



Bits of Blue



November in Tampa

A Monthly Publication of the Tampa PC Users Group, Inc.

Vol. 12 No. 11

November 1999

Meeting

**Matt McCann from
Quicken**

**November 10, 1999
6:00 PM
Museum of Science
and Industry
4801 E Fowler Ave.**

Meeting Preview: At the November meeting we look forward to an interesting presentation from Quicken on their popular software. Mary Sheridan, as usual, will conduct a 30-minute Windows discussion at the beginning of the meeting.

President's Message

By Merle Nicholson, President, Tampa PC Users Group

Monthly Programs: We've had a couple of "program emergencies" in recent months, and I'd like to thank Brian Lance and William LaMartin for stepping in there and making a success of the evening. The Windows SIG discussion at 6:00 prior to the meeting is going very well, too. Thanks to Mary Sheridan for conducting these. The Windows SIG is a discussion forum for anyone to discuss their current computer problems and successes. Please don't think you don't know enough to participate. Make use of this, just one more reason that the club works for you, the membership.

Please come to the meeting this month. It's the month for officer nominations, the election itself being in December.

I'd decided to mess around with setting up voicemail on one of my computers, the intention being to use it as an intelligent screening tool for the useless and annoying calls I get. First I'd like to state that I've failed but have not given up hope. I removed the trial software I had and intend to try again later, perhaps early next year.

If I'd been successful, it would make a good article, but since it failed, I
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December 8: Christmas Party plus election of officers

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Minutes of the September Meeting

*By William LaMartin, Editor,
Tampa PC Users Group*

Since the official minutes were not available at press time, what follows is a reconstruction of the meeting to the best of your editor's memory.

Our presenter from BCD didn't show. Thus, with a little forewarning Mary Sheridan lined up member Brian Lance, who just happens to work at BCD, to do a presentation for part of the meeting. She also persuaded William LaMartin to speak.

The meeting started at 6:00 with Mary Sheridan leading the Windows SIG discussion. We continued this a little longer than usual since our scheduled speaker was not coming.

Merle Nicholson then took over and conducted the group's business session. Bruce Register then reminded everyone about the upcoming election of officers. We will have nominations at the November meeting and vote at the December meeting.

Brian Lance then did a presentation on the software product he uses to diagnose hardware problems with computers, demonstrating the various tests available for the different components

Brian's presentation was followed by William LaMartin displaying the statistics for the group's web site for the month of September. Of note was that we averaged 134 user sessions per day with each visitor staying an average of 7.5 minutes. He highlighted the most visited pages—some surprises here—and noted that AltaVista was by far the leading search engine directing people to our site. ♦

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want to make a short mention of the product in case anyone else is interested. I couldn't get the tech support for the product to help because it wasn't tested on Win 98 SE, so I've given up for now.

Anyway, the product is called Cognitel, made by NovCom, a company in Minsk, Belarus. It has some very intriguing features. First, it uses caller-id to identify the caller. If the caller-id is not in its database it asks for the caller's last name and then asks for the first name. It uses voice recognition then to decide who the caller is! You can program specific actions depending on who it is. The actions you can take are: Play a specific message for a specific person, take a message in any number of

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SpinRite 5.0 from Gibson Research

By William LaMartin, Editor,
Tampa PC Users Group

SpinRite is a disk maintenance utility. Its main use is with hard drives, but it can also be used with floppies and removable media such as Jaz and Zip drives. It is similar to Scandisk in that it, like Scandisk, searches your hard drive for disk surface problems. But it does much more than Scandisk. Ideally, you should verify the logical file system structure of the disk using Scandisk and then switch to SpinRite to scan the disk surface. Here is a quote from the SpinRite web site.

“Running SpinRite periodically prevents disk crashes by containing any problems that are discovered. SpinRite examines the data storage surface of a drive one region at a time. It first reads the data out of a region, then exercises that region with patterns of data that SpinRite has determined are the most difficult for the drive to read and write. In this way, any weak and failing areas within the region are located and removed from use while none of the drive's original data is being stored there. Only after the region has been made absolutely safe, will the drive's original data be restored to that area. This crucial process of testing the surface of a drive while it contains data is completely unique to SpinRite.”

