Bits of Blue

June in Tampa
Watering our lawns
(once a week)

Meeting

**Bill Preece
Speaking on Linux**

**June 14, 2000
6:00 PM
Museum of Science
and Industry
4801 E Fowler Ave.**

INSIDE THIS ISSUE

Meeting Preview: At the June meeting we will have a presentation on Linux by Bill Preece of the Suncoast Linux User Group (http://www.suncoastlug.org/). Mary Sheridan, as usual, will conduct a 30-minute Windows discussion at the beginning of the meeting.

President's Message

*By Mary Sheridan, President, Tampa PC Users Group
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Half of the year 2000 is already gone and half of my year as President. I'm enjoying it, and I hope I'm doing a good job

We went to ITEC (Information Technology Exposition and Conference) at the Convention Center recently. It wasn't as large as I had expected, but it was interesting nonetheless. I met the President of the Tampa Bay Computer Society, Dave "Doc" Dockery. The group is headquartered in Clearwater and meets at the Clearwater Central Catholic High School. They had a table for the event, and Doc said that people were asking if there was a group in Tampa. He was giving them our web address. The following day I took our brochures down there, and they handed them out for us. What an amazingly philanthropic thing for them to do. I want to extend a great big "Thank You" to them and hope we can find some way to repay them in the future.

The garage/rummage sale with the Greater Tampa Bay Computer User Group (Brandon) for this summer has been postponed until December. MOSI has some old equipment they would like to sell, also. This sale will enable all of us to clean out some of those old components and software and help the user group at the same time. We decided it would be better to have the sale after the "Snowbirds" return for the winter.

July 12: To be announced. Check our web site later.

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Minutes of the May Meeting

By James Weber, Secretary, Tampa PC Users Group
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Our meeting started with the Windows SIG. Just like the news this month, the "Love Bug" virus was the first point of discussion. Following that was a discussion on setting up a network to share a high-speed Internet connection at home. It was suggested a Road Runner connection can be run straight into a hub with the other computers connect to the hub to get on the net. One possible problem was two computers might not be able to access the net at the same time. Another option would be to run your Internet connection to the network card that came with the RoadRunner package, and then add a second network card to connect to the hub. To connect the other computers to the Internet through your first computer, connect them to the hub and install proxy server software on the main computer or install Windows 98 SE with its Internet connection Sharing enabled on that computer. Of course, these solutions require knowledge of how to implement a small local network. With the growth of high-speed Internet connections, security is a growing concern also. Road Runner is an always-on connection that shares a network environment with all other Road Runner customers in your area. Anyone with basic hacking skills can "surf" the network and see your hard drive. Another security issue that is also common to DSL is a static IP address. Hackers can find this and either attack you directly or become you when your connection goes down. A precaution would be to install a firewall on your computer. I'm not talking about the stand-alone machines that filter e-mail and web sites you'd find in large companies. Firewall programs are available for the home user and are installed directly on your machine.

The general meeting started at 6:30 PM with our president passing out sign up sheets and making announcements. Our demonstration of scanning devices didn't go far due to a software issue with the computer Office Depot brought in. We did have our door prize drawings. Brian Lance won a Visual C++ and a gardening program, William Coleman won a T-Shirt, Nellie Lim (one of our guests) won a resource CD, and Gary Ennis won a copy of Drive Image.

The meeting closed at 8:00 PM. ◆

The presenter at the next meeting (June 14th) will be Bill Preece. He plans to talk about the Linux operating system, and I'm looking forward to hearing what he has to say.

The Pocket PC has Truly Arrived

By Larry Anders, Librarian, Tampa PC Users Group
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Originally I went running and yelling, "The Palm is dead", and I wasn't referring to the palm tree in my yard that's dying because of this draught we're currently in here in the Tampa Bay area. I was talking about the Palm Operating System. More later on this….

I had read an article in the Wall Street Journal (WSJ) a few months back that really caught my attention when it described Microsoft's third try at Windows CE, their operating system based on the Windows platform and aimed at the palmtop and handheld market. This newly released operating system is now called PocketPC, and the new devices pictured above are coincidentally called PocketPCs also. Heretofore most palmtops were just PDAs (personal digital assistants) or PIMs (personal information managers) but not anymore, and that's what caught my attention in the WSJ article. I travel for a living, and although my notebook isn't all that heavy, by the end of a long travel day it feels like it weighs a ton. Most of the time I just carry my notebook for the ability to check email and access the web, but not anymore. Now I can carry something much lighter and be able to check my mail and browse the Internet anywhere I go.

After reading in the WSJ article about what was to come in the future, I started doing my research on these new PocketPCs and decided that I wanted an HP Jornada 540 series color pocket PC (HP PPC). It's the one on the right in the picture above. Symbol, Casio, and Compaq units are also pictured with it. Why the HP PPC? Name recognition, features included, highly rated bright color screen and the fact that it is one of the first to be released.

