SEMCO

DATA BUS

IN THIS ISSUE

The SouthEastern Michigan Computer Organization, Inc. (SEMCO) is a non-profit, 501(c)(3), group dedicated to providing information, education and a forum to computer users (professional and amateur) and other interested individuals. Membership in SEMCO is open to all individuals 18 years or older. Persons under 18 years may become members through the sponsorship of a parent or guardian. Dues of $30/year include monthly DATA BUS and free personal ads.

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SEMCO MEETINGS
Sunday, December 14, 2003

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**

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 14, 2003 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) Two Members at Large of the Board of Directors

NOTICE OF ANNUAL MEETING AND ELECTION

The annual meeting of the members of the SouthEastern Michigan Computer Organization, Inc. will be held Sunday, January 11, 2004 at 1:30 pm in Room 164 of the Science and Engineering Building, Oakland University, Rochester, Michigan. The election of Officers and Members at Large of the Board of Directors of the Corporation will take place at the annual meeting.

DEALS COLUMN
from the DealsGuy
Greater Orlando Computer UG
by Bob "The Cheapskate" Click

I've been so busy between our two-week cruise and working some interesting trade shows (to pay for the cruise) this month that I hope my readers can live with some bits and pieces held back previously for future columns.

Just Some Comments

On the cruise, the ship (Summit) had a nice Cyber Café. Their computers all used LCD monitors. The price for using a computer was fifty cents per minute. When you are a captive audience there are no choices, but I didn't think that was bad under the circumstances. All you had to do was run your stateroom card through a slot and start typing, FAST. I didn't make use of it, so when

I got home it took me almost a day to go through all my e-mail, reading it and cleaning out all the spam. It was a disgusting job with so much spam.

Who's next?

I read that Symantec is buying PowerQuest Corp. for $150 million and should complete the purchase by the end of the year. I'm not sure if it will affect user groups, but as you know, Symantec dropped user group support a few years ago, and PowerQuest cut the financial support they were giving Gene and Linda Barlow last year. It is, however, a fact that PowerQuest is more than pleased with the job that User Group Relations (Gene's Company) still does for them, and I doubt they will want to lose that kind of product support. In the meantime, if you are thinking of purchasing a PowerQuest product, I wouldn't wait long to go to <http://www.ugr.com> and take advantage of the low UG prices, just in case. Who knows, with such a great track record, perhaps Gene will also be selling Symantec products. Makes sense to me!

A Show I Love To Hate

I was working a Direct Marketing Assoc. trade show for a few days and had a chance to browse some of the booths. I doubt I need to explain who participates. While they were very much in a minority, I did come across a booth selling a few million e-mail addresses for marketing. The interesting part was the product's package, which was a can that looked exactly like a can of the famous Spam. I wonder if Hormel knows about this. There were also CD Duplicators, automated mailing equipment, automatic dialing equipment, and other interesting booths. I must say that I really had to bite my tongue when I talked to a few of those booths that make their money inconveniencing us. On the other hand, I found some nice give-a-ways there, such as clocks, calculators, stuffed animals, and other great items.

It was interesting talking to a salesman in one booth for a company that has print shops and distribution centers all over the country where they print many of the advertising flyers we all find in our newspapers. He talked about how they transfer all the data by wire, and computers handle much of the production.

Correction

Last month I talked about getting some flag screensavers at <http://www.improbable.ukgateway.net/flag3d/flag3d.htm>, but Paul Witheridge e-mailed me that I wrongly described the site offering Canadian flag screensavers. Here is the correction I received: "Bob, there was only ONE Canadian flag and a good selection of others including US, UK, and Australia, but the BIG bonus is that it will make a flag out of any BMP [bitmap file] you add to the folder! Too bad you misinformed your readers, and a lot of non-Canadians will miss out on a good screen saver, thinking that it's Canadian only." Sorry for that mistake folks, and I thank Paul for the correction.

Still Good

I'm pretty sure that great Serif offer of free software and mouse for just the cost of shipping is still good. Call 1-800-55-SERIF to order. The various free programs are actually on just one CD ROM. The negative side is that now they often send you special offers for all kinds of products.

Enough Of Those Darn CC Offers

Most homes get an average of at least five credit card offers a month, and I

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think I get that many in less than a week. You notice they are all "Preapproved" too, although I doubt they actually check to see if you are credit-worthy. I sure get sick of them. With the National Do-Not-Call list lurking in the wings (on again, off again twice), the Post Office is offering better discounts to the issuers of major credit cards. Everybody knows that Internet use is hurting the Post Office's mail volume. I read that you can call 1-888-567-8688 and opt out of those preapproved offers by mail now. I get about two a day, often from the same people, in different type envelopes.

More On Long Distance Deals

I previously wrote about cheap ways for long distance calling. Since then, I read about <http://www.onesuite.com> offering 2.9 cents per minute if you use their 800 number. They also have many local access numbers whereby you would get the service for 2.5 cents per minute if there is one in your city. When I looked, there was none in Orlando, but they are in many other cities.

Gerry Wooldridge of Boeing Employees Computing Society e-mailed that she uses the long distance service offered by Costco Wholesale, which has stores all over the country. It is TTI National and is billed separately, so no extra charges are incurred on your phone bill. I don't have the details since I am not a member, but Gerry is well satisfied with the service, and there are Costco membership stores all over the country where you can check on it.

If you have a lot of incoming calls from your own family, such as college students, some providers offer an optional 800 number to call home (I need money Dad). Recommended is Enhanced Communications Group (1-800-254-4060). Check out <http://www.saveonphone.com> who made that recommendation.

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 or freebies I have found or arranged, and my comments should not be interpreted to encourage, or discourage, the purchase of any 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 many interesting articles I have taken from various users group newsletters to my "Articles of Interest" page for viewing or downloading.

