

README.DOC

A Monthly Journal of the Orange Coast IBM PC User Group

\$3.00

**General Meeting, May 20, 1989 at 9:00 AM
Orange Coast College-Science Lecture Hall**

**Computers for the Handicapped
and
PC Care and Maintenance**

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GENERAL INFORMATION

README.DOC is published monthly by the ORANGE COAST IBM PC USER GROUP, P. O. Box 6100-211, Costa Mesa, CA 92628. The group's recorded message phone number is (714) 898-7998.

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Articles may be submitted via modem to the OCIPUG BBS, on paper or on an IBM format diskette (5-1/4" 360k format preferred). We will accept them in any of several formats, although we strongly prefer pure ASCII files. Other acceptable formats include Microsoft Word, Multimate, WordPerfect and Wordstar. Submissions on paper should be double-spaced and typed. All items submitted for publication are subject to editing.

DEADLINE

Articles and advertising must be received by the twentieth (20th) of the month prior to date of publication.

ADVERTISING

All advertisements must be camera ready and prepaid; rates and deadlines for commercial advertisements are available on request.

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Members are allowed to place an advertisement for personal items in the *README.DOC* newsletter at no cost. There will be a limit to the amount of advertising placed in the newsletter. All submissions will be placed on a first come, first served basis.

Commercial advertisements, from members and others, are also welcome. For information concerning advertising rates and requirements, contact:

Steven Dela (714) 775-8373 or write to Advertising Manager, OCIPUG, P. O. Box 6100-211, Costa Mesa, CA 92628.

PURPOSE STATEMENT

The purpose of the ORANGE COAST IBM PC USER GROUP is to provide a forum for members to share information and experiences that will help other members obtain maximum benefit and enjoyment from the use of their IBM PC and compatible personal computers.

TRADEMARKS

The mention of the names of various products in this publication without indication of Trademark or Registered Trade Mark status does not imply that these products are not so protected by law.

General Meeting, May 20, 1989 at 9:00 AM Orange Coast College-Science Lecture Hall

Computers for the Handicapped and PC Care and Maintenance

OCIPUG IS FOR EVERYONE

Since OCIPUG is dedicated to serving the needs of all PC computer users, we will turn our attention to products which make it possible for handicapped persons to use computers. In some cases, it is the computer itself which helps those persons to do tasks which most of us take for granted.

The dictionary defines a "handicap" as a disadvantage that makes achievement unusually difficult. It usually refers to a physical disability, as opposed to other types of disabilities.

Alan Crafton, Southwestern Territory Manager for Telesensory Corporation, an international manufacturer of products for the visually impaired, will discuss three products in his company's Blindness PC Access Product Group:

1. VERT Plus (Verbal Terminal) Speech System - Hardware and software, for the totally blind,

which provides verbal output for data entry and retrieval.

2. VISTA - A PC screen-magnification system for low-vision impairment.

3. BIT (Braille Information Terminal) - An access tool for Braille users. Mr. Crafton will make this product available during the meeting for any Braille-competent persons in the audience to try out.

MAINTAINING YOUR PC

Dr. John Goodman has provided OCIPUG with some of its finest presentations in the past. John, who is currently a 2-year OCIPUG Director, has been busy traveling throughout the country teaching 3-day classes in Upgrading, Maintaining, Troubleshooting, and Repairing PC's.

Since the dictionary defines "maintenance" as what you do to prevent trouble, the term "preventative maintenance" is probably redundant. John

describes his approach as "common sense."

If you remember, John uses PC Outline and other graphics programs to illustrate his points. Bring something to take notes, since we're sure you will not be able to get this professional and practical information anywhere else.

LEFT-OVER DEPARTMENT

We had a large crowd at the WORD SIG after the April general meeting, but we still have a large number of WORD 5.0 demonstration disks left over. We are making them available at the May general meeting to members who may be interested in seeing the more salient features of Microsoft WORD 5.0. The disks are in 5-1/4 inch high-density format (quad-D2S, not readable by the usual 360K -XT drive) and may be copied freely.



Reminder:

**Deadline for articles, advertisements, and contributions
to the newsletter is
May 30th**

PRESIDENT'S MESSAGE

Paul Curtis

Based upon the idea of SHARING IT WITH OTHERS, I suggested to Mr. Jim Moody of Borland International, the SYSOP of the Association of PC User Groups (APCUG) Electronic Bulletin Board System, that we attempt to have a national BBS teleconference involving leaders of several important user groups. He thought it was a good idea, and so we put together some ideas on how to make it work, and what its purpose should be.

On April 2, 1989 at 3:00 PM PST, Jerry Schneider (Executive Director of APCUG), Mike Todd (founder of the Capitol PC User Group), Richard Samuels (President of the Portland PC User Group), Jim Moody (Borland), Richard Sabin (OCIPUG SYSOP), and I, were privileged to make history. We were all linked by computers through the APCUG BBS in Scotts Valley, California for a one-hour teleconference.

The historical part is not about linking a BBS teleconference; that happens from time to time. What made history, we believe, is that this is the first time that user-group leaders have ever been linked in a planned teleconference to conduct user group business. This is exciting stuff! The ideas generated from that teleconference will contribute to permanent change for the better, for each user group!

Many thanks to Tymnet, Borland International, Dell Computers, and Intel PCEO for their valuable contributions to microcomputing in general, and particularly to the User Group Community! Without their cooperation and Jerry Schneider's leadership, this would never have been possible.

We now have a National BBS Teleconference every Monday

evening at 7:00 PM PDT. User Group Leaders call in from wherever they happen to be, using laptop systems or whatever they can get their hands on.