When your hard drive has trouble reading or writing data that in the past caused no problem, you may not at first notice it, since the drive will retry the read many times if it has trouble getting a good read the first time on some data. So if it finally gets the data, it proceeds as if there is no problem, and you know nothing about it. When things get bad enough that you finally notice something is wrong, if you are lucky the drive will still function well enough for you to back it up or at least get all your important data off it. If you are not so lucky, then you may wish that you had used SpinRite regularly. Again, quoting from the web site:

“SpinRite reads and re-writes the entire surface of the drive, reporting everything it finds. Thus, it is able to provide early warning of increasing numbers of regions that are becoming troublesome for the drive.Scandisk's 'surface analysis test' is read-only and provides no exercise for the drive or the data surfaces. Just before a drive fails, Scandisk indicates that everything is completely fine, whereas SpinRite goes nuts showing the user that the drive is near death.”

Even when there is damage to the disk, SpinRite claims to recover much, if not all, of the data in a damaged sector. It does this using its DynaStat Data Recovery method to reconstruct the “lost” data. Don't confuse this with recovering lost files due to deletion or a virus, for which a program like PowerQuest's *Lost & Found* is useful. This is recovery of data that is “lost” due to the difficulty in reading that particular sector of



the drive.

You run SpinRite from a floppy disk which has been formatted with the system files. Simply add SpinRite.exe to the floppy, boot from this floppy, then type in SpinRite.exe at the DOS prompt, and the program takes over from there.

When the program starts, it first analyzes your hard drive and gathers information about the drive's characteristics by running such tests as an integrity test, viral infection test, ram test, revolutions/minute test, physical intersection angle (didn't know there was such a thing did you?), and many more.

For example, on my ThinkPad 233 with an approximate 3.2 GB hard drive it noted that the drive was performing an average of 4,201.49 revolutions/minute and had a physical intersection angle of 2.43 degrees. The partition information for the C partition was a sector size of 512, 8 sectors/cluster and 4,096 bytes per cluster. It also gave benchmarks for drive access time.

After the initial disk analysis, SpinRite starts its real work. There are various levels of disk analysis/repair. I chose level four (locate surface defects). This process took about 8.5 hours to process the 2,098 MB C partition. It took another 5 hours to do the 1,1152 MB D partition. Both partitions were FAT 32. No errors were found. That is what you use SpinRite for—Peace of mind. If you need that comfort, get SpinRite.

You can view one of seven screens while this is going on, including one that looks like the detail view when Scandisk is running. Everything is happening so fast, screens like the Surface Analysis Monitor flash their changing information so quickly, that it is of little value. I settled on the Screen Blanker display that displays the estimated time to completion and the percent done.

SpinRite costs \$89, less for updates, and is downloadable from the Gibson Research web site. The program is only about 90 KB in size (it is written in assembly language), so you are paying about \$1/KB—probably the most expensive program I have bought when figured on a per KB basis. Technical help is free, and an 800 number is provided.

The license is for use on only one computer. To test the pro-
(SpinRite.....Continued on page 4)

Software Summary of AOL 5.0

By Larry Anders, Librarian,
Tampa PC Users Group

For all of you AOL users, America Online has introduced their latest integrated software package that is used to access AOL. Below is a list of changes and enhancements in **AOL 5.0** that makes this download worthwhile.



New Welcome Screen

The new Welcome Screen has several new features:

- Channel Guide -- one-click access to all of AOL's channels.
- AOL Search -- one-click access to searching AOL and the rest of the Internet.
- My Places -- a customizable list of places that are most often visited.

You've Got Pictures

Developed in partnership with Eastman Kodak, *You've Got Pictures* lets you choose to have your pictures delivered online so you can share the pictures with friends and family. Additionally, you can order reprints, enlargements and personalized merchandise.

My Calendar

My Calendar is the new, easy-to-use, interactive calendar that allows you to plan and manage important parts of your life by tracking appointments, key dates and other personal events -- all online. With an online calendar, you'll be able to check your calendar from anywhere.

AOL Search

This all-new search product enables you to easily search AOL and the rest of the Internet without leaving the AOL service. It delivers a comprehensive list of results -- both categories and sites -- ranked by relevancy drawn.

Seven Screen Names

AOL 5.0 offers you 2 additional screen names, bringing the total number of screen names for each AOL account to 7.

Retrieve Recently Deleted E-mail

You can recover e-mail that you deleted in the last 24 hours.

Personalized E-mail Signatures

You can create personalized "signatures" that are automatically added into your e-mail messages. The signatures can include your name, contact information, a personal quote, or however you like to end each of your e-mail messages.

Switch Screen Names for Auto AOL

You can set up Auto AOL to sign on and download e-mail and newsgroups from multiple screen names without disconnecting.

Favorite Places and Address Book Save/Replace Features

Now you can save copies of your Address Book and Favorite Places. You can use these copies to update AOL software on another computer where you might also use AOL.