The HP545 was already available when I decided I *needed* one, but the 548 was due out May 1st. Well, I called HP on May 1st, and I had a 548 in my hand by May 3rd. I never have been one to wait too long for new technology. Two days was a lifetime.

This new line of handhelds is actually a PocketPC, not just a PDA. I have been a 3Com Palm user for about three years now, and although I had never used a PDA, or even any type of PIM before my Palm III, I could not live without one now. The Palm has been my right hand for quite a while, and I get a sinking feeling in my stomach when I realize it's not close by.

When I first got the HP548, and realized it could do everything my Palm III could do and so much more, I immediately decided the "Palm was dead." Then I read an article about the new PocketPC operating system in a recent PC World magazine that made me stop and re-think about the entire situation. I don't agree with the author's conclusion that most Palm users aren't willing to "sacrifice the simplicity of the Palm for the fripperies

of Windows CE" (PC World, June 2000, Alexandra Krasne). First of all, what the heck is a frippery? And second, it is no longer Windows CE. It is a revamped operating system that has obviously been retooled for speed. My new HP548 has a 133Mhz 32-bit Hitachi processor and the new operating system is permanently on the 16 MB ROM chip. It also has 32MB of RAM.

The screen on my 548 is a 240 x 320 pixels, 4,096 colors (it was originally supposed to be 65,000 colors), LCD color display. With Microsoft's ClearType™ technology, on-screen reading approaches the quality of reading text printed on paper. Input into the PPC is provided by a pen and touch interface using the included stylus that has a nickname of "string-bean", which is stored neatly in the flip-top lid. You can enter text utilizing handwriting recognition software or an on-screen keyboard that is much more functional and useful than the keyboard on the Palm. On the Palm I immediately began using the handwriting recognition but so far on the 548 I have stayed with the keyboard input. The battery is a built-in Lithium-ion rechargeable with an 8-hour battery life. The unit recharges in a little over an hour. Input/output consists of RS232 serial, IrDA infrared, USB, CompactFlash type 1 card slot and an AC input jack. There is an external audio speaker and a microphone for the voice recorder. There is also a stereo earphone jack for the digital audio player. It is slightly larger than my Palm III and weighs less than 9 ounces.

The software (http://www.hp.com/jornada/products/540/prod_software.html) included is:

- Microsoft® Windows® for Pocket PC
- Microsoft Pocket Outlook (manage calendars, tasks, contacts, and e-mail)
- Microsoft Pocket Internet Explorer (browse Web pages, AvantGo™ Mobile Channels, Mobile Favorites Synchronization, Microsoft Mobile Channels)
- Microsoft Pocket Word (view and edit Word documents)
- Microsoft Pocket Excel (view and edit Excel documents)
- Microsoft Pocket Money (manage your stocks and checking account)
- Microsoft Pocket Streets (view U.S. maps)
- Microsoft Reader (read electronic books)
- Microsoft Windows Media Player (enjoy digital music and more)

(Pocket………Continued from page 3)

- Landware OmniSolve (Business/financial calculator)
- Conduit Technologies' PeaceMaker 1.0 (exchange contacts with other PDAs via IrDA – *even the Palm*)
- Socket Communications™' drivers for Ethernet and digital phone cards
- HP settings, backup, home, task switcher, game buttons, Microsoft ActiveSync® 3.1 (synchronize files with your desktop PC)
- Microsoft Outlook 2000 (full retail desktop version)
- AOL Mail 1.0 (send and receive AOL e-mail)
- Yahoo! Messenger (send and receive instant messages to online friends and check news, stock prices, and more)
- Sierra Imaging's Image Expert (view, edit, and share digital images)
- MusicMatch JukeBox 4.4 (record, organize, and play digital music)
- Emusic.com (free sample digital music tracks)
- AudiblePlayer for Windows PocketPC 2.0 and Audible-Manager 2.5 (if you don't feel like reading, listen to audio-books and news)
- ZIO Interactive's ZIO Golf 1.1 (play realistic 3D golf)
- Inso's Quick View Plus (view e-mail attachments in Word, embedded tables, and selected graphics formats)
- HP's JetSend 2.0 for Windows PocketPC (exchange information with digital cameras, printers, and more)
- PhatWare's HPC Notes 3.03 Lite and Professional (create and organize notes)

I could go on and on, but if you really want to see what it's all about go to http://www.hp.com/jornada/tour/index.html and take the tour. Pocket PC technology is available with the following devices: HP Jornada 545, HP Jornada 548, Casio E-115, Casio EM-500, Casio EG-80, Casio EG-800, Compaq iPAQ, and the Compaq Aero 1500.