Visit the SEMCO website <http://www.semco.org>

Meeting information is posted there before you receive your DATA BUS and any changes will be posted there. The "Hot Links" page contains links to many other sites which have still more useful information (if you have any suggestions for additional links for this page, let us know). The DATA BUS is also posted on our website in PDF format and the links are "live" so you can just click on them instead of typing them into your browser.

There is more, check it out!

Tip: Some Internet Service Providers have a limit on how big an e-mail can be. Bignet says they won't send an e-mail bigger than 6 MB.

Feeling Annoyed with Your PC? Fight Back!
By Steve Bass

Six Irritating Annoyances and Six Fixes
These are actual annoyances contributed by annoyed *PC World* readers. Incidentally, I'll also share below a few time-wasting, funny, and occasionally weird sites I've discovered browsing the Web, just to relieve the tension.

System Restore on Your Desktop
The Annoyance: I took the advice in your book about creating a Restore Point every time I install new software or fiddle with my PC's settings. The hassle is navigating through the Start menu to get to the buried System Restore dialog. There's gotta be a quicker way.

The Fix: It would be handy if Microsoft already had prefab desktop shortcuts for many of Windows' system functions. But it's pretty easy to do it yourself. Dig around and find the System Restore icon and drag it onto the desktop, and when the dialog appears, choose "Create Shortcuts Here.")

As you might imagine, you can do the same for other items. For instance, open Control Panel, right click on any icon, and choose "Create Shortcut." Then answer Yes to the dialog that appears.

If you want to create a shortcut directly from the desktop, right-click any empty spot on the desktop and select New—>Shortcut. In the "Command Line" (98 and Me) or "location" (2000 and XP) field, type *%SystemRoot%\System32\restore\rstrui.exe*. Click the Next button, give your

shortcut a name—like SysRestore, and click the Finish button. Double-click the shortcut and up pops the System Restore dialog.

> **Kill Some Time:** You thought duct tape was just for fixing leaky radiator hoses and covering wall holes under the kitchen sink? Wrong. It's good for decorative wall hangings. See <http://snipurl.com/walltapings>.

Remove Weird Lines in Word
The Annoyance: Whenever I enter underlines by themselves in a Word 2002 document, they're automatically transformed into solid, thick horizontal lines. That's *not* what I want. I think it's a bug in Word, and it's driving me nuts.

The Fix: So you're saying you don't like Word's overly ambitious AutoFormat feature that turns your lines into borders? Because that's exactly what's happening. Every time you type more than three asterisks, hyphens, underscores, or equal signs, Word applies a character or paragraph border style. It's an easy—dare I say, gratifying—fix. From Word's toolbar, choose Tools—>AutoCorrect, click the AutoFormat As You Type tab, and uncheck the Border lines box. (In Word 2000, uncheck the Border box.)

Stop Annoying Crash Reports
The Annoyance: I'm getting *really* tired of XP asking me if I want to send an error report to Microsoft every time a program crashes. I think the company should spend its time *reducing* crashes, don't you?

The Fix: I'll bet Microsoft's tired of taking all your reports, too, but that's another story. Stopping these report prompts takes five minutes. From the

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Start Menu, click the Control Panel, then double-click the System icon. If Windows XP is in the Category View, click Performance and Maintenance, then double-click the System icon.

In the System Properties box, click the Advanced tab, then the Error Reporting button. If you want absolutely no notification about errors, check "Disable error reporting" and make sure the "But notify me when critical errors occur" box is unchecked. (FYI: I leave notification checked so I can see details of the crash, something that helps me troubleshoot system problems.) Click OK, then OK again.

> **Kill Some Time:** Looking for something to do besides worrying about underlining in Word? Try the Snarg site. After the first few images flash on screen, click the tiny pound sign on the right, then click the "squeee" or "framina" link (To exit either, just close the window.) Hint: Move your mouse around and click here and there until patterns emerge, or until your significant other walks in and asks how that defrag is going <http://snipurl.com/snarg>.

Big Hard Drive Corruption
The Annoyance: Ever since I upgraded my PC with a 160GB hard drive, hibernation has stopped working correctly. Every so often, my system annoyingly restarts rather than resuming from hibernation. I've run ScanDisk and defragged the drive, but the problem still occurs. What gives?

The Fix: Someone once said you can never have too much RAM or too big a hard drive. Unfortunately, without a fix from Microsoft, Windows XP will choke—and possibly corrupt data—on any drive that exceeds 137 GB. There's a quick and easy downloadable fix at <http://snipurl.com/atapi1>. And if you're interested in the background, check out Microsoft's Microsoft Knowledge Base Article: 331958 at <http://snipurl.com/atapi2>.

> **Kill Some Time**: Almost everyone gripes about Windows. If you want to file a complaint, however, you'll have to take a number: <http://snipurl.com/complaint>.

Stop Quick Launch Pop-ups
The Annoyance: Whenever my cursor hovers over the Quick Launch toolbar, enormous yellow pop-ups appear with tons of text. It blocks the other icons, and besides, I already know what program the icon represents.

The Fix: The biggest offenders are—surprise, surprise—Microsoft applications. Word's descriptive pop-ups are billboard size, and definitely annoying.

Rather than eliminate the pop-up, shrink it down to size. Right-click the icon in the Quick Launch Toolbar, choose Properties, and change—or remove—the text in the Comment field. Easy, eh?

Ban Annoying Boot Logos
The Annoyance: I just bought a new PC. When the system boots, all I see is the manufacturer's irritating logo.

The Fix: Watching the logo screen is more than just annoying; it's also depriving you of valuable troubleshooting and diagnostic information that's served up while the PC's booting. This annoyance is pretty easily dispensed with, provided your system's BIOS allows you to turn off the logo screen.

As you're booting up, tap the Delete or F1 key. (Pay attention during boot-up: The system usually displays the proper key on screen.) Browse through the various BIOS options until you find something similar to "disable the Logo Screen," and change the setting to not show the logo.

The World at Your Fingertips
By Lee Alexander

All you need is the Internet and a modem to scan the globe for images, gossip, and data—at times, questionable data. The explosive popularity of the Internet has made the technology far reaching, but have you ever wondered how that information finds its way into your computer? And just what is a MODEM?