Easily Locate Files that You've Downloaded

The Download Manager now contains a "Locate" feature that will show you the directory location of the file that you downloaded.

Get Profile Button on the Instant Message Form

A Get Profile button has been added to the Instant Message form. You can click the Get Profile button to instantly access a member's profile in the Member Directory.

System Information (SysInfo) Tool

The SysInfo tool was developed to aid Member Services' Technical Support in providing timely and efficient help to you. This tool provides system and modem information, error messages, update status and version numbers, and additional troubleshooting utilities.

Auto detect new modems

After you install a new modem, AOL will automatically begin detecting the new modem and prompt you to update your AOL setup.

Download times range from 40 minutes at 56K to 2 hours 40 minutes at 14.4K. If the icon doesn't show up when you connect, just type "**AOL 5**" in **Keyword** and you'll be taken directly to the download area. Don't be the last one to update, especially when it's free. ♦

(*SpinRite.....Continued from page 3*)

gram for this article I had to disregard that, since I wanted to see how it ran on various machines. My first choice was another laptop on which the hard drive had definite problems and indicated as much by a message to that effect and a requirement that Scandisk be run. Unfortunately, Scandisk would start then eventually freeze (probably when it got to the problem area). Sadly SpinRite also stopped responding during its initial disk integrity test. A call to the tech line got the response that "if Scandisk wouldn't run, neither would SpinRite". That, however, is not what you are led to believe at the web site, where it says, "If MS-DOS is aware of the existence of a drive, then SpinRite will run on it." I could do a

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DOS directory and , in fact, used a ZIP drive in DOS to transfer files to the Zip drive, so DOS was aware of the drive.

My next attempt to use SpinRite was on an old 486 laptop with a compressed drive, which I use for testing purposes. SpinRite is supposed to work on such compressed drives (it says it works with Microsoft's Double Space), and I made the boot floppy on that machine so that it included drvspace.bin (Is this the same as Double Space? I don't know; it has been too long since I dealt with such things.) I even created a config.sys file containing a device line about drvspace.sys and included it on the floppy. Indeed, SpinRite started up, did a little something to begin its initial drive analysis, gave a message to wait a moment—and never did any more. I tried the suggestion to add the command line option “nocachetest” to no avail. I suspect the compressed drive was the problem. Anyway, I then moved on to the machine I used for this review.

Frederick O'Keefe reviewed SpinRite 4.0 in the August 1997 newsletter. That review was more extensive than what I have done here. And most of what is mentioned there is still applicable to version 5.0. He obviously had used the product much more than I and had a better understanding of its technical aspects. If you find the topic of interest, you would benefit from reading that article at <http://www.tpcug.org/reviews/SpinRite.html>.

The Gibson Research site is <http://www.grc.com/> and offers much information about the product.◆

Internet picture of the month



Alice Waters, restaurateur & chef
From the book *Women* by Annie Leibovitz

The above photo is from photographer Annie Leibovitz's book *Women*, which is featured in the New York Times' web site Photo section.

The link for the NY Times is <http://www.nytimes.com>. The link for the photo section is <http://www.nytimes.com/library/photos/index.html>. The Times site is free, but you may have to register to view the material.

November's Interesting World Wide Web Locations

Tampa PC Users Group (that's us)	http://www.tpcug.org/
Merck Manual (medicine)	http://www.merck.com/pubs/
Britannica.com (now free)	http://www.britannica.com/
CareerMosaic (jobs)	http://www.careermosaic.com/
GuideStar - Donors Guide To Charities	http://www.guidestar.org/
Nordstrom (clothing, etc.)	http://www.nordstrom.com/
Maxfootball.com (football news)	http://www.maxfootball.com/
AtomFilms Instant Entertainment (short films)	http://www.atomfilms.com/
Carsdirect.com (cars)	http://www.carsdirect.com/
CD-Recordable FAQ	http://www.fadden.com/cdrfaq/
The Icon Browser	http://www.cli.di.unipi.it/iconbrowser/icons.html
Standard MIDI Files on the Net	http://www.aitech.ac.jp/~ckelly/SMF.html



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.

New Sony FD73 Digital Camera Improves the Older FD71

By Merle Nicholson, President,
Tampa PC Users Group

In case you're wondering how you take a picture of your camera when you only have one of them, you take it in a mirror, and, through the magic of Paintshop Pro, mirror the image!



Only problem is, then you have to edit out the fingers.