Mr. Greg Joy is also a SYSOP of the APCUG BBS. He wasn't able to be on the net this first time because, as Jim Moody put it, "Greg sends his regrets but he was 'forced' to take a free trip to Phoenix to check out a luxury hotel for a Borland Sales Conference." In our discussions by voice with him, we came up with the idea of an International BBS Teleconference, to involve leaders of user groups in Singapore, Tokyo, Sidney (Australia), London, Moscow, Canada, and the USA. Can you imagine using large screen projection in front of a user-group audience? What an opportunity to take a step toward international understanding and all that it implies!

We experienced some technical difficulties during the early part of the session. The results were the quotes of the year: Jerry Schneider said, "My mind automatically times out on occasion"; Mike Todd said, "Mine just continues until it drops carrier grin"; and Richard Samuels came on with "There's a lot of free lunches. They just tend to be expensive."

The session was wonderful, exciting, and experimental. We had serious discussions about national account advertising, in our newsletters, to help defray the cost of publication. Things are in the works in this area. We also had discussions about incentive programs for volunteers. We may even get vendor support on this one. We have tentatively titled this idea "User Friendly of the Month." Who knows where this will go?

The telephone number for the APCUG BBS is (408) 439-9367 and is available for anyone to use. If you don't want to make the long distance call, you can upload something to our BBS, and leave a note for the SYSOP for it to be

forwarded to Scotts Valley.

Beta testing on Release 4.0 of Microsoft Word 5.0 is complete. Thanks to those of you who participated in this effort. We saw at our last general meeting, the finished product, in a fine demonstration by Jon Reingold of Microsoft.

You might check out Prodigy if you haven't been on it for a while. There was a download which occurred automatically when you logged in on Thursday, April 27th. Since then, the system has run considerably faster. It is worth checking out.

Mr. Hank Levinson (member #1278) called me one evening with a request. He teaches at a Veterans Administration Rehabilitation Facility and told me about a student who is disabled to the point where he must learn to operate a computer by using a probe between his teeth, to create keystrokes.

The sad part of all this is that he is doing it on an old CP/M machine with 8" diskettes. Learning on this system will not give this individual much of a chance at employment in the real world. Hank wanted to know if we could figure out a way to obtain an IBM or compatible machine that this person could learn to operate. I told Hank that I was sure we could do something like that, because we had done it previously.

I proposed to Hank that we solicit old used parts from members, to be assembled at a New User SIG meeting. We could get people from the Consultants Forum or the Hardware SIG to provide expertise and the New Users could watch, help, and ask questions. If the cursor comes up on the screen when we turn it on, everyone will be a winner!

If anyone has parts to donate, please bring them to the next meeting. We'll see they get to the New User SIG and get put to good use.

General Meeting Report

APRIL GENERAL MEETING REPORT

Steven Dela

The April General Meeting was opened by Paul Curtis at 9 AM to a capacity audience. After a few brief remarks by Paul, Tom Sutro spoke about the Tim Smith Scholarship awards to be presented in May.

Two students majoring in Computer Science at Orange Coast College will be awarded a \$250 scholarship to help further their studies. Award ceremonies, hosted by Orange Coast College, will take place on May 11th. Paul Curtis, Tom Sutro, and Dave Lorenzini, will represent OCIPUG at this event. We hope to have the students at our May General Meeting for a proper introduction to OCIPUG members.

As the main feature for the April meeting, Dave Lorenzini introduced Jon Reingold and Greg Cheever from Microsoft Corporation. WORD 5.0 will soon be released, and this was a perfect opportunity to preview the product in its final form.

During March and April, selected OCIPUG members were beta testers of the final product. A brief article in the SIG report details this testing at OCIPUG.

Mr. Reingold demonstrated to the audience such new features of WORD 5.0 as Auto-Save, Auto-Pagination, and an ease of importing graphic files to merge quickly into text. As time passes, word processors look more like desktop publishers, and desktop publishers take on more of the feel of word processors.

One feature that experienced WORD users liked was consolidation of the option page into a single screen. Entries are

highlighted, then toggled to the desired setting within one window, where other settings are viewed, before returning to editing the document. WORD 5.0 can also display formatting and fonts in the screen display; this feature lets you view your document before it is printed. Bolding, italics, strike-through, and the ability to display fonts from 8- to 14- point, makes WORD 5.0 a competitive word processor which is winning new converts.

Greg Cheever demonstrated how a spreadsheet can be linked automatically by importing directly to a LOTUS 123 worksheet. With a few keystrokes, columns were perfectly aligned, tabs were corrected, and the data was even high-lighted within the text by bold lines. If cell entries are changed later, the data is updated when the worksheet is brought back into the document.

WORD 5.0 has an integrated outliner which justifies text in the proper format automatically. Entries can be keywords, or sub-entries can be expanded to phrases or sentences from the document. A spelling checker is included which is much easier to use than the checker of version 4.0. Words can be added to create a custom dictionary, but dictionaries cannot be merged and checked at the same time.

A listener asked about plans Microsoft might have for a toll-free help line, like that of WordPerfect.

Jon Reingold countered by emphasizing the promptness with which Microsoft now answers calls, and how fast an accurate answer is given, thus saving time for all involved.

Microsoft surveys of WORD users show the lack of a toll-free number not of great importance. Members voiced appreciation for the efforts of the two Microsoft people to show this latest release and to answer questions from the audience.

