



# Bits of Blue



August in Tampa

A Monthly Publication of the Tampa PC Users Group

Vol. 10 No. 8

August 1997

## Meeting

**PowerQuest presents  
Partition Magic**

**August 13, 1997**

**6:00 PM**

**Museum of Science  
and Industry**

**4801 E Fowler Ave.**

## Microsoft Internet Explorer 4.0 preview 2 & Office 97

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

**Partition Magic** Come see a very useful product demonstrated this month. If you ever need to re-partition your hard drive and don't want to delete your data, this is the product for you. It certainly saved me from grief when I failed to remove a NTFS partition from the drive when I uninstalled Windows NT from a computer. There I was with Windows 95 now installed and no way to do anything with a good portion of the hard drive. FDISK was of no use, but Partition Magic did the job. They also have, I believe, a useful hard drive copy program. That should come in handy when you want to replace that 1 GB drive with a new 4 GB drive.

**Internet Explorer 4** The more I make changes to my computer setup, the more I see why some people never make changes to their computer setup. I downloaded and installed the newest "preview" (not to be installed by the faint of heart) version of Microsoft's World Wide Web browser, Internet Explorer 4.0 preview 2. It is far more polished than preview 1; however, it is still probably not finished enough for those among us who can't tolerate a few things not working correctly. I will briefly give my impressions of the program and invite you to read the review of Netscape Communicator in this same issue. I can't make a comparison since I have not used the new Netscape program.

If you so choose, it can function as a shell for Windows 95, making changes in the way Windows Explorer functions and the appearance of your desktop. My choice was the standard Win 95 desktop and windows Explorer functioning as originally, except that I did customize one folder as an HTML page just to see what was going on. I wanted to keep the possibilities for problems at a minimum—remembering preview 1. Thus, I did not choose the active desktop,

*(Comments.....Continued on page 4)*

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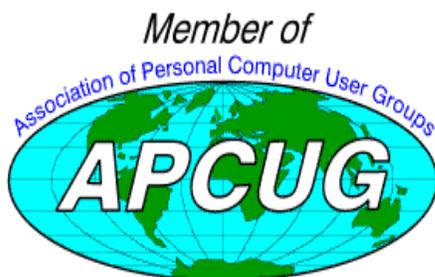
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All advertisements must be prepaid by check payable to TPCUG, be in camera ready format (actual size, black ink on white paper), and be submitted on or before the 20th of the month preceding the month of publication. Commercial advertising is usually limited to 25% of the total space of an issue. The Editor reserves the right to hold ads if the total space for ads exceeds this limit or if they are not received on time.

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## SECRETARY'S REPORT & MINUTES OF MEETING July 9, 1997

### *Minutes and Comments by Merle Nicholson, Secretary, Tampa PC Users Group*

Mike Hodges brought the meeting to order, did introductions and SIG group announcements and some informal polls. Mark Cassetta and John Reis from *Productivity Point International* gave a talk on "Maximizing the Use of Your Computer". After the break, we held the door prize drawing and concluded about 8:40.

Mike Hodges, our Vice President filling in for the running-late-Connie-Kincaid did the welcome and introductions and SIG announcements. He then conducted some informal opinion polls to help out the board with information for future direction of the club.

Productivity Point International provides computer training services from five centers in Florida - Orlando and south - on a variety of subjects and products. From their catalog, they do 1 or 2 day sessions in desktop training ... publishing, database, spreadsheets and word processing; and also longer - 5 day - Microsoft Technical training; operating systems, networking and application development. They have a very slick, impressive catalog that they handed out to everyone.

Mark Cassetta gave a PowerPoint-guided talk on "Maximizing the Use of Your Computer", discussing:

- PC configuration
- Key Components of a PC
- What you'll need in 3Q 1997 (*in the way of equipment*)
- What you want to do in 3 months, 6 months and 12 months and how to Achieve your Goals (*Get more training, of course!*)
- Put Magic in your Computer
- Questions

Mark, with John Ries helping out in the background, gave an interesting talk on the components and use of a computer, leading up to the training they provide. He unfortunately had to compress the training discussion to be very short. But there was some good interaction from the club members during the course of the presentation., where some of our computer-head members were quick to pick up on any incorrect piece of information regarding a particular processor. The meeting was stimulating. Thanks, Mark and John.

We had an eclectic selection of door prizes this month: Ford and Bambi Bond won CA Tax and CA Simply Money. Kevan Sheridan a CD Homicide game and Clark Evans, a Win Jack game. Roger Waters, Will Gobel and Ken Boyd won cups. ◆

## COMDEX '97 in Atlanta

by Don Patzsch, Tampa PC Users Group

**Editor's Note: Don sent this in for the July newsletter, but your editor misplaced it, so here it is one month later than it was meant to appear.**

# COMDEX 97 Atlanta

What would you see if you went to the Atlanta COMDEX in June of 1997?

We go to a motel at one of the four ends of the MARTA system. MARTA is a train that takes you from your motel to the COMDEX. It is a very smooth riding train. We think we save money and our sanity by staying out of town and it is great to have MARTA, a cheap way to get downtown in a hurry!