Do I still think that the Palm is dead? … No, not really. Do I think that most Palm users aren't willing to "sacrifice the simplicity of the Palm for the fripperies of Windows CE?" …No, not really. Why? We're looking at two different tools serving two different purposes. I just happen to have need for a PocketPC with many of the features of my desktop and notebook, including MS Word, Excel and Internet Explorer. The fact that it is also a PDA… hey… *life is good!* (…and I still have my Palm III too.)

http://www.hp.com/jornada/
HP545 - $499
HP548 - $599   ◆

Book Review:
The Age of Spiritual Machines

By Tim Condon, Tampa PC Users Group
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Attention all inhabitants of Earth: This is a message for all human beings, including those of you who are members of the Tampa Bay PC Users Group in Tampa, Florida. There is something you should be aware of: The human species is going to go extinct, and that will happen relatively soon, probably within the next few hundred years. It's not that we're all going to die at the same time. It's that within the next 100 years most people, if not everyone, will voluntarily merge into the intelligent machines that are even now being planned and created, resulting in what will arguably be a new species.

At least that's what well-known scientist, author and inventor Ray Kurzweil postulates in his book, recently out in trade paperback, *The Age of Spiritual Machines*. Yes, I know, it sounds like just so much mumbo-jumbo baloney, on the same level as the predictions 50 years ago that we'd all be commuting to work in helicopters today. But Kurzweil deals with such skepticism, and draws upon an extremely good record in predicting the future of technology to bolster his vision.

Many of us in the TPCUG remember quite clearly the dawn of the "microcomputer" revolution. It happened, if any event like that can be specifically pinned down, in 1981 when the IBM-PC was introduced. Prior to that everyone was fiddling with Apple II's and Texas Instrument TI-88's (was that it?), and Altairs, and Commodores, and various computer operating systems, mostly CP/M. Of course, the stodgy, backward business world resisted all along, regarding microcomputers as mere "toys"...until IBM came out with its Personal Computer, whereupon the new "micro"computer was "validated", and the revolution began in earnest.

That revolution has been driven by the inexorable march of "Moore's Law." Gordon Moore, an inventor of the integrated circuit and in 1965 the chairman of Intel Corporation, postulated then that the number of switches (transistors, if you will) that could be placed onto the face of a silicon wafer would double about every twelve months. In 1975 he is said to have increased the timeline to "every 18 months" (although Kurzweil notes that Moore today says that "his 1975 update was to twenty-four months, and that does appear to be a better fit to the data").

So far no insurmountable obstacles have been encountered to the continuation of Moore's Law. But Kurzweil notes that chip companies only have confidence that the process can continue for about another 15 to 20 years, when "the paradigm

will break down. The transistor insulators will then be just a few atoms thick, and the conventional approach of shrinking them won't work."

"What then?" Kurzweil asks.

He spends a considerable portion of his book explaining "what then." And explaining why the continued exponential growth of computing power won't hit a brick wall as expected around 2018 (think quantum computers for starts). If he's right, the result will be the creation of machines with computing power billions of times more powerful than the human brain, and, ultimately, the merging of human intelligence with machine (or "artificial") intelligence.

Mere science fiction? Kurzweil, who is the inventor of the music synthesizer, reading machines for the blind, and a leading variant of speech-recognition technology, was named Inventor of the Year in 1988 by the Massachusetts Institute of Technology. In addition, Carnegie Mellon University awarded him its top science prize in 1994. He's not a nut case. And, in fact, he has an enviable record of correctly predicting the future over the past 20 or so years (which he goes over in the book).

What he predicts now—in fact, postulates as "an inexorable emergence"—is the imminent arrival of machine intelligence superior to human intelligence:

In the second decade of the next century [that is, from 2011 to 2020], it will become increasingly difficult to draw any clear distinction between the capabilities of human and machine intellgence. The advantages of computer intelligence in terms of

Internet picture of the month

From the May 21 online version of the Tampa Tribune

The graphic above shows Tampa PC User Group member Merrill Friend and his wife Patsy viewing the aftermath of the great Ybor City construction site fire. The Tampa Tribune's URL is http://www.tampatrib.com. A special section on the fire can be found at http://tampabayonline.net/yborfire/ at their Tampa Bay Online site.

June's Interesting World Wide Web Locations

Tampa PC Users Group (that's us)	http://www.tpcug.org/
Suncoast Linux Users Group	http://www.suncoastlug.org/
Adaptec	http://www.adaptec.com/
Hillsborough County Property Appraiser (new URL)	http://www.hcpafl.org/
Cap'n Bry's Gnutella search	http://capnbry.dyndns.org/gnutella/gs.php
Seminole Tribe of Florida	http://www.seminoletribe.com/
Visual Basic Code at vbcode.com	http://www.vbcode.com/
Daily PhatPhat News (digital music information)	http://www.dailyphat.com/
Hammacher Schlemmer (gifts)	http://www.hammacher.com/
Bloomingdale's Online	http://www.bloomingdales.com/
Macys Online	http://www.macys.com/
Neiman Marcus Online	http://neimanmarcus.com/

Some of these links will join the many already on the Links page at our web site, where you need only click on the name.

speed, accuracy, and capacity will be clear. The advantages of human intelligence, on the other hand, will become increasingly difficult to distinguish....Before the next century is over, human beings will no longer be the most intelligent or capable type of entity on the planet.