Bonnie Ulanovsky gave an overview of disks featured this month and spoke about the upcoming meeting of the Shareware SIG (be sure to check the SIG guide for all the latest times, dates, and locations). Dave Carroll talked about the SIGs and some of the topics to be featured in May.

Two representatives from Executive Micro in Irvine were to have demonstrated features of the HP LaserJet II and the new HP ScanJet Plus scanner, but failed to show. Fortunately, Dave Lorenzini was prepared to give a personal demonstration of an AST Turbo Scanner and to show how it could enhance WORD 5.0 by importing graphic images for output to a Laser printer. For more information on these topics, plan to attend the WORD SIG and the DESKTOP PUBLISHING SIG in the near future. Thanks, Dave, for the quick substitution.

Before the raffle, during which seven prizes were awarded, Paul Curtis announced final plans for the new OCIPUG offices and SIG meeting space. These will be on the second floor of 17632 Metzler, in Huntington Beach, near the intersection of Slater and Gothard.

April Raffle Prize Winners

	Prize	Donated By
Marilyn Grimbley	Learning DOS	Microsoft
Steve Blakesley	PC Type Plus	Buttonware
John Kruse	WP Mug	WordPerfect
Vernon Wade	Turbo Search	Ashton-Tate
Bob LaFave	Manager Mouse	ACP
Ruth West	Sidekick Plus	Ralph Minerich
Jean Collins	Flight Simulator	Microsoft

The small office will be for the BBS, newsletter equipment, and club display facilities; the rest of the space will be used for SIG and similar meetings, and will accommodate twenty to twenty-five people comfortably. Tom Sutro and Paul Curtis have worked many hours to secure this space at a very reasonable cost. We plan to occupy this facility by June 1st, but be sure to check the SIG Guide, the BBS, and the OCIPUG Hotline (714-898-7998) for the latest time and place for meetings.

Editor's Corner

Jean Stevens

Many of the articles in this month's README.DOC carry familiar bylines. These writers have consistently shown an interest in sharing their skills and talents with others in our organization, for which a mere "thank you" could never suffice.

However, we need to welcome some new authors into the fold. Many of you are lucky enough to have expertise in the areas of hardware, software, graphics, and related fields. Why not share it with those of us who do not, but are eager for this knowledge? That is the primary reason for the existence of OCIPUG.... the mutual sharing of information.

One member recently told me that he'd like to write an article but has never written one before, and didn't know if he could put it all together. No problem! You don't have to be an English major! Our newsletter staff is here to help with your text whenever you feel it's necessary, just give us a call. Also, if you would like to discuss an idea for an article or column, please contact us. Here's your chance to see your name in print, because we offer your very own byline....so why not jump in?

I can see the ideas flowing already!!

Member Spotlight

Richard Villa

by Paul Curtis and Jean Stevens

Responsible for each month's SIG GUIDE insert to README.DOC, and "Guru" to the Desktop Publishing SIG, is OCIPUG board member Richard Villa. Richard is a sales representative for Golden-Lee Book Distributors, the largest computer book distributor in the country. His territory covers Southern California, Arizona and Las Vegas. He has been selling computer books and software since 1981, working for Wayne Green, Addison-Wesley, and Continental Software. Just stop by any computer retailer in the area, and if they carry computer books, chances are they are serviced by Richard.

Born in Orange County, Richard moved to Long Beach at the ripe age of one month, and has resided "just across the border" ever since. After attending LB Wilson High and LBCC, he graduated from CSULB in 1979 with a B.S. in Business-Marketing.

While working toward his degree, Richard purchased a 16K TRS-80 Model I, on which to do his homework. After graduating, he took his "Trash-80" expertise and

became a store manager for Radio Shack. He retired the TRS-80 in 1985 for a XT clone, and currently uses a GST-286 with a S-VGA graphics system, HP LaserJet and Microsoft Mouse and runs Excel, PageMaker, Microsoft Word, Dollars & Sense, and any other Windows applications he can acquire.

Richard joined OCIPUG in March of 1986, and is member #150. Shortly after joining he organized the Desktop Publishing SIG, and later the Windows SIG. Richard is an avid collector of ocean liner memorabilia. His apartment is full of artifacts and furniture from the Queen Mary, where he worked as a tour guide during his college days. He also sings regularly and performs in a local church choir. His favorite vacation spot seems to be at sea, since he has been on 12 cruises to date. Richard, who is single, spends the rest of his leisure time trying to find a cure for bachelorhood!

Why not take a few moments the next time you see Richard to thank him for his ongoing support and commitment to OCIPUG, and for the great job he is doing.



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The Paradise VGA Plus Card, The Ultimate VALUE in VGA Adapters

Steve Gibson

Having answered the burning question of the ultimate video monitor for Steve's Dream Machine with my enthusiastic ravings last month about the marvelous Sony CDP-1302A multiscan monitor, the final question to be answered for our display sub-system project is: What's the ultimate display adapter?

Determining the correct answer to this question was complicated substantially by the simple fact that the VGA marketplace is filled with an incredible degree of clutter, misdirection, overstatement, and outright lies. What you see and hear is almost always FAR FAR different from what you actually get. Wild claims made by VGA adapter manufacturers abound, the ads are largely full of baloney, and it's quite hard to really know what's true. It's also quite hard to know what really makes a DIFFERENCE in VGA adapters, so consequently even the normally shrewd buyer will wind up guessing.