The first thing we noticed at the 1997 Atlanta COMDEX is that there were very few 3.5 inch floppies given out. At previous COMDEX there were many thousands of them given away. Now it is all CD ROM's. Do you want a CD ROM that gives you the ZD tests on your particular computer, comparing the speed of the Computer to a "standard"? Two CD ROM's are given to you at the ZD booth. Ziff Davis publishes PC Magazine and many others. The two disks are Winstone97 and Winbench97 and also 3D Winbench97. On the disks, they have the URL to go to for updates.

Would you like to understand what memory is all about? There are many booths with memory people inside. Want to know what interleaved memory is? Page mode memory? Row and column memory? WRAM? EDO RAM? Any questions can be answered by asking these people or letting them demonstrate their wares. Gold or tin plating, why? Get a few of their pamphlets on what memory is and does. Go to Rambus on the web if you want to see the new 665 MHz memory. You use 60 or 66 MHz in your latest computers.

**The magazines** So many magazines have booths at COMDEX you can't pick up a free copy of all of them. PCWeek, PC Magazine, and all the Reseller magazines are there. Don't pick up a copy of Computer Shopper early in the morning and carry it all day. Wait till you are ready to leave for the night.

**The foreign companies** Hong Kong, and most of the Asian companies have representatives in booths. They have literature on their countries and also how to sell to them through various means. They want to sell to you also. You can see motherboards and other boards and hardware that they sell, as well as their pricing schedules. Take home catalogs on anything you think you want next. Let me give you an example. Hitachi has a booth in each of the football field size rooms. One is on hardware; they have a complete line of monitors out

for you to look at, and also computers. In the other section, they show their software booth. (Some people do not realize how much software is produced in other countries.) You see it here.

Have you been a beta tester for a few companies? I went to the **PowerQuest** booth and the man I saw recognized my name on my badge. He was the person I talked with via email during the testing of the Drive Copy program. You may be surprised at what they tell you about the company and what they have on tap next. Anyone can be a beta tester, you only need to know your limitations.

At previous COMDEX, they had lots of "girlies" dressed or not dressed, in costumes. There were less girlie shows at this COMDEX, but there were the usual number of people doing "magic tricks" One guy really mystified the audience. He had someone from the audience put on handcuffs and get into a trunk. During the show, he almost instantly was in the trunk and the man from the audience was out of the trunk. Most surprising! And of course, there were prizes given out. But the big one, a large combination surge suppressor and battery backup; you had to come back at 4 P.M. to win that.

**Adobe** has a booth. They really show you how to handle photos and what their software will do. I won a book at the end of the demo. Others win very expensive software after each demo.

Like to play miniature golf? Putt the ball into the hole and win a very neat folding umbrella or other prize.

Then there is the **Curtis Mathis** booth. I watched and talked with many of the people in this booth. They have a "Web TV" set up; in fact, they have maybe ten of them. Not one of the demonstrators could make it put email on the screen for me! For some reason, their system did not work at the show! You can go to any Curtis Mathis showroom here in Tampa and see it work, though.

Now for the real show. **Corel** has a booth. The screen size is about eight feet high and maybe twelve feet wide. The person who talks has a radio mike, and can move around while she tells you about Corel Draw7, and Corel WordPerfect version 8, and Quattro Pro, and Presentations, and Corel's Webmaster.

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She makes up home pages while you watch, she shows you the latest and the greatest and you see just which keys to push to get that animation or the post card you want in Corel Draw etc. We watched this demo at least three times, because I wanted to learn the latest changes in Home Page construction and also in the WordPerfect manipulations. Mary Farrell sure knows how to key in the stuff to get the best out of Draw and WordPerfect and also the Internet package, Corel Webmaster. The demo was to be in Tampa downtown on June 19, I believe. Corel is always the hit of the COMDEX for me.

**Laplink** shows you how to use the Laplink program. They gave three 3.5 inch floppies with a complete copy of Laplink for WindowsNT to anyone that asks for one. It times out after a period of time.

**IBM** and others gave away a notebook computer.

**USB**, a new bus. It is called the **Universal Serial Bus**. It is on many of the new computers, and instead of having your keyboard and all the things like your external modem, monitor, etc-plugged into separate connectors on the back of your computer, you can daisy chain over a hundred items using this system. I have been watching it develop for about three years. Now it is here. You can get info from the Intel people who are here, or from many other companies who are in this same booth, and they all have literature for you. Perhaps this is the biggest single thing to hit your computer in years. Rambus is next.

I could go on for a long while, but maybe this will give you an inkling of what you can see and do at COMDEX, Atlanta. Next year it will be in Chicago. If there is anything you want to know about computers, this is the place to meet the people who design and build computers, and also the place to see and hear from your software manufacturer. They will tell you what you want to know. ♦

*(Comments.....Continued from page 1)*

which turns your formerly fixed Windows background wallpaper into an HTML page that, in addition to your old folders, can contain Java components, links, ActiveX controls, and other HTML pages.

One of the more ballyhooed features is the use of push technology to move information to you automatically. The idea is that you subscribe to a channel—a Web site that has been especially prepared to push its information at you at the specified times you set— e.g. when the content changes, or every

two hours from 9:00 AM - 7:00 PM, or once a day. Microsoft provides a beginning list of such web sites with, I am sure, many more to follow. Three I found useful were the Wall Street Journal (not the full fee based online version), the New York Times, and MSNBC. It took me awhile to get used to my computer all of a sudden dialing out on the modem on its own initiative to look for updated content. You can, of course, subscribe to any Internet site in this way, but as best I can figure with the limited time I have to devote to this right now, you only update the immediate page you go to. With channels, however, the update goes as deep as necessary to get past the “headlines” and retrieve the whole story.