Kurzweil is so sure of his predictions that he includes a detailed timeline, handing over the last five chapters of his book to explicit scenarios that he sees emerging in 1999, 2009, 2019, 2029, and finally what the world will look like in 2099. He postulates that by about 2020 a computer that can be purchased with $1,000 of today's dollars will have the computing power of a single human brain. Then...well, here's what he says:

After human capacity in a $1,000 personal computer is achieved around the year 2020, our thinking machines will improve the cost performance of their computing by a factor of two every twelve months. That means that the capacity of computing will double ten times every decade, which is a factor of one thousand (2^{10}) every ten years. So your personal computer will be able to simulate the brain power of a small village by the year 2030, the entire population of the United States by 2048, and a trillion human brains by 2060. If we estimate the human Earth population at 10 billion persons, one penny's worth of computing circa 2099 will have a billion times greater computing capacity than all humans on Earth.

I know, I know, it's incredible (i.e. "not credible") and beyond belief, and there are all kinds of arguments to throw in Kurzweil's face. We all know about the *current* limitations of computers and computing, and it seems reasonable that it's going to be more than a little hard to overcome hurdles in the future to attaining the kind of computing power Kurzweil is talking about. Yet he's an acknowledged expert in the area, active in computing and invention for over 20 years and making spot-on predictions through the whole time.

There are two concepts which Kurzweil argues are driving the evolution of humans and machines: The Law of Time and Chaos and The Law of Accelerating Returns. The definition of the Law of Time and Chaos is this: "In a process, the time interval between salient events (that is, events that change the nature of the process, or significantly affect the future of the process) expands or contracts along with the amount of chaos." A further definition of "chaos" is needed: "It refers to the quantity of disordered (that is, random) events *that are relevant to the process*....If we're dealing with the process of evolution of life-forms, then chaos represents the unpredictable events encountered by organisms, and the random mutations that are introduced in the genetic code."

The next Law postulated by Kurzweil, which he says is the

opposite of the Law of Time and Chaos, "is the most important and relevant for our purposes." This "inverse sublaw" to the Law of Time and Chaos is "the Law of Accelerating Returns." Definition? "As order exponentially increases, time exponentially speeds up (that is, the time interval between salient events grows shorter as time passes)." Thus, "The Law of Accelerating Returns...applies specifically to evolutionary processes. In an evolutionary process, it is order—the opposite of chaos—that is increasing."

But wait! Surely Kurzweil isn't arguing that biological evolution itself is "speeding up"! Well...yes, he does make that argument. Evolution has one huge deficiency, he notes:

[It] is very slow. While it is true that it has created some remarkable designs, it has taken an extremely long period of time to do so. It took eons for the process to get started, and, for the evolution of life-forms, eons meant billions of years. Our human forebears also took eons to get started in their creation of technology, but for us eons meant only tens of thousands of years, a distinct improvement.

The Law of Accelerating Returns also suggests that evolution will devise a way to bypass itself. That is, it evolves intelligence (namely, us) which is capable of devising intelligence (namely, computers) that surpasses itself. Furthermore, says Kurzweil, the Law of Accelerating Returns "predicts that the progression in the capabilities of human-created machines will only continue to accelerate. The human species creating intelligent technology is another example of evolution's progress building on itself. Evolution created human intelligence. Now human intelligence is designing intelligent machines at a far faster pace."

In fact, Kurzweil argues that normal biological evolution will eventually have to be scrapped altogether by humans. Consider the human brain, the most complex object known in the universe, a crowning achievement of billions of years of biological evolution. Says Kurzweil:

The human brain is eminently capable in some ways, and remarkably weak in others. Its strength is reflected in its massive parallelism, an approach that our computers can also benefit from. The brain's weakness is the extraordinarily slow speed of its computing medium, a limitation that computers do not share with us. For this reason, DNA-based evolution will eventually have to be abandoned. DNA-based evolution is good at tinkering with and extending its designs, but it is unable to scrap an entire design and start over. Organisms created through DNA-based evolution are stuck with an extremely plodding type of circuitry.