The acronym is comprised of the primary two functions of the device: to MOdulate and DEModulate a stream of information for communication with another modem. In the sense of our topic, modulation is the conversion of the digital data within the computer to an analog form. An analog signal can be thought of as having an infinite number of levels within a range of amplitude, while the digital format has a discrete number of levels within that range—a handicap ramp vs. a flight of steps, or a rotary volume control on a radio vs. the up/down volume buttons on your TV remote control.

Most of us are aware that our computers run with binary data; i.e., a byte of information (8 bits) is comprised of 0's and 1's. These are the two states of binary—off/on, high/low, black/white—with nothing in between. The early modems (of the 300 bps [bits per second] family) simply converted the two states into two frequencies or tones. Within the computer, data is transmitted over buses—parallel pipelines of multiconductor ribbon cables. The "last mile" of your Internet connection has a single pipeline, the pair of copper conductors that is your telephone line. (Cable and DSL connections require special modems but the principle prevails.) The gobs of data on the multilane highways have to be funneled down to the serial port's two lane highway for transmission beyond your home. Information theory states that the possible amount of information correlates to bandwidth, which correlates to frequency—which brings us to another problem.

The human bandwidth for hearing is from 20 to 20,000 Hz (Hertz—we used to say cps, cycles per second, but that is now reserved as a unit of measurement for things mechanical). Devices employing this range of audio are referred to as HiFi (High Fidelity) systems. Developers of the telephone system realized early on that we only needed a small bandwidth for voice communications, around 600 Hz. The simple modulation of the 300 bps modems hit this barrier. How did we get around this limit? Compression and standards assure that one modem will

be able to talk to another modem on the World Wide Web and other Internets.

It should be of no surprise to you that your computer is fast. The serial port (an intermediary path from the modem to the outside world) is capable of 115,200 bps. The present common modem for home use is the 56kbps version running at slightly less (53kbps) due to FCC regulation. This difference in speed gives the modem time to assemble the data into packets and apply compression algorithms more complicated than the above described simple modulation. Multiple pitches of sound, along with phase relationships, can represent combinations of bits, greatly reducing the volume of content to be transmitted. Compression algorithms look for redundancy in data streams. For example, if the data contains a string of four 0's, a single sound could be sent rather than the four bits. These algorithms are pretty smart. If the data to be transmitted has already been compressed, such as a JPEG image, the program knows not to compress it again.

All in all, modems are considerably slower than your PC. This requires a buffer, a special register to hold data while the modem catches up with the input from the PC. For this feature we need flow control. Flow control can be by software (Winmodem) or hardware. Software flow control uses commands, such as <Ctrl> S to pause the PC and <Ctrl> Q to resume sending. This occurs as the buffer is partially emptied and ready for more data. Hardware flow control uses two channels (separate from the data channel): RTS—Request To Send and CTS—Clear To Send. The hardware version is much preferred over the software version. Line noise or other interference can hamper communications; further, binary files cannot be sent over a modem using software flow control as the file could contain a sequence that would invoke the pause control.

We mentioned line noise as an impediment to communication. This is particularly prevalent in less densely populated areas (such as western North Carolina) where economics forced telephone companies to bundle widely separated neighbors onto multiplexed lines. Squirrels chewing on insulation also do not help. An error correcting algorithm reads the packets created by compression and produces a piece of data known as a checksum for the information to be transmitted. This number is then added to the packet before sending it. At the receiving modem, the packet is read by the same algorithm and another checksum is produced. Unless the checksums are identical, inferring no corruption of the data, the transmission is repeated.

Everything has to have a starting point, even the Big Bang. How does communication by computer get going? The first step, as in any communication, is a common language. Originally developed for the Hayes modem, the AT (for Attention) command set became the standard for modem operation. All commands start with AT; such as: ATDT (use Dial Tone) or ATDP for pulse dialing (rotary phones). Some other examples are: ATH, Hang up; ATA, Answer the phone; ATZ, reset (Zero out) to the default settings. Registers within the modem hold the values of settings, typically with numbers of 0 or 1, for Off or On, or integers for levels. Two speaker control registers are the L and M (for Loudness

and Mute). ATM0 turns the speaker off, and ATL3 sets the speaker's volume level to its highest.

Prior to the establishment of a modem-to-modem connection, all data to the modem in your PC is considered a command. Your connection with the Internet is initiated with a sort of boot-up routine—wake up, dial my ISP, handshake with the ISP's server (that's what all that squealing and squawking is about—the devices are checking how fast they can talk to each other) and check my ID and password. Now all bits to the modem are seen as data. What if you want to send one of those AT commands to the modem? As politeness does not apply to inanimate objects, we simply interrupt their conversation. We do so by sending an escape sequence of three plus signs (+++), which keeps the connection but stops the transmission. Using a program such as HyperTerminal, we await an "OK" from the modem and then can send a command to change the speaker level, to hang up, or to go back online—ATO.

The aforementioned handshake is a line probing protocol to check for line impairment—how much noise is present, is the interference cyclic (the modems can synchronize to avoid transmission during that period), and is more than one digital-to-analog conversion employed. In the last case, transmissions are restricted to no more than 33.6 kbps. To briefly summarize the process, let's look at the connection phase:

• Command to modem: wake up—modem initializes to default settings.

• Dial my ISP—off-hook the phone line, wait for dial tone, generate the dialing tones (perhaps add a digit to get an outside line) by the modem's DSP (Digital Signal Processor), and place the call.

• ISP's server modem answers with a carrier tone.

• The modems "talk" and agree on settings to optimize transmissions.

• The modems decide which compression table they will use.

• To terminate communications, one of the modems drops its carrier tone. Since they both monitor this signal at all times, the other modem then hangs up.

If your "call" is to access a web site, your browser software will ask your ISP's server to request a connection to the website's server. Now that we have power to communicate between two computers, your PC and your ISP's server, let's follow a "conversation."