As my research into VGA adapters progressed, and I learned more and more, I became increasingly upset by the state of affairs. Therefore, I committed a disproportionate amount of time and energy to the task of finding out what's REALLY going on. Getting underneath the covers, to substantiate or debunk various claims, required the creation of special benchmarking software to directly measure critical adapter parameters, such as horizontal sweep rates, overall vertical refresh rates, and raw low-level adapter data bandwidths. What I discovered amazed me, and even though the results of this research

may upset some significant players in the industry, I feel compelled to share what I found.

Since I don't want to tease you any more than necessary, I'm telling you right up front, here and now, that for my money, there is no adapter in the industry which delivers more overall value than the inexpensive, analog-only, 8-bit, incredible Paradise VGA Plus. Though the VGA Plus is currently in very short supply, being affected both by its own popularity as well as by our industry's current dynamic RAM shortage, it's an incredible value at its current street price of between \$230 and \$260.

I urge you not to purchase any other display adapter, VGA or otherwise, until you've heard me out. Though you might have to struggle and/or wait a while to find one, it'll be a decision you couldn't regret.

The various VGA adapters in the industry may be differentiated by applying the following tests and comparisons: raw low-level data bandwidth, companion software drivers, display monitor compatibility, IBM VGA register level compatibility, system-level hardware compatibility, and (to a lesser degree) backward compatibility with prior display standards.

Of all these characteristics, only video display compatibility and backward compatibility are obvious from the surface. Every other characteristic must be determined through actual use and testing. The only negative feature of the Paradise VGA Plus, in this regard, is its total lack of support for the older digital-only monitors, including the original IBM monochrome, CGA, and EGA displays. You won't be able to use the VGA Plus if you have one of these, though Paradise has stated that they will make a version of their card, for sale to large OEM customers, which will support both digital and analog monitors. This

liability is shared by the Compaq and Video Seven FASTWRITE™ and VRAM™ cards, so the Paradise is in good company. Of course, this is no problem if you already own, or intend to purchase, any multisync monitor like Steve's dream monitor, the Sony CDP-1302A.

Almost every VGA adapter in the industry is a so-called "five-in-one" card. 5-in-1 refers to MDA, CGA, Hercules, EGA, and VGA, and means that such cards can run virtually any software ever written to any of these major standards. The two notable exceptions are IBM and Compaq, which lack support for the Hercules standard. Even though Compaq's VGA adapter utilizes the Paradise PVGA1A VGA chip, and could thus have easily implemented Hercules backward-compatibility and the useful extended resolutions, as do the Paradise VGA's, Compaq chose not to bring these features to their purchasers, apparently preferring to remain more strictly IBM compatible. For this reason, and considering its high price, you'd have to really love the Compaq name in order to intelligently purchase Compaq's VGA adapter. It's a very nice adapter, but the Paradise Plus or Pro do more, cost less, and are otherwise identical, all being based upon the same VGA chip.

I'm out of room this month, but next month we'll plunge into the critical issue of VGA adapter performance, and we'll see why the 8-bit Paradise Plus is a far better value than the 16-bit Paradise Pro, and why 16-bit data paths in general mean next to nothing in VGA adapters.

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SIG Reports

HARDWARE SIG

Kim Betterley and Dan Likens

The always popular Hardware SIG met on March 23 at 7:00 PM at Advanced Computer Products. This SIG provides a forum for exchange of information on, and experiences with, hardware use and installation. The random access nature of the meeting provides an opportunity to discuss many topics.

The SIG started with a plea for help to find why SPINRITE, a product of Gibson Research, would not recognize drive C after a low-level reformat. We found that a TSR to blank the VGA monitor had not been removed before starting the software. SPINRITE timing is critical and SPINRITE must have total control of the CPU, and must not be interrupted by TSRs or device drivers. We noted also that the work disk may not have been configured before use, as required by SPINRITE.

A discussion of advantages and disadvantages of DOS 4.0 showed on the positive side that logical disk partitions could exceed the limit of 32 megabytes, imposed by older versions of DOS. On the negative side, Paul Curtis noted that networking software he uses does not work with this version of DOS. Club members who were present do not make wide-spread use of the DOS 4.0 operating system.

SIG leader Dan Likens answered questions on how to design driver circuits for stepper motors. Four-wire or six-wire stepper motors are available readily at surplus stores. With proper circuitry, stepper motors can be driven by two signals: a step signal and a direction signal. This lets any standard 8-bit parallel port drive up to four

motors. The step pulse increments the motor either clockwise or counter-clockwise, according to the state of the direction input. In critical applications, the addition of closed-loop feedback can provide absolute positioning. Applications include window shades, satellite dishes and telescopes, or any mechanical system where automatic positioning is called for.

Discussion continued about a group purchase of 386 computers. Steve Gibson was reported as recommending purchase of a system not faster than 16 Mhz; the performance per dollar drops significantly as the processor speed increases. At higher clock speeds, the CPU bus becomes significantly I/O-bound.

Appreciable savings are expected via a group purchase through a local distributor. The base system will consist of a 16 Mhz Mylex mother board with 1 Megabyte of RAM, a tower-type case, a power supply rated for at least 220 Watts, a 101-key keyboard, and (of course) a multi I/O card and floppy disk drive. A choice of hard disk system, as well as video display and controller would also be included. At the time of this meeting, a final tally for these items was not known.

In a final debate, the opinion was popular that generic floppy disks are as good as the name brands and deliver a significant saving per diskette.

Make a point to attend this SIG and to bring your questions to our open forum. Many who attend the Hardware SIG also attend the ADVANCED Hardware SIG; you can count on an opinion from them, and possibly a solution to your problem. It's a good place to improve your knowledge of hardware and related topics.