But the Law of Accelerating Returns tells us that evolution will

(Kurzweil............Continued from page 6)

not remain stuck at a dead end for very long. And indeed, evolution has found a way around the computational limitations of neural circuitry. Cleverly, it has created organisms that in turn invented a computational technology a million times faster than carbon-based neurons (which continue to get yet faster). Ultimately, the computing conducted on extremely slow mammalian neural circuits will be ported to a far more versatile and speedier electronic (and photonic) equivalent.

Yes, everyone, he's talking about scanning and exactly replicating every neural connection and synapse in our brains, in a computer a billion or more times more powerful than the most powerful computers in existence today. "When will this happen?" Kurzweil asks, not figuratively. His guess is that by the year 2023 a personal computer costing $1,000 will have equal processing power to a human brain. From there it is only a short jump to being able to replicate all the connections of a single brain in a single computer.

In the second half of the twenty-first century, there will be a growing trend toward making this leap. Initially, there will be partial porting—replacing aging memory circuits, extending pattern-recognition and reasoning circuits through neural implants. Ultimately, and well before the twenty-first century is completed, people will port their entire mind file to the new thinking technology.

There will be nostalgia for our humble carbon-based roots, but there is nostalgia for vinyl records also. Ultimately, we did copy most of that analog music to the more flexible and capable world of transferable digital information. The leap to port our minds to a more capable computing medium will happen gradually but inexorably nonetheless.

As we port ourselves, we will also vastly extend ourselves. Remember that $1,000 of computing in 2060 will have the computational capacity of a trillion human brains. So we might as well multiply memory a trillion fold, greatly extend recognition and reasoning abilities, and plug ourselves into the pervasive wireless-communications network. While we are at it, we can add all human knowledge—as a readily accessible internal database as well as already processed and learned knowledge--- using the human type of distributed understanding.

Ultimate meaning? Immortality. That is, we're not going to have to die.

Actually there won't be mortality by the end of the twenty-first century. Not in the sense that we have known it. Not if you take advantage of the twenty-first century's brain-porting technology. Up until now, our mortality was tied to the longevity of our hardware. When the hardware crashed, that

was it. For many of our forebears, the hardware gradually deteriorated before it disintegrated....As we cross the divide to instantiate ourselves into our computational technology, our identity will be based on our evolving mind file. We will be software, not hardware.

And evolve it will. Today, our software cannot grow. It is stuck in a brain of a mere 100 trillion connections and synapses. But when the hardware is trillions of times more capable, there is no reason for our minds to stay so small. They can and will grow.

So that's it. Ray Kurzweil, a respected scientist and inventor, is either off his rocker, or is foretelling a future that is assured and unavoidable, and will happen within the lifetime of many us reading this article.

Don't believe it? Read the book. It'll blow your mind. ◆

New Projector Fund Drive

By Merle Nicholson, Member at Large,
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The TPCUG needs a video projector desperately and as quickly as possible. I've started a drive to collect funds to buy one. We need to raise $3,000 to $4,500.

Anyone who's been at the meetings lately knows of the failures we've had with the projector we're using at MOSI. It's just VGA resolution, and it's increasingly becoming incompatible with speakers' notebooks. And more than once – it didn't work at all when we needed it.

I feel very strongly that the future of our club depends on owning our own projector. We must attract good presenters to continue and to attract new members, and some of the very good ones depend on our having the facilities. But it's not just the projector that's critical, it's also the room where we hold the meetings. We hold three meetings a month: the regular meeting and two SIGs. A portable projector gives us far more flexibility to use different rooms and different locations.

The fund was announced at the meeting last month, and so far we have $215 in four donations. I'd like to set a goal of ten donations at $100 each, and the remainder with $25 to $50

Windows Startup Disk

By Merle Nicholson, Member at Large,
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Do you have a startup disk? Do you know where it is? Do you know how to use it? Better still, DOES IT WORK? What are you going to do if your PC doesn't boot because of a disk or Windows file problem? What if you have the seemingly correct diskette and when you boot, the CDROM doesn't work? Never happen to you? It will; sooner or later your good luck will run out, and you'll be glad you're prepared. To get ready for the coming sad event, read on.

Let's start at the beginning. Locate your Windows CD. Read the label. Is it an upgrade or a full version? Does it say "Only for use on a new computer" or "OEM version for a new computer"? Let's cover an upgrade version first, then the full version.

Upgrade Version CD. What are the issues for an upgrade CD? Well, when you installed this version, you already had a qualifying operating system installed, either say Windows 3.1 or a Windows 95a, b or c, or perhaps a Windows 98 and you have an SE upgrade. What's the big deal? Well, you **still** have to have the qualifying product to re-install from your CD if for some reason you have to reformat the hard drive. So, for instance, I have a Windows 98SE upgrade, but I also have a Windows 95 upgrade CD. If I have to reinstall Windows 98SE from scratch, the installation program will ask for my qualifying product, and I'll insert my Windows 95 CD for it to look at before it will continue with the setup. I even have Diskette #1 of my Windows 3.1 product!