So, if you want a little computing excitement, go to <http://www.Microsoft.com>, find the free download site and have at it. You will first download a “starter” file of about .5 MB which, when run, will then download the actual 23 MB IE 4.0 preview 2 file. With my 28,800 modem connected at 26,400, I received this file in 4 hours, 20 minutes, and the installation went smoothly. This download includes much more than just the IE 4.0 browser and auxiliary mail and news group reader Outlook Express. Before listing the extras, just note that Outlook express provides the ability to add backgrounds, called stationary, to your email. It also permits embedded graphics and sounds. However, whether or not the recipient will be able to see any of



this will depend on the email program he is using. The newest Netscape seems to handle all such messages except for the embedded sound, which is done with a Microsoft only supported HTML command.

With this full download you will also get NetMeeting, which allows you to hold voice and video conferences, share software applications, chat, and share a whiteboard. You also get the Web page editing program WordPad (a scaled down version of FrontPage), the Web Publishing Wizard, NetShow 2.0 which allows you to stream multimedia across the Internet and intranets without eating up a lot of network bandwidth, Personal Web Server and a few other odds and ends. If you don't want all these extras you can get by with only about a 15 MB download.

**Office 97** Wanting to take advantage of a good price on Microsoft Office Professional 97, I bought the CD and am now writing this in Word 97. And that introduced another problem: Microsoft Publisher 95, the version I have, will not use Word 97 as its auxiliary text editor; it wants Word 95 or Word 6. Another example of how a change causes problems. But this gave me the opportunity to experiment.

You may recall that when I started doing the newsletter, I did it

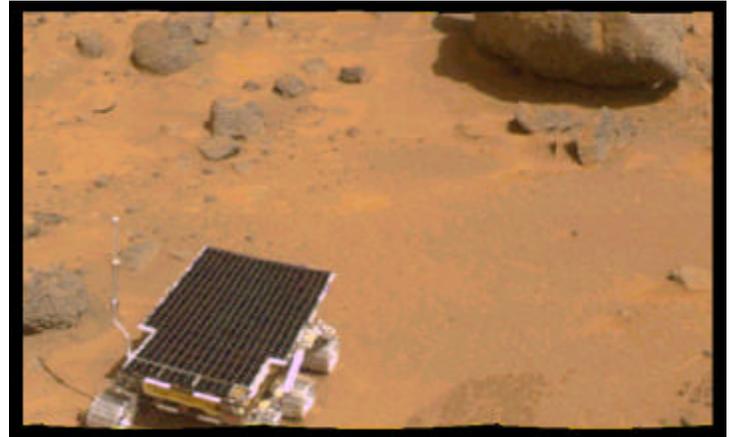
*(Comments.....Continued on page 10)*

### SOFTWARE AVAILABLE FOR REVIEW

1. **G-NOME** - 7th Level - Pilot more than 20 different mechanized vehicles in war action- Win95, Pentium 90, 16 MB RAM & 4X CD required (13+)
2. **HELI COPS** - 7th Level - Helicopter war game simulation - Win95, Pentium 100, 8MB RAM, 4X CD
3. **Magic Cap** - General Magic - Organize all your communications: email, fax, etc. - Windows 95 CD
4. **Work Safe Office for Windows** - Production Technology Engineering & Management Services - Ergonomic risk analysis for computer work stations - Windows 3.1 & 95
5. **On File** for Windows - Arranges your files into fun-to-use "notebooks "
6. **How Would You Survive?** - Grolier - Multimedia Adventure (ages 7-12) - Windows CD
7. **Jump Start Preschool** - Knowledge Adventure - getting a head start on education (ages 2-5) - Windows CD
8. **Space Adventure**- Knowledge Adventure - up to the moment exploration of outer space (8-adult)
9. **Aviation Adventure** - Knowledge Adventure - complete world of flying (8-adult)

(Call 251-3817 for information on review software)

**People with software reviews due--we need them!**



**Internet picture of the month**

This is a screen capture from the **Martian Panorama** found at <http://www.ambitweb.com/pf/pf.html> . The photo was taken at Sagan Memorial Station, Mars, on July 6, 1997.