BETA TESTS OF MICROSOFT WORD

Dave Lorenzini

Eighteen members of OCIPUG's WORD SIG participated in a final beta test of WORD 5.0 before it went into production.

Several weeks ago, Monica Harrington, of Microsoft's WORD Product Management team, contacted Dave Lorenzini, OCIPUG's Microsoft contact person, for names and addresses of WORD users interested in testing a pre-release version of WORD 5.0 prior to production. A message was posted on the club's RBBS and the list of responding users was FAXed to Microsoft. One person even went out and purchased WORD 4.0 so he could be included on the list. Soon each person received an Airborne Express delivery of 13 disks and a thousand pages of double-sided documentation.

After about a week of familiarization, most of the testers attended the March WORD SIG to discuss the new product. Much of the discussion focused on installation. I don't think Microsoft could have anticipated the large number of diverse experiences our members described. The group also took a look at many of the new customization features and printing enhancements. A complete report on the WORD SIG appeared in last month's issue.

There were many positive comments regarding the special telephone support we received. As beta testers, we were directed to programmers fine-tuning the final product. One of our members needed help with an out-of-date color graphics board. The Microsoft technician contacted the company directly for information

needed to provide compatibility with the member's system. You can't beat that for service!

About a week after the testing ended, our beta testers received another surprise in the mail from Microsoft. If we filled out a Word 5 Beta Questionnaire, and sent in the title page from our WORD 4.0 manual, we would each receive an upgrade to the final version of WORD 5.0 absolutely FREE! Fortunately, one of the conditions for being on the list in the first place was to be a licensed WORD user.

Hopefully, this experiment proved beneficial to Microsoft Corporation. Many of the bugs and inconsistencies were brought to their attention before the product was packaged. It appears, however, that Microsoft needed more time to resolve these additional problems. We were informed by the speakers at our April general meeting that the master was cut and that the product would appear on dealer shelves around May 15, 1989.

Our WORD SIG group can also be proud to have returned something of value to Microsoft, since we have received many favors from Microsoft over the past few years. (One such example is our free GENIE account, but more about that another time.)

WORDPERFECT SIG

James Pieratt

Twelve OCIPUG members attended the WordPerfect SIG on April 10th at 7:00 PM in the Advanced Computer Products facility in Santa Ana.

The main topic was creating Table of Contents, Indexes, and Lists by using the Alt-F key, either during or after completion of the text. Formation of a DataPerfect SIG was also discussed, to start early in summer (when and where dependent upon new OCIPUG arrangements).

DataPerfect is a relational data base from WordPerfect. A major advantage over dBASE IV and others is its use of many of the same control codes used by WordPerfect, and its generation of reports in WordPerfect format. The initial SIG meeting will be mainly a demonstration of different applications, including creation of a simple newsletter.

The WordPerfect SIG will again meet on Monday, May 8th at 7:00 PM in the ACP facility at Santa Ana.

PC Networking SIG

Jim Mansfield

The February, March, and April meetings of the PC Networking SIG all were held at Coastline's Mesa Verde Center on the third Thursday of each month.

Subject of the February meeting was the DNA NETWORK OPERATING SYSTEM, from DNA Networks, Inc. DNA is one of several PC LANs that are particularly good for ten users or less in environments of light demand. DNA features very fast and easy installation, low cost, and minimal use of memory (130 Kbytes on a server, and 10 Kbytes at each workstation). DNA uses a proprietary protocol which operates at 2.5 megabits per second over a twisted-pair cable.

Another low-cost Local Area Network, LANtastic from Artisoft, Inc., was the subject of the April meeting. LANtastic was PC Magazine's recent choice as best low-cost LAN. Dewey Black of Paragon Computers in Garden Grove has been recommended by Artisoft as a qualified local dealer, and he graciously agreed to demonstrate the product at our meeting.

LANtastic, which uses dual twisted-pair cable, features a proprietary 2-megabit per second network protocol. A LANtastic starter kit containing two workstation adapters, a cable, and

the Network Operating System lists for only \$399. LANtastic, Dewey explained, requires very little effort to install and operation is very simple. Perhaps its most outstanding feature, however, is its frugal use of memory. The software comes on one 360-Kbyte disk (and takes up but a third of it). The LANtastic workstation program takes up only 12 Kbytes of memory; on a server-configured machine, the overhead is merely 33 Kbytes (compared to 100 Kbytes or more for many PC LANs). Our thanks to Dewey for sharing his knowledge of LANtastic with us.

In March, the Networking SIG took a breather from low cost LANs to talk about the high-performance use of LANs for relational database management. The first part of the meeting discussed DOS 3.1 record and file locking specifications, and the system software that supports them. Next, the relative merits were discussed of dBASE IV, dBASE clones, PARADOX 3.0, SQL SERVER, ORACLE, and other sophisticated database management software. Finally, I reviewed my problems and successes in configuring PARADOX 3.0 under NETWARE. After the discussion, PARADOX 3.0 was demonstrated to re-emphasize some of the advantages and disadvantages previously reviewed.

SPREADSHEET SIG

Neil Carman

The May meeting was devoted to random access and reorganization. The major topic was, "Which spreadsheet should I be using?"

LOTUS 123 - If you already know how to use Lotus, and want to maintain 100% compatibility with this current business standard, choose LOTUS 123. If you need an output for desktop publishing, purchase one of the two Lotus add-ins, ALWAYS or

Do they call it a h it's so hard to find wh



You're looking for a specific piece of information on your PC. But you can't remember which memo, spreadsheet or even which file it's contained in.

And you're certainly not about to

search through each directory, much less load and unload every file to find it.