Now look at the CD you intend to install or reinstall. Is the CD key on the jewel case or paper sleeve? If not, you're in trouble! Better find it now while you're not in a hurry. And if you do have it, a good idea is to put a paper CD label on the CD with the CD Key written on the label. I also have been writing the key directly on the top of the CD with a permanent marker. The idea is that with it labeled on the CD, you'll never lose it.

Full Version CD. Two issues exist with the full version. One, is that it came with a boot diskette. Do you still have it? It can substitute for a startup disk that we'll make later; it's not as good, but it does have an advantage in that you can do a full installation to a blank hard drive at any time. The other issue is the same as the upgrade version – the CD Key.

Now for the Startup Disk. There are a couple of issues with this diskette, mainly in making sure all the possible needed utilities are on it and also that it works – that is, that it will

boot the computer, and that the CD ROM drive is working.

If you already have this disk made, you can skip this part, but pick it up a little further on because we're going to test it. First you need a diskette. I'd use the newest one you have around. Don't for heaven's sake use your old Quicken For DOS disk. Diskettes do have a shelf life, you know. Open Control Panel, click on Add/Remove Programs and select the "Startup Disk" tab. I really do have trouble remembering where this is. If it's a used disk, the program will replace any files on it. Click on the "Create Disk" button. It will tell you how to label the disk, insert it in the drive and click OK. It takes a few minutes to copy all the files.

Now, the above process was just a little different if you have Windows 95 than it is if you have Windows 98. Windows 95 needs the Windows 95 CD in its drive to make the diskette, Windows 98 does not. And there are other differences, and those of you who already have a startup disk need to pay attention here.

Win 98. You should hopefully have a good bootable diskette now. There's just one thing I'd do. Find the files C:\windows \command\EDIT.COM C:\windows\command\SYS.COM and copy them to the boot diskette. I find that these two programs are especially helpful when I have a dead system to contend with.

Now with the diskette still inserted, select Start, Shutdown, Restart. As the system boots, you'll get a DOS menu like this:
1.   Start computer with CD-ROM support
2.   Start computer without CD-ROM support
3.   View the help file.

Select 1. You'll see that a CD-ROM device driver – usually the OakCD driver - should load, and then a number of ASPI for DOS drivers in case you have some SCSI drives, and finally the MSCDEX driver. This is the DOS driver for the CD-ROM. It should appear successful, and hopefully it will be. It's crucial. You should now have an A:> prompt.

Now with any data CD – your Windows CD may be best – do a directory list on the CD-ROM. Usually it'll be drive E:. The reason? This boot disk installs a virtual disk drive (a ramdisk) in memory for a few files, and it takes the first letter after the hard drive. So that'll be D: and then the CD-ROM driver loads as E:. I mention this because you don't want to be fooled into believing the files you see in the directory list are the CD, when they're really the ramdisk. Look at the light on the drive when you do the DIR E: command and make sure it spins up, and if you have the Windows CD there, it'll show you a WIN98 directory.

So all is well. And if not – perhaps the CD-ROM drivers are

NOT loaded – then just read on, because the Windows 95 boot diskette has similar problems.

Win 95. We have some real work to do here, and it's more complicated. You can go ahead and boot your system with the new diskette, but you'll see that the CDROM doesn't work. There are no drivers on the diskette. Also there's no ramdisk, and that's a <u>good</u> thing. The disk does have EDIT.COM and SYS.COM on it. That's good. Re-boot back into Windows without the disk, then insert the disk again so we can copy missing files to it.

First we have to find the CD-ROM real-mode device driver. And it'll be a file like SBIDE.SYS or OAKCDROM.SYS. You will probably find one of these on the hard drive. One clue may be had from the c:\config.sys file. Edit or view that file and see if at one time the CDROM drive was used. Often it was, and then REM'd out. You may also have a diskette that came with the CDROM with the right one on it, and this is the best one you can get. DO NOT install the diskette. Instead open it with the Windows Explorer and look for the file. Copy this to the boot disk. Then find the c:\windows\command \mscdex.exe file and copy that to the diskette. OK. Now we have to do some file editing.

There's already a config.sys file on the diskette. Edit it with notepad, and add a line after the himem.sys line like: DE-VICE=A:\OAKCDROM.SYS /D:MSCD001, or whatever the name of your device driver is. The /D part is the same for everyone. Save the file and then open a:\autoexec.bat. It'll be blank because there isn't a file. Just let Notepad create one for you. It needs one line. A:\MSCDEX.EXE /D:MSCD001. Save that file. Now boot with it. Hopefully you'll have a CDROM after booting. If not, pay particular attention to the screen when the device driver and the MSCDEX programs run. You'll usually have a clue from the messages. The MSCDEX program will not connect to the drive if the device driver in config sys doesn't find the drive. So make sure the device driver messages look good. Usually it'll tell you how many drives it found. (One). Look for keying errors. I have seen a couple of systems where you have to tell the device driver which IDE drive and interrupt it's attached to. In this case the config.sys line would read: DEVICE=A:\SBIDE. SYS /P:170,15. This is right only if the cdrom drive is installed in the secondary IDE port. Get this fixed! The Windows 95 reinstallation assumes that most of the system is still working, and in my own experience, that doesn't happen very often.