### August's Interesting World Wide Web Locations

Tampa PC Users Group (that's us)	<a href="http://www.tbos2cla.com/tpcug/">http://www.tbos2cla.com/tpcug/</a>	
Astronomy - Mark Elowitz	<a href="http://www.seds.org/~rme/mark.html">http://www.seds.org/~rme/mark.html</a>	
AudioNet AudioBooks	<a href="http://www.audionet.com/books/">http://www.audionet.com/books/</a>	
Boston. Sidewalk (Microsoft city guide)	<a href="http://boston.sidewalk.com/">http://boston.sidewalk.com/</a>	
Florida Professional Malpractice Records	<a href="http://www.doi.state.fl.us/liability/">http://www.doi.state.fl.us/liability/</a>	
Freeware Publishing Site	<a href="http://www.katho.be/freeware/freeware.htm">http://www.katho.be/freeware/freeware.htm</a>	
Gibson Research Corporation (SpinRite)	<a href="http://www.grc.com/default.htm">http://www.grc.com/default.htm</a>	
Intellectual Capital	<a href="http://www.intellectualcapital.com/">http://www.intellectualcapital.com/</a>	
Lowry Park Zoo	<a href="http://www.med.usf.edu/NINA/park/index.html">http://www.med.usf.edu/NINA/park/index.html</a>	
Microsoft CarPoint	<a href="http://carpoint.msn.com/Home">http://carpoint.msn.com/Home</a>	
Policy.com - Reports on today's leading issues	<a href="http://www.policy.com/">http://www.policy.com/</a>	
South Carolina Historical and Genealogical Resources	<a href="http://historic.com/schs/main.html">http://historic.com/schs/main.html</a>	
Tampa-Hillsborough Public Library System	<a href="http://scfn.thpl.lib.fl.us/thpl/thpl.htm">http://scfn.thpl.lib.fl.us/thpl/thpl.htm</a>	
WFMT 98.7 Chicago - Fine Arts	<a href="http://www.audionet.com/radio/stations/station.asp?station_id=139">http://www.audionet.com/radio/stations/station.asp?station_id=139</a>	
WHNZ 570 AM Tampa - News & Talk	<a href="http://www.audionet.com/radio/stations/station.asp?station_id=64">http://www.audionet.com/radio/stations/station.asp?station_id=64</a>	
WRCY 107.7 FM Washington, DC - Country	<a href="http://www.audionet.com/radio/stations/station.asp?station_id=59">http://www.audionet.com/radio/stations/station.asp?station_id=59</a>	
Windows 95.com (Win 95 software & information)	<a href="http://www.windows95.com/">http://www.windows95.com/</a>	
World City Maps	<a href="http://www.lib.utexas.edu/Libs/PCL/Map_collection/world_cities.html">http://www.lib.utexas.edu/Libs/PCL/Map_collection/world_cities.html</a>	

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

## Software Review

### Netscape Communicator

by Larry Anders, Librarian, Tampa PC Users Group

As in the past, with some of my articles, this is more of a summary of the good stuff than a full-blown review. Quite frankly, if I didn't think this was a good product I wouldn't waste your time or mine discussing it. Any of you that know me, know that I am an avid supporter of Microsoft and Microsoft products, because they have done more to make computing fun and enjoyable for me than anyone else out there..... until now.

Like most of you I wasn't an early user of the Internet. I started after the graphical user interface (GUI) came along. I tried them all in the beginning but settled on Microsoft's Internet Explorer (IE) primarily because it was feature-rich and designed to run specifically under Windows 95. And FREE! The one thing I never liked about IE was that the e-mail program was not purely integrated. It takes too long to start up and shut down e-mail in IE.

I recently began publishing web sites and learned that there is a difference in how each web browser displays a web page. So to make sure that the best possible displays of my web pages were presented I had to view my sites in the various browsers. During this process I started using the new Netscape Communicator and it has become my browser, or actually suite, of choice because it is a collection of software components for sharing, accessing, and communicating information via Intranets and the Internet.

*Communicator Standard Edition* now includes components for navigation (Navigator 4), e-mail (Messenger), discussion groups (Collabra), HTML authoring (Page Composer), dynamic information delivery (Netcaster) and real-time collaboration (Conferencing). *Communicator Professional Edition* also includes calendaring and scheduling (Calendar), IBM host communications, and Communicator management. Communicator runs on 16 platforms.

*Navigator 4* is the cornerstone of Communicator. It has a new, user interface and new technology that makes browsing dynamic web content easier than ever. Navigator 4 comes pre-installed with the most popular multimedia plug-ins (small programs that add functionality to Navigator). SmartUpdate automatically configures and installs new multimedia plug-ins so they work right away without any user configuration. There are currently 154 plug-ins available. Access to favorite sites and Internet searches are just one-click away. With the initial release of version 4 there were security problems discovered, but Netscape immediately plugged the holes. Now Navigator includes open standards-based security features to protect information such as credit card numbers and personal financial data. Data encryption in Navigator 4 protects infor-



mation as it is transmitted over the Internet. Navigator's tool bar can be customized to your individual preferences including bookmarks for marking favorite sites. There is a new Search button that links directly to a collection of the Internet's leading search engines.

*Messenger* is a full-featured application for sending and receiving e-mail over Intranets or the Internet. Messenger includes new message-management features that are powerful enough for corporate power-use but easy enough for individual novice use. Open standards-based features, such as mobile user support and online address searching, allow you to access your email from any location and find people anywhere on the Internet. I have two separate Internet accounts: GTE and AOL. I have no problem checking my GTE e-mail while in AOL and AOL Internet access runs terrific under Navigator. Messenger is fully integrated with Netscape Composer, allowing you to create e-mail messages that look like web pages, complete with graphic images - even Java applets. As with all other Communicator components, Messenger includes encryption to protect private communications. A fully integrated spelling checker helps eliminate spelling errors.

*Collabra* brings the benefits of newsgroups and online information exchange to workgroups, businesses, and corporations and can also be integrated with Internet newsgroups. It's as easy to use as e-mail. You can perform cross-discussion searches for relevant information. With Collabra's filters you can highlight certain postings and ignore others. You can also post forum messages with graphic images and Java Applets. Documents created in Composer's HTML editing environment can be displayed and viewed in Collabra.