That's why we created Magellan.[®] The first utility that helps you find your files by letting you instantly see their contents as

¹Applications supported in SpeedView include Lotus 1-2-3, Symphony[®], Manuscript[®], Agenda[®], WordPerfect[®], dBase[®], MultiMate[®], Microsoft[®] Word, WordStar[®], DisplayWrite, all ASCII files, plus many more.
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Hard disk because at you're looking for?

they appear in your favorite applications.

Without even having to load the specific applications that created the file.

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Because unlike other programs, the Magellan Explore function can perform a search on a phrase, a topic, an idea or even an entire file. Not just key words.

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As fast as you can scroll down this list, the Magellan SpeedView

function instantly displays the complete contents of each file on the right of your screen, highlighting the relevant text for you.

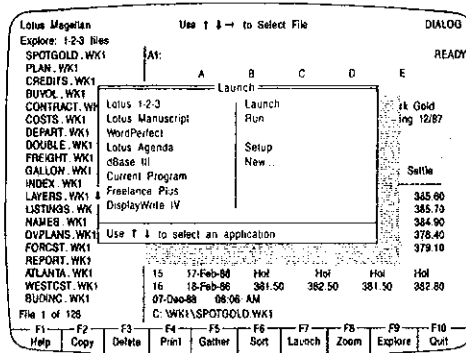
Using the information is easiest of all. Because all it takes is one keystroke to launch into the application that created the file, and it'll be loaded and ready to go.

Or you could use Magellan to gather the

information you choose from several different applications (like a 1-2-3[®] spreadsheet and a WordPerfect[®] memo)¹ and put it into a single file so you can start using it right away.

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five minutes after installing Magellan. The menus are intuitive, and everything you need to run the program is on the screen right

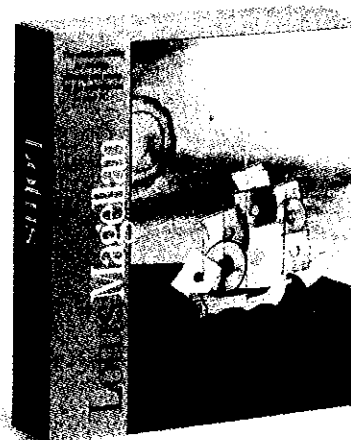


With one keystroke, Magellan loads the selected file and application, in this case 1-2-3, so you're ready to go to work.

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Call 1-800-345-1043 for your free Magellan demo kit. Ask for ALG-3593 to learn more on why Magellan is the quickest, easiest way to access all the information on your hard disk.

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Introducing Lotus Magellan

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The June meeting will be on Microsoft EXCEL. Some lucky attendee will win a copy of EXCEL. Check the BBS or the telephone message center for time and place; hopefully, we'll be meeting at our new OCIPUG World Headquarters.

Keep your columns and rows in order!

**ADVANCED
HARDWARE SIG**

Kim L. Betterley

The advanced hardware SIG met at 7:00 P.M. Thursday April 13 at Advanced Computer Products in Santa Ana. The topic of the evenings discussion was centered around the uses of the 555 timer.

The 555 timer is an eight pin DIP, (Dual Inline Package), integrated circuit and is very useful and commonly available. Some of the applications include one-shot timers, square wave oscillators, missing pulse detectors, bounceless switches, time delays, charge pumps, and frequency dividers.

The 555 timer operates by watching the voltage across a capacitor that is being charged by the power supply. Without resistance small capacitors charge

instantaneously and large electrolytic capacitors will charge as fast as the power supply allows. Resistance is used to gain some kind of control over how fast or how slow the capacitor charges. This is what is known as a RC (Resistive Capacitive) circuit. When the voltage across the capacitor reaches 66% of the supply voltage the internal circuitry of the 555 discharges the capacitor to 33% of the supply voltage. Depending on how the 555 is wired the timer can start the cycle again, (a stable operation), or stop and wait for an external trigger, (monostable operation). Internal circuitry includes, operational amplifiers, a flip-flop, and a power amplifier. This produces a square wave output with timing dependent on the RC time constant of the resistors and the capacitor used in the circuit. There is also a reset input to inhibit operation, and the 555 can source or sink 200mA on the output.

Two circuits were demonstrated through the use of an oscilloscope. The first circuit employed the use of an 556 I.C. which is a dual version of the 555. By using two timers a tone burst can be generated. By using a variable resistor to vary the frequency of the first timer, a tone burst can be created that last from a few moments to a continuous

tone. The second timer is oscillating at a higher frequency than the first timer. The circuit works because both timers are wired as astable multivibrators. The tone burst comes due to the first timer modulating the second timers reset input. When the output of the circuit is connected to a speaker, it sounds a lot like a digital alarm clock with its beep-beep-beep sound only not as loud. By using an external amplifier and a very loud sound could be produced.

The second circuit demonstrated the wiring required to control the duty cycle of an astable square wave oscillator. The duty cycle is the percentage of time the circuit is on. By using a variable resistor, (potentiometer), and two diodes the charge and discharge rate of the RC circuit can be controlled independently. This allows a duty cycle from 0 to 100 percent. The circuit operates by forcing the capacitor to charge through the forward biased diode and discharge through the reverse biased diode. This circuit can be used to control the speed of motors and as a lamp dimmer.

Coming up in the next few months are projects centered around the ADVANCED HARDWARE SIG's EXPboard, stepper motors, DAC (Digital to Analog Converters), and ADC (Analog to Digital Converters).