This \$499 camera is at the low end of the models. It looks pretty much like the old FD71. It still does 640x480, not the mega-pixels of the higher end models, but they've improved a lot of things. For the original article on the FD71 by Larry Anders, go to our web site and view the article at the link <http://www.tpcug.org/reviews/mavica.html>.

Three things stand out about this model. First, it's very much lighter in weight. Second, the floppy disk is much, much faster, and, third, it snaps pictures faster. The obvious advantage to a floppy is the ease of transferring pictures to your PC. Insert the diskette and drag.

In case you're new to the subject, Sony has taken a different approach to storing the images. All the models (and there are a lot of them) have a slot for floppy disks. Depending on the format you want, one disk will store from one to forty images. Mostly you'll store twenty.

There's a "bitmap" format (.BMP) that takes nearly a whole diskette. When you take one of these, it puts the standard JPEG file on the disk, too. The one picture I tried this on, I did a slideshow of the two images, so it would flip from one to the other every two seconds, and then maximized to the full screen, and I just couldn't tell one from the other (actually I couldn't even tell when it flipped).

Sony calls this floppy drive "2X", and I can tell you that it's a very welcome improvement. There are other improvements like adding a "series" file numbering option so that you don't

repeat the file number between diskettes, handy when you're dragging more than one diskette's worth to a single directory.

Other features: a 10X optical zoom, three levels of flash, and a half dozen pre-programmed modes that preset shutter speed and aperture. This model is cheap, slick and very easy to use. Sony FD73, \$499. ♦

I Remember...

By Ed Buzza, Tampa PC Users Group

I remember my first 286 PC from Leading Edge. I remember, with a secret smirk, how powerful MY machine really was. Why, there was a switch to adjust the speed of the processor. What a charge to jack that switch up to "turbo" mode; yeah, man, I was cruising.

You'd try 10 MHz and it would run most programs. There were some where you had to step it down to 8 MHz for them to run properly. And then there were some where you had to crank down the PC to 6 MHz. These were the game programs that depended on timing by using an instruction loop. Like you'd put a number in a counter and subtract 1 each time you went through the loop and kept checking for zero. And that's how they'd time the program for showing objects on the screen or moving icons, etc.. Later, this method was abandoned since the PC speed kept getting faster and faster and soon an internal clock/timer was available to programmers.

Note in the above sentence that the use of two m's in programmer is a sign of an old timer. Old - like mid-1950's!! The first computers were monsters in size. The old ENIAC took up the space of a large garage. In the IBM 702, cathode ray tubes served as memory components. The IBM 705 used ferrite doughnut cores as memory. They were small but still large enough that the charging and sensing wires were actually threaded by hand. A 20K (yup, twenty thousand) core box was about the size of one of those containers the county used for recycling stuff.

Now 20k was pretty daunting to program. You learned to put your housekeeping routines in the I/O areas reserved for your working files. Then, after you'd done the housekeeping and you'd set up the machine for your program, you "abandoned" the code that was in the I/O areas. Sort of like putting socks and hankies and stuff inside of shoes when packing for a trip.

Later, we (Social Security Administration) were offered 40k of

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Broadband Internet Access

By *Tim Condon, Tampa PC Users Group*

Fast Internet Access. What a subject. When our esteemed newsletter editor William LaMartin asked me to write an article about cable modem access and asynchronous data subscriber line (ADSL) access to the Internet, I figured it would be a simple either-or proposition. After all, several years ago I was a beta tester for the Roadrunner cable modem service when it was rolled out in South Tampa. And I've now been using Roadrunner's service for several years on a daily basis.

Then came DSL. Recently I became one of the first customers to sign up for GTE's new lower-priced "DSL access service," also in South Tampa, at my office.

So now I use Roadrunner when I'm at home on a Pentium running at 233 MHz with 64 megs of RAM; and at the office I use GTE's DSL access service on a Pentium II running at 433 MHz with 128 megs of RAM. Does the faster and newer machine at work speed up my daily Internet activities? Not really. The speed with which you access the Internet is primarily a function of your "bandwidth" (that is, the speed or "broadness" of the "pipe" you have connecting you to the Internet, which in turn is a function mainly of what kind of access service you use).

Look at it this way. If you have an Internet connection giving you high bandwidth (that is, a big, "wide" pipe), you'll be zipping along on the Internet whether you're on a Pentium 133 or a hotrod running at 700 MHz. Conversely, if you have a low bandwidth connection, then your Internet experience is going to crawl regardless of whether you're running a slow machine or a speedster. However, your ultimate Internet experience is also affected by the machine you're using, particularly with respect to your PC bus and video display.