1. Your PC checks that the modem is set to send a transmission.

2. The data then streams, a bit at a time, into the modem's buffer.

3. The modem looks at the buffer contents, groups bits of data together, runs the error correcting algorithm, and generates a checksum, adding it to the packet.

4. If the data is compressible, the compression algorithm looks up the previously agreed upon table to encode the complex sounds for the data to be transmitted.

5. The DSP then generates the sound indicated.

6. The receiving modem checks the sounds against its compression table and decompresses the packet into a string of bits.

7. This string is then checked by the receiving modem's error correcting algorithm, comparing the checksums.

8. If the checksums are valid, the data is then passed on to your computer program.

Earlier, we mentioned compression and standards to assure compatibility among modems. Along with the specification of speed, there is another parameter: the V.nn of the ITU (International Telecommunications Union). The first 56kbps modems came in two models: X2 from US Robotics and 56kflex from the Open 56k forum that included Lucent Technologies and Rockwell Semiconductor Systems. Before buying a modem, you had to check with your ISP as to which system they employed. In February of 1998, the ITU created the universal V.90 standard. Implemented in September, it specified parameters common to both systems. Other specifications were: V.34, which set the 28.8kbps standard with fallback to 24.4k and 19.2k; V.42, for better error correction; and the latest, V.92, incorporating a quicker connect time and Modem-on-Hold (MOH) to accommodate call waiting.

The devices can be external, internal, or PC Card modems. Regardless of form, a modem requires three basics:

• Interface—a power source, connection to the computer, and a communication line.

• DSP—the Digital Signal Processor to perform the modulation/demodulation, compression, and error checking routines.

• Flow control—hardware or software; a controller must be present to affect the flow of data between the DSP and the computer.

Perhaps you never realized how many modems we live with in today's world. The subject we have discussed is that of POTS (Plain Old Telephone Service) modems. Think about ATMs, gas stations' "pay outside," swiping a credit card at the supermarket, and even

traffic light systems. Broadband modems (cable, DSL, satellite) are now available to many of us. But, until availability, reliability, and price are more attractive to the general populace, POTS modems will be with us for some time to come.

Speaking of broadband, Les Cottrell of SLAC recently set a land speed record on Internet II of 2.3 Gbps across the Atlantic Ocean. That is equivalent to getting 180 700MB-full CDs in one minute.

Lee Alexander is Secretary of the Macon Users Group in Franklin, North Carolina <www.maconusersgroup.org>.

MSCONFIG (Microsoft Configuration Utility)
Secrets To Your Computer Startup
By Bruce Cramer
Alamo PC Organization, Inc., San Antonio, TX

Do you ever wonder what takes your computer so long to start up? In most cases the reason is that computer manufacturers and software developers think you need, or even want, all those programs and accompanying little icons to start up every time you turn your computer on. By the time Microsoft, Compaq, or whoever your computer manufacturer is, and a few software companies are done with your computer you probably have 10 or more different programs running into each other every time your computer starts. Most of the programs that start up when your computer starts up are being shoved in

there vying for room for no reason at all. But you can prevent that. I used to work as a computer technician at a national computer chain store where they charged a pretty penny for the following little operation but you can do it at home armed with a little knowledge.

First of all, MSCONFIG stands for Microsoft Configuration Utility. If you click on Start, run, then type MSCONFIG you will see 6 tabs. On the far right you will see Startup.

Click on the startup tab, and there you see what loads up when your computer starts. Many applications put items in your startup group that are absolutely unnecessary such as Real Player streaming audio, calendar birthday reminder, bill payer reminder to name a few. Even if you have 512 megabytes of RAM or more I don't recommend that you load any unnecessary applications on startup; hopefully you will know about aunt Jenny's birthday before your computer tells you. Its like the guy who is unpacking the family car at the beach. He dropped the family off near the water so they are there ready to have fun, but dad has to go park the car ½ mile away, then walk through the hot sand loaded down with the sun tan lotion, towels and ice chest. Do you really think he needs to carry any more? Even without the beach balls and rafts he's lucky if he doesn't fall and spill the sun tan lotion all over the towels—yes that would be a mess.

After you turn your computer on it has to wake everything up (BIOS, network card, ports, etc.), load all its drivers, the bare essential applications, and the fonts. The only startup items you absolutely need are:

ScanRegistry
TaskMonitor
SystemTray
LoadPowerProfile
Your antivirus software

There is an extensive and regularly updated list of startup files and what they do on a web site at <http://www.pacs_portal.co.uk/startup_pages/startup_full.htm>. As of February 27, 2003, this guy had 2,277 files listed. I applaud his enthusiasm, but he really should get out more often. The general rule of thumb is—if in doubt leave it alone. After you uncheck the boxes of unneeded items and click Apply, OK, you will be asked if you want to restart or exit without restarting. You can do either, but you will not reap the benefits of unloading the items until after you restart. After you restart your computer Microsoft will give you a message that says you have run the MSCONFIG utility and wants to know if you are satisfied with the results. If you do not want to see this message again, check the box. You should notice an immediate improvement in performance and stability, all for free, and you did it yourself the all natural way without adding more programs such as Ram Booster or an "optimizer" program, which only leads to more memory use and possible software conflicts.

MSCONFIG is not available for Windows 95, NT, or 2000. However there is a free "Startup Control Panel" at <http://Mlin.net> that will work just as well for Windows 95, and if you are using Windows NT or 2000, you can download the official Windows XP version of MSCONFIG on the Tech Guide Web site.