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Technical Corner

PC TOOLS DELUXE VERSION 5.0

by Bob Ackerman, GS-BUG

The latest version of PC Tools to come out from Central Point Software looks completely different from any other version of PC Tools previously available. By using a window type approach and the availability of many more features, PC Tools Deluxe sets a new standard for utility programs. Those of you who have purchased (or upgraded to) PC Tools Deluxe Version 5.0 will be quite surprised at the new look and the number of features now being offered. Besides offering all of the old favorites, PC Tools Deluxe has many new features. PC Tools has always been one of my favorite programs to move files, clean up directories, undelete files and perform other hard disk maintenance functions that need to be done now and then.

All of the old features of PC Tools are still here but are found in different places. Those of us who are familiar with the old PC Tools will have to adjust to the new way to move around the program.

PC Tools Deluxe looks a lot like Microsoft Windows or the Presentation Manager of OS/2 with the use of pull down menus, window displays and mouse support. The difference is that PC Tools Deluxe stays in the text mode whereas Microsoft Windows and the OS/2 Presentation Manager use a graphics mode for all displays. The biggest change in PC Tools is that it is now divided into two main programs called "PCShell" and "Desktop". PCShell contains most of the old functions of PC Tools set in the new windows format. Desktop contains a new set of applications previously not available with the program. And

all of the older support programs, such as PC-Cache, Mirror and PCBackup are still there.

PCShell, which contains all of the same functions as the old PC Tools main program, now allows secondary programs such as backups, disk maintenance and other programs that are defined by the user to be included in the menu for execution. One of the improvements in PCShell (over the old version of PC Tools) is that now the directory tree and file listing are shown at the same time. To make it nicer, PCShell allows for the display of two directories and two directory trees at one time which is great for selective file copying and comparing. PCShell offers the user full window control of the file and directory displays. This allows the windows to be moved and sized as needed. With the use of a mouse the moving and sizing of windows is very easy and actually quite fun. Since the screen stays in the Text Mode, the sizing and moving of windows is much faster than Microsoft Windows. Also, the default colors for PCShell (as well as most other programs provided as part of PC Tools Deluxe) can be changed and saved.

A big improvement in PCShell over the old version of PC Tools is ability to place the program into memory as a TSR program. The memory size needed when PCShell is inactive is less than 10K (compared to about 75K for the old version). Anyone can spare 10K of memory! PCShell works as a TSR by using a memory manager to save the contents of memory to the hard disk. When PCShell is exited it will restore the memory to what it contained before being called. This can cause a short delay of a second or two on some systems. Desktop is a set of applications which are new to PC Tools. From the Desktop, main menu users

now have a Word Processor, Outline program, Data Base program, Appointment Manager, Modem Telecommunication program, Macro Editor, Clipboard and a Calculator. Quite a collection of programs.

The Word Processor (Notebook) offers simple text entry with word wrap, margin setting, tabs, spell checker, printer codes and other common word processing features needed for simple document generation. For most users these would be all of the features needed of a word processor.

The Outline program contains all the features expected to be found in most outline programs such as expanding and contracting the outline selectively, line promotion and demotion as well as all of the word processing features such as spell checking and page formatting.

The Data Base program advertises that it can read and write to dBASE III files. This is limited to file reads, writes, record deletes and file packing. Also, the file is limited to 3500 records. If the data base exceeds this limitation then only the first 3500 are allowed to be processed. The Data Base does support custom screens, indexes, and printed forms. It also includes an autodialer to dial telephone numbers. My only big complaint with PC Tools Deluxe is that it advertises a "Databases, including rolodex with autodialer" which is only the sample data base with the autodialer feature included.

The Appointment Manager is what an user expects of a calendar program. All scheduled appointments include an alarm time and an optional attachment of a note to the appointment. The Things-To-Do section allows for the listing of several items to be

displayed over a range of days.

The Appointment Manager supports many other features not found in most other calendar programs. Appointments can be scheduled as "today only," only on workdays, this day of the week or through a date range, such as Wednesdays between 1/4/89 and 6/7/89, for example. I could not get the calendar to schedule conflicting appointments while in the appointment screen but I was able to schedule conflicting appointments by using the pull down menus to record the appointment.

One of the biggest features of the Appointment Manager is the ability to execute macros at scheduled times. At my office I currently use this appointment schedule to automatically backup the hard disk in the middle of the night to a tape drive. More on macros in a minute.

The Telecommunications program allows for modem communications between two computers. This program is not as feature-rich as most communication programs currently available but offers enough features to be considered for occasional use. Baud rates are supported up to 9600 baud (or bps, to be accurate) and the program supports Xmodem file transfers. By loading an in-memory program called "Backtalk," this telecommunication program can be placed in background after starting a file transfer. This allows the return to any other program until the transfer is complete. A short beep will announce the completion and a couple of quick keystrokes will return to the communication session. A script language is included to automate login procedures for most bulletin boards. By using the macros, the appointment manager and the script language, the telecommunication program can be scheduled to automatically retrieve electronic mail. Sample scripts are included for

CompuServe and MCI Mail.

The Macro Editor allows for the creating and editing of macros. These macros can be combined to perform just about any task within and outside of PC Tools Deluxe. These macros can be active only in PC Tools Deluxe or system wide while Desktop is in memory. By combining these macros with the Appointment Manager, scheduled execution of key maintenance functions such as backups can be performed automatically.

The Clipboard allows for the cutting and pasting of screen information between applications programs and PC Tools Desktop programs. By displaying the information on the screen and using Clipboard to capture the information, the data can be copied or pasted into most word and text processors as well as the programs provided with PC Tools.