*Composer* is an easy-to-use tool that makes creating HTML-based documents as easy as writing a memo with a word processor. Hypertext Markup Language (HTML) describes how words and images should be displayed on a web page or in an e-mail message. Like a word processor, Composer uses fonts, styles, paragraphs, and lists, and includes an integrated spelling checker. Composer can also publish, or upload, documents to an Internet document server with a single button click.

*Netcaster* dynamically (automatically) delivers Intranet and Internet information right to your desktop. With "push" capabilities Netcaster enables you to receive constant information updates in the background while you're working on something else. Customize how and when information is delivered to your desktop. Information is delivered in an of-

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(Netscape.....Continued from page 6)

flines cache for faster display. You can "anchor" any web content to your desktop to create a "webtop" environment. Net-caster's offline download capabilities lets you download content and then view it when you're ready.

**Conference** is a real-time multimedia communications tool. Unlike email and newsgroup communications, which use "store-and-forward" technology, real-time communications happen simultaneously. A telephone conversation, for example, is a real-time communication, while a voicemail message is store-and-forward. With Conference, one or more users can hold a conference call, share a whiteboard, or conduct a text-based discussion as easily as you can send e-mail or read newsgroup postings. Full-duplex audio conferencing is supported. You can send and receive any kind of data, including files, text, and images, in real time. A shared whiteboard provides a central location for sharing images between users. Chat allows users to exchange text messages. File transfer lets you upload and download documents and applications during a conference. With Conference you can send voicemail messages to standard e-mail addresses in WAV voicemail standard.

**Calendar** (available in Netscape Communicator Professional Edition) is a heavy-duty calendaring and scheduling tool for the corporate environment. With Calendar, you can schedule meetings and reserve conference rooms or other resources, all in real time. Calendar can support more than 100,000 users and is accessible from any Communicator component menu. Keep calendars and schedules private. Access control allows users to specify user access to their personal calendars.

There are also various other assorted utilities included in the Professional Edition such as the **IBM Host On-Demand** component that was co-developed by IBM and Netscape that is a cross-platform, Java-based application that uses the industry-standard 3270 protocol to provide Communicator clients with Intranet or Internet access to IBM hosts. Also available is **AutoAdmin**, which allows IS managers to centrally manage and update Communicator and manage the installation and configuration of client software.

The rest I won't bore you with at this time. Just let me reassure you that this software package can handle anything you can throw at it, and more than likely, it can handle a few things you haven't thought of yet. Requirements are Windows 95/NT, 16 MB of memory, 16 MB of disk space for base installation or 30 MB for all components. You can download a free, fully featured trial copy of version 4.01a from Netscape at: <http://home.netscape.com/download/index.html>. The software is free for all students, faculty, and staff at educational institutions, charitable nonprofit organizations, and public libraries. For the rest of us it costs only \$59. **Don't miss out on this one!** ♦

## SpinRite

### Disk Diagnostic & Data Recovery – As Good as it Gets

By Fredrick Rea O'Keefe, Tampa PC Users Group

#### UP FRONT SUMMARY:

Product - SpinRite 4.01

Publisher - Gibson Research Corporation

Website: [www.grc.com/default.htm](http://www.grc.com/default.htm)

Class - Utility, Disk Drive Maintenance

PC requirements - 100% IBM Compatible PC (XT & up), 1 diskette drive, any DOS version 2.1+, any DOS formatted (12/16 bit) hard drive. Comes on 1 diskette

Street price - available from publisher for \$93, or upgrade price \$43 (plus tax in CA, s/h included)

Rating (0-10) - 10

Recommendation - This is "required" for all IBM PC owners.

In the "good old days," when we knew that floppy diskette and hard drive media were going to fail, taking data with them, and that this was a certainty; back when we had to "clean" our diskette drives regularly because the diskette media both rubbed off onto the drive heads and eventually "sandpapered" the heads into uselessness -- there came a rescuer. No, not Peter Norton. I refer to the noted columnist Steve Gibson and his SpinRite program.

Don't know the name? Shame on you! Then you don't know that the disk media scanning programs included with Windows (Scandisk), and programs such as Norton Utilities' surface test are light duty and not sufficient. Such programs will detect only the most gross disk media aberrations, often after the damage has been done to your precious data, or to as yet unused sectors. Or when the disk drive is ready to collapse.

Without discussing esoteric disk drive hardware and media technicalities, let me state that only one program can deep-test every bit on a hard drive or floppy diskette, checking for every possible form of weakness. SpinRite not only finds the already shot areas, but those which have weakened and will soon fail, or even those bits marked bad by other programs -- but which are actually good! On the old-time hard drive types (how soon we forget -- MFM, RLL, ESDI), SpinRite is able to test, restore and deep format an entire drive, while preserving or recovering the data. Head drift and fading away or migration of formatting data (track location, cluster and sector start/end location) and your precious data are no longer problems. On newer, huge capacity IDE and SCSI drives, as well as compressed drives, SpinRite works its magic, eliminating problems in advance, preventing drive media recording fail-

(SpinRite.....Continued on page 8)

*(SpinRite.....Continued from page 7)*

ures from occurring. Fortunately, newer media and mechanisms are greatly improved, with longer MTBF (mean time between failure), and on floppies, very little rub off or sandpapering of the drive heads.