Got all that? So cable modem Internet access and DSL Internet access are known as "broadband connections." And the traditional dialup modem connections---which started at 1200 baud some years ago and successively moved up through fairly predictable increments to 2400, then 9600, then 14,400, then 28,800, and finally, today's standard, 56,600 BPS (bits per second)---might be called "narrowband," although you never hear at 56.6 connection referred to quite that way.

Incidentally, the original measure of throughput was "baud," meaning roughly (very roughly) "characters per second" (one character in the "old days" generally consisting of one 8-bit instruction; today we're all using 32-bit chips and operating systems, with 64-bit chips and the 64-bit operating system, Windows NT, soon to appear). Somewhere along the line the measure of modem throughput got changed from "baud" to the current standard, "bits per second" or "BPS." Thus, today's stan-

dard 56.6 KBPS modem stands for a throughput of 56.6 kilobits per second, or 56,600 bits per second. (As with every other subject in the world, you can find an excellent primer on modems and modem technology on the Internet, in this case provided by the University of Chicago Campus Computer Stores, at <http://www-desktop.uchicago.edu/store/technotes/misc/Modems.html>.)

Which brings us back to today's Internet reality. First reality: When it comes to Internet access, dialup modems are dead, or soon will be. They are being replaced by various sorts of broadband access, starting with cable modems and DSL service. Second reality: The ultimate struggle over Internet access won't be fought out between DSL service and cable access, but rather will be fought out among four contenders...but more about that later.

What about today's choice between Roadrunner's cable modem and GTE's DSL service?

First cable modem access, because it's been available longer. In Hillsborough County cable Internet access is a service of Time Warner Cable, and is available virtually everywhere in the county. It is an adjunct to cable TV service and runs over the same cable network. Cost is \$39.95 for current Time Warner cable TV subscribers for non-business service, and \$49.95 for non-cable subscribers. Then there's a one-time installation fee of \$99.95 for desktop PC's and \$149.95 for laptops. (Roadrunner sends a tech out to your location to install a cable modem and get you up and running.) For business use, Roadrunner charges \$79.95 per month, with a one-time installation charge of \$149.95.

Speed? Using cable modem access to the Internet is a whole new experience, as anyone can tell you who's tried it. Access speeds are measured by "downstream" and "upstream" data speeds. Downstream is the important measure, as that tells you how fast Internet text and pictures are downloaded or "painted" onto your computer screen. Actually, "painted" isn't a good term for broadband access, because the images don't slowly scan onto the screen, they just "pop up."

"Upstream" measures of speed have to do with how fast your own instructions, from your browser to the Internet, are transmitted. Thus, upstream bandwidth is concerned mainly with mouse clicks and file requests you do.

Roadrunner advertises its downstream speed of "up to 27 MBPS over the network, but the device with the slowest throughput along this path determines the effective speed. Typically, this is the PC bus and/or video display." Upstream speeds are advertised as ranging from one to three megabits per second.

Now. How does all this comport with reality? On the one

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hand, I can't really say, as I don't have the capabilities of measuring upstream and downstream throughput independently of my own machine. But I can give you anecdotal evidence. And that is that Roadrunner is terrifically faster in downloads than any modem connection I've ever experienced, yet much slower than the advertised "maximum speeds." In downloading files (after all, that's the kind of activity that ties up our machines the most, for the longest periods of time, right?), I have on rare occasions had my computer tell me that I was downloading data at the rate of up to 150 kilobits per second. When compared with the theoretical 27 megabits per second, that doesn't seem all that fast. But trust me, it is.

I have also been told by my computer geek friends that what my Netscape software says is my download speed may not be, and that the only way to get a really accurate measure of downstream throughput is by downloading a file of a known size, and measuring the download time with a stopwatch. That I haven't done. And the 150 kilobits per second mentioned above is a relative surprise. More often Roadrunner gives me reported download speeds in the range of 20 Kbps to 50 Kbps... still blazingly fast compared to what is possible on a dialup modem (usually in the range of 3 to 7 Kbps was what I experienced on my 33.6 Kbps dialup modem when I was using it).

All of the above means that really large files can be downloaded off the Internet in just a few minutes. The largest Netscape Communicator install, for instance, takes less than five minutes to download.

A few technical caveats need to be mentioned here also. Much has been made of the fact that the design and structure of cable networks is "shared," and as more users log on at the same time, network performance is degraded. Here's what Roadrunner says about it: "Data bandwidth is shared from the neighborhood node to users in individual homes, so performance may vary depending on how many customers are actively using the system at any given time. The system has been designed to offer worst-case bandwidth exceeding that of ISDN service (which stands for Integrated Services Digital Network), and that worst case assumes continuous, maximal usage by every Roadrunner user in a neighborhood, simultaneously."

