files with the source file, using the spectrum analyzer, gave us a pretty good idea of what information the MP3 algorithm discards in the interest of file compression.

What Is White Noise?

A white-noise signal is used widely in audio circles as a test providing a full spectrum of audio energy. Converted into sound, a white-noise spectrum sounds much like the noise that a TV set makes when it's tuned to an unoccupied channel. It is also often

compared to what sunlight is to visible light. This infinitely-random characteristic makes it quite useful in striking comparisons between audio systems.

Since we needed only a short sample of the white-noise signal, we recorded a 30-second burst. Using a short file provides enough material for analysis and reduces the time involved in each file conversion to about 45 seconds.

The Reference File

First, some detail about the WAV reference file: Recorded at one-half maximum level (to avoid clipping) at CD-quality (44.1kHz sampling; 16-bit depth) resulted in the spectrogram [amplitude vs. frequency] shown in Figure 1. Compare this with the others of this article.

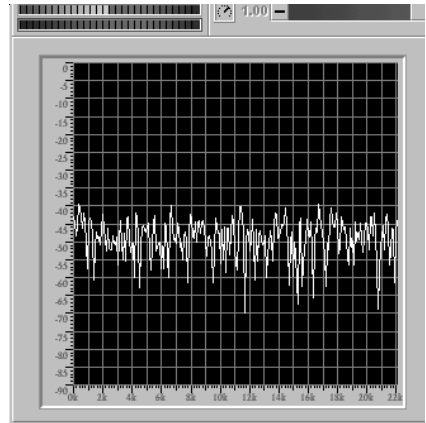


Figure 1

Note the uniform distribution of average energy from 0 to 22kHz. The resulting 30-second file uses 2.7 megabytes of storage. The dips are characteristic of a white-noise spectrum, and they are entirely transient in nature, averaging out over time. In real life, the spectrogram is in constant motion, around an average level that remains a

constant amplitude. The “snapshot” characteristic of the illustration cannot convey this motion.

The Smallest MP3 File

First, we converted the huge WAV file to the parameters that result in the smallest MP3 file that GoldWave software affords: A 16kHz (kilohertz) sampling rate at 8kB/s (kilobytes per second) bitrate. The resulting file uses only 30 kilobytes of storage, trading off most of the passband and about half of the amplitude of the original. Figure 2 shows the spectrogram for that file.

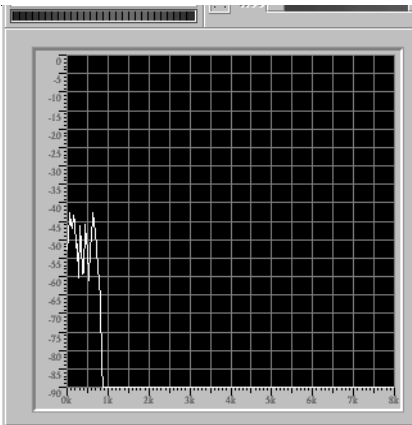


Figure 2

Note that the conversion cut the 22kHz of the signal to a passband of less than 1kHz with the entire bandwidth limited to 8kHz. Although the spectrogram doesn't show it because its vertical scale is logarithmic, the average level of the signal is down about 50 percent or, 6dB below the original level. The playback sound we heard couldn't possibly compare with the original under these terms, sounding much like the squawky sound a conch seashell makes when you put it to your ear.

Next, we converted the WAV file to an MP3 file with the next set of parameters that GoldWave offers:

16kHz at twice the bitrate: 16kB/s. It resulted in a file of 61kB: Precisely double that of the smaller one. Figure 3 shows the spectrogram for that file:

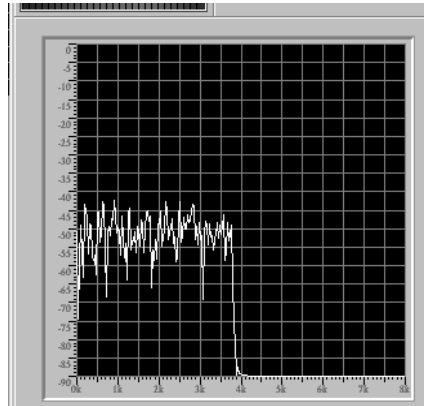


Figure 3

Note that doubling the bitrate nearly quadrupled the passband to almost 4kHz and, in addition, increased the amplitude to nearly that of the original.

Our third conversion, at 16kHz at 24kB/s, resulted in a file size of 91kB. Note that the passband now exceeds 5kHz at about the same amplitude as the 16kB/s spectrogram above.

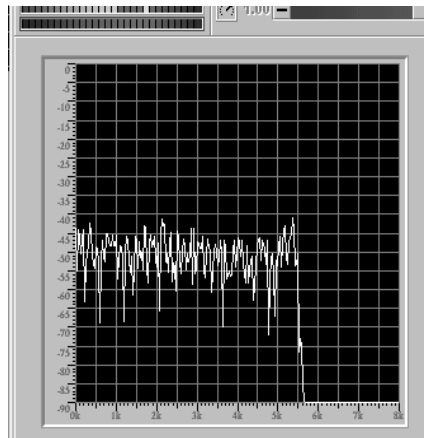


Figure 4

For the fourth conversion, we increased the bitrate to 32kB/s which increased the file size to 122kB and expanded the passband to nearly 7kHz with zero loss in amplitude as compared to the original signal. Figure 5 is the spectrogram of that file:

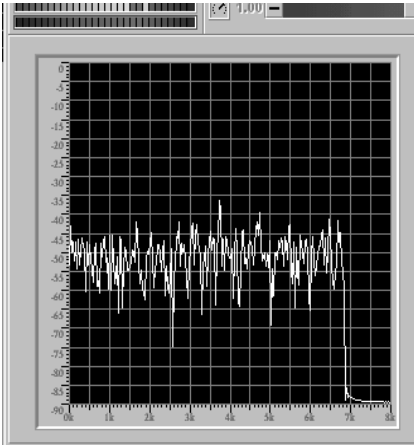


Figure 5

The relationship between passband and bitrate became quite apparent at this point when we increased the bitrate to 40kB/s and the passband filled out to the 8kHz bandwidth limit imposed by the 16kHz sampling rate. The file size ballooned to 152kB. Bitrates beyond 40kB/s (48, 56, 64, 80 and 96) made no improvement in the passband, but the storage requirements increased accordingly. At 96kB/s the storage requirement went to 365kB for a 30-second file. So, the indication is that if you use a 16kHz sampling rate with an 8kHz bandwidth, you're wasting storage space if the bitrate exceeds 40kB/s.