Why use SpinRite if new drives are so good, when you already have a disk utility? Let me clinch the reasons for you by quoting from the small manual: "SpinRite reads and recovers all or most data from completely unreadable hard or floppy disks; Optimizes and resets improper sector interleaves; Renews critical low-level drive formats; ... Verifies drive characteristics and setup parameters ..." What that doesn't make clear is that various brands of disk drives use techniques to fool DOS into exceeding its limits on drive capacity. All IBM PC clones use DOS to format the drives. Drive mechanisms and DOS use Error Correction Code (ECC firmware on the drive) to account for what the drive or DOS thinks are errors, validly or not. SpinRite is unique in being able to eliminate results of erratic drive error correction schemes and DOS limitations by addressing the drive media directly at the register level. A drive would have to be far off the wall for it to not be completely accessible to SpinRite. Virtually all hard drive and floppy drive interfaces, data transfer, and operating technologies managed by DOS are automatically and effectively handled. SpinRite is unique. (Remember that your drives are FDisked and formatted by DOS in either a 12 or 16 bit FAT (File Allocation Table), regardless of "Windows" or other operating systems. DOS has an inherent limitation of 4.3 GB for a partition. SpinRite tests drives up to that capacity. The limitation is that of DOS, not SpinRite. No, SpinRite does not analyze the new 32 bit FAT, and won't until Microsoft releases Windows 97, and end-users can "upgrade.")

Another unique, "wow" reason to use SpinRite is that it can correct a damaged or incorrect BIOS drive setup parameter! SpinRite determines exactly what the true drive is, how it operates, and lets you know the most efficient parameters. Nobody but Steve Gibson has thought of such a "needed" program. Part of the accuracy is due to reading the actual drive, not relying on the BIOS report or Windows record. "So what?" Even without having been used on your machine, SpinRite can resurrect your hard drive when the BIOS collapses (such as when your power-loss CMOS batteries fail during a power outage), and you can't find the BIOS/CMOS data disk, or the paper records you always keep up to date and available. So it is that you have another potent tool in your arsenal for defending your vital data against the vagaries of mechanical and electronic "betrayal."

Technical users familiar with SpinRite 3.1 know that there are up to 22 individually-shifted test patterns which scrub (write and read) the daylights out of every widely spaced "data bit cell," guaranteeing that every possible media and head function performance factor is tested. Testing under version 3.1

takes hours, but is extremely effective in locating existing bad "spots," soon-to-become-bad spots, and data weakening or damage (including endangered data existing on those spots). Data is analyzed, restored, and moved to proven-safe locations.

When I used older versions of SpinRite for testing at the deepest level on a 486-66 DX with a 350 MB HD, it took overnight and then some before the drive was completely tested. Unfortunately, I don't have the time or an older computer (anymore) to compare various versions of SpinRite. I can tell you that on the 200 MHz Pentium, with a 2.5 GB HD, it took only three hours and 56 minutes (236 minutes) to complete the test! That's 10.6 MB/minute. I'll explain the speed improvement later. Oh yes -- not a defect was found on my hard drive. Nor could I find a defect on any of the floppies I tested, including some old 720 KB diskettes I hoped would challenge SpinRite. Oh, well. It takes four minutes to test a 720 KB floppy, and six minutes for a 1.44 KB diskette. Not bad at all for a thorough write/read rejuvenation of the media.

The excessive time that hard drive testing takes with older versions of SpinRite is one of two major problems. The other, more troublesome problem existing with version 3.1 is a "ping pong effect," that is, unwanted reaction of the drive mechanism's read/write electronics throughout the data channel when subjected to such massive test data flow. This causes, in some drives, some media regions to be erroneously marked bad, then good, and back and forth on subsequent testing. Data is nonetheless preserved. How could this last problem occur? A seemingly admirable quality of SpinRite 3.1 is an absolute intolerance of variation in data amplitude. But, such a variation is purposely forced by 3.1 from use of the long-period test patterns! Then the drive mechanism reacts. This is not an obvious problem, and came to light only with three years of extensive use of SpinRite by observant users and laboratory testing. Back to the drawing boards!

SpinRite 4 designer Steve Gibson rewrote the machine language program to incorporate available research and new and pending drive technologies. As much as I have been able to enthusiastically recommend that users rely on older versions of SpinRite, I can recommend to you version 4.01 even more. Both problems just mentioned have been eliminated. A new pattern testing approach called "short-period" creates the needed weak amplitude data signal for detecting fading media areas, while not interacting with the drive controller firmware. Bye, bye ping pong effect. But, is 4.01 notably faster? Yes. As much as ten times faster. Because short-period patterns are able to test every other data bit cell simultaneously, two patterns alone suffice where twenty two used to be needed! Now, only one "level" of surface evaluation is required to deep scrub the disk media.

*(SpinRite.....Continued on page 9)*

*(SpinRite.....Continued from page 8)*

While users have an option of five test parameters (as opposed to the previous seven), the first three use only DOS' pattern testing, the fourth and fifth use Gibson's test pattern. The reason for a choice is that users need to frequently do a quickie "disk scan" with pre-selected actions in case of problems with data: 1) examine the surface (read); 2) recover weak or damaged data (read and, as needed, move data); 3) refresh the surface (all the previous plus write to and read every sector). These three are better in quality than Windows based disk scanning, in my opinion, because they directly address the drives. For the complete testing, using the short-period patterns, levels four and five do all that level three does, plus: 4) locate surface defects not apparent to DOS or the hard drive's limited Error Correction Code (ECC) of 11 bits (SpinRite can read and correct up to "510 bytes out of 512"), and 5) restore to use perfectly good sectors wrongly marked bad by DOS or the hard drive itself.