The Calculator supports a few modes that would be useful to most users. Besides the normal calculator functions (four basic and memory) the calculator supports programmer calculations such as base conversions and emulates the HP-12C financial calculator. Stored in the Utility section is the ability to change the hot-key used to start Desktop while in memory and the ability to change the keys used to cut and paste to and from the clipboard. Also hidden here is an ASCII table giving both decimal and hex values of all characters.

If the above two programs (PCShell and Desktop) are not enough for most users, PC Tools Deluxe includes several other programs to make life easier (at least with a computer).

PCBackup is a high speed backup program that is about as fast as you can get. The user has the ability to select whether to use a compress feature to minimize disks needed for the backup or no compression which will add diskettes but makes a DOS-readable backup. Full support for all diskette formats is

included. PC Backup can even recover up to 160 errors per backup diskette (according to the manual; I have no way of testing this). Mirror, which was included in previous versions of PC Tools, creates a copy of the File Allocation Table (FAT Table) on the hard disk. By running Mirror frequently the user can recover from most drive problems. An added feature in Mirror is the ability of extracting the hard disk partition table to a file which, when stored on a floppy for safekeeping, is used to recreate a damaged partition table. On top of these features is a Delete Tracking option. When files are deleted, Mirror will through a small memory module keep track of all deletions. If an file undelete is requested and the file is totally recoverable, (that is, the space the file occupied has not been used by another file), the delete tracking will even give the first letter of the filename backup. This gives a total undelete function.

Sometimes drives and diskettes are accidentally formatted. A program called Rebuild is included that can recover most data on diskettes and hard disk. Even if Mirror has not been run recently, Rebuild can usually recover some of the data. If Mirror has been run recently then chances are that most, if not all, of the disk will be recovered.

PC Tools Deluxe has included their own format program called PC FORMAT. This program is designed to replace the DOS Format command. By using this format program the chance of data recovery from a bad or formatted disk improves. PC Tools can easily recover from most accidental formats if PC Format was used.

Fragmentation of a hard disk will slow down any system. PC Tools Deluxe includes their Compress program which will defragment files on the hard disk. Compress has been included in previous versions and is one of the nicest features of PC Tools.

Besides unfragmenting files, Compress will perform a surface analysis of a hard disk. This analysis will repeatedly read a hard disk looking for a marginal surface. If one error is detected, Compress will attempt to either reformat that bad sector or move the data to another cluster while marking the old sector as bad.

PC Cache will improve hard and floppy disk performance by storing frequently used information in memory. This speedup will vary among systems but on slower XT's, the speed difference might be noticeable. PC Magazine had very good comments about PC Cache in their latest review of cache programs.

A new program was added to the tool set with this version. PC Secure is a data encryption program designed to encode and compress data. Files can be compressed from 20% to 70% to save disk space.

Overall PC Tools Deluxe Version 5.0 is a massive change from the older versions. The older versions always seemed to be a quick "place the disk in the drive

and run the program" type of program. This newer version gives the impression of a large program considering it now comes on four diskettes (5 1/4"). The look of Windows and the mouse support makes for easier selection of commands and options.

Each program can be run separately or run through the two main programs (PCShell and Desktop) as needed. No special configurations or setups are needed for use but the install procedures are recommended.

The install program is very simple to run but can be a little confusing. Most users expect install programs to say "Install To Floppy" or "Install To Hard Disk". PCSetup, the install program for PCTools, says "Install From Floppy" and "Install From Hard Disk". Note the difference with the words "To" and "From". This confusion has let several users get stuck during the installation.

Having PC Tools Deluxe in memory is great. Just pop it up when you needed it. To make is simpler, I wrote this short batch file:

```
C:\pctools\BACKTALK /I
C:\pctools\PCSHELL/R
C:\pctools\DESKTOP/R/CS/OE:
```

This batch file will load PC Tools Deluxe into memory using the defaults set up from when I installed PC Tools Deluxe into the AUTOEXEC.BAT file. When PC Tools is no longer needed in memory, there is a program provided with PC Tools called KILL.EXE that will remove PC Tools from memory. The above batch file is actually the same lines placed in the AUTOEXEC.BAT file when PC Tools Deluxe was installed. I removed the lines from the AUTOEXEC.BAT file and created a batch file called PCTOOLS.BAT with them.

Overall PC Tools Deluxe is a valuable addition to my software library. Owners of the previous version of PC Tools can upgrade for only \$15.00. Owners of SideKick, Sidekick Plus, Norton's Utilities, Word Perfect Library, and other similar programs can upgrade for only \$25.00! At this price PC Tools Deluxe Version 5.0 is a bargain that cannot be beat.



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OCIPUG Financial Report

Jerry DeAinza, Treasurer

OCIPUG April, 1989 Changes in Cash:

	Unrestricted Funds	Tim Smith Fund
Cash balance, March 30, 1989	\$13,101.87	3,920.92
Cash receipts		
Membership dues	2061.00	
Advertising	126.50	
Interest	108.43	35.94
Contributions, Tim Smith Fund		25.00
Library fees	305.00	
Total Receipts	2,600.93	60.94
Cash disbursements		
Meeting expenses	535.98	
Printing	826.21	
Postage	227.20	
Deposit Office Space	3,190.00	
Telephone	68.06	
Supplies	541.83	
Total Disbursements	5,389.28	
Cash balance, April 30, 1989	10,313.02	3,981.86

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Our General Meetings are held on the last Saturday of each month except when there is a conflict with a major holiday (asterisked months in list below).

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April 29	May 20 *	June 24
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October 28	November 18 *	December 16 *

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