Translation: You get better performance from the cable modem network at 5:00 a.m. than at 5:00 p.m. Nevertheless, when you have a worst-case designed speed in excess of ISDN (offered by GTE at a designed speed of 128 Kbps which is itself being supplanted by the much faster ADSL service), you're still flying, even in the worst-case situation.

Let's talk about ADSL service now. Asynchronous Digital Subscriber Line service is the fastest Internet access service offered by GTE, the telephone service-provider for our area. They also

offer dialup access, at 56.6 Kbps, and ISDN service at 128 KBPS. With the recent rollout of more reasonable pricing of DSL service---which I would hope will inevitably fall over time-- traditional dialup access and ISDN service seem to be fading.

And there's the bandwidth. DSL Internet access, according to GTE, offers downstream speeds of from 256 KBPS to 1.544 MBPS. Compare that with 56.6 KBPS and we find that the slowest DSL connection is almost five times faster than your normal dialup modem...and potentially nearly 30 times faster.

How does DSL work? Basically, it takes the "twisted-pair" technology---the two small copper wires that are twisted together and which serve us all as telephone lines---and applies "a three-way channel data delivery system." Pretty snazzy technology, when you think that just recently everyone was talking about how the phone companies were "trapped in a copper cage" and would have to massively re-deploy fiber optic cable (yes in the long-term, no in the here and now).

According to GTE, the three-way channel data delivery system mentioned above operates like this: "One channel transmits voice services, so normal phone usage can continue regardless of whether a user is connected to the Internet. A second channel can transmit a massive downstream of up to 1.544 MBPS, and a third bi-directional channel allows upstream of up to 768 KBPS." Furthermore, per GTE, "DSL Internet access also gives the consumer a constant connection at a click of an icon, eliminating the time spent waiting for call set-up and busy signals."

The first question I had when I read the above information was "How do they do that?" It has to do with frequency bands. Again, GTE: "Traditional analog voice band modems use the same frequency band, 0-4 kilohertz (kHz), as telephone service, preventing concurrent voice and data use. Because the new DSL modems operate at frequencies above the voice channel from 100 kHz to 1.1 Megahertz, POTS (plain old telephone service) and DSL data service can operate concurrently. By using the same telephone line, there's no need to get a new telephone number to use your DSL service."

That means you save on having to have a second telephone line for your computer. However, unlike cable modem access, you still have to have an ISP (Internet Access Provider; in the case of cable modem service, the cable company itself is the access provider).

Up until recently GTE insisted on pricing its DSL service like a monopoly. The result was that cable access beat their pants off for the past several years. However, someone at GTE finally got through to the old monopoly-pricing-heads, and DSL service has now fallen to a roughly comparable range with cable

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access. GTE has rolled out various "service packages" referred to by the names of metals: Bronze Plus, Bronze, Silver, Gold, Platinum, and Platinum Plus, in ascending order in terms of speed. Prices for those services range from \$32.50 per month up to \$230 per month

But remember, you also have to pay for an ISP when you use DSL service. GTE is offering a pretty attractive ISP package with unlimited access for as low as \$14.95 per month. When combined with the cheapest DSL access (the one I chose, of course), then the monthly charge comes out to \$49.95, which is the same as cable access for those who don't have existing television cable subscriptions.

DSL setup charges? Yes, they're there: a one-time charge of \$150 if you provide your own network interface card (that is, a usable network card), and \$200 if GTE provides the network card. And the tech who sets you up will wire your telephone system up with a "frequency splitter"; from that little box, one plug goes to your telephone, and the other heads for your computer.

There's a further hitch on DSL service also: Your computer has to be within a certain distance from a telephone company switching station, or the technology won't work. The distance is about 16,000 feet, I'm told.

So what's the bottom line in terms of prices? You can compare the prices listed above. Further information on both DSL service and cable modem access can be obtained on the Internet by going to: <http://www.gte.net/pands/residential/dsl.html> (as to DSL service), or <http://www.tampabay.rr.com> (as to cable modem access service).

What's the bottom line in terms of speeds? Well, the "designed" speeds are all outlined above, with the Hillsborough County Roadrunner access advertising up to 10 MBPS on a typical Pentium machine (there's a designed maximum speed of 27 MBPS and a worst-case scenario, shared-network speed of 128 KBPS). GTE's DSL service, on the other hand, advertises anywhere from 256 KBPS up to 1.5 MBPS upstream.