Aren't you glad you're doing this now instead of when it's all broken? ◆

Editor's Comments

By William LaMartin, Editor, Tampa PC Users Group
lamartin@tampabay.rr.com

My contributors came through early and strong this month, so there is just a small space for me to fill. I encourage others to send me your thoughts on computing. The newsletter can always use a new slant.

Since last month's newsletter, I have learned more about Delphi and written a couple more programs. One makes a log file of all the WWW URLs you visit, and the other compares your system time to the Universal Time available via the Internet. Both still need a little polishing. But I have been pleased with my ability to pick up Delphi and use it to complement what I do in Visual Basic.

For those of you interested in the collection of old Tampa photos taken by the Burgert Brothers and being digitized by the Tampa/Hillsborough County Library, the searchable database of them (as well as the static listing) I created at my web site http://www.lamartin.com is now of use again. The Library is again allowing access to the photos via the Internet. ◆

We are in need of a projector for meetings in other rooms at MOSI and at the SIGs. Merle Nicholson has started a projector fund. He generously made the first pledge to get the ball rolling, and Bruce Register was next to pledge. Thanks to both of them and everyone else who is able to help out. Mike Hodges has some older projectors that can hopefully be used as "trade-ins". This should lower the cost of the projector. Let's all pull together and make this a successful project.

I've gotten a couple of phone calls this month from people looking for beginner computer classes. If anyone has ideas of how to serve the needs of new PC users, please let me know. Most people seem to be intimidated by our regular meetings, so we may need to have a beginners' SIG. Any thoughts on this subject will be welcome.

I got an invitation to the Fall APCUG Conference in Las Vegas during Comdex week. My response was, NO, I cannot think about November yet! I do well to know where I might be next week.

Thanks to everyone for continuing to support the group. ◆

Special Interest Groups

Microsoft Access SIG

This SIG meets the first Monday of the month at the Gateway 2000 Store on North Dale Mabry (just south of Columbus Drive) at 6:30 PM.

For information contact either William LaMartin at *lamartin@tampabay.rr.com* or Merle Nicholson at *merlenic@tampabay.rr.com.*

Genealogy SIG

To be included on the TPCUG genealogy mailing list, contact

Jenny Lind Olin at 960-5723 or jlolin@aol.com

Visual Basic for Applications SIG

This SIG meets the third Tuesday of the month, at the Gateway 2000 Store on North Dale Mabry at 6:30 PM. For information, *contact Merle Nicholson at merlenic@tampabay.rr.com.*

Windows SIG

This SIG occupies the first 30 minutes of our monthly, regular meeting at MOSI and is devoted to a general Windows and computing discussion. Mary Sheridan moderates the discussion.

Update your Anti-Virus NOW !!

By Merle Nicholson, Tampa PC Users Group,
Member at Large, merlenic@tampabay.rr.com

Man, there's some nasty stuff going around now. And you can prevent viruses from coming into your PC by:
1) Own a good Anti-Virus program.
2) Make sure it's running !!
3) Get the virus signatures UP-TO-DATE!
4) Disable Windows Scripting Host.
5) Reject incoming Outlook messages with "FW:" in the subject line.
6) Reject any file attachments with .vbs
7) Go to http://www.microsoft.com or http://www.netscape.com and get any Internet security updates.

There's no excuse for not having anti-virus software running on your machine at all times if you have a Pentium class machine. Office Depot puts Norton Anti-Virus on sale regularly for $15. I bought a couple of copies at $9.95!

Make sure it's properly installed. If you're not sure, call one

of the club members. This is very important. Further, make sure it's scanning all files. Many times it will scan only at startup and scan only executables (program files). Go into the settings and make sure you're doing the maximum possible.

If you have an anti-virus package that's not more than a couple of years old, you can get free updates. If you can't get free updates, then you need a new program for sure. The companies are now putting out new signature files several times a month, instead of once a month as before because of the proliferation of new viruses. They're on the Internet, and they're free.

Open the anti-virus software you have and do a help | about and see if you can't find the web address. The most popular ones are McAfee, Symantec (Norton), Dr. Solomon and Trend Micro(PC-cillin) at:
http://www.mcafee.com, http://www.symantec.com. http://www.drsolomon.com, and http://www.antivirus.com.