Bruce is A+, Network+, I-Net certified as well as a Microsoft Certified

CMOS
By Richard Maybach
Brookdale Computer Users Group
Lyncroft, New Jersey

When you first turn on your PC, no programs are loaded into RAM; instead, a program, called the Basic Input Output System (BIOS), which is permanently stored in Read Only Memory (ROM), begins the boot process. It consults a small non-volatile memory (meaning that it doesn't lose information when you shut off the power), which stores your PC's configuration. This memory is called CMOS, because it was originally implemented using Complementary Metal Oxide Semiconductors. It keeps such information as the configurations of your hard and floppy disks, from which disks to boot, the date and time, power management (what to shut down after an idle period), and configurations of any non-plug-and-play expansion cards. You must edit this if you add hard or floppy drives or if you add non-plug-and-play expansion cards. Because making an error here can disable the PC, many people are reluctant even to look at it. However, with a little care you can safely explore CMOS and change the data to fit your needs.

To access the CMOS configuration program, watch the screen carefully as your PC boots. You will see a brief message on what keys to press to configure the computer. Common ones are F1, F2, F10, Esc, Ins, and Del. You may have to reboot more than once to catch the message. Once you know what to do, place your finger over the correct key or keys and reboot again and repeatedly (once a second or so) press the key(s) until you see the CMOS set-up screen.

Before you do anything, carefully read everything on the screen. Note especially the instructions, usually at the bottom. You will see there are two ways to exit the program, one saves any changes you've made, and the other discards them. The second one is the key to safe exploring. You should always exit without saving changes, unless you are sure what you've done is correct. So long as you do this, there is little chance of creating problems.

There are three kinds of items on CMOS screens, parameters that you can edit, action buttons, and new pages that you can select. With some BIOSs, you change screens with a key press (ALT-P on my desktop, for example), and these won't have items of the last type. Approach action buttons with care. Two common action buttons are "Load BIOS defaults" and "IDE auto-detect." The first sets all the parameters to values the motherboard manufacturer thinks are reasonable. They probably aren't all correct for your PC, and if you select this, you may have to reset some parameters. The second queries the hard disk and sets up the BIOS parameters to match. This is almost certainly safe,

unless your hard disk was set up incorrectly.

Your first task should be to navigate all the CMOS pages (there are usually several) and write down or print everything you see. You probably can use the print-screen key for this, but because modern BIOSs use graphics on the CMOS screen expect to see many gibberish characters. Once you have recorded all the parameters, you are safe, since you can restore any incorrect parameters.

Now that you can access the CMOS set-up, what can you do there? (There are many different BIOSs, and yours may differ somewhat from this.)

Find out about your hardware: It lists such things as CPU type and speed, cache sizes, video controller type and memory, disk sizes, and sound card type.

Change the boot order: You can set from which disks and in which order your PC will try to boot. I prefer to boot only from the hard disk. On those rare instances when I really have to boot from a diskette or a CD-ROM, I change the boot order only as long as I need it.

Configure the POST: The first thing your BIOS does on boot-up is to run the Power On Self Check. This can be either elaborate or minimal. I prefer minimal since it decreases boot time.

Configure the ports: You can enable or disable your infrared port, configure the printer port (to SPP, EPP, or ECP), and enable or disable the COM ports. Usually you set the printer port to ECP, but you may have to change it if you connect different devices to this port. Internal modems that use the ISP bus use the same addresses and IRQ as one of the serial ports. When you install one, you'll have to disable the appropriate COM port. You will also

have to set up the plug-and-play features to tell the BIOS that it must not try to allocate the addresses and IRQ that the modem uses. See your computer or motherboard manual for the instructions if it isn't clear on the CMOS screen. You have to configure plug-and-play for any non-plug-and-play interface card. Fortunately, these are becoming rare these days.

Configure a hard disk: When you add or replace a new disk, select the "IDE Auto-detect" feature and let the BIOS load the correct parameters. (The wording of this feature may differ for your particular BIOS.) If the disk is very old, you will have to enter the parameters by hand.

Set up power management: Modern PCs can shut down the display monitor and hard disk if you leave them idle. You can set the length of these periods and what happens when the period ends. This is more important for laptops than for desktops, and they can cause problems with some programs. If you experience problems after changing these parameters, just change them back or disable power management altogether.

Set up security: There are two passwords: one is needed to run the PC and the other to modify CMOS. Usually both are disabled, but you can set them to keep others from using your PC.

It is not difficult to set up CMOS to reflect your own preferences, and because you can always exit the set-up program without saving changes, there is little risk, especially if you've recorded the correct parameter values.

Reprinted from the February 2003 issue of BCUG BYTES, newsletter of the Brookdale Computer Users Group <http://www.bcug.com>.

Are You Guilty of Piracy?
An Editorial

By Art Shady
Editor, PC Register
Tennessee Computer Society

Of course I am not talking about bearded men living on ships with tattoos, hooked hands, and wooden legs. In the software industry, piracy is someone (anyone) who copies a software program, whether they bought it or not. Most End User License Agreements (EULA's) allow you to make one backup and use the program on one other "portable" computer like a laptop. Some don't even do that though; some state you can't sell or rent the program, or use it on more than one computer ever.

What would it be like if you applied such a restrictive condition to other things we buy—like a car for instance. Ok, here's a car; say it costs you 30 times what it costs to make it in Detroit. But if you buy it, you can drive it, but your wife and children may not. You can't sell or rent this car, and you really don't own it. Then, in the software case, there's a twenty-five cent disk, with ten dollars worth of packaging and twenty dollars worth of printing that sells for eight hundred dollars.

In the early eighties, when DOS was on a floppy, and a floppy was on the IBM 8088 with 256k RAM, Microsoft, a baby company that I wish I had bought stock in, could largely attribute it's existence and future to a program called Lotus 1-2-3. You put your 5 ¼ inch floppy disk in to load DOS 2.x (Windows was not yet available), and it loaded DOS into RAM. Then you took that disk out of the floppy drive and put in another floppy with Lotus 1-2-3 on it, and you built a spreadsheet on an amber monitor (color monitors were too expensive to justify).

On such a system, and an IBM System 32 Mainframe that used programs written in Cobol, I cut my teeth with computers. My position as the Inventory Control Supervisor afforded me the opportunity to learn Lotus 1-2-3, the hottest thing in business software at the time. Businesses bought computers that ran DOS just to use Lotus 1-2-3. Lotus was a little slow in developing a Graphic User Interface (GUI), and Microsoft seized the opportunity to excel their Excel program and develop an office suite we know as MS Office, which ultimately dwarfed Lotus and upstart Quattro Pro.