So you'd think that cable modem access is clearly a faster mode of accessing the Internet, right? I'd have to say wrong, given my experience with both services. In fact, I'd have to say the quality of the Internet experience, in terms of speed, is roughly the same, as far as I can tell. Part of the reason for that is doubtless that once you get into the higher speeds of accessing the Internet, incremental increases or decreases in speed aren't noticeable. I mean, you hit a key, a picture pops up. Who can tell if it pops up in 2.4 seconds or 2.3 seconds, you know?

My personal favorite? You had to ask. Well...I'd have to say... ummmm...hmmmm...well, uh...ahhhh...the final answer is... neither. I must say that I like them both. Anyone who is con-

sidering broadband access---and once you experience it, you'll be through with dial-up modem access in the long run---has to look at the options available. You may not be close enough to a telephone switching station for broadband DSL service. Time-Warner's Roadrunner cable modem access service may not be available in your area. Check them both out. And then if you find you have the terrible situation where both services are available, check out the information at the above web pages, and talk to other users of the broadband services. In the end, you really can't go wrong.

Afterword: You may have noticed that I mentioned in the above article that "The ultimate struggle over Internet access won't be fought out between DSL service and cable access, but rather will be fought out among four contenders...but more about that later." Well, this article spun out of control in terms of length, and I never did have a chance to get to that issue, which is kind of futuristic. However, the future seems to be rushing upon us with great speed. If there's any demand, and you want to hear about it, I'll write another article about that area. Otherwise, I'm a curmudgeon, leave me alone. ♦

(Remember.....Continued from page 6)

memory in the 705-II. Now we could breathe. Do all kinds of fancy stuff. Soon, IBM upgraded (even way back then, computers were being upgraded on a very fast time table) and offered us the 705-III with 80k of memory. We refused it! At the time, we didn't need it.

Then, when the micro-computers, the original personal computers, were introduced, it wasn't long before they too joined the upgrade merry-go-round. Like the story about the chicken and the egg, you wondered which came first, bigger and faster PC's or bigger and hoggier programs. Needless to say, that question has never been answered.

As on the main frame (affectionately called "big iron"), the first PCs were programmed in a symbolic language that was just one step up from actual machine language. People took pride, and were rewarded, for "tight code". That is, "doing the mostest with the leastest". Soon their bosses, always concerned with the "bottom line" figure of profit, were demanding faster delivery times for programs.

That lead to the so-called higher language programming, assemblers and compilers like FORTRAN (FORmula TRANslation), arguably the first higher language, COBOL (COMmon Business Oriented Language), and then the rest such as Jovial, Pascal, etc. While it made life easier all around for the programmers and the bosses, it sure did take up a lot more of the computer resources like memory and created the need for big disk drives.

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Special Interest Groups

Internet SIG

This SIG meets the first Monday of the month at 6 PM at the Reflectone Building, off West Waters Ave. You must sign up to get on the list and to get by security. *Contact Mike Hodges at hodges@reflectone.com.* For directions, see the map at our web site or contact Mike Hodges.

We consider all topics concerned with creating web sites. We study sites of interest from the web and those created by members of the SIG. And, in general, we consider anything of interest concerning the Internet.

Genealogy SIG

To be included on the TPCUG genealogy mailing list, contact Jenny Lind Olin at 960-5723 or jloin@aol.com

Visual Basic SIG

This SIG meets the third Tuesday of the month, at the Gateway 2000 Store on North Dale Mabry (just south of Columbus Drive) at 6 PM. For information, *contact Merle Nicholson at merlenic@tampabay.rr.com.*

FACUG Meeting

By Don Patzsch, Tampa PC Users Group

Review of the FACUG meeting at Sarasota October 23, 1999

This meeting reminds me of the first meetings we had when this group started about eight years ago. Right now, the software companies are not sponsoring much, as the cost of software has dropped to the point that no one company is making real large incomes as they did in the more recent past.

The registration started at 9:30 and there was a continental breakfast for all. There were about 75 people in attendance. There was a handout of the usual cloth carrying bag, containing a lot of goodies such as pens. These bags came from Office Depot.

In the first morning session, I attended the session on Volunteers. About one hour was spent in talking about how to find volunteers and keep them interested long enough to get the job done. There were perhaps 30 people in the room, and many good ideas came up.

The second morning session was about Web Pages, and was chaired by Gary Schweinshaupt. This was a fascinating session as the group talked about many URL's that are used by the members to help them prepare their home page and the rest of their web sites. Several groups have over 1,500 members, so they have fairly complex web sites. Orlando is thinking about putting all its members' names on their site. (They have way over 1000 members.) This was one of the best sessions I have ever attended, but there is far too much to list all the discussion here.