All that might seem confusing to some readers, but more technical users should be aware of the improvements.

A couple of other points. "DynaStat Data Recovery" is so effective at reading data from a defective drive, and subjecting the unclear portions of data to statistical analysis that almost all data can be recovered intact. By matching known characteristics of a disk drive with the readable or "not readable" data, comparing the subtle variations in magnetic flux of the "on/off" bits on a track, and being able to determine the true location of a track, SpinRite allows DynaStat to reconstruct almost all the otherwise "lost" data. That's as close to a miracle as one can get. This applies to both hard and floppy drives. Do you have an old floppy with archival data you wish you could use, but can't?

In using every version of SpinRite to test or recover a hard drive, one must always boot from a bare floppy, because SpinRite works directly on the drive without intermediate programs. Other drivers and background software would interfere. New with SpinRite 4.0, to test a floppy, you may run from Windows 95 using the "Exclusive DOS Mode" without requiring a clean boot from a floppy. The SpinRite "pif" program (desktop icon) will close all running programs (except comm programs which you must first manually close) and remove Windows, then move to the exclusive DOS mode, run SpinRite (you must select the floppy drive to test) and, when done, warm boot Windows for you.

As it operates, SpinRite documents all of its work and findings, including an extensive and accurate analysis of your disk drives and partitions and locations of any unresolved data problems for your bit-by-bit correction, tests the RAM and drive hardware every time SpinRite is started, and writes a "fingerprint" with pertinent data of recent tests. This valuable record is also a time-saver whenever you run SpinRite; no

need to redo the extensive drive tests.

There is too much more to cover in this article! Be encouraged to visit the website for all the minute details of what SpinRite can do. You will be amazed and delighted with all the benefits of faithfully using SpinRite to protect your data! A completely effective defensive product, like SpinRite or Zero Surge Suppressors, is so "boring" that you might forget how potent and necessary it is. However, if you, too, are a semi-techie, you will appreciate the fully detailed, live-action screen reports SpinRite shows on the screen and records for your next run (or in case of interruption).

The 4.0 manual contains an error on page three. "Data Recovery 'Aggression' Control" is not implemented yet. I found no other documentation error.

That overview of SpinRite should be more than enough to convince anyone that SpinRite 4.01 is more than valuable, it is a necessity. To frost the cake, this summary: SpinRite can prevent data problems due to unreliable media, recover virtually all data from failed media, rejuvenate and maintain your hard and floppy drives. It's fast and easy to use, the help file is extensive and completely detailed with technical explanations anyone can understand. "SpinRite is a complete, ready-to-run, data recovery and disk repair system." There is no other comparable program, not by miles. If you don't buy it, when you have the inevitable problem I will be more than pleased to assist you with a copy of SpinRite, which I will sell to you, and charge you for my time in recovering your data! (Please don't take this seriously -- I'm not available for technical support.)

A bonus demo program included with SpinRite is Chroma-Zone™, Steve Gibson's "World's only animated, virtual reality, interactive, screen saver construction set." Written in machine language, it is far tinier than After Dark and similar programs, yet includes far more presentations. It can even capture screens. The demo is a neat "ad" for the \$19.95 program. Replace the static or dreary screensavers you are using.

As ever, wishing you safe and enjoyable computing,  
Rick O'Keefe ♦

# SpinRite

## Special Interest Groups

Microsoft Access SIG — **Canceled** (temporarily we hope)

### Communications SIG

This SIG meets the first Monday of the month at 6 PM at the Reflectone Building. **Directions: Proceed west on Waters from N. Dale Mabry across the railroad tracks, about 1.5 miles, take second left on Savarese. Proceed on Savarese until you reach the Reflectone building. Use the north**

**door.** You must sign up to get on the list and to get by security. *Contact Charles Howe: at 968-1207 or HOWE@INTNET NET*

### Genealogy SIG

This SIG meets the second Monday of the month at 7:00 PM at the Museum of Science and Industry. *Contact Jenny Lind Olin at 960-5723 or Ford Bond at 987-6309 .*

## Book Review:

### Internet Service Providers, July/August 1997

Published by: Boardwatch Magazine

*by Don Patzsch, Tampa PC users Group*

This book arrived today, and I am very surprised at the depth of information about the Internet provided here. The introduction is written by Jack Rickard. Jack is one of the most knowledgeable people I know on the subjects of bulletin boards, telephone company information, the Internet, and computers in general.

The introduction tells you a little about what you will see in the book. To start, there is a story on the Architecture of the Internet. This is not a brief section; it goes into great detail as to what it is that makes up the Internet. A "backbone" is thoroughly explained. (A backbone is the wiring that interconnects everyone around the world by wires, wireless, glass fiber, and/or satellite.) You may have wondered how so many people can be on the Internet all around the world, yet your connection to any one computer on the Internet will be private and your download proceeds with no interference. (Ideally.) This section of the book describes how this is accomplished. What Jack did is to have 27 cities set up to call each of many backbones and download programs to determine a means of comparing these backbones as far as how reliable they are and how fast the download took place. This was not done in one location by one computer on one Internet Service Provider.