Moi, a Pirate?

Back in those early years I pirated (copied) the Lotus 1-2-3 DOS version that I used, primarily to help me learn how to use it. This had benefits to me for educational purposes. The free-use clause in the copyright law excludes educational use, but it only applies to educational institutions. I think it should apply to all not-for-profit use. Most loss of revenue due to "piracy" takes place overseas by counterfeiters, not by Joe Blow in his living room. The non-business consumer, who couldn't copy an extremely expensive program, most of the time would never buy it anyway. They would just buy a cheaper program.

This is the reason the software companies go after the corporations that "pirate" software rather than the common man. It's all about money. Corporations have deeper pockets, and prosecuting individuals would be bad

public relations. But aside from that, the software companies' "application of the law," which is usually the one held up by the courts, makes most everyone in America from age 9 up a criminal.

My copying Lotus and learning it had benefits for Lotus too. I was able to master it and promote it in other companies. When I began to use it in a personal business for profit I bought a legal copy. I then felt it was no longer for education, and if I used it in any way to profit, I should purchase it. I still have the old DOS version of Lotus 1- 2-3 on 5 ¼ inch floppies, which are pretty much worthless now, but I paid what was an enormous amount of money for me at the time. I bought Lotus Smart Suite too, more recently, but Excel's dominance of the market has made the price of Lotus and Corel Office pretty cheap. I use mostly a legally purchased copy of Excel these days. However, if you apply the law literally the software developers way, I committed a criminal act.

So What's the Solution?

Back in the early days, when you actually got a printed manual with everything, it seemed easy to me: make software cheap (Under $50 for anything), and it would have been more expensive to duplicate manual and software than to buy it with a manual. It seemed to me that the price gouging some software companies were guilty of, in my opinion, made them the real "pirates." This may have been rationalizing, but there is a lot of truth to it. I believe a company should be able to price fix, even if they have no competition, or drive the competition out of business, as long as when I pay their price the property is mine.

That means I can copy it, loan it, resell it, etc. just like a car. If I can't do all that, then just like there are usury laws to prevent companies from exploiting the poor, there could be laws fixing software prices within everyone's income level. That's not going to happen, nor should it, but the software companies have been having their cake and eating it too, and the individual who can't afford five, six, eight hundred or more dollars for one program has been demonized as a "pirate." I leave it to you to decide who is the pirate.

These days software vendors have moved away from fancy packaging and no longer provide manuals, etc. Help and upgrades are online, and they are distanced from the customer. The public has rebelled against inequities in the law, and the backlash caused by the software developers' demonization has driven the public to "pirate" even more.

Today a large percentage of computer users use KaZaa.com and imesh.com to download anything they want. Napster made a big noise in the news a year ago, but morpheus.com makes napster.com look mild in comparison. Why do some sites get away with it and others don't?—because they are not located in America. They are hosted in a country where America has no jurisdiction. Software prices continue to get ridiculously high, but the software industry would be quick to blame this on all the money they are losing to "pirates." There's another factor too—what is ethical on both sides of the debate? Laws change, what was legally acceptable last year may be illegal today and vice-versa. This brings us to the question of what should be legal, or what is ethical. Are the consumers getting a fair shake; are the

software developers who charge enough for some network solutions to buy a house getting a fair shake? You decide.

Peter Coffee wrote an article in eWeek Magazine recently, where he said, "When legislators make foolish laws, or courts enforce laws foolishly, they teach people to justify doing whatever they want. In particular, when teen-agers spend their formative years acquiring contempt for laws that are made by the ignorant at the behest of the selfish, I fear for the consequences when those young people become our next generation of leaders."[EWeek, February 3, 2003, page 45.]

Mr. Coffee has a good point. The music industry and the software industry have failed to understand their reason for being. I am not trying to encourage anyone to "pirate" software, but I would like you to realize that the issue is extremely complex, and the moral ramifications are vastly vague. If the laws are changed, I believe they should be relaxed rather than tightened, but, of course, the industry has all the lobbyists and the power of money on it's side. Bribing a politician is illegal, unless you are a lobbyist.

Reprinted from PC Register, March 2003, the Official Journal of the East Tennessee Computer Society. Article reproduction coordinated by Steve Bass, author of* PC Annoyances: How to Fix the Most Annoying Things about Your Personal Computer, *O'Reilly Press. <*http://snurl.com/annoyances*>.
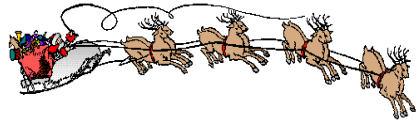
Letter From The Editor

Some wishes I might have for Christmas:
    1. A computer store somewhere near Romeo.
    2. Less spam.
    3. Longer life laptop battery.
    4. Fewer McAffee popups.
    5. Faster boot-up.
    6. DSL in my area.
    7. A class to teach me Photoshop.
    8. More feedback from SEMCO members.
    9. More young people in SEMCO.
   10. More people in SEMCO.
   11. More outside speakers in SEMCO.
   12. Fewer mistakes in DATA BUS for proofers to find.
   13. A digital camera.
   14. A neat pocketknife.
   15. A mini USB Flash Drive.
   16. One of those blue lighted balls with the date, time, and message on it like Warner Mach had at a recent SEMCO meeting.

                                          Bill

Moms
(Making the rounds in e-mail)

Answers by school age children:

Why did God make mothers?

    1. She's the only one who knows where the scotch tape is.

    2. Think about it, it was the best way to get more people.

    3. Mostly to clean the house.

    4. To help us out of there when we were getting born.

Why did God give you your mother and not some other mom?

    1. We're related.

What ingredients are mothers made of?

    1. They had to get their start from men's bones. Then they mostly use string, I think.

How did your Mom meet your Dad?