Then, we increased the sampling rate to 22,050Hz at 8kB/s (30kB file), and something strange took place: When we played the MP3 file in GoldWave

and WinAmp, the sound became a random series of midi-like chords instead of the "rush" of a noise spectrum.

When we wrote to Chris Craig, the developer of GoldWave about this phenomenon, he wrote back: "That is pretty typical when using very low bitrates [with white-noise]. There just is not enough room [in the algorithm] to store the broad white-noise spectrum at that bitrate."

When we increased the bitrate to 16kB/s (61kB file), the resulting MP3 file playback came out as a noise spectrum limited to about 3kHz in much the same manner as the earlier conversions. The passband increased proportionately with each increase in bitrate until the 11kHz bandwidth limitation kicked in at 56kB/s with a 213kB file size. It follows then, that a bitrate greater than 56kB/s with a 22,050Hz sampling rate merely uses more storage space without any improvement in passband. (See chart below.)

Increasing the sampling rate to 24kHz with a 40kB/s bitrate (152kB file), the falloff occurred at about 9kHz. Using a bitrate beyond 64kB/s (243kB file) adds no more passband beyond the sampling rate limitation as shown in the chart.

With a 32kHz sampling rate the lowest bitrate available is 64kB/s with a 243kB filesize. This limits the passband at a point just above 13kHz. Increasing the bitrate beyond 80kB/s (304kB file) adds no more passband beyond 16kHz.

Using a 44.1kHz sampling rate and a 32kB/s bitrate (122kB file), the cutoff frequency runs about 6kHz. Increasing the bitrate beyond 112kB/s (425kB file) only increases storage space.

To summarize, here's the data in tabular form:

Sample Rate (Hz)	Bitrate (kB/s)	Bandwidth (Hz)	Passband (Hz)	File Size (30 sec)
16,000	8	8,000	1,000	30kB
16,000	16	8,000	4,000	61kB
16,000	24	8,000	6,000	91kB
16,000	32	8,000	7,000	122kB
16,000	40	8,000	8,000	152kB
16,000	48	8,000	8,000	182kB
16,000	56	8,000	8,000	213kB
16,000	64	8,000	8,000	243kB
16,000	80	8,000	8,000	304kB
16,000	96	8,000	8,000	365kB
22,050	8	11,100	See Text	30kB
22,050	16	11,100	3,000	61kB
22,050	24	11,100	6,000	91kB
22,050	32	11,100	9,000	122kB
22,050	56	11,100	11,100	213kB
22,050	40	11,100	11,100	151kB
22,050	48	11,100	11,100	182kB
22,050	56	11,100	11,100	213kB
24,000	40	12,000	9,000	151kB
24,000	48	12,000	10,000	182kB
24,000	56	12,000	11,000	213kB
24,000	64	12,000	12,000	243kB
32,000	64	16,000	13,000	243kB
32,000	80	16,000	16,000	304kB
44,100	32	22,050	6,000	122kB
44,100	40	22,050	10,000	151kB
44,100	48	22,050	12,000	182kB
44,100	56	22,050	14,000	213kB
44,100	64	22,050	16,000	243kB
44,100	80	22,050	19,000	304kB
44,100	96	22,050	20,000	365kB
44,100	112	22,050	22,050	425kB
44,100	WAV	22,050	22,050	2676kB

The last line in the table lists the data for the WAV file that we converted 32 times into MP3 files for the experiment. Note that the tabulation includes much more data than referenced in the text. Note also that the 44k/112kB/s MP3 file delivered the same passband as the WAV file with a 6:1 compression ratio.

Note also that there are no data (in the chart) for sampling rates above 44,100 at 112kB/s, although GoldWave provides six more MP3 conversion levels (128, 160, 192, 224, 256, and 320kB/s) at 44k and 48k sampling rates. Chances are these parameters increase file size with little improvement in passband.

In the interest of print space, we chose not to include spectrograms for the files in this article with sampling rates above 16kHz because, for all practical purposes, they appear redundant and virtually identical with those shown here except for the differences in bandwidth imposed by the change in sampling rate. The curve on each had essentially the same characteristics as those included here.

In conclusion, bear in mind that a white-noise spectrum is very difficult to compress, because it lacks the pitch and amplitude changes of program material. As a result, it really challenges the file-compression system. While it points up the passband limitations, it doesn't take into account the psychoacoustic features of the encoder when it removes the redundant information that we don't perceive in order to reduce the file size.

Now, we're curious to see what MP3 compression does to a complex musical recording.

Your comments are always welcome at tsokrebah@juno.com or lyrevaw@juno.com.

Are You Having “Buffer Underrun” Errors With Your CD Burner?

By Ira Wilsker

During one of my recent radio shows (KLVI 560AM, Tuesdays 6-7pm, Saturdays, 1-4pm), I received many calls asking how to overcome the infamous “Buffer Underrun” error when writing to CD-R discs. While many of the newer CD-RW drives have built-in protection to prevent this error, the vast majority of CD-RW drives in use are subject to this most frustrating disc-ruining error.