The lunch was free and was served in the Masonic (SAHIB)

building in which we met. We had grilled chicken breasts, fish, salads, and all the extras. A great lunch, and we could get to meet some new people and find out what they thought about computers in general.

After lunch, the people from Office Depot and also from Compaq talked about their companies and what they are doing currently.

Following the lunch hour, I attended the session on Grants. The art of applying for a grant has now reached a point where any group should be able to get what they want fairly easily. A very long discussion was held about the fact that the Gainesville group is applying for a grant for a whole building and the associated lot! Sun City Center also has that idea. One foundation has over a billion dollars to give away. Everyone had some stories to tell and all the groups are interested in grant applications. Many groups have now bought LCD projectors and other equipment with the grants they have received.

The last session I attended was that of Incorporating as a tax-exempt group. You get to know what groups have had special tax considerations and also you find out in detail how to set up your own incorporation papers. A discussion was held about the C designation; there is more than just a C3 designation.

Following that session, a prize drawing was held. Software and other materials were given away by the number on your ticket given you at lunch. The meeting wrapped up about 4 p.m. From my standpoint this was one of the better meetings of the last two years. And no software people were there at all! Just OFFICE DEPOT and COMPAQ. We can't stop without commending Mary for her work with the FACUG. ♦

Friends of the User Group

We acknowledge the following firms for their support

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

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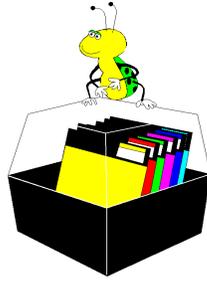
Check the address label for your renewal month

MEMBERS' HELP LINE

Program	Code	Name	Time	Phone	Codes
Adobe Acrobat	AA	Cheryl Alexander	10:00am - 9:00pm M - F	914-0008	HTM,PSP,WP
Alpha4	A4	Larry Anders	Mon - Sun 6:00pm - 10:00pm	989-9119	AOL, ME, MW, FP, PSP
AOL	AOL	Tom Cone	Mon - Sun 7:00pm - 9:00pm	949-3716	A4,VdB
Computer General	CG	Warren Fuss	10am - 9:30pm	949-6844	CG, WNT, N
Delphi	DE	Bob LaFave	8:00pm-10:00pm	248-3379	W95/W98, MOS
DOS	DOS	William LaMartin	Mon - Fri 9:00am - 9:00pm	251-3817	AA, FTM, IG, MOS, MP, VB, W95
Family Tree Maker	FTM	Merle Nicholson	Mon - Fri 7:30pm - 9:30pm; weekends	879-3602	CG, DE, DOS, HG, HM, HP, VB
Hardware General	HG	Jenny Lind Olin	Mon - Sun 8:00am - 10:00pm	960-5723	ME, MW, PAF, Q, WP
Hardware Modem	HM	Don Patzsch		689-8662	CG
Hardware Printer	HP	Mary Sheridan	9:30am - 9:00pm	988-6480	AOL, CG, DOS, HG, IG, MW, Q, W95, W98
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				
Visual dBase	VdB				
Windows 3.1	W3				
Windows 95/98	W95/W98				
Windows NT	WNT				
WordPerfect	WP				

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.
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- Member: Your membership is up for renewal
- Vendor: Your product was reviewed on page ____

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So what used to be a 40-60k routine or program suddenly became a bloated giant needing ten and twenty times as much in memory and disk requirements. Sure, some will say that with today's prices and availability of huge memory and disk space, all that is irrelevant. But do we really need a twenty ton semi to haul the garbage can from the backdoor out to the curb?

My next PC will be a 700 MHz Pentium III. Can you imagine that speed? Way back on that old 286 (in turbo mode at 10 MHz) my typing speed was about 40 words per minute. I know that with the new 700 screamer my typing speed will STILL be 40 words per minute. And I will have acres of hard disk space to store my 15-20k word processor files which, if stored in ASCII, will only take up 3-4k of space. ◆



(President.....Continued from page 2)

voicemail boxes, send a message to your pager or forward the call to your cell phone – or any other phone. You can set up the initial voice recognition part yourself by saying the names yourself, and when that person calls, it will update to the person's actual voice. And it's only \$50. The downside is that you must have some specific type of modem that meets the TAPI standard. There are increasingly more modems being built for that standard, but, sorry, you can't use the old Zoom or Hays turkey. Let me know if you decide to try it. I'm still very much interested. ◆