    1. Mom was working in a store and Dad was shoplifting.

What did Mom need to know about Dad before she married him?

    1. His last name.

Why did your Dad marry your Mom?

    1. She got too old to do anything else with him.

Who's the boss at your house?

    1. Mom doesn't want to be boss, but she has to because Dad's such a goofball.

What does your Mom do in her spare time?

    1. Mothers don't do spare time.

Describe the world's greatest mom?

    1. She would make broccoli taste like ice cream!

    2. She wouldn't make me kiss my fat aunts!

What would it take to make your Mom perfect?

    1. On the inside she's already perfect. Outside, I think some kind of plastic surgery.

BOARD MEETING
11/9/2003
Carol Sanzi

Board Members Present

President Gary DeNise, Treasurer Roger Gay, Secretary Carol Sanzi, SIG-IBM Co-Chairman Tom Callow, Warner Mach representing SIG-IBM Intermediate Chairman Jack Vander-Schrier, Publications Committee Chairman Bill Agnew, and Members at Large Bob Clyne and Chuck Moery. Also attending were members Richard Jackson, Richard Levitski, and Rene Jacque. The meeting was called to order at 12:08 p.m.

Old Business

Treasurer Roger Gay reported that the bank balance is $5194.76. SEMCO's membership stands at 86. Richard Gach's and Dr. William L. Landrum's memberships expired in October. It's also time for Barbara Dubrinsky, George Kargilis, and Clarence O'Neal to renew their memberships.

New Business

Bob Clyne contacted Oakland University about renewing our room usage agreement. However, no correspondence has taken place yet.

A discussion took place regarding the removal of the ad in the DATA BUS offering a $1.00 discount to the A1-Super Computer Sales shows. It was decided to leave the ad running.

Bill Agnew said he would post nomination and election announcements in the DATA BUS for December. If you are interested in supporting SEMCO by running for a board position, please contact any board member.

Bob Clyne moved to adjourn. Tom Callow seconded the motion, and it was carried. The meeting adjourned at 12:40 p.m.

SPECIAL INTEREST GROUPS (SIGs)

SIG-IBM
Tom Callow
Warner Mach

Dec. 14: Microsoft Office 2003— First Look: SIG-IBM Co-Chairman Tom Callow will provide a first look at some of the new features of Microsoft Office 2003.

November Meeting Attendance: 31

SIG-IBM INTERMEDIATE
Jack Vander-Schrier

Dec. 14: Free Utilities For Your Computer: SIG-IBM Intermediate Chairman Jack Vander-Schrier will demonstrate how to make your life a little easier at no cost to you.

NOVICE-IBM GROUP
Rotating Volunteer Hosts

Dec. 14: Q&A: Discussion directed by the Audience.

SIG-ADVANCED
Franz Breidenich

Jan. 5: 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. **Topic: Wide ranging discussion of computers and computing.**

January 2004 DATA BUS DEADLINE (7th day after meeting)
SEMCO Input and Members' Ads — Deadline: Sun, Dec. 21, 11:59pm.
Members' personal ads are free. To mail, use Editor address on Page 2; e-mail address: <agnew@bignet.net>. PLEASE send to arrive sooner than deadline.
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)
Jan. 24–Saturday, 10am-noon (No meeting in December); W. Bloomfield Twp. Library, 4600 Walnut Lake Rd., 1 mile west of Orchard Lk Rd., Info: Jack Lockman at <thunder@tir.com or 313-341-8855.

COMP (Computer Operators of Marysville & Port Huron)
Jan. 7–Wednesday, 7 p.m. (1st Wednesday): Rm 201, Clara E. Mackenzie Library-Science Bldg, St. Clair Community College, 323 Erie St., Port Huron. Ron Walters, 810-679-4144. Web: <http://www.bwcomp.org>. Topic: How to Burn a CD simplified.

DCOM Computer Club
Jan. 9–Friday, 6:30 - 8:30pm (2nd Friday); Henry Ford C.C., Patterson Tech Bldg, Ford Rd/ Evergreen, Rm T143, Parking Lot C. Info: Doug Piazza 313-582-2602.

DPUG (Detroit Palm Users Group)
Jan.8–Thursday, 7pm (2nd Thursday); Kelly Services Building, 999 West Big Beaver, corner Crooks & Big Beaver Rds, Troy, MI. <http://www.dpug.org>. **Free membership.**

FACE (Flint Area Computer Enthusiasts)
Jan. 13–Tuesday, 6:30pm (2nd Tuesday); Kettering Univ. Academic Bldg. Rm I-817 (enter Security Door, back of building by parking lot). <http://www.gfn/FACE/index.html>.

MacGroup Detroit
Dec.21–Sunday, 3pm-5pm (3rd Sunday); Bloomfield Twp. Library, 1099 Lone Pine Rd. (corner of Telegraph Rd.). Info: Terry White, <terry@macgroup.org> or 313-571-9817. <http://www.macgroup.org>. Topic: Mac OS X 10.3 Panther.

MacTechnics, (MAC User Group)
Dec. 13–Saturday, 10:00am; Annual Holiday Party, Auction, and Raffle. 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)
Dec. 18–Thursday, 7pm (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
Jan.8–(2nd Thur), MAC SIG; Jan. 8–(2nd Thur), Golden Masters SIG; Dec. 18–(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 at Oak Park Recreation Bldg., Oak Park Blvd. west of Coolidge.

SHCC (Sterling Heights Computer Club)
Jan. 6–Tuesday, 7:30pm (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.)
Jan. 8–(2nd Thursday), 6:30-9:00pm; Zauel Library, Shattuck & Center Rds., Saginaw. Web: <http://www.svca.org>.

Wayne State U. Mac User Group
Dec. 13–(2nd Saturday), 10:00am-Noon (2nd Saturday); at Mich.com, 21042 Laurelwood, Farmington. Info: Lorn/JoAnn Olsen 248/478-4300 or Denny MeLampy 248-477-0190.