According to several of the CD-RW drive manufacturers' websites, as well as the websites of several of the major CD burning software publishers, this error is the single most common problem encountered by users when creating CD-R discs. A buffer underrun occurs when a buffer or memory cache (temporary storage), either built in the CD-RW drive or supplied by the CD burning software, cannot keep up with the data being written to the CD disc. Normally the buffer receives data from the computer, and parcels it out to the disc, the buffer supposedly holding enough data to feed and write smoothly to the CD-R disc as it is also receiving data from the computer. Ideally, the data stream should be smooth and continuous. If, for any of many reasons, the buffer does not have the requisite amount of data available, it is possible that a buffer underrun error may be created. Common causes of this error are inadequate system performance (not enough memory, slow processor, hard

drive problems, too many programs loaded and running), and low quality or defective CD-R discs.

There are several simple tasks that can be done to reduce the chance of buffer underrun errors due to poor system performance. Most CD burning software indicates the maximum speed that the CD can write, typically in the format of “8x” or “10x” on a pull down menu. By selecting a writing speed one or two levels lower than the maximum, the error often disappears. Running both the Windows integral Scandisk and Defrag programs, or similar third party utilities, can possibly ensure that the hard drive is not the culprit causing the errors. Most of the CD burning software uses that hard drive as intermediate storage while the CD is being created, and the rule-of-thumb is that hard drive space of at least 150% of the amount of data being written must be readily available on the hard drive. If cluttered with obsolete data, simply cleaning the c:\windows\temp directory by deleting obsolete files can often help prevent the problem. In many older Windows computers, mostly running Windows 98 and 95, the CD drive settings may be incorrectly configured. Go to My Computer – Control Panel – System – Device Manager – click on the “+” to the left of “CDROM” to show the drive model – click on the CD drive to highlight it – click on properties – Settings – and check both “Disconnect” and “Auto Insert Notification”, and uncheck “Sync Data Transfer”. On many computers, properly setting this configuration alone may be adequate to eliminate the error.

If inadequate system resources cause the problem, it may also be easily resolved without the necessity of spending money to add memory or

install a faster processor. Sometimes programs that have been already exited leave kernels of code or data in memory that unnecessarily consumes resources; typically the easiest method to restore those resources is to simply reboot the computer. By simply stopping any unnecessary programs from running in the background, and not performing any other tasks while burning CDs (multitasking), system resources consisting of CPU power, memory, and other resources may be easily and quickly made available. The traditional method to stop unwanted programs that may be running is to either right click on their icon in the taskbar and click on “close,” or do a CTRL-ALT-DELETE, followed by task manager on newer operating systems, and “end task” all programs running except “systray” and “explorer”, before burning the CD. After the CD has been successfully created, reboot the computer in order to load antivirus software, and other desired utilities. Another option, which may also improve general system performance, not just CD writing, is to stop unnecessary programs from loading at all during the boot “start up” sequence. Detailed instructions on how to do this for all Windows operating systems can be found by clicking on the first link on my radio show web page at www.mycomputershow.com. An alphabetical list of programs that may be in the startup, along with an indication of whether or not they are necessary, is the second link on my website. Being connected to an “always on” broadband internet connection, such as DSL or cable can also consume resources. If the error occurs, disconnect from the net.

Another possible cause of the error may be the CD burning software itself.

Most software included free with CD-RW drives is the “lite” or “limited” version, lacking some of the features of the full commercial versions. Check your software publisher’s website for updates to the version of software being used, as these may resolve the buffer underrun problem. Newer versions of the software, sometimes downloadable either as free upgrades, or available to registered users at a discount, may also resolve the problem. Some CD burning software better manages resources and buffers than others, and a software change may show improvement. Many of the CD software publishers offer a free trial version of their product for download; this may be a useful exercise.

The CD-R media itself can be the culprit. Newer disc technologies, often using a blue or green dye on the writable side of the disc, can usually be written to faster and more reliably than the older, and cheaper, silver dye technology. The difference in price between the better quality blank CDs, and the no-name cheaper generics is often small, considering the savings in both ruined discs, and the time to create them.

By properly configuring your computer and software, the CD burning experience can be less frustrating and more productive.

Ira Wilsker is a member of the APCUG Board of Advisors, hosts a radio show <<http://klvi.com>>, writes a column for his local paper, and is on the faculty at the Lamar Institute. E-mail him at <ira@apcug.org> . This article is brought to you by the Editorial Committee of the Association of Personal Computer User Groups (APCUG), an International organization to which this user group belongs.



The Easy XP Upgrade: Ready or (Probably) Not

The Upgrade Curve Gets Steeper

Right out of the chute I’m going to tell you that I really like Windows XP. It’s not the first time I’ve said it, and despite the upgrade hassles people tell me about, you’ll hear me say it again. (And yeah, I know, Infoworld’s Brian Livingston, the Windows guru, is so unimpressed by XP, he’s decided not to author a “Windows Secrets” book about it. But I think he’s off base on this one.)

Here’s why XP is worth the upgrade: For end-users, XP is the most stable version of Windows Microsoft has ever released. XP’s underlying architecture substantially decreases the odds of system crashes and General Protection Faults (GPFs). That’s oh-so-very good.

XP’s efficient use of memory lets me run practically an unlimited number of applications simultaneously. On my test PC with 128MBs of RAM, I had 14 programs running, including Word, Excel, PowerPoint, Outlook, Eudora, dBase, four sessions of Internet Explorer, and PowerDesk. Wait, I’m not done. I was downloading a file, had Microsoft’s Media Player showing an AVI, Apple’s player screening a MOV file, and Jukebox belting out Brubeck. And I haven’t mentioned the half-dozen items in the system tray.

Wait, I Have a Concern...

Not everyone's as convinced as I am that XP is so great. After writing about it in PC World, I was buried in e-mail from readers. Many wondered about NT and Windows 2000 upgrades, Others voiced discomfort (oh, that was diplomatic, wasn't it? Many people shouted, hooted, and HOLLARED) with upgrade problems.

So I gathered up some of the more common questions and problems, and tried to summarize the answers below.