Now Jack goes to a monumental work. He provides you with the story on MCI, AT&T, Sprint, BBN, UUNET, and so many others you will have to read for a long time. The stories fill you in on the start of the Internet, the companies that provide the circuits your data goes through, and the maps that show you exactly who has long line connections all over the world. In other words, you can better understand what is meant when people tell you your data from your keyboard goes all over the country to get from one place to another. Now Jack lets you in on the

tremendous knowledge he has about computers. He begins to tell you how to set up a dialup connection to the Internet using your computer. This is a long description and it is worth reading if you want to know just how these things are accomplished. Next, Jack tells you in great detail how to configure Windows95 on your computer. A complete story on how you can set up Windows95, with all of the pictures showing you the screens you will see on your monitor is included. This part of the book is worth the cost of the whole book, for those who do not really understand how to set Windows95 up.

The last section of the book gives you a list of all the Internet Service Providers, complete with telephone numbers and details of how each provider is connected. This will tell you why some ISP's are not as reliable as others. You can learn a lot simply by reading this book, if you want to know how the Internet works, who provides what connections, and how it all started and has grown. But that is not all. It tells you what is coming up. There is no way I can give you a real description of all this! The book is called *Internet Service Providers* and sells for \$9.95 at Barnes and Noble and many computer book places. ◆

*(Comments.....Continued from page 4)*

in Microsoft Word—probably Word 6. But there was always a problem with the flow of text from one part of the document to another place in the document. Word could only easily continue onto the next page. Switching to Microsoft Publisher solved that problem, and, as noted, I could still take advantage of the superior editing power of Word. Well, Word 97 will now allow you to flow text too by the use text boxes—the same method Publisher uses. Unfortunately it does not provide the automatic little message: "Continued on page....." as Publisher does. Anyway, I got bold and decided to do this month's newsletter in Word 97. But I soon encountered an-

*(Comments.....Continued on page 12)*

## Friends of the User Group

*We acknowledge the following firms for their support*

Museum of Science and Industry  
BCD (Brainchild Computer Distributions, Inc.)  
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Reflectone

*And these national software vendors for their demonstrations  
and contributions of evaluation software to our group*

Access Software	Micrografx
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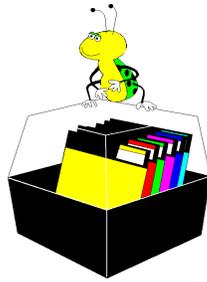
## MEMBERS HELP-LINE

The following phone list is provided for our Tampa PC Users Group members in an effort to establish local support for those frustrating times which we have all encountered while using our PC's. Please note that these are members that have volunteered to help you; treat them in a courteous manner. Be sure to ask if it is convenient for them to help you now, or if you should call another time. It would also be helpful to have your documentation and have it handy when you call. (Don't expect help if your software is an illegal copy or you do not have documentation!) TPCUG is not responsible for the information or advice provided by volunteers. Volunteers may or may not be experts in the subject matter. You are on your own with any advice received. Be aware also that some of these volunteers may be consultants in their area of expertise. If you are interested in volunteering to answer members' questions, either leave a message on the BBS or fill in the forms provided for this purpose at the meetings.

<b>Name:</b>	<b>Phone No:</b>	<b>Day:</b>	<b>Time:</b>	<b>For help on:</b>
Ed Buzza	685-5898	Mon-Sun	10am-9pm	WordPerfect 5.1 and 6 for DOS
Jim Clark	986-3888	Mon-Sun	10am-9pm	Express Publisher for Windows, Word for Windows
Charles Howe	968-1207	Mon-Fri	9am-5pm	Modems, BBS & Internet
Tom Cone	949-3716	Mon-Sun	7pm-9pm	Alpha 4 & Compuserve
Larry Anders	989-9119	Mon-Sun	6pm-9pm	Lotus 123 for Windows
Connie Kincaid	661-8185	Eve.+ Weekends	Leave message	MS Professional Office Suite
Merle Nicholson	879-3602	Mon-Fri	6:00pm-10:00pm	Hardware Memory Management, DOS, Windows 3.1 & 95, Visual Basic, Delphi
John Meroth	831-7878	Mon-Sun	Anytime except 6-8pm	OS/2, Database (general), Clarion, DTP (limited)
William LaMartin	251-3817	Mon-Fri	10am-9pm	Win 95, MS Office Suite, Internet

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*(Comments.....Continued from page 10)*

other obstacle that I could find no way around: Using text boxes I can find no way to flow the text around graphics. If I want the text to flow around graphics it appears that the text can't be in a text box—even if the graphic is in the text box. Perhaps I am missing something, but I don't think so. Well, if Word did everything Publisher did we wouldn't need Publisher, but it came so close—just one little feature short.

I am not going to give up text easily wrapped around graphics, and I can't live without the text flow allowed by the use of text boxes—all things provided by Publisher. I also want the text editing capabilities of Word. So, by buying Word 97, it looks like I have also committed myself to Publisher 97. And, indeed, from this paragraph on I am using Publisher 97 and Word 97 to do the newsletter. I had the newsletter 80% completed in Word 97 when I discovered the graphics problem with text boxes. So now I must take a little time to bring everything back into Publisher 97. Don't get me wrong: Word 97 will wrap text around graphics—just not if the text is in a text box. If any one can make text wrap around a graphic inside a text box I would love to hear about it ♦