**NOVEMBER
REFRESHMENT
DONORS**
Warner Mach, Coordinator
Betty MacKenzie
Carol Sanzi
Roland Maki
Gary DeNise
Richard Jackson

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	**MS Office for Windows:** Callow
AutoCAD: Comptois, Gay	**MS Word:** Clyne
Genealogy: Cook	**Networking:** Callow
IBM PC Hardware Issues: Clyne, Gay, Yuhasz	**Novell Netware:** Yuhasz
Operating Systems: Callow, Clyne, Yuhasz	**Quicken:** Clyne, Gay
MAC Hardware and OS Issues: Yuhasz	**Geocaching:** Cook

Clyne, Bob—810-387-3101, 9am-10pm .... clyne@lodden.com
Callow, Tom—248-642-1920 9am–5pm .... tcallow@vmddlaw.com
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
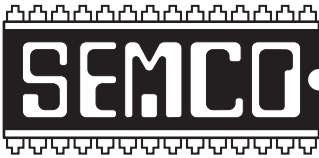
SEMCO CALENDAR—December/January

SCIENCE & ENGINEERING BUILDING, OAKLAND UNIVERSITY, ROCHESTER, MICHIGAN

DECEMBER 14–SUNDAY (Meet 2nd Sunday)

SEMCO Board Meeting at 12:00 noon, **Room 164.** For Officers and SIG Chairpersons. Other members are invited to attend.

SEMCO General Meeting at 1:30 pm, **Room 164.**

Special Interest Groups (SIGs)

SIG-IBM 1:45 pm, **Room 164. Program: Microsoft Office 2003— First Look:** SIG-IBM Co-Chairman Tom Callow will provide a first look at some of the new features of Microsoft Office 2003.

SOCIAL PERIOD 3:15 pm, **Room 172.** Refreshments! (Reminder: We must maintain a neat environment.)

NOVICE-IBM GROUP 3:45 pm, **Room 168. Program: Q&A: Discussion Directed by the Audience.**

SIG-IBM Intermediate 3:45 pm, **Room 164. Program: Free Utilities For Your Computer:** SIG-IBM Intermediate Chairman Jack Vander-Schrier will demonstrate how to make your your life a little easier at no cost to you.
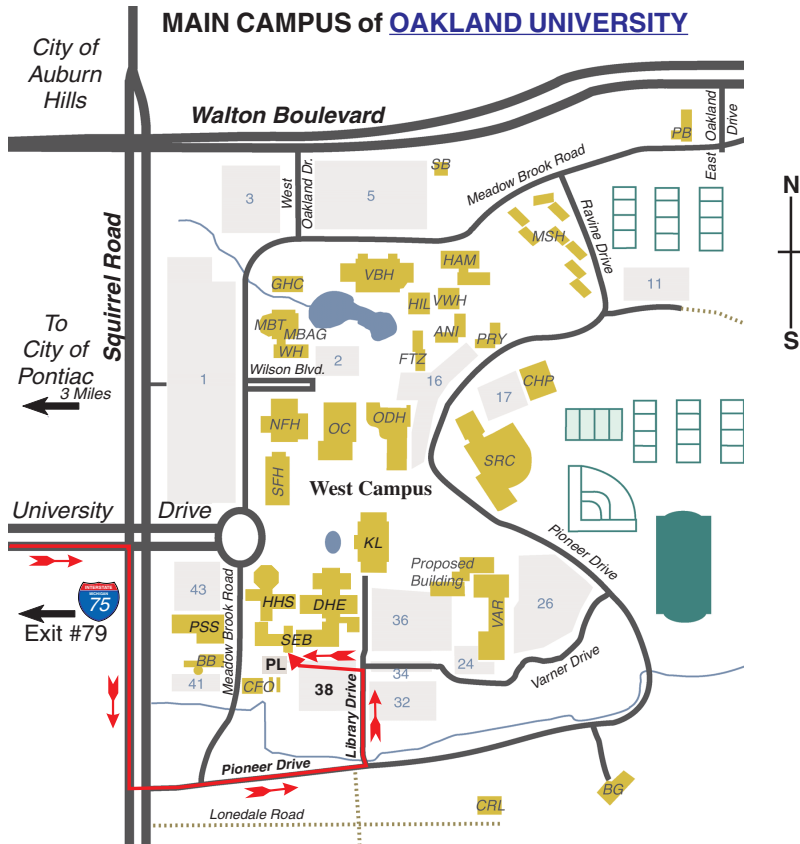
JAN. 5–MONDAY , 6:45 pm (Meets first Monday), **SIG-ADVANCED** Oak Park Public Library, 14200 Oak Park Blvd.,Oak Park, MI. Phone: (248) 691-7480. Directions: Oak Park Blvd. is 9 1/2 mile Road, located west of Coolidge. Best route from freeway: take I-696 to the Coolidge exit. Head south on Coolidge for 1/2 mile to Oak Park Blvd., and turn right. Info: Franz Breidenich 248-398-3359. **TOPIC: Wide-ranging discussion of computers & computing.**

JAN. 11–SUNDAY (Meet 2nd Sunday). **SEMCO**, 1:30 pm. **Topics: To be announced.**

http://www.semco.org

PUBLIC INVITED

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

MAIN CAMPUS of OAKLAND UNIVERSITY

City of Auburn Hills

Walton Boulevard

To City of Pontiac → *3 Miles*

Squirrel Road

University Drive

Exit #79

West Campus

Proposed Building

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
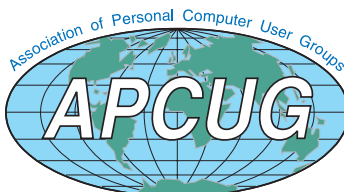
The meetings at Oakland University
are sponsored by the University's Academic Computer Services (ACS).
SEMCO thanks Oakland University and ACS for their assistance.

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

SEMCO (future meetings)
December 14
January 11

SEMCO: A Community Organization
Helping People for the 21st Century