But There's W2K

I was surprised how many people asked if they should abandon Windows 2000 (W2K) for Windows XP Professional, the version for businesses. Nope, I don't think it's a wise move, especially if W2K is working fine. XP inherited most of its skills from W2K. (Some people say XP is just a candy coated W2K anyway.) If you're happy with W2K, stick with it.

Drive, I said!

If you're not sure what a driver is, you're not alone. Drivers are programs that tell hardware how to interact with operating systems. The most common drivers you'll hear about are printer drivers, but you'll also see USB, scanner, video and sound card, camera, and mouse drivers. You don't "run" a driver; it just acts as an invisible intermediary between the device and the PC.

Most device drivers are included on a CD-ROM when you buy new hardware. Many drivers, both generic and product specific, are already on the Windows installation CD-ROM.

Quick aside: I rarely upgrade drivers unless I'm experiencing a problem—say, a video card malfunction when I use a newly installed font.

You'll note lots of weaving, ducking, and bobbing in my responses about drivers. Why? Many XP upgrade problems just can't be fixed because manufacturers don't want the hassle of writing new drivers for phased out, oh, wait, they're now called legacy, devices.

I think Microsoft knew these driver problems could—maybe even would—happen. And they chose not to act. Disappointing, yes, but not at all surprising.

Give Me a Clue

Windows XP will give you a preview of which devices (as well as software programs) won't work when you upgrade. So it's essential to do two things before upgrading. First, take a look at the least helpful of MS's pages—the incompatibility list. Not every product is listed, and worse, those that are shown may not have a version number. For instance, Zone Alarm needs to be upgraded, but from MS's list, it appears as if it's compatible. Check the page here:

www.microsoft.com/windows/catalog/catalogshell/shell.asp?page=1&subid=22.

A better bet is to have Microsoft prepare an upgrade report for your PC. If you have a broad band connection (DSL or cable modem) visit Microsoft's Windows XP Upgrade Advisor page and download the upgrade advisor. It's a massive 50MBs but it's the same tool that's on the XP CD, and the one that'll give you the best idea of your PC's incompatibilities. It's located at:

www.microsoft.com/windowsxp/pro/howtobuy/upgrading/advisor.asp.

If the Microsoft download is more than you can swallow, try PC World www.pitstop.com and click on the XP Readiness Test link. No matter what,

play it safe and check the lengthy list of XP incompatibles. It's at:

<http://www.microsoft.com/windows/catalog/catalogshell/shell.asp?page=1&subid=22>>.

You might want to see an awful sounding upgrade report from the Advisor. Check my report at www.pibmug.org/files/Bass-winX.htm.

Start Reviewing

So before you start upgrading, spend time reviewing some of MS's Product Support documents. For instance, "Troubleshoot Windows XP Setup Problems" is a must read article at:

<http://support.microsoft.com/default.aspx?id=kb;en-us;Q310064>>.

Another good article explains what to do when you get the dreaded "3E6h" error during the upgrade. It means something on your PC is incompatible with XP, and except for advising you to contact tech support, the message tells you nothing about the problem. Read the article at:

<http://support.microsoft.com/default.aspx?scid=kb;en-us;Q311442>>.

The "3E6h" error struck while I tried upgrading my wife's PC. I had to perform a clean boot—essentially booting with no drivers, few VXDs, and no systray-type programs. (The method is described in the above MS article.)

Upgrade Advice

1. Run MS's upgrade advisor. If that's not available to you, inventory every component on your PC—obvious ones, such as USB devices, printers, video and sound cards, and modems. think about the products you use rarely—the X-10 module, or the dumb, 3-year old program you use occasionally, the one that links your pager to the PC.

2. Check MS's site and see which products are mentioned as compatible.

3. Visit the company's site to check for drivers. Alternatively, you can swing by Windrivers, Driverguide, cnet, or Galt's Download Zone. These sites have either drivers or links for drivers:

www.windrivers.com>

www.driverguide.com>

controllerswww.galttech.com/drivers.shtml>

Cnet's Drivers site: "Most Popular," "New Releases," and "Our Picks":

http://download.cnet.com/downloads/0-10010.html?tag=stbc_gp>

4. If you have the time, do an accurate inventory of your software, and all the original disks for all your programs, format your drive, and do a fresh installation of XP. While it takes more time, in the long run, it may take less time than upgrading over an existing Windows version. One reason is you won't be carrying baggage—outdated drivers or old INI or INF files that claim you have hardware you've long abandoned. You also won't get waylaid by XP stopping the installation to warn you of incompatible software.

5. If you're doing a clean install, if you can, make sure you have all subsequent patches to your software.

6. Consider disconnecting those pesky legacy devices before upgrading to XP. In fact, it's something Microsoft obliquely recommends. When asked if users should add a printer during Setup, MS suggests you wait to install your printer until after you set up Windows XP. They explain that many printers and other hardware devices need drivers that may interrupt the XP Setup process, and that XP automatically detects many printers as soon as you connect them to your computer.

Printer Fiascos

The number one upgrade annoyance for most users is discovering their printer company decided not to provide support for XP.

In a private e-mail, one PC World reader was furious because his three-year-old NEC laser printer was only partially supported by XP. Neither MS nor NEC would do anything.

Scott Dunn, PC World's Windows Help-Line columnist responded, and I think he's on target: "The reality is that Microsoft can't write drivers for every device out there—they rely on the manufacturers to do so. If your manufacturer has decided not to invest its resources in providing new drivers, you have only two options (assuming that a Windows 2000 driver does exist or work with XP): stay with your previous Windows version, or find other stranded users of the product and start hounding the manufacturer. The latter worked in the case of HP, which changed its policy on providing Windows 2000 USB drivers for its products after customers complained."

Find Microsoft's supplied list of supported drivers here:

<http://support.microsoft.com/default.aspx?scid=kb;EN-US;Q293360>>. For the next five articles, substitute [Q293378](#) in the URL, then [Q293380](#), [Q293381](#), and finally [Q293382](#).