The latest email virii come to you as a file with a .vbs extension. VBS stands for Visual Basic Script. Users of Windows 95 and 98 should turn off the Windows Scripting Host. Click on Start (the button on lower left of your Windows desktop). Click on Settings. Choose Control Panel. Click on Add/Remove. Choose the Windows Setup tab. Click on Accessories to obtain details. Uncheck Windows Scripting Host if it is checked. It may not be in the list at all for Windows 95 if it's an older copy. Click on OK to save any changes.

Last, be conscientious. Set a schedule to get anti-virus updates at least monthly. Don't forget you're a member of a community of other users who can help. See the members help inside the back cover of this issue. ◆

Friends of the User Group

We acknowledge the following firms for their support

Museum of Science and Industry
Gateway 2000
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Marshall & Stevens

And these software and hardware vendors for their demonstrations and review software and contributions of evaluation software to our group

Adobe Systems	Microsoft
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Intuit	Symantec

RENEWING YOUR MEMBERSHIP?
WE CERTAINLY HOPE YOU WILL

MAIL YOUR CHECK AND ANY
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PO BOX 3492
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$25 Individual $35 Family
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Go to our web site http://www.tpcug.org and click on the Join link to fill in an online membership application

Check the address label for your renewal month

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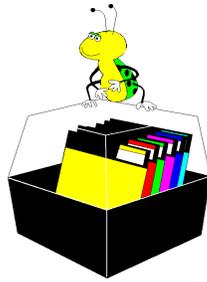
Program	Code
Adobe Acrobat	AA
AOL	AOL
Computer general	CG
Delphi	DE
DOS	DOS
Family Tree Maker	FTM
Hardware general	HG
Hardware Modem	HM
Hardware Printer	HP
HTML coding	HTM
Internet general	IG
Micrografx Graphics Suite	MGS
Microsoft Access	MA
Microsoft Excel	ME
Microsoft FrontPage	FP
Microsoft Office Suite	MOS
Microsoft Publisher	MP
Microsoft Visual Basic	VB
Microsoft Word	MW
Networking	N
PAF	PAF
PaintShop PRO	PSP
Quicken	Q
Windows 3.1	W3
Windows 95/98	W95/98
Windows NT	WNT
WordPerfect	WP

Name	Time	Phone	Codes
Cheryl Alexander	10:00am - 9:00pm M - F	914-0008	HTM,PSP,WP
Larry Anders	Mon - Sun 6:00pm - 10:00pm	989-9119	AOL, ME, MW, FP, PSP
Warren Fuss	10am - 9:30pm	949-6844	CG, WNT, N
Bob LaFave	8:00pm-10:00pm	248-3379	W95/W98, MOS
William LaMartin	Mon - Fri 9:00am - 9:00pm	251-3817	AA, FTM, IG, MOS, MP, VB, W95
Merle Nicholson	Mon - Fri 7:30pm - 9:30pm; weekends	879-3602	CG, DE, DOS, HG, HM, HP, VB
Jenny Lind Olin	Mon - Sun 8:00am - 10:00pm	960-5723	ME, MW, PAF, Q, WP
Don Patzsch		689-8662	CG
Mary Sheridan	9:30am - 9:00pm	988-6480	AOL, CG, DOS, HG, IG, MW, Q, W95, W98

We encourage other members to add their names to the list of those willing to assist fellow members with their computer problems. Contact William LaMartin to add your name to the list.

Tampa PC Users Group, Inc.
P. O. Box 3492
Tampa, FL 33601-3492

☐ Member: Your membership is up for renewal
☐ Vendor: Your product was reviewed on page ___

(Projector………..Continued from page 7)

amounts. Remember that we're a 501-C3 non-profit corporation. So what you'll get in return is a letter of thanks – by way of a receipt to show the Tax Man and, if you wish, recognition in the newsletter. The recognition is optional, of course.

I'm optimistic that we can do this. It's unusual for the TPCUG to raise the money this way, but it's an extraordinary need. And anyone in the group who's participated in the search for a new meeting location will tell you our options are very, very limited without a projector.

Please don't take this as a desire to vacate MOSI ! We have an excellent relationship with MOSI, and we'll continue as long as they can accommodate us. They do have other rooms that may be more suitable than the computer lab. But we can't do anything at all without a projector!

Think of all the time you have invested in the club. Hasn't it paid back to you in value exceeding $100? It certainly has for me. Give it some thought will you? Make a check made out to Tampa PC Users Group right away. You can contact me:

Email: merlenic@tampabay.rr.com
Tel daytimes: (813) 225-5227
Tel evenings & weekends (813) 879-3602
Or contact any officer. ◆

E Fletcher Ave

USF

E Fowler Ave

I - 275

Parking

50th St

Meeting site: MOSI
4801 E Fowler
Main Entrance

To Tampa

N

The map is **not** to scale