Before you chuck your existing printer out the window consider installing a driver for a common Hewlett-Packard printer, say HP-III, HP-IV, or even HP5. For instance, one old application—Ventura Publisher—crashes when I try printing to a Brother laser printer. When I use VP, I send it to the virtual "HP"—the HP driver—

which in turn prints the doc on the Brother.

HP's WinXP upgrade page is: www.hp.com/pond/windowsxp/printingdigitalimaging.htm>.

Granted, upgrading to Windows XP may be a hassle. But once you have it working, the hardest part is unloading the 14 or so applications you have happily running.

Steve Bass is a Contributing Editor with PC World and runs the Pasadena IBM Users Group. He's also a founding member of APCUG. Write to him at <Steve_bass@pcworld.com>. Check PCW's current edition at <<http://www.pcworld.com/resource/toc/index.asp>> and sign up for the Steve Bass online newsletter at <www.pcworld.com/bass_letter>.

Google is Great By John Lenihan Pikes Peak Computer Application Society

Listen to any of the technology talk shows or read articles that discuss "search engines" and you'll see that Google has been rated high for a long time. I find it accurately displays whatever I'm looking for, so much so, that it's like having an encyclopedia of knowledge at my finger tips. Newer engines are coming out, but I still trust Google to find my answers. But have you dug deeper down into what's available with this search engine? Well read on, because there's a lot more to it.

Let's start by using the basic search window found on <http://www.google.com>>. When my computer runs into a problem and can give me enough of an understandable error message, I've found that typing the

message into a Google search window usually gives me enough hits to help me narrow the problem. My son called me a few months ago and said he thought he had sent me a virus, and wanted me to delete the file called sulfnbk.exe. It sounded a little fishy, and since he was close to his computer, I asked him to type the file name into Google. He saw the words HOAX come up in big block letters. Google saved me the hassle of trying to resurrect that file later. If you want to narrow your searches to just Microsoft-related pages, you can click on “Advanced Search” and go to the bottom of the displayed page and click on “Microsoft.” Thus, if you have an operating system or Microsoft application question, this narrows the boundaries of the search. You can also get there directly by going to <http://www.google.com/microsoft.html>. Notice from the “Advanced Search” page that other narrow searches can be done for Apple, BSD Unix, Linux, and Government-related sites.

Try doing a “vanity search” by typing your name in the search box. Or even try it with friends you’ve lost contact with. I’ve found some long-lost souls just by doing this. Enter a name, city, state, or zip code for a business or a person and see if you get a hit. You may be surprised at how easy it can be to find information about yourself. Enter a phone number and see if you get a name back. If Google recognizes what you entered as an address, you’ll get a street map back. Google is so good at finding things that there was even a game called “googlewhacking” where people would try typing in a combination of words that just returned one search reply. It’s

fairly hard to do unless you use some really obscure word variations.

Looking at the basic search screen on the opening Google page, you’ll notice four tabs on top. The default is the Web tab, which we were just using. The next one is the Images tab, taking you to <http://images.google.com>. This will allow you to access millions of images on the Web. Suppose your child is doing a school report on oak trees. Type “oak trees” into the images search engine and you’ll find plenty of pictures for the report. Of course, I need to pass along the disclaimer that lots of stuff on the Web is copyrighted, so you need to be careful how you use what you find. But I doubt you’ll get into too much trouble using a picture in your school report. But I did hear that teachers could use Google to search for text phrases in reports to check for plagiarism.

There are thousands of newsgroups in cyberspace, covering thousands of topics, and only so much time in a day. The third tab over is the “Groups” tab and it will let you find out what is (or was) being discussed out there that you would be interested in. For example, if you’re thinking of buying a new digital camera, type the model number in the Groups search window. You’ll see messages from people in various newsgroups that discussed that item. You can use this method to monitor almost any topic you have an interest in.

The last tab over at the top is the “Directory” tab. Click here and you’ll see Web pages organized into directories by topic, much like you’d see at Yahoo. For example, click on “Computers” and you’ll see almost 50 computer topics arranged by categories, any one of which takes you to many other Websites.

They advertise they have over 1.5 million pages indexed in this directory.

To keep up with current news stories go to <<http://news.google.com>> and enter in a news topic. Say you wanted to stay abreast of the Hayman Fire that burned close to me a few months back. Entering those words into the search window resulted in stories from newspapers all across the country. Google would even tell you how old the stories were, with many only hours old.

For the linguists out there that need help translating short pieces of text from one language to another, there's <http://www.google.com/language_tools>. Need help translating "yo quiero" from Spanish to English, then give it a try.

Want to see additional tools being worked on by the Google development team? Look at <<http://labs.google.com>>. Four tools are listed, the most interesting to me being the glossary. If you come across an unfamiliar word or phrase and go here, you'll get a link or pointer to pages that offer a definition. Another tool at this site is Google Sets, where you can type in a few related words,

and it gives you a list of more related items. There's also a voice recognition tool to help you search Google by phone, and a keyboard shortcuts tool that lets you search Google without a mouse.

I hope I've convinced you why Google is great, not only as a search engine for the Web, but also for its many other capabilities for specialized searches. Do you ever wonder how history would look if recorded by the types of searches being done on the Web? Then look at the year 2001 laid out at <<http://www.google.com/press/timeline.html>>. You can see what was on the minds of many people that year by the searches that were requested. So search wisely—historians may learn about us, while we learn about what interests us.

There is no restriction against any non-profit group using the article as long as it is kept in context, with proper credit given to the author. This article is brought to you by the Editorial Committee of the Association of Personal Computer User Groups (APCUG), an International organization to which this user group belongs.

Letter From The Editor

Being editor of the DATA BUS is a marvelous experience. Just learning to use Pagemaker is a serious challenge. With its many functions, far more than MS Word ever thought of, and its 600 plus pages of manual, its hard to remember from one day to the next how to do some things. But fortunately Bob Clyne is close by to get me out of trouble. And after all, learning is the greatest indoor sport (well, even outdoor).

However, the editor's job includes finding articles that interest the reader, and in that task I need your help. I need feedback from readers to tell me what interests you, what you agree with, and what you disagree with. Let me know what you think. Also, it would be a big help if some of you would submit articles that you have written yourselves. Describe your computer experiences, good and bad for the edification of other readers. If you just bought a new program, tell us how it works and how good or bad it is. Don't worry about your literary talents; I can put in the commas where needed. But help the poor editor.

Bill

What Do You Know About Oakland University? By Bill Agnew

How much do you know about SEMCO's host, Oakland University? Did you know it has schools of Arts & Science, Business Administration, Health Sciences, Education & Human Services, Nursing, and Engineering & Computer Science? The university was created in 1957 when Alfred and Matilda Wilson donated their 1500 acre estate to begin a new college. The university now has an enrollment of around 16,000 students and a faculty of over 800.

The School of Engineering & Computer Science (SECS) now offers undergraduate programs in Computer Engineering, Electrical Engineering, Mechanical Engineering (with Options in Manufacturing and Automotive Engineering), and Systems Engineering. Master degree programs are in Computer Science & Engineering, Electrical & Computer Engineering, Engineering Management, Systems Engineering, and Software Engineering. There is also a PhD program in Systems Engineering. SECS also offers continuing education courses, engineering type training courses in specialized software products, for local companies.

The unique philosophy of the SECS is: hands-on laboratories integrated with the courses; an accent on a systems approach, an emphasis on a liberal education, and close student-faculty interaction. There is a strong focus on automotive engineering in both the courses and research, responding to the central location of the university amid Southeastern Michigan's automotive

industry. Only about 10% of the university's students live on campus, although that is now changing with the construction of new dormitories along Walton Blvd. In SECS some 25% of the undergraduates and 85% of the graduate students are part-time.



Board Members Present: President Gary DeNise, Treasurer Roger Gay, Secretary Carol Sanzi, SIG-Advanced Chairman Franz Breidenich, SIG-IBM Co-Chairman Tom Callow, Publication Committee Chairman Bob Clyne, and Warner Mach representing SIG-IBM Intermediate Chairman Jack Vander-Schrier. Also in attendance was DATA BUS Editor Bill Agnew. Arriving late was Vice-President Vic Charns and member Art Laramie. The meeting was called to order at 12:04 pm.

Old Business

Treasurer Roger Gay reported that there is \$4090.74 in the treasury. The membership has dropped to 91 with four non-renewals. There have been no new members in the past month.

Carol Sanzi will contact Heather Newman and Mike Wendland to see if they would like to receive the DATA BUS. She will then give their addresses to Roger Gay to add to our mailing list. Carol Sanzi will also place a SEMCO meeting announcement in the Suburban Lifestyles newspaper.

New Business

Bob Clyne moved that SEMCO pay the \$50 APCUG membership, as it expires soon. Warner Mach seconded the motion, and it was carried.

Continued on page 19

SPECIAL INTEREST GROUPS (SIGs)



SIG-IBM
Tom Callow
Warner Mach



SIG-IBM INTERMEDIATE
Jack Vander-Schrier

November 10: Getting The Most Out Of Your PC—Part 2: Co-Chairman Tom Callow will continue his demonstration of things you can do to tweak your computer and how you use it to make your computer work better for you.

Continued from page 18

Tom Callow reminded the Board that nominations for board members will be taken at the December meeting. Bob Clyne moved that the Board create one “at large” position on the board of directors. Roger Gay seconded the motion, and it was carried.

A discussion took place weighing the possibility and feasibility of offering Associate Memberships with a free online subscription. It would be with the hope that this may attract new members. The Associate Members would have access to the SEMCO web site and receive notification of meetings. No decision was made at this time.

Early in November, Bob Clyne will contact Oakland University regarding our use of the University facilities for the next year.

The meeting adjourned at 1:12 pm.

November 10: Paint Shop Pro: Chairman Jack Vander-Schrier will demonstrate how to use Paint Shop Pro 7 to alter graphics, remove features, and combine two pictures into one.

NOVICE-IBM GROUP **Rotating Volunteer Hosts**

November 10: Q&A: Member directed discussion.



SIG-ADVANCED
Franz Breidenich

December 2: Meetings held first Monday, 6:45 pm, at the Oak Park Library. The library is located at 14200 Oak Park Blvd., Oak Park, MI. Phone: (248) 691-7480. Directions: 14200 Oak Park Blvd. is 9 1/2 Mile Road, located west of Coolidge. Best route from freeway is to take I-696 to the Coolidge exit. Head south on Coolidge for 1/2 mile to Oak Park Blvd. and turn right. **Topic: Wide ranging discussion of computers and computing.**

December 2002 DATA BUS DEADLINE (7th day after meeting)

SEMCO & SIG DATA, & MEMBERS' ADS - Deadline: Sun, Nov.17, 11:59pm

Members' personal ads free. To mail, use Editor address on Page 2; e-mail address: [<agnew@bignet.net>](mailto:agnew@bignet.net). PLEASE send to arrive sooner than deadline if possible.

BUSINESS ADS - Deadline: Second Friday monthly. Mail **unfolded** camera-ready copy; payment in full made out to SEMCO, to the Editor (address Pg 2).

Bill Agnew
agnew@bignet.net
(to post monthly computer group info)

**CALENDAR-OF-EVENTS
OTHER GROUPS**

AAIICI (American Association of Individual Investors, Computerized Investors),
Nov. 23–Saturday, 10am–Noon (Meet 4th Saturday) (not December); W. Bloomfield Huntington Bank, Orchard Lk Rd., S.of Maple Rd. Info: Jack Lockman at 313-341-8855 or <thunder@tir.com>.

COMP (Computer Operators of Marysville/Port Huron)

Nov. 6–Wednesday, 7pm (Meet 1st Wednesday): Rm 201, Clara E. Mackenzie Library-Science Bldg, 323 Erie St., Port Huron. Ron Walters, 810-679-4144. Web: <<http://www.bwcomp.org>>. **TOPIC: Birthday Celebration.**

DCOM Computer Club

Nov. 8–Friday 6:30 - 8:30 pm (Meet 2nd Friday); Henry Ford C.C., Patterson Tech Bldg, Ford Rd/Evergreen, Rm T143, Parking Lot C. Info: Doug Piazza 313-582-2602.

Delta Computer Club

Not Nov./Dec., (Meet last Thursday, 7 pm); Bay de Noc C. C., Escanaba. Info: Gordon Nelson, Pres. & Editor at <gnelson@bresnanlink.net> or 906-428-1014.

GDOUG (Greater Detroit OS/2 Users Group)

Nov. 14–Thursday, 6:30 pm (**Last Meeting of Group**); Stardock Systems, Farmington Rd, N. of Six Mile, Livonia; Info: Carolyn Kolaz, Pres. at <76460.3040@compuserve.com>.

MacGroup Detroit

Nov. 17–Sunday, 3pm–5pm ; Bloomfield Twp. Library, 1099 Lone Pine Rd. (corner of Telegraph Rd.). Genius Table (Q&A) at 2 pm. Info: Terry White, <terry@macgroup.org> or 313-571-9817. Web: <<http://www.macgroup.org>> . **Topic: How To—Tips and Tricks.**

MacTechnics, (MAC User Group)

Nov. 16–Saturday, (Meet 3rd Saturday); Coffee 9:00am, SIGs 9:30am, Main meeting 11:00am. Mack Open School, 920 Miller Road, Ann Arbor, MI 48103. <<http://www.mactechnics.org>>. Info: Cassie at <cassiemac@yahoo.com> or 313-971-8743.

MCUG (Michigan Computer Users Group)

Nov. 21–Thursday, 7pm (Meet 3rd Thursday); 35271 Rockingham Dr, Sterling Hts., MI 48310-4917; Info: Jerry Zinger, Pres., <kahuna15@comcast.net> 810-792-3394.

Michigan Apple Computer User Group

Nov. 14–2nd Thur, MAC SIG; Nov. 14–2nd Thur, Golden Masters SIG; Nov. 21–3rd Thur, Green Apple SIG; Eagles Hall in Clawson, 174 Bowers St (one block North of 14-Mile and one block East of Main). Carl Pendracki 248-647-8871 or <carlpen@aol.com>. Web:<<http://www.themichiganapple.com>>.

Oak Park Computer Club

Meets every Friday, 10:15am (except holidays) at Oak Park Library, Oak Park Blvd. at Coolidge Hwy.

SHCC (Sterling Heights Computer Club)

Dec. 3–Tuesday, 7:30pm (Meet 1st Tuesday; Carpathia Club, 38000 Utica Rd, Sterling Hts, Pres. Don VanSyckel at <Don@VanSyckel.net>, 586-731-9232; Web: <<http://www.SterlingHeightsComputerClub.org>>.

SVCA (Saginaw Valley Computer Assoc.)

Nov. 14–Thursday, 6:30-9:00pm (Meet 2nd Thursday); Saginaw. Web: <<http://www.svca.org>>.

Wayne State U. Mac User Group

Nov. 9–Saturday 10:00am–Noon (Meet 2nd Saturday); at Mich.com, 21042 Laurelwood, Farmington. Info: Lorn/JoAnn Olsen 248/478-4300 or Denny McLampy 248-477-0190,

**TAX DEDUCTIBLE
DONATIONS
SEMCO Members
Helping the Community**

Beth Fordyce is accepting Macintosh computers, components, peripherals, manuals and software (working or broken) for Immaculate Heart of Mary School PreK–8th grade, 175-200 students for computer science classes.

Contact Beth

734/453-0349 7pm–10pm or

bfordyce215331MI@comcast.net

You may also contact the school directly: Sister Mary Stephanie Holub
19940 Mansfield

(Greenfield/8-Mile area, Detroit)
313/272-0990

If you want to use your donation as a tax deduction, make an itemized list (with one copy for yourself) of items you donate, and attach it to your donation. Include on the list the full name or description of each item, and its fair market value. Also make sure your full name, address and phone number are on it. The donee will see that you receive a receipt.

**OCTOBER
REFRESHMENT
DONORS**

Warner Mach, Coordinator
Gary Denise
Betty Mackenzie
Carol Sanzi
Jerry Comptois

Your **SEMCO** membership card is good for a **\$1 discount** (not valid with any other offer) on

admission to

A1-Super Computer Sales

shows. See

www.a1-supercomputersales.com

or www.a1scs.com

for show schedule.

COMPUTER RESOURCE PEOPLE

This is a list of members willing to be resources for other members to call when they have hardware or software questions.

Are you willing to help members learn?

Which software programs are you familiar enough with?

It is not necessary to be an expert, but just have some familiarity with the program and be willing to help someone starting to learn it. Please give this some thought and volunteer at the next group meeting.

Almost Anything: Vander-Schrier

AutoCAD: Comptois, Gay

Genealogy: Cook

IBM PC Hardware Issues: Clyne, Gay, Yuhasz

Operating Systems: Callow, Clyne, Yuhasz

MAC Hardware and OS Issues: Yuhasz

MS Office for Windows: Callow

MS Word: Clyne

Networking: Callow

Novell Netware: Yuhasz

Quicken: Clyne, Gay

Clyne, Bob—810-387-3101, 9am-10pm clyne@mich.com

Callow, Tom—248-642-1920 9am–5pm tcallow@voyager.net

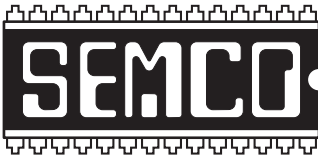
Comptois, Jerry—248-651-2504, anytime jerrycandotoo@juno.com

Cook, Stephen—313-272-7594, eves scook48227@ameritech.net

Gay, Roger—248-641-7799, 9am-10pm rgay@voyager.net

Vander-Schrier, Jack—586-739-7720, 12-8pm jvanders@myself.com

Yuhasz, Steve Help@yuhasz.org



SOUTHEASTERN MICHIGAN
COMPUTER ORGANIZATION, INC.

SEMCO CALENDAR—November/December 2002

SCIENCE & ENGINEERING BUILDING, OAKLAND UNIVERSITY,
ROCHESTER, MICHIGAN

November 10—SUNDAY (Meet 2nd Sunday)

SEMCO Board Meeting at 12:00 pm, **Room 172**. For Officers and SIG Chairpersons. Other members are invited to attend.

SEMCO General Meeting at 1:30 pm, **Room 172**.

Special Interest Groups (SIGs)

SIG-IBM 1:45 pm, **Room 172**. **Program: Getting The Most Out Of Your PC—Part 2:** Co-Chairman Tom Callow will continue his demonstration of things you can do to tweak your computer and how you use it to make your computer work better for you.

SOCIAL PERIOD 3:15 pm, **Room 164**. Refreshments! (Reminder: We must maintain a neat environment.)

NOVICE-IBM GROUP 3:45 pm, **Room 168**. **Program: Q&A, member-directed discussion.**

SIG-IBM Intermediate 3:45 pm, **Room 172**. **Paint Shop Pro:** Chairman Jack Vander-Schrier will demonstrate how to use Paint Shop Pro 7 to alter graphics, remove features, and combine two pictures into one.

December 2—MONDAY , 6:45 pm (Meet 1st Monday), SIG-ADVANCED

Oak Park Public Library, 14200 Oak Park Blvd., Oak Park, MI. Phone: (248) 691-7480. Directions: Oak Park Blvd. is 9 1/2 mile Road, located west of Coolidge. Best route from freeway is to take I-696 to the Coolidge exit. Head south on Coolidge for 1/2 mile to Oak Park Blvd., and turn right. Info: Franz Breidenich 248-398-3359. **TOPIC: Wide-ranging discussion of computers & computing.**

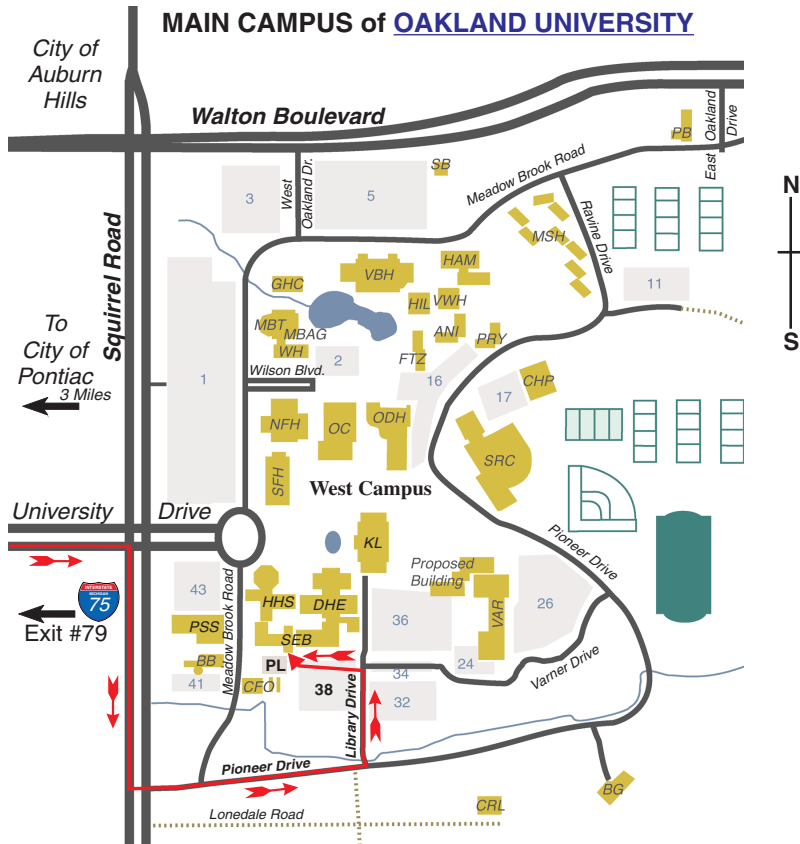
December 8—SUNDAY (Meet 2nd Sunday).

SEMCO, 1:30 pm. **Topic: To be announced.**

<http://www.semco.org>

PUBLIC INVITED

(Please copy this and the next page to post on your bulletin board)



MAP LEGEND

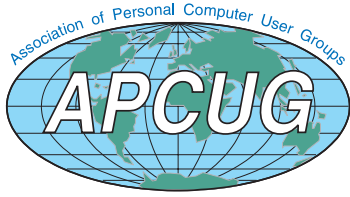
- SEB** Science and Engineering Building
- DHE** Dodge Hall of Engineering
- KL** Kresge Library

Note: SEMCO meetings are in the Science (west) wing of the Science and Engineering Building.

DIRECTIONS

Driving north on I-75 (from Detroit and suburbs), take Exit 79 (University Drive), stay to the right on University Drive to campus entrance. Turn right (south) on Squirrel Road (at traffic light which is just outside campus), turn left on Pioneer Drive (next street to left). Turn left off Pioneer Drive onto Library Drive (second left) toward Kresge Library. Turn left before you get to the buildings, into parking lot 38 on the left. Proceed to the far end of the parking lot and up to the next lot. After parking, enter the first set of glass doors (at the SE corner of the building).

Member of



The meetings at Oakland University are sponsored by OU's Academic Computer Services (ACS), and the student chapter of the Association of Computer Machinery (ACM). SEMCO thanks OU, ACS & ACM for their assistance.

**SouthEastern Michigan
Computer Organization, Inc.
P.O. Box 707
Bloomfield Hills, MI 48303-0707**

**SEMCO (future meetings)
November 10
December 8**

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Helping People for the 21st